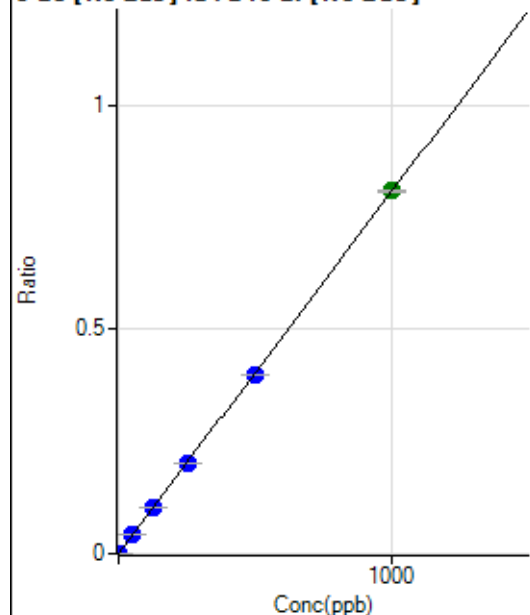


Batch Folder: D:\P8050118- MS .b\
Analysis File: P8050118- MS .batch.bin
DA Date-Time: 2018-05-03 13:55:01
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB P8050118- MS.D	S00	2018-05-01 12:25:26
2			
3	005CALS P8050118- MS.D	S02	2018-05-01 12:32:58
4	006CALS P8050118- MS.D	S03	2018-05-01 12:36:40
5	007CALS P8050118- MS.D	S04	2018-05-01 12:40:21
6	008CALS P8050118- MS.D	S05	2018-05-01 12:43:57
7	009CALS P8050118- MS.D	S06	2018-05-01 12:47:27
8	010CALS P8050118- MS.D	S07	2018-05-01 12:50:52
9	011CALS P8050118- MS.D	S08	2018-05-01 12:54:11

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	105.56	0.0001	P	32.2
2	☐	0.100					
3	☐	1.000	0.964	1448.27	0.0008	P	2.9
4	☐	50.000	51.731	70135.53	0.0418	P	1.0
5	☐	125.000	126.768	175820.00	0.1023	P	1.3
6	☐	250.000	248.037	361546.82	0.2001	P	0.4
7	☐	500.000	494.956	720896.84	0.3992	P	0.3
8	☐	1000.000	1002.705	1449049.74	0.8086	A	0.7
9	☐			264.83	0.0001	P	21.6

$$y = 8.0634\text{E-}004 * x + 6.2815\text{E-}005$$

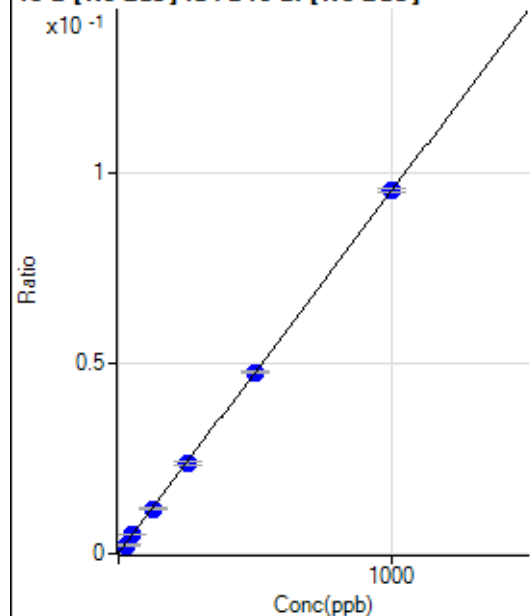
$$R = 1.0000$$

$$DL = 0.07514$$

$$BEC = 0.0779$$

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	208.34	0.0001	P	3.9
2	☐	2.500					
3	☐	25.000	22.329	3867.38	0.0022	P	3.0
4	☐	50.000	51.811	8463.94	0.0050	P	3.8
5	☐	125.000	122.999	20281.77	0.0118	P	2.2
6	☐	250.000	248.945	42920.85	0.0238	P	2.8
7	☐	500.000	499.993	85926.59	0.0476	P	1.7
8	☐	1000.000	1000.494	170397.00	0.0951	P	1.2
9	☐			7757.95	0.0041	P	8.2

$$y = 9.4910\text{E-}005 * x + 1.2392\text{E-}004$$

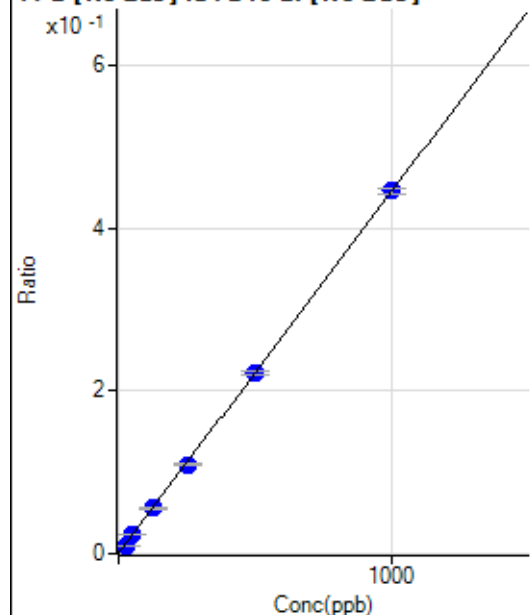
$$R = 1.0000$$

$$DL = 0.1509$$

$$BEC = 1.306$$

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	969.52	0.0006	P	6.4
2	☐	2.500					
3	☐	25.000	21.871	17761.60	0.0103	P	2.7
4	☐	50.000	50.604	38742.30	0.0231	P	3.0
5	☐	125.000	123.947	95726.78	0.0557	P	1.8
6	☐	250.000	245.911	198618.68	0.1099	P	3.2
7	☐	500.000	498.731	401482.47	0.2223	P	1.8
8	☐	1000.000	1001.836	799294.84	0.4460	P	1.6
9	☐			35768.09	0.0190	P	7.6

$$y = 4.4459\text{E-}004 * x + 5.7675\text{E-}004$$

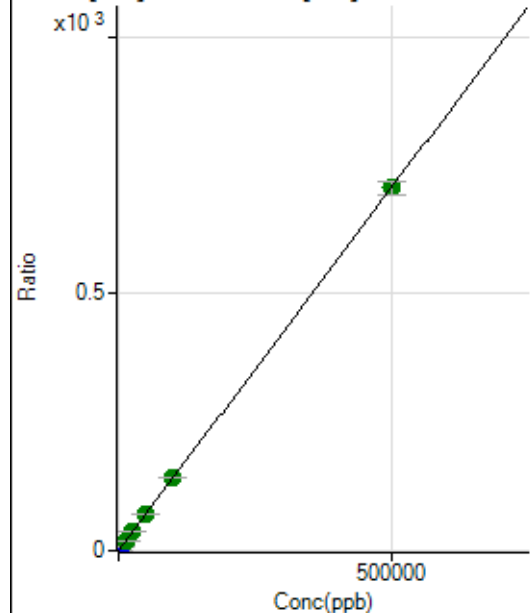
$$R = 1.0000$$

$$DL = 0.2475$$

$$BEC = 1.297$$

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	8958.83	0.1240	P	2.0
2	☐	50.000					
3	☐	500.000	477.851	57675.87	0.7985	P	1.1
4	☐	5000.000	5478.752	545978.18	7.8575	P	5.1
5	☐	12500.000	13470.515	1370827.35	19.1382	A	3.0
6	☐	25000.000	26162.728	2711418.16	37.0537	A	1.1
7	☐	50000.000	50709.377	5256479.24	71.7022	A	0.8
8	☐	100000.00	100738.15	10478502.32	142.3197	A	0.8
9	☐	500000.00	499694.26	55196044.98	705.4613	A	3.9

$$y = 0.0014 * x + 0.1240$$

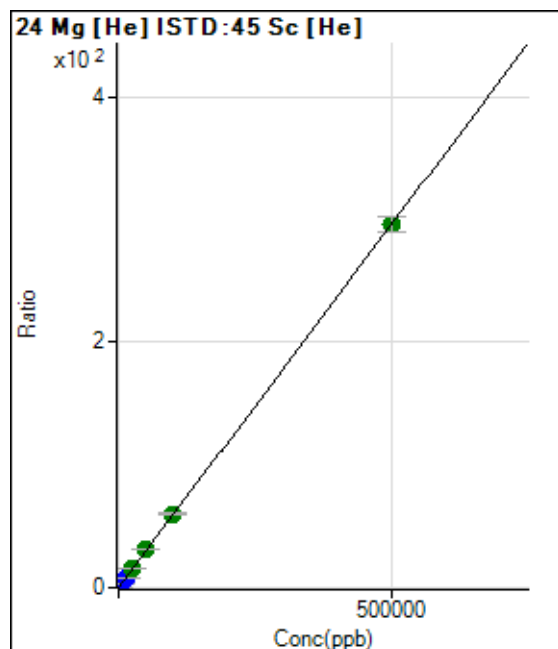
$$R = 1.0000$$

$$DL = 5.209$$

$$BEC = 87.87$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	322.24	0.0045	P	26.2
2	☐	50.000					
3	☐	500.000	456.345	19850.66	0.2749	P	1.2
4	☐	5000.000	5525.186	227878.92	3.2781	P	4.0
5	☐	12500.000	13346.604	566658.58	7.9123	P	3.8
6	☐	25000.000	26898.429	1166574.67	15.9418	A	0.8
7	☐	50000.000	52528.656	2282034.30	31.1277	A	0.2
8	☐	100000.00	101538.47	4429689.47	60.1661	A	1.4
9	☐	500000.00	499318.14	23146271.18	295.8509	A	4.2

$$y = 5.9250\text{E-}004 * x + 0.0045$$

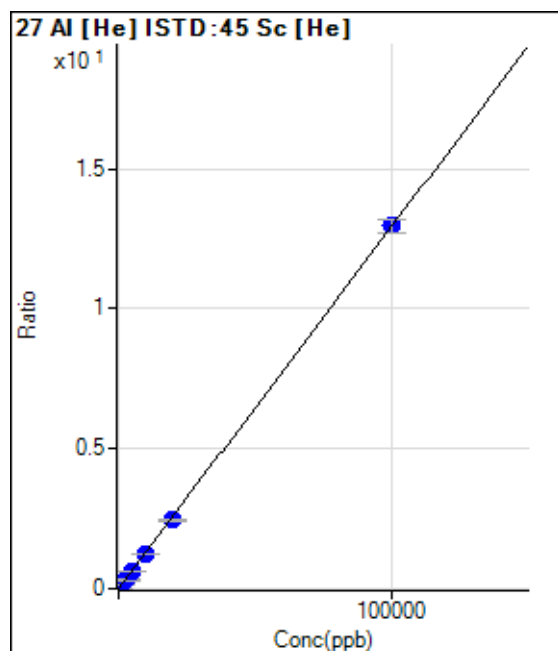
$$R = 1.0000$$

$$DL = 5.921$$

$$BEC = 7.545$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44.45	0.0006	P	29.4
2	☐	2.000					
3	☐	20.000	15.760	191.68	0.0027	P	22.5
4	☐	1000.000	1027.369	9270.05	0.1334	P	4.3
5	☐	2500.000	2424.201	22468.54	0.3139	P	6.6
6	☐	5000.000	4838.418	45794.18	0.6259	P	2.2
7	☐	10000.000	9507.576	90121.87	1.2292	P	1.1
8	☐	20000.000	18982.442	180647.10	2.4536	P	1.3
9	☐	100000.00	100262.45	1013762.09	12.9570	P	3.9

$$y = 1.2922\text{E-}004 * x + 6.1595\text{E-}004$$

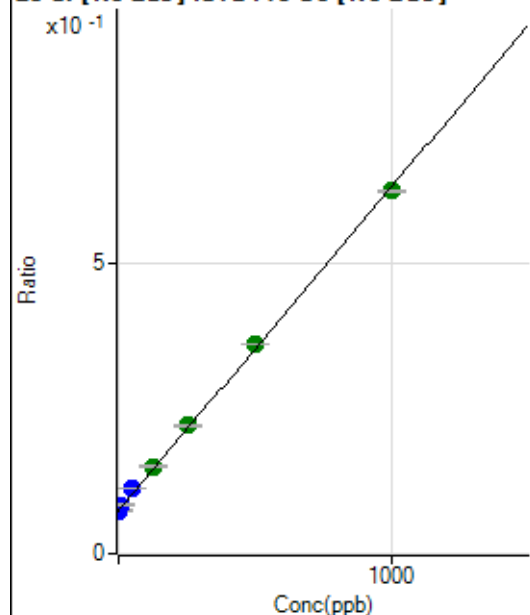
$$R = 0.9999$$

$$DL = 4.198$$

$$BEC = 4.767$$

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	462852.21	0.0742	P	1.0
2	☐	1.000					
3	☐	10.000	17.799	529172.81	0.0841	P	0.4
4	☐	50.000	70.622	711787.59	0.1135	P	0.3
5	☐	125.000	135.685	951585.33	0.1497	A	1.1
6	☐	250.000	262.970	1443774.65	0.2205	A	0.8
7	☐	500.000	513.720	2357845.58	0.3600	A	0.5
8	☐	1000.000	987.453	4121864.41	0.6235	A	0.6
9	☐			755633.59	0.1124	P	3.1

$$y = 5.5621\text{E-}004 * x + 0.0742$$

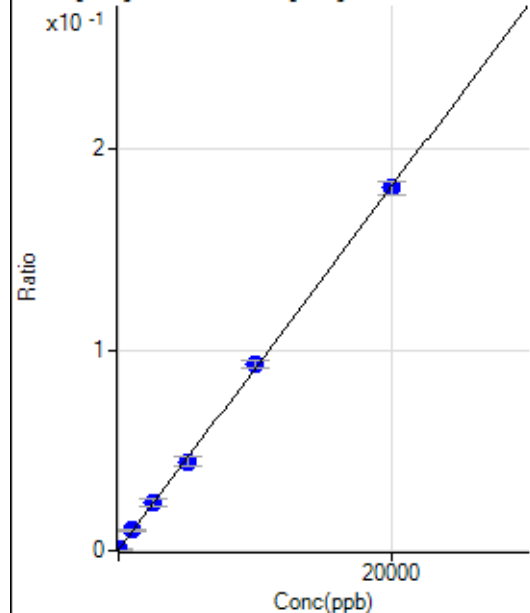
$$R = 0.9997$$

$$DL = 4.048$$

$$BEC = 133.4$$

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	27.459	44.45	0.0006	P	20.9
2	☐	0.000					
3	☐	0.000	-27.459	8.33	0.0001	P	173.
4	☐	1000.000	1085.674	708.38	0.0102	P	8.3
5	☐	2500.000	2624.567	1727.97	0.0241	P	15.9
6	☐	5000.000	4834.407	3233.87	0.0442	P	11.0
7	☐	10000.000	10188.592	6793.60	0.0927	P	4.1
8	☐	20000.000	19927.248	13323.50	0.1809	P	3.6
9	☐			22.22	0.0003	P	81.5

$$y = 9.0608\text{E-}006 * x + 3.6579\text{E-}004$$

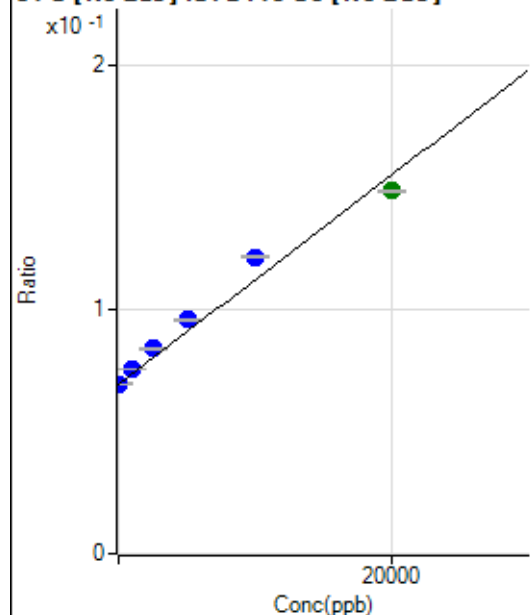
$$R = 0.9999$$

$$DL = 54.86$$

$$BEC = 40.37$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	37.428	433304.37	0.0695	P	0.6
2	☐	0.000					
3	☐	0.000	-37.428	435072.02	0.0692	P	0.9
4	☐	1000.000	1454.215	473762.29	0.0755	P	0.4
5	☐	2500.000	3381.327	532680.82	0.0838	P	1.2
6	☐	5000.000	6203.283	627761.16	0.0959	P	0.8
7	☐	10000.000	12189.272	795755.59	0.1215	P	0.8
8	☐	20000.000	18471.667	980925.09	0.1484	A	0.3
9	☐			442630.28	0.0659	P	0.6

$$y = 4.2794\text{E-}006 * x + 0.0693$$

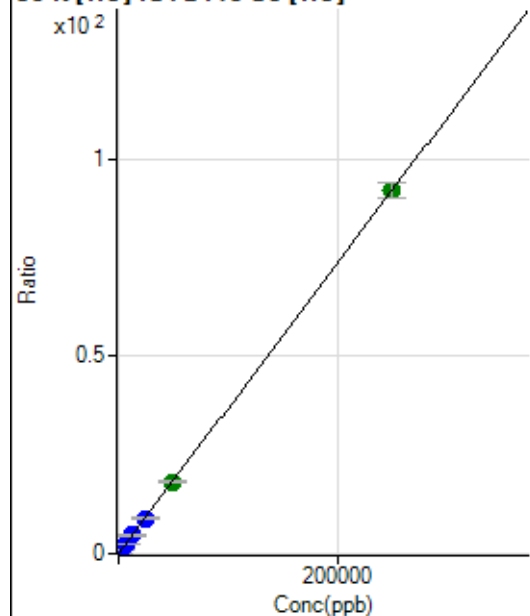
$$R = 0.9878$$

$$DL = 367.9$$

$$BEC = 1.62\text{E+}04$$

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	3675.65	0.0509	P	6.4
2	☐	50.000					
3	☐	500.000	466.887	16048.68	0.2222	P	3.5
4	☐	2500.000	2622.733	70415.30	1.0134	P	5.1
5	☐	6250.000	6315.796	169699.66	2.3687	P	2.2
6	☐	12500.000	12517.175	339839.93	4.6446	P	2.0
7	☐	25000.000	24400.448	660193.97	9.0058	P	1.3
8	☐	50000.000	49292.636	1335635.81	18.1411	A	1.5
9	☐	250000.00	250197.76	7187757.63	91.8726	A	4.2

$$y = 3.6700\text{E-}004 * x + 0.0509$$

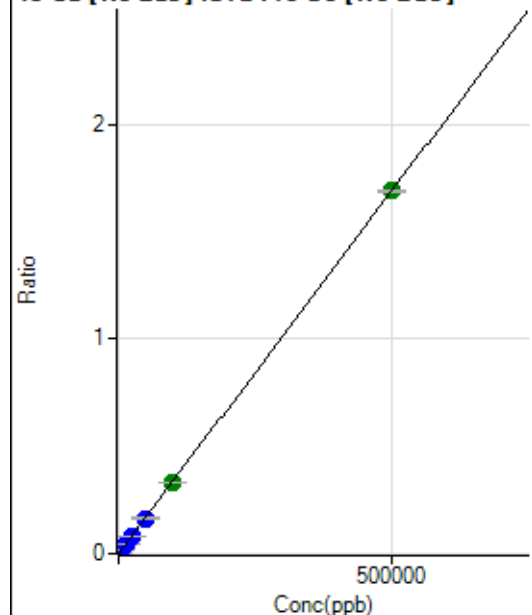
$$R = 1.0000$$

$$DL = 26.49$$

$$BEC = 138.6$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	955.63	0.0002	P	10.5
2	☐	50.000					
3	☐	500.000	432.329	10140.21	0.0016	P	0.6
4	☐	5000.000	4917.568	105011.05	0.0167	P	1.1
5	☐	12500.000	12199.969	262646.86	0.0413	P	0.1
6	☐	25000.000	24415.729	540424.02	0.0825	P	0.9
7	☐	50000.000	49019.760	1084359.70	0.1655	P	0.5
8	☐	100000.00	98057.192	2188312.39	0.3310	A	0.6
9	☐	500000.00	500524.19	11350043.31	1.6889	A	0.5

$$y = 3.3740E-006 * x + 1.5323E-004$$

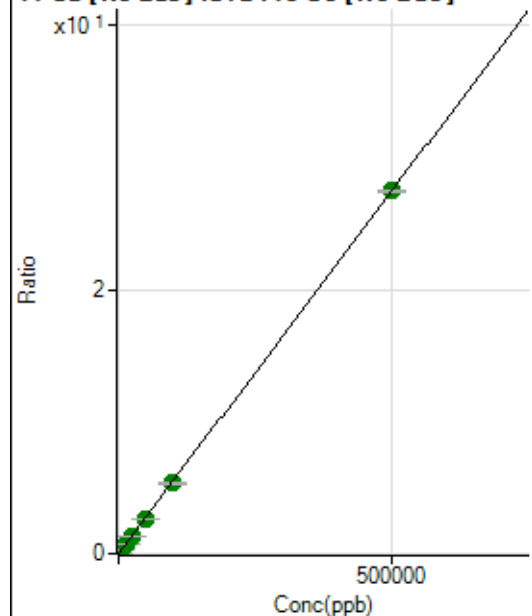
$$R = 1.0000$$

$$DL = 14.32$$

$$BEC = 45.42$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	39821.59	0.0064	P	1.5
2	☐	50.000					
3	☐	500.000	447.342	194589.51	0.0309	P	0.8
4	☐	5000.000	5025.872	1769572.59	0.2822	A	1.5
5	☐	12500.000	12264.813	4319037.38	0.6794	A	0.6
6	☐	25000.000	24310.459	8777045.08	1.3404	A	0.8
7	☐	50000.000	48542.720	17489830.77	2.6701	A	0.5
8	☐	100000.00	96916.712	35202260.86	5.3245	A	0.3
9	☐	500000.00	500802.53	184722780.5	27.4871	A	0.4

$$y = 5.4873E-005 * x + 0.0064$$

$$R = 1.0000$$

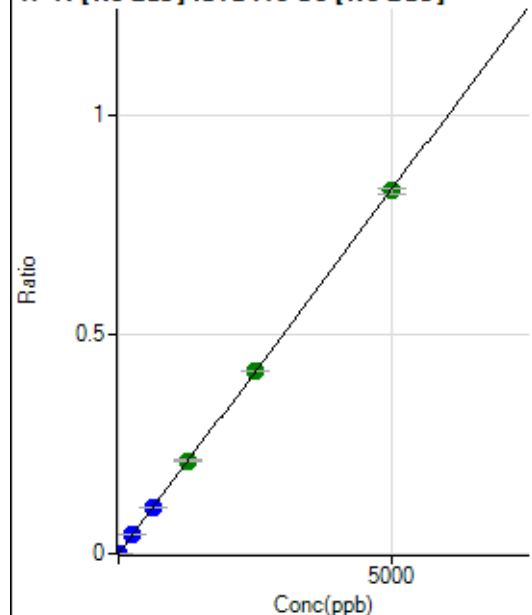
$$DL = 5.282$$

$$BEC = 116.4$$

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	233.35	0.0000	P	23.2
2	☐	0.500					
3	☐	5.000	4.576	5006.71	0.0008	P	3.8
4	☐	250.000	252.974	263190.55	0.0420	P	0.3
5	☐	625.000	629.522	663558.76	0.1044	P	0.3
6	☐	1250.000	1279.953	1389436.65	0.2122	A	1.1
7	☐	2500.000	2517.907	2733968.57	0.4174	A	0.2
8	☐	5000.000	4982.845	5460521.52	0.8259	A	1.4
9	☐			1869.67	0.0003	P	15.2

$$y = 1.6575E-004 * x + 3.7406E-005$$

$$R = 1.0000$$

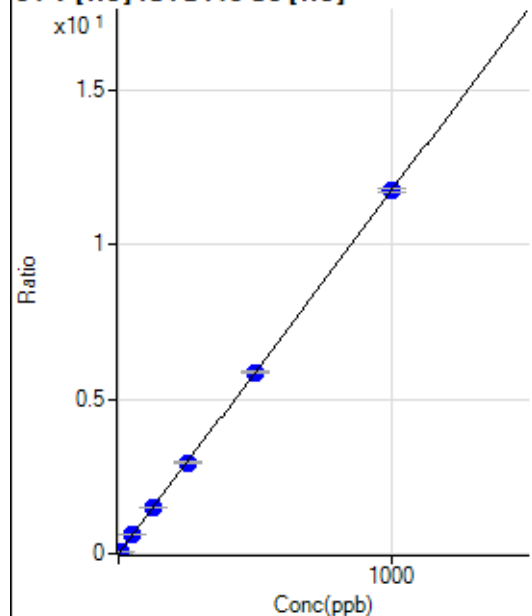
$$DL = 0.157$$

$$BEC = 0.2257$$

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	35.55	0.0005	P	20.3
2	☐	0.500					
3	☐	5.000	4.565	3908.39	0.0541	P	3.0
4	☐	50.000	52.302	42720.73	0.6148	P	4.9
5	☐	125.000	127.781	107542.22	1.5013	P	2.5
6	☐	250.000	251.341	216052.20	2.9525	P	1.1
7	☐	500.000	499.380	430018.87	5.8658	P	0.7
8	☐	1000.000	999.514	864361.70	11.7399	P	1.0
9	☐			510.02	0.0065	P	4.7

$$y = 0.0117 * x + 4.9261E-004$$

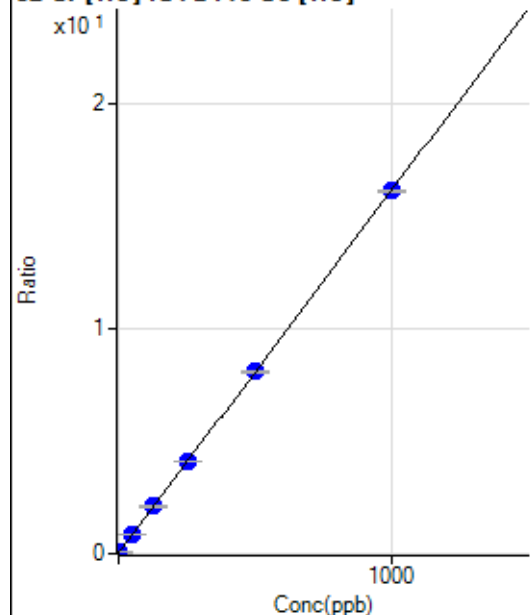
$$R = 1.0000$$

$$DL = 0.0255$$

$$BEC = 0.04194$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1228.97	0.0170	P	5.0
2	☐	0.200					
3	☐	2.000	1.954	3507.16	0.0486	P	4.3
4	☐	50.000	52.999	60630.93	0.8728	P	5.8
5	☐	125.000	129.133	150577.02	2.1021	P	2.6
6	☐	250.000	253.708	301024.80	4.1136	P	0.7
7	☐	500.000	499.707	592754.53	8.0857	P	1.2
8	☐	1000.000	998.553	1188371.25	16.1406	P	0.9
9	☐			52688.80	0.6734	P	3.8

$$y = 0.0161 * x + 0.0170$$

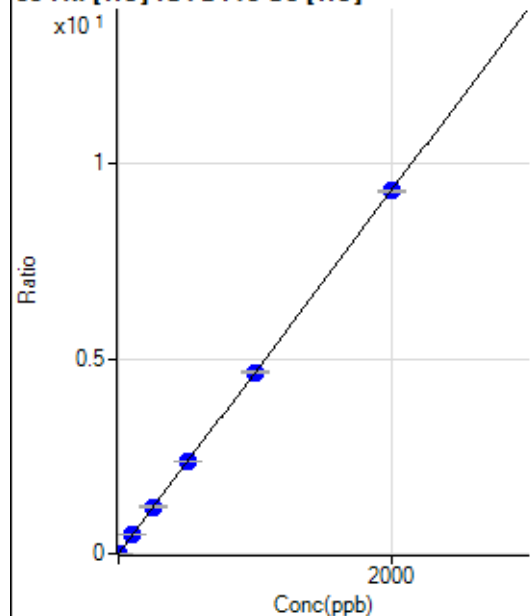
$$R = 1.0000$$

$$DL = 0.1589$$

$$BEC = 1.054$$

Weight: <None>

Min Conc: 0

55 Mn [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	94.45	0.0013	P	27.0
2	☐	0.100					
3	☐	1.000	0.912	401.13	0.0056	P	5.0
4	☐	100.000	107.135	34742.22	0.5000	P	5.0
5	☐	250.000	256.036	85458.24	1.1930	P	2.7
6	☐	500.000	506.680	172671.54	2.3597	P	1.0
7	☐	1000.000	998.759	340889.39	4.6501	P	1.3
8	☐	2000.000	1997.839	684763.04	9.3004	P	0.5
9	☐			3183.75	0.0407	P	4.6

$$y = 0.0047 * x + 0.0013$$

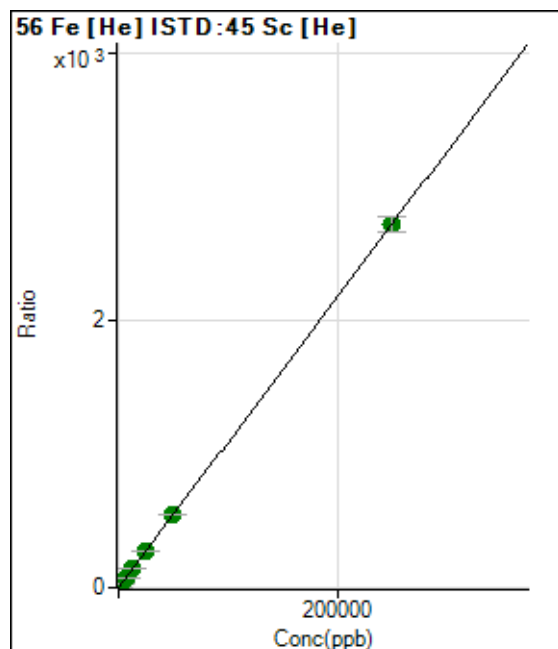
$$R = 1.0000$$

$$DL = 0.2282$$

$$BEC = 0.2815$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3670.96	0.0508	P	3.4
2	☐	5.000					
3	☐	50.000	47.323	40721.04	0.5639	P	1.1
4	☐	2500.000	2706.847	2042987.05	29.3972	A	4.6
5	☐	6250.000	6505.937	5056923.20	70.5853	A	1.7
6	☐	12500.000	12741.023	10112087.61	138.1832	A	0.5
7	☐	25000.000	25147.398	19990446.28	272.6876	A	1.1
8	☐	50000.000	50111.910	40004050.43	543.3415	A	0.9
9	☐	250000.00	249942.36	212006702.8	2,709.812	A	4.2

$$y = 0.0108 * x + 0.0508$$

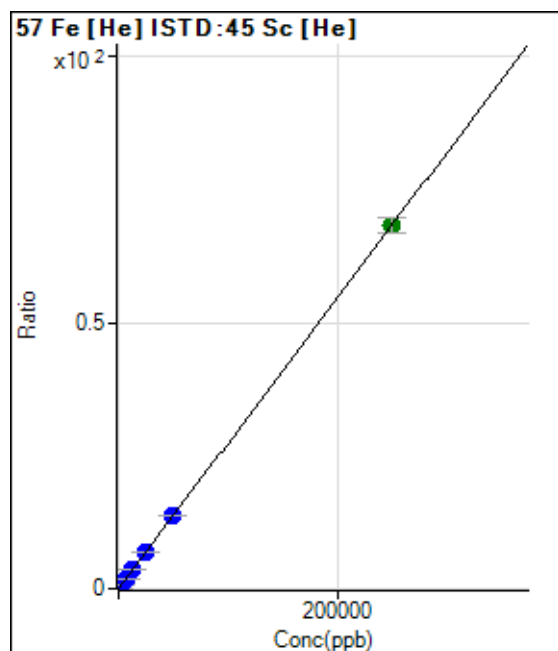
$$R = 1.0000$$

$$DL = 0.4715$$

$$BEC = 4.688$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	96.30	0.0013	P	34.1
2	☐	5.000					
3	☐	50.000	52.376	1127.86	0.0156	P	5.9
4	☐	2500.000	2649.578	50293.02	0.7239	P	5.8
5	☐	6250.000	6421.874	125556.42	1.7528	P	2.4
6	☐	12500.000	12740.822	254375.14	3.4761	P	0.6
7	☐	25000.000	25128.693	502499.93	6.8546	P	1.2
8	☐	50000.000	50183.296	1007777.66	13.6877	P	0.8
9	☐	250000.00	249932.63	5332936.00	68.1648	A	4.2

$$y = 2.7273E-004 * x + 0.0013$$

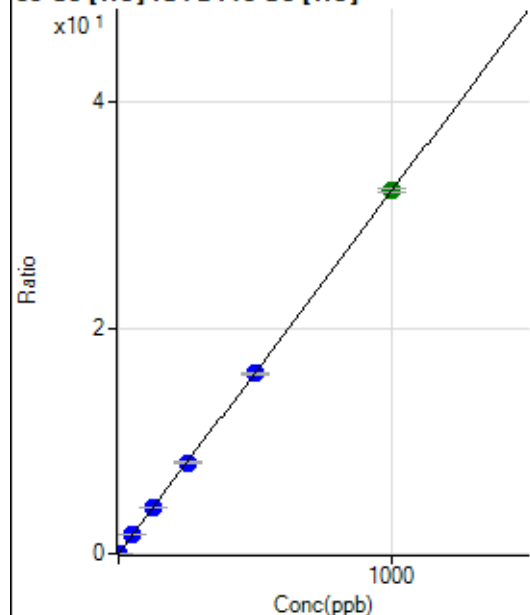
$$R = 1.0000$$

$$DL = 4.997$$

$$BEC = 4.89$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	193.34	0.0027	P	19.0
2	☐	0.100					
3	☐	1.000	0.870	2210.21	0.0306	P	3.0
4	☐	50.000	52.434	117172.88	1.6863	P	5.1
5	☐	125.000	127.179	292706.06	4.0862	P	2.5
6	☐	250.000	251.073	590101.97	8.0642	P	1.1
7	☐	500.000	496.320	1168453.93	15.9387	P	1.0
8	☐	1000.000	1001.178	2366954.29	32.1489	A	1.2
9	☐			3877.28	0.0496	P	5.0

$$y = 0.0321 * x + 0.0027$$

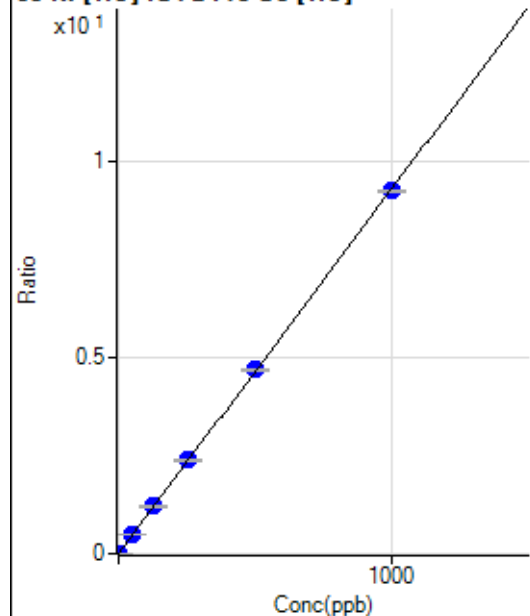
$$R = 1.0000$$

$$DL = 0.04766$$

$$BEC = 0.08343$$

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	115.56	0.0016	P	19.3
2	☐	0.100					
3	☐	1.000	0.929	738.92	0.0102	P	3.8
4	☐	50.000	53.817	34847.05	0.5014	P	4.2
5	☐	125.000	130.414	86867.72	1.2127	P	2.5
6	☐	250.000	256.149	174176.07	2.3803	P	1.2
7	☐	500.000	504.206	343370.19	4.6839	P	1.0
8	☐	1000.000	995.492	680768.46	9.2462	P	0.7
9	☐			18458.02	0.2359	P	4.6

$$y = 0.0093 * x + 0.0016$$

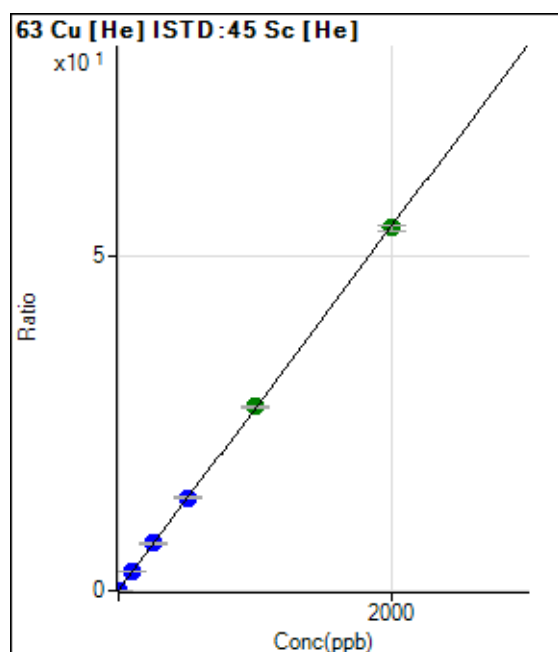
$$R = 1.0000$$

$$DL = 0.09972$$

$$BEC = 0.1723$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2726.99	0.0378	P	1.2
2	☐	0.200					
3	☐	2.000	1.855	6361.55	0.0881	P	2.3
4	☐	100.000	105.990	202518.46	2.9142	P	4.6
5	☐	250.000	257.722	503704.31	7.0319	P	2.6
6	☐	500.000	508.689	1012912.21	13.8428	P	1.5
7	☐	1000.000	1010.579	2013285.61	27.4634	A	1.3
8	☐	2000.000	1991.273	3981567.30	54.0779	A	1.3
9	☐			7980.19	0.1020	P	4.5

$$y = 0.0271 * x + 0.0378$$

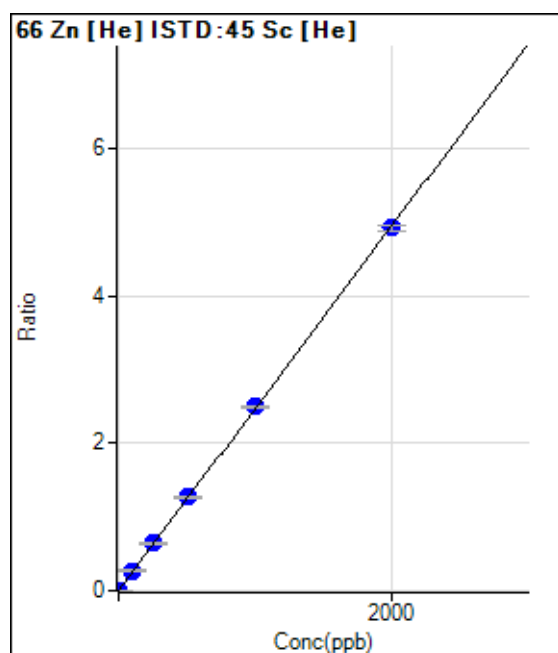
$$R = 1.0000$$

$$DL = 0.05187$$

$$BEC = 1.391$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	32.22	0.0004	P	60.2
2	☐	0.200					
3	☐	2.000	2.233	430.02	0.0060	P	9.4
4	☐	100.000	107.833	18529.23	0.2667	P	5.9
5	☐	250.000	260.053	46027.39	0.6426	P	3.2
6	☐	500.000	513.105	92748.32	1.2675	P	1.3
7	☐	1000.000	1008.133	182541.15	2.4900	P	0.4
8	☐	2000.000	1991.009	362013.96	4.9171	P	1.5
9	☐			1315.64	0.0168	P	7.4

$$y = 0.0025 * x + 4.4519E-004$$

$$R = 1.0000$$

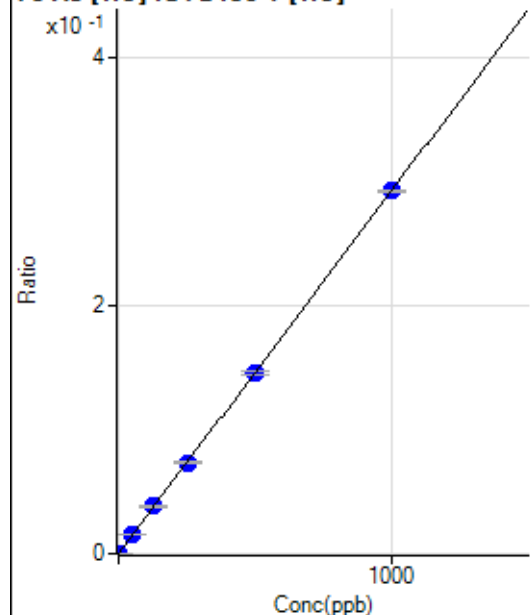
$$DL = 0.3257$$

$$BEC = 0.1803$$

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	12.96	0.0000	P	14.1
2	☐	0.100					
3	☐	1.000	0.946	130.25	0.0003	P	6.7
4	☐	50.000	51.538	6221.21	0.0151	P	3.5
5	☐	125.000	129.941	16039.02	0.0380	P	2.6
6	☐	250.000	250.934	32142.30	0.0733	P	1.4
7	☐	500.000	498.356	63951.92	0.1455	P	1.3
8	☐	1000.000	999.894	129703.55	0.2920	P	0.5
9	☐			107.41	0.0002	P	5.0

$$y = 2.9198\text{E-}004 * x + 3.0274\text{E-}005$$

$$R = 1.0000$$

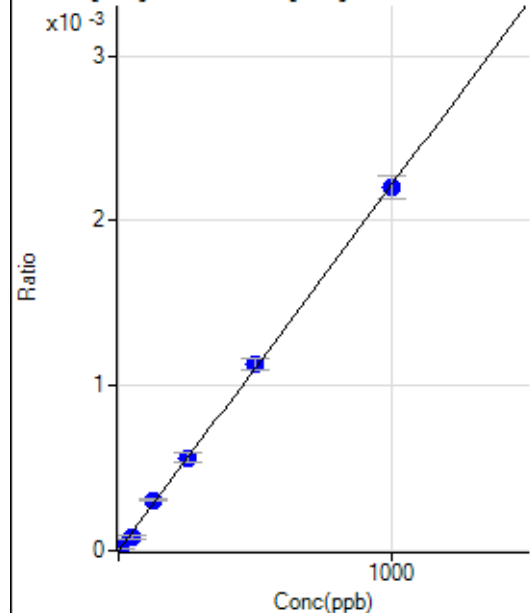
$$DL = 0.04381$$

$$BEC = 0.1037$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	0.500					
3	☐	5.000	4.727	4.45	0.0000	P	86.6
4	☐	50.000	38.524	35.55	0.0001	P	26.0
5	☐	125.000	138.877	130.00	0.0003	P	3.1
6	☐	250.000	254.022	246.67	0.0006	P	11.1
7	☐	500.000	510.358	496.69	0.0011	P	5.3
8	☐	1000.000	992.656	976.72	0.0022	P	6.3
9	☐			1.11	0.0000	P	173.

$$y = 2.2149\text{E-}006 * x + 0.0000\text{E+}000$$

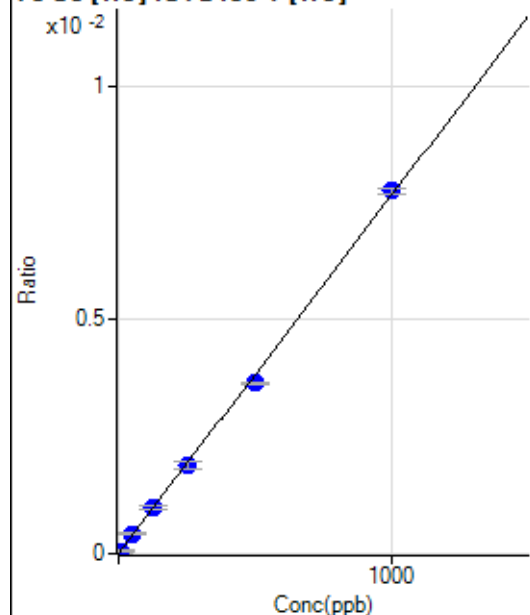
$$R = 0.9997$$

$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1.85	0.0000	P	0.3
2	☐	0.500					
3	☐	5.000	6.267	22.22	0.0001	P	38.2
4	☐	50.000	55.376	177.16	0.0004	P	13.3
5	☐	125.000	127.499	413.59	0.0010	P	8.7
6	☐	250.000	245.659	826.58	0.0019	P	8.6
7	☐	500.000	476.479	1604.43	0.0037	P	0.9
8	☐	1000.000	1012.258	3443.67	0.0078	P	1.9
9	☐			4.32	0.0000	P	68.5

$$y = 7.6543\text{E-}006 * x + 4.3213\text{E-}006$$

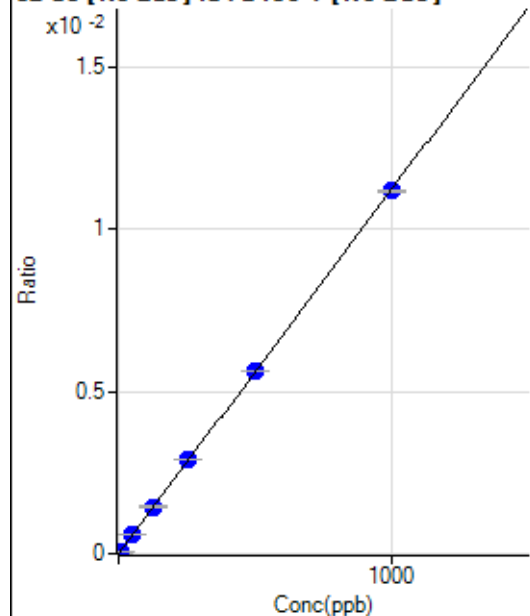
$$R = 0.9995$$

$$DL = 0.005297$$

$$BEC = 0.5646$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	-55.98	0.0000	P	-8.6
2	☐	0.500					
3	☐	5.000	4.947	450.60	0.0000	P	3.9
4	☐	50.000	51.666	5215.33	0.0006	P	1.1
5	☐	125.000	128.867	13465.35	0.0014	P	1.7
6	☐	250.000	257.335	27764.31	0.0029	P	0.5
7	☐	500.000	502.072	55009.36	0.0056	P	0.5
8	☐	1000.000	996.564	110935.30	0.0112	P	0.8
9	☐			119.59	0.0000	P	32.9

$$y = 1.1228\text{E-}005 * x - 6.1952\text{E-}006$$

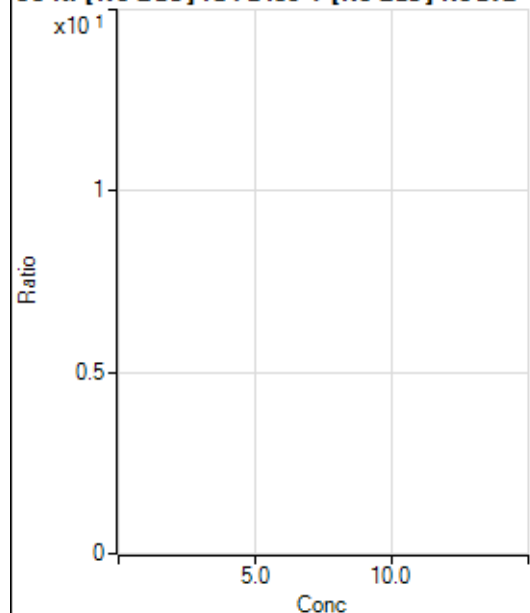
$$R = 1.0000$$

$$DL = 0.1422$$

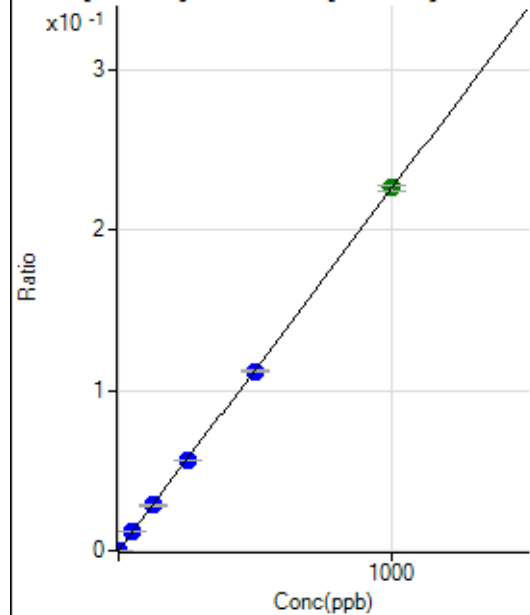
$$BEC = -0.5518$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] ISTD:89 Y [No Gas] No av_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			444.46	0.0000	P	1.7
2	☐						
3	☐			470.02	0.0001	P	9.6
4	☐			420.01	0.0000	P	10.4
5	☐			384.46	0.0000	P	6.5
6	☐			445.57	0.0000	P	15.0
7	☐			434.46	0.0000	P	1.4
8	☐			441.13	0.0000	P	14.5
9	☐			424.46	0.0000	P	7.6

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	669.49	0.0001	P	7.8
2	☐	0.100					
3	☐	1.000	0.915	2561.47	0.0003	P	2.6
4	☐	50.000	50.417	104005.72	0.0114	P	0.1
5	☐	125.000	125.044	264282.46	0.0283	P	1.2
6	☐	250.000	248.658	540754.63	0.0562	P	0.8
7	☐	500.000	495.838	1093128.11	0.1119	P	1.0
8	☐	1000.000	1002.390	2243192.31	0.2261	A	1.4
9	☐			76673.58	0.0078	P	1.5

$$y = 2.2554E-004 * x + 7.4118E-005$$

$$R = 1.0000$$

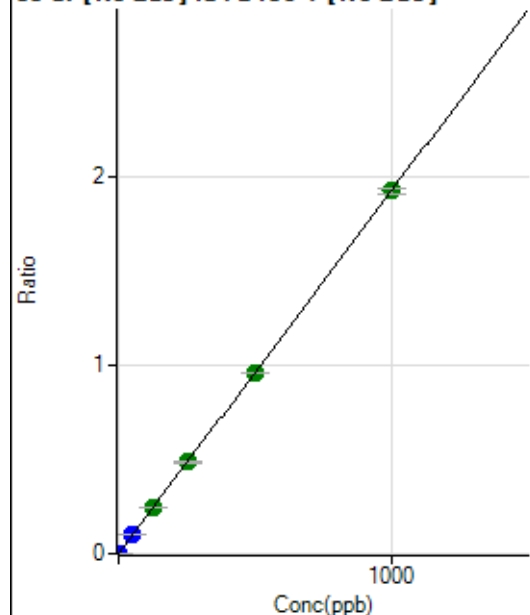
$$DL = 0.07645$$

$$BEC = 0.3286$$

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	797.28	0.0001	P	13.9
2	☐	0.100					
3	☐	1.000	0.918	16902.83	0.0019	P	1.3
4	☐	50.000	50.898	889529.32	0.0979	P	0.8
5	☐	125.000	128.021	2300082.86	0.2461	A	0.9
6	☐	250.000	252.481	4672502.71	0.4852	A	0.8
7	☐	500.000	498.273	9353308.28	0.9575	A	1.0
8	☐	1000.000	999.821	19056713.79	1.9212	A	1.3
9	☐			647940.64	0.0656	P	0.5

$$y = 0.0019 * x + 8.8280E-005$$

$$R = 1.0000$$

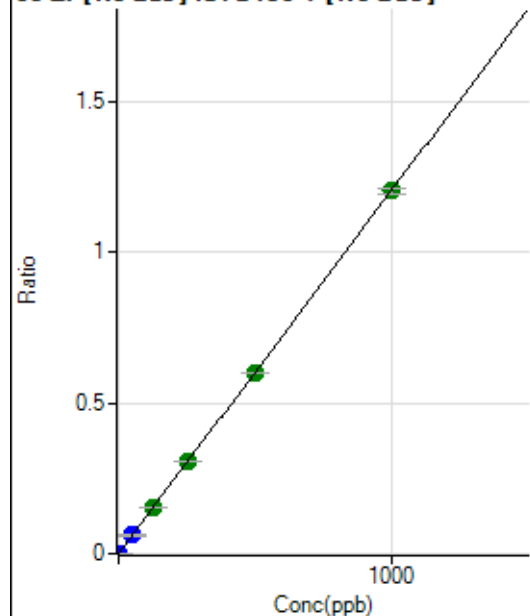
$$DL = 0.0192$$

$$BEC = 0.04594$$

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	544.48	0.0001	P	13.4
2	☐	0.100					
3	☐	1.000	0.878	10195.90	0.0011	P	1.7
4	☐	50.000	50.439	551945.59	0.0607	P	1.1
5	☐	125.000	127.285	1431712.35	0.1532	A	1.2
6	☐	250.000	253.456	2936715.67	0.3050	A	0.8
7	☐	500.000	499.623	5872080.04	0.6011	A	0.1
8	☐	1000.000	999.017	11921558.68	1.2019	A	1.3
9	☐			4687.12	0.0005	P	6.8

$$y = 0.0012 * x + 6.0283E-005$$

$$R = 1.0000$$

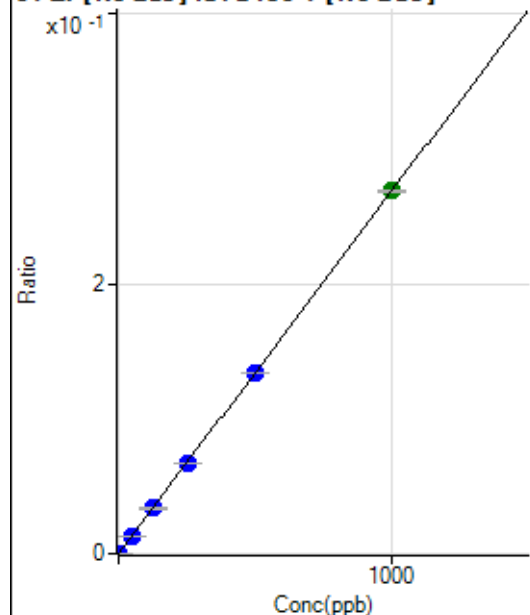
$$DL = 0.02019$$

$$BEC = 0.05011$$

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	105.56	0.0000	P	52.6
2	☐	0.100					
3	☐	1.000	0.907	2330.86	0.0003	P	2.8
4	☐	50.000	49.695	121373.86	0.0134	P	1.0
5	☐	125.000	124.750	313202.12	0.0335	P	1.6
6	☐	250.000	248.610	642978.24	0.0668	P	1.2
7	☐	500.000	498.078	1306679.56	0.1338	P	0.3
8	☐	1000.000	1001.355	2667530.72	0.2689	A	0.6
9	☐			966.75	0.0001	P	6.7

$$y = 2.6853E-004 * x + 1.1689E-005$$

$$R = 1.0000$$

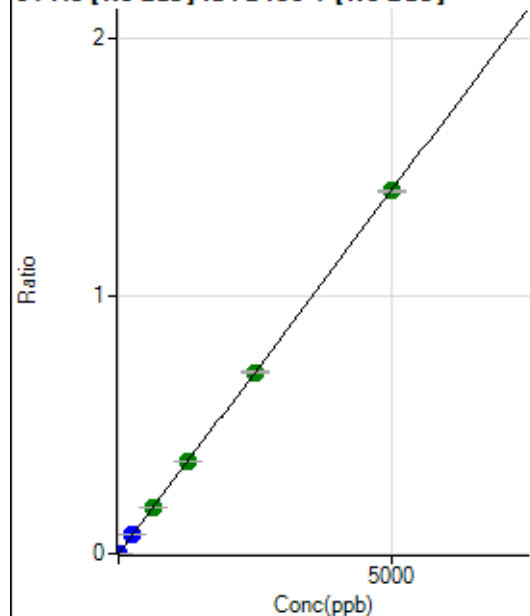
$$DL = 0.06869$$

$$BEC = 0.04353$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	347.25	0.0000	P	14.5
2	☐	0.500					
3	☐	5.000	4.620	12242.14	0.0013	P	1.7
4	☐	250.000	254.408	652109.62	0.0718	P	1.3
5	☐	625.000	636.668	1677960.87	0.1795	A	1.2
6	☐	1250.000	1275.042	3461890.83	0.3595	A	1.0
7	☐	2500.000	2499.032	6882735.83	0.7046	A	1.2
8	☐	5000.000	4992.545	13962376.35	1.4076	A	0.9
9	☐			20076.82	0.0020	P	5.1

$$y = 2.8192E-004 * x + 3.8439E-005$$

$$R = 1.0000$$

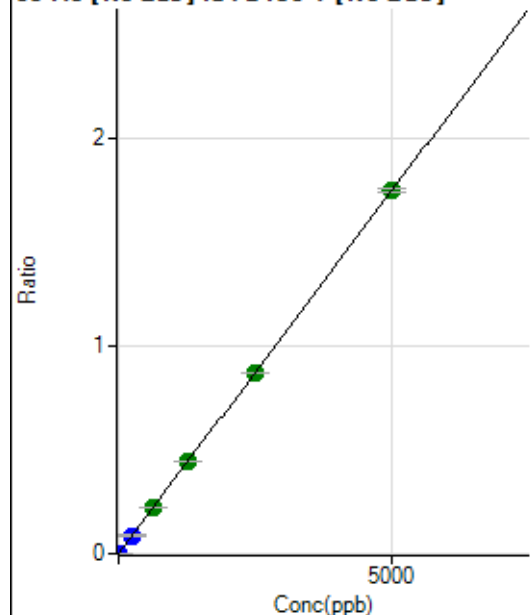
$$DL = 0.05915$$

$$BEC = 0.1363$$

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	216.68	0.0000	P	14.0
2	☐	0.500					
3	☐	5.000	4.528	14644.63	0.0016	P	1.0
4	☐	250.000	250.943	796013.06	0.0876	P	1.2
5	☐	625.000	636.303	2075672.61	0.2221	A	1.2
6	☐	1250.000	1268.593	4263418.11	0.4427	A	0.2
7	☐	2500.000	2484.591	8470495.94	0.8671	A	0.2
8	☐	5000.000	5001.597	17314282.68	1.7455	A	1.2
9	☐			32155.99	0.0033	P	4.7

$$y = 3.4898E-004 * x + 2.3988E-005$$

$$R = 1.0000$$

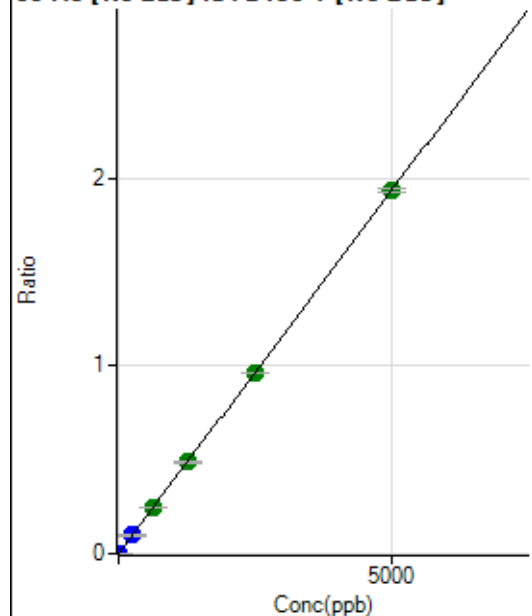
$$DL = 0.02881$$

$$BEC = 0.06874$$

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	305.58	0.0000	P	23.0
2	☐	0.500					
3	☐	5.000	4.516	16235.36	0.0018	P	0.5
4	☐	250.000	252.068	885188.37	0.0974	P	0.6
5	☐	625.000	640.400	2312523.81	0.2474	A	1.1
6	☐	1250.000	1260.345	4688705.66	0.4869	A	1.3
7	☐	2500.000	2495.068	9415972.87	0.9639	A	0.3
8	☐	5000.000	4997.852	19151559.98	1.9307	A	1.1
9	☐			36174.34	0.0037	P	3.9

$$y = 3.8630E-004 * x + 3.3833E-005$$

$$R = 1.0000$$

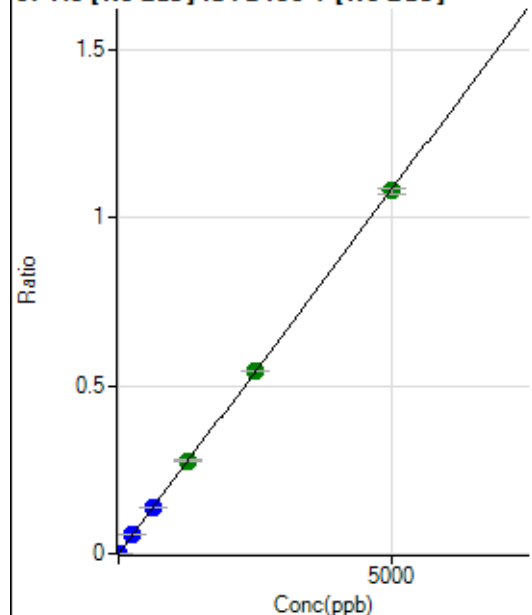
$$DL = 0.06043$$

$$BEC = 0.08758$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	227.79	0.0000	P	5.4
2	☐	0.500					
3	☐	5.000	4.566	9253.51	0.0010	P	1.8
4	☐	250.000	251.174	494316.59	0.0544	P	0.3
5	☐	625.000	623.080	1260878.14	0.1349	P	0.5
6	☐	1250.000	1279.521	2667359.78	0.2770	A	0.5
7	☐	2500.000	2517.891	5324522.90	0.5451	A	0.3
8	☐	5000.000	4983.856	10701274.46	1.0788	A	1.3
9	☐			19734.74	0.0020	P	2.9

$$y = 2.1646\text{E-}004 * x + 2.5213\text{E-}005$$

$$R = 1.0000$$

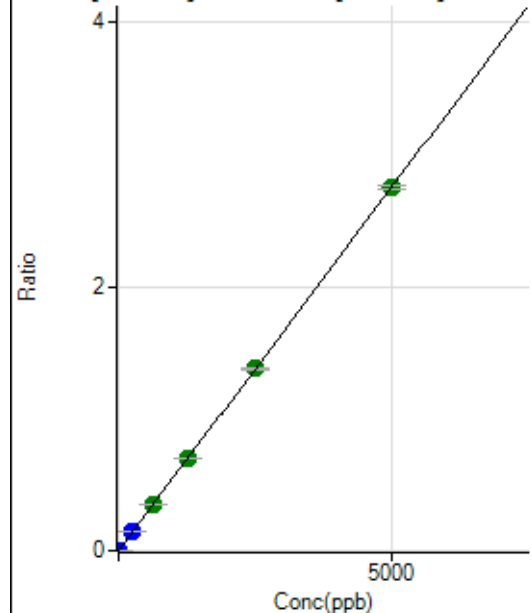
$$DL = 0.0188$$

$$BEC = 0.1165$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	369.47	0.0000	P	10.9
2	☐	0.500					
3	☐	5.000	4.608	23501.74	0.0026	P	1.3
4	☐	250.000	254.886	1273892.00	0.1402	P	0.5
5	☐	625.000	633.938	3258051.11	0.3486	A	1.3
6	☐	1250.000	1260.496	6674160.56	0.6931	A	0.5
7	☐	2500.000	2505.065	13455061.24	1.3774	A	0.7
8	☐	5000.000	4993.482	27234907.55	2.7455	A	1.1
9	☐			51167.25	0.0052	P	2.3

$$y = 5.4982\text{E-}004 * x + 4.0906\text{E-}005$$

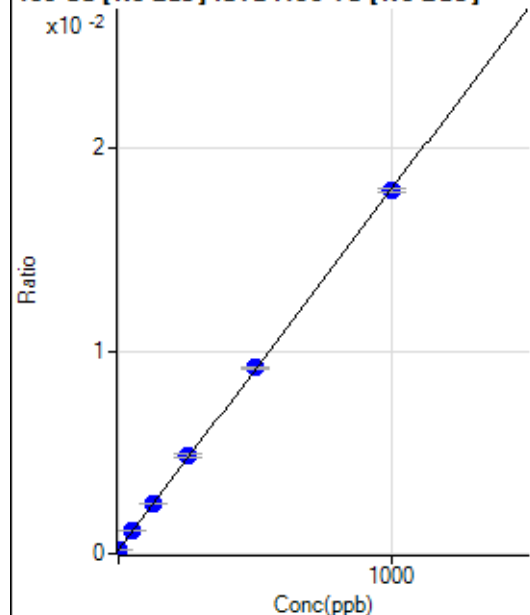
$$R = 1.0000$$

$$DL = 0.02436$$

$$BEC = 0.0744$$

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	1630.73	0.0002	P	4.7
2	☐	0.100					
3	☐	1.000	1.978	1958.58	0.0002	P	4.4
4	☐	50.000	54.196	10009.71	0.0012	P	1.7
5	☐	125.000	127.190	21874.09	0.0025	P	0.6
6	☐	250.000	260.306	44031.49	0.0048	P	4.3
7	☐	500.000	504.657	86762.42	0.0092	P	1.3
8	☐	1000.000	994.610	172635.08	0.0179	P	1.1
9	☐			2186.39	0.0002	P	3.0

$$y = 1.7803\text{E-}005 * x + 1.9243\text{E-}004$$

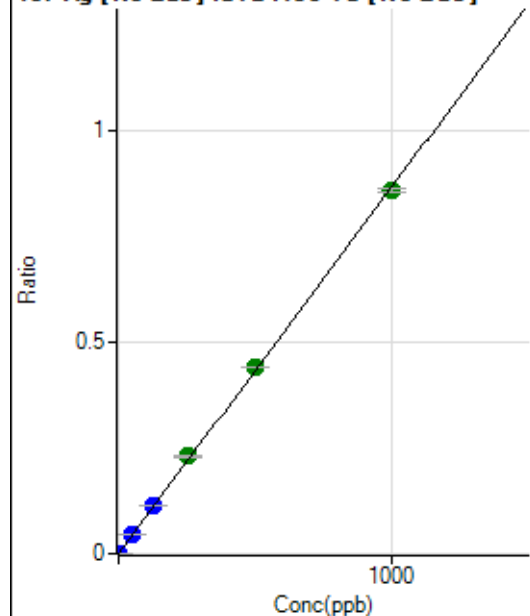
$$R = 0.9999$$

$$DL = 1.535$$

$$BEC = 10.81$$

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	83.33	0.0000	P	34.2
2	☐	0.100					
3	☐	1.000	1.002	7535.77	0.0009	P	1.9
4	☐	50.000	53.311	398758.24	0.0461	P	0.6
5	☐	125.000	131.230	1010216.59	0.1135	P	0.7
6	☐	250.000	265.780	2096673.38	0.2298	A	2.1
7	☐	500.000	509.355	4163397.45	0.4404	A	0.8
8	☐	1000.000	990.433	8258828.14	0.8563	A	1.1
9	☐			983.42	0.0001	P	8.4

$$y = 8.6458\text{E-}004 * x + 9.8234\text{E-}006$$

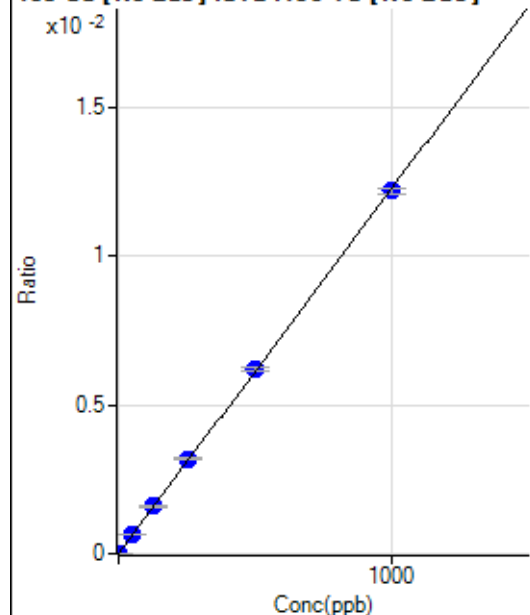
$$R = 0.9998$$

$$DL = 0.01167$$

$$BEC = 0.01136$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	11.11	0.0000	P	57.1
2	☐	0.100					
3	☐	1.000	1.144	131.95	0.0000	P	12.1
4	☐	50.000	53.220	5655.47	0.0007	P	1.6
5	☐	125.000	129.110	14106.26	0.0016	P	2.9
6	☐	250.000	259.271	29014.82	0.0032	P	1.4
7	☐	500.000	504.832	58522.47	0.0062	P	1.7
8	☐	1000.000	994.591	117614.40	0.0122	P	1.6
9	☐			29.17	0.0000	P	36.9

$$y = 1.2261\text{E-}005 * x + 1.3096\text{E-}006$$

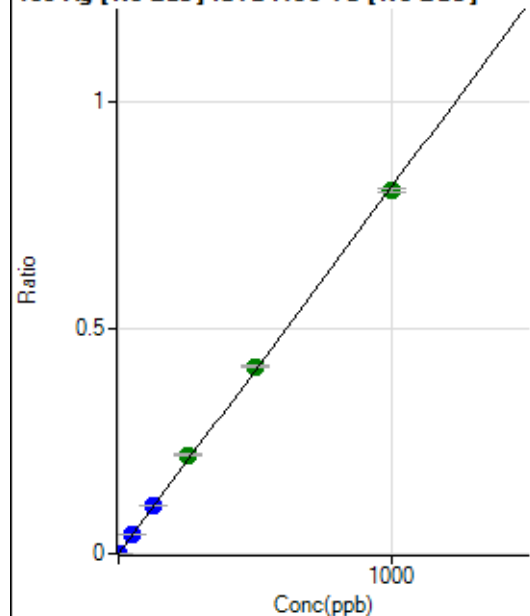
$$R = 0.9999$$

$$DL = 0.1831$$

$$BEC = 0.1068$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	52.78	0.0000	P	93.0
2	☐	0.100					
3	☐	1.000	1.008	7099.39	0.0008	P	5.9
4	☐	50.000	53.482	375782.05	0.0434	P	1.3
5	☐	125.000	131.469	950770.42	0.1068	P	0.2
6	☐	250.000	268.641	1990855.38	0.2182	A	1.7
7	☐	500.000	509.752	3914079.17	0.4140	A	1.3
8	☐	1000.000	989.481	7751276.04	0.8037	A	1.1
9	☐			858.40	0.0001	P	6.2

$$y = 8.1224\text{E-}004 * x + 6.2528\text{E-}006$$

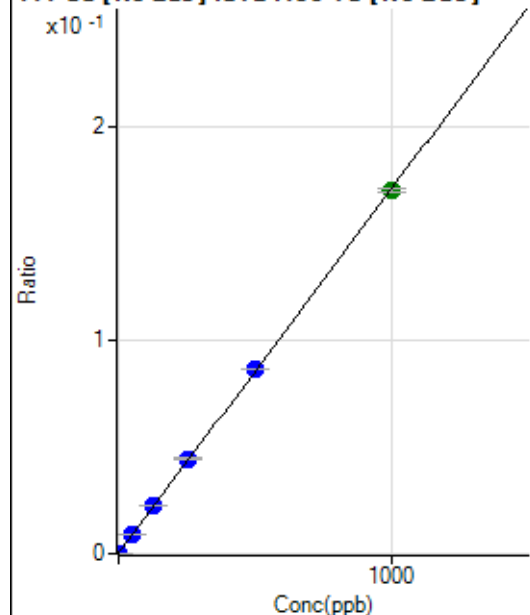
$$R = 0.9997$$

$$DL = 0.02148$$

$$BEC = 0.007698$$

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	1178.18	0.0001	P	3.4
2	☐	0.100					
3	☐	1.000	1.019	2689.86	0.0003	P	5.9
4	☐	50.000	52.754	78949.46	0.0091	P	1.0
5	☐	125.000	130.430	199100.50	0.0224	P	0.6
6	☐	250.000	259.945	405371.08	0.0444	P	1.8
7	☐	500.000	504.246	813566.86	0.0861	P	0.1
8	☐	1000.000	994.575	1635740.95	0.1696	A	1.2
9	☐			1829.51	0.0002	P	3.1

$$y = 1.7039\text{E-}004 * x + 1.3904\text{E-}004$$

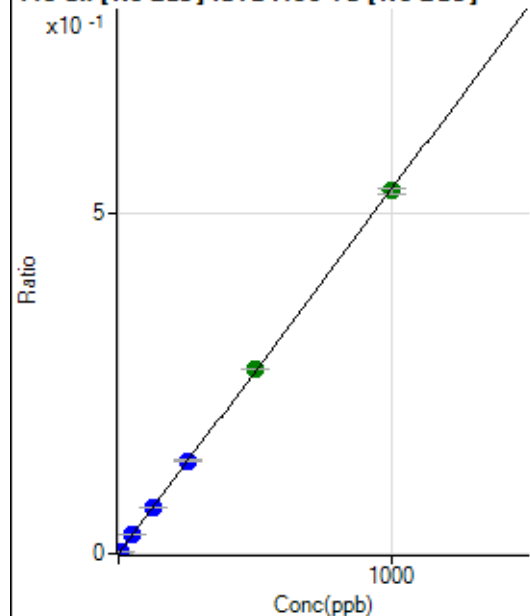
$$R = 0.9999$$

$$DL = 0.08264$$

$$BEC = 0.816$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	980.64	0.0001	P	10.8
2	☐	0.500					
3	☐	5.000	4.671	22537.80	0.0026	P	1.8
4	☐	50.000	51.203	238397.08	0.0276	P	0.5
5	☐	125.000	126.102	602824.67	0.0677	P	0.5
6	☐	250.000	254.790	1247174.11	0.1367	P	1.3
7	☐	500.000	506.382	2567126.36	0.2716	A	0.7
8	☐	1000.000	995.415	5147002.50	0.5337	A	1.4
9	☐			10273.94	0.0011	P	5.9

$$y = 5.3603\text{E-}004 * x + 1.1574\text{E-}004$$

$$R = 1.0000$$

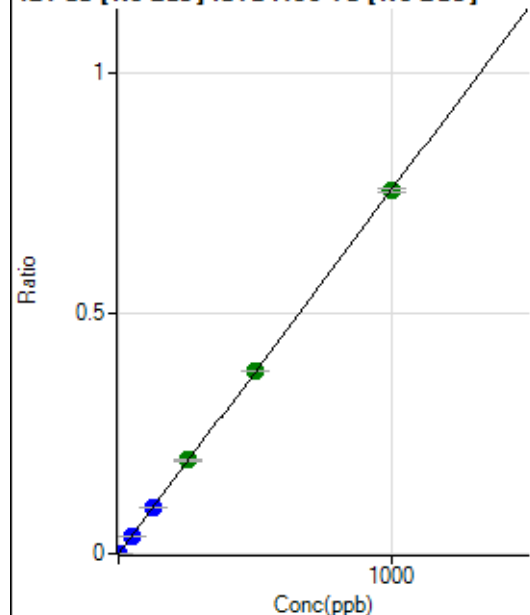
$$DL = 0.07024$$

$$BEC = 0.2159$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	341.69	0.0000	P	12.3
2	☐	0.200					
3	☐	2.000	1.856	12406.26	0.0014	P	1.7
4	☐	50.000	49.894	326308.89	0.0377	P	0.4
5	☐	125.000	126.295	849613.98	0.0954	P	0.5
6	☐	250.000	256.653	1768949.82	0.1939	A	1.8
7	☐	500.000	501.731	3582956.68	0.3790	A	0.3
8	☐	1000.000	997.315	7265282.37	0.7533	A	1.1
9	☐			27265.06	0.0029	P	8.9

$$y = 7.5529E-004 * x + 4.0310E-005$$

$$R = 1.0000$$

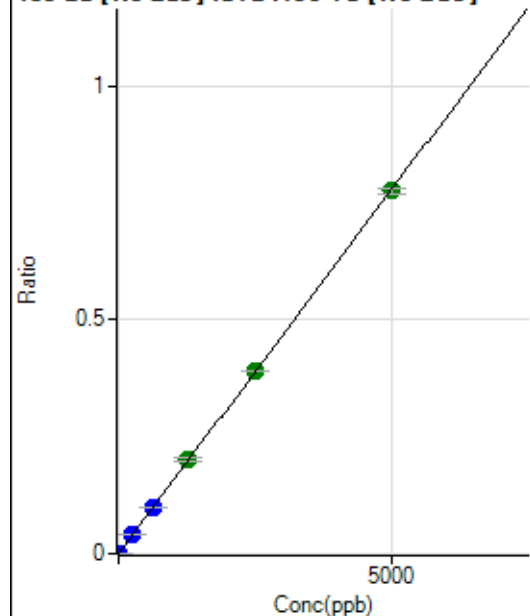
$$DL = 0.01976$$

$$BEC = 0.05337$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1766.87	0.0002	P	8.3
2	☐	1.000					
3	☐	10.000	7.993	12500.90	0.0015	P	0.8
4	☐	250.000	252.105	341303.59	0.0395	P	0.7
5	☐	625.000	627.211	871243.08	0.0979	P	1.1
6	☐	1250.000	1290.461	1834824.69	0.2011	A	2.8
7	☐	2500.000	2512.305	3699789.01	0.3914	A	0.1
8	☐	5000.000	4983.354	7484620.31	0.7761	A	1.5
9	☐			2394.79	0.0003	P	1.0

$$y = 1.5569E-004 * x + 2.0852E-004$$

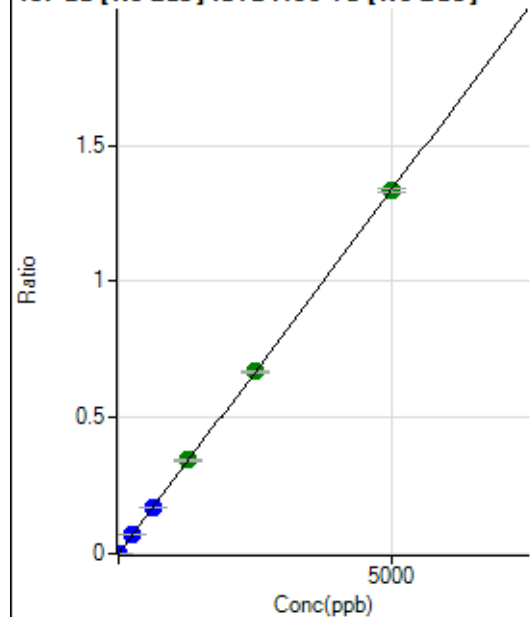
$$R = 1.0000$$

$$DL = 0.3323$$

$$BEC = 1.339$$

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	3167.21	0.0004	P	10.0
2	☐	1.000					
3	☐	10.000	7.897	21359.73	0.0025	P	1.1
4	☐	250.000	255.329	592964.61	0.0686	P	0.9
5	☐	625.000	630.835	1503084.22	0.1688	P	0.6
6	☐	1250.000	1288.085	3141774.55	0.3443	A	1.1
7	☐	2500.000	2500.577	6316117.85	0.6681	A	0.9
8	☐	5000.000	4989.199	12853215.22	1.3327	A	1.0
9	☐			4245.35	0.0005	P	5.8

$$y = 2.6704\text{E-}004 * x + 3.7370\text{E-}004$$

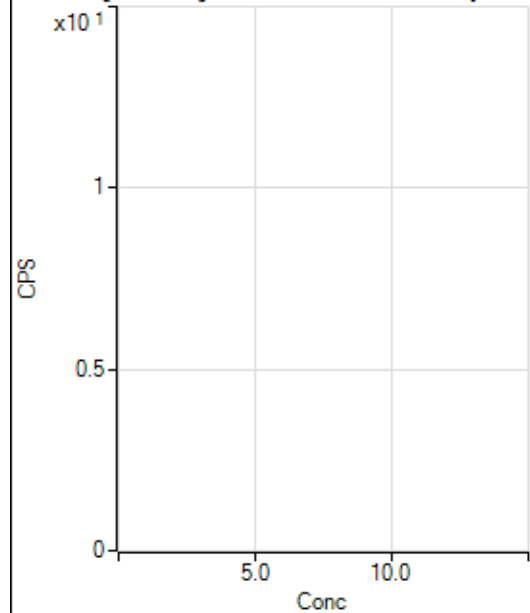
$$R = 1.0000$$

$$DL = 0.4197$$

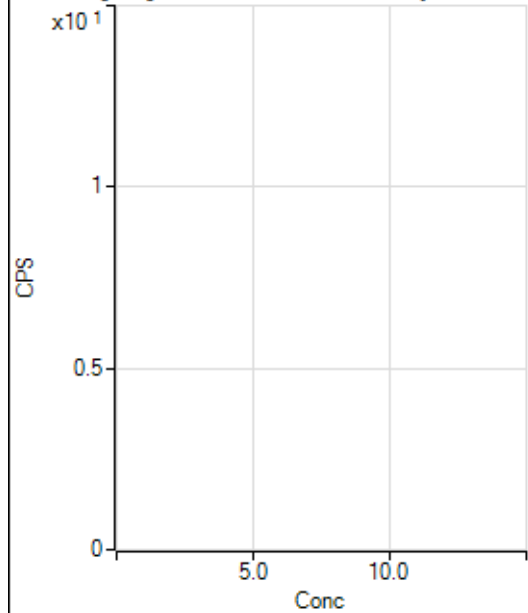
$$BEC = 1.399$$

Weight: <None>

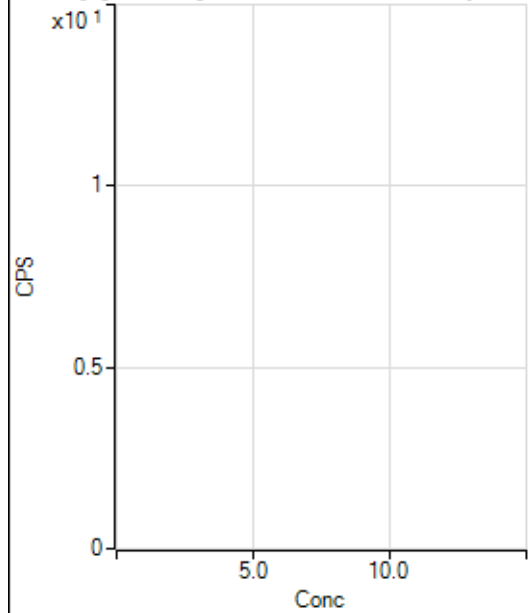
Min Conc: 0

150 Nd [No Gas] No available calibration points

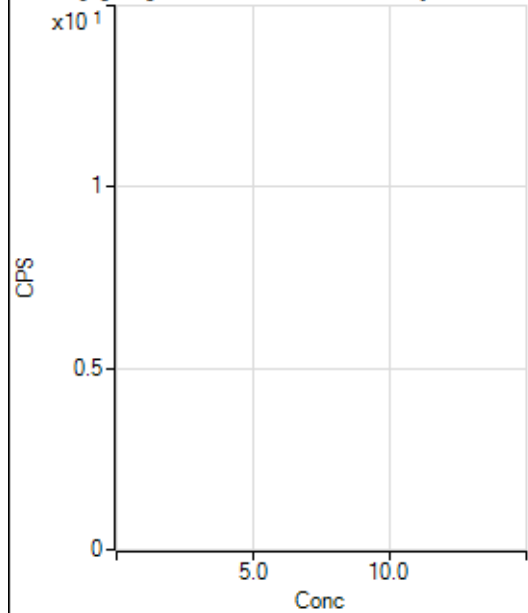
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			20.00		P	33.4
2	☐						
3	☐			6.67		P	0.0
4	☐			11.11		P	69.3
5	☐			62.22		P	37.6
6	☐			80.00		P	36.3
7	☐			126.67		P	5.3
8	☐			244.46		P	17.7
9	☐			51.11		P	41.9

150 Nd [He] No available calibration points

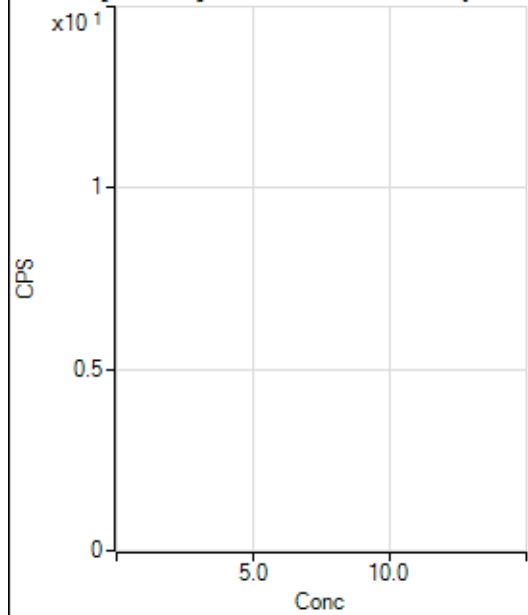
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	86.6
2	☐						
3	☐			0.00		P	
4	☐			1.11		P	173.
5	☐			0.00		P	
6	☐			4.44		P	43.4
7	☐			3.33		P	173.
8	☐			8.89		P	78.1
9	☐			14.44		P	35.3

156 Dy [No Gas] No available calibration points

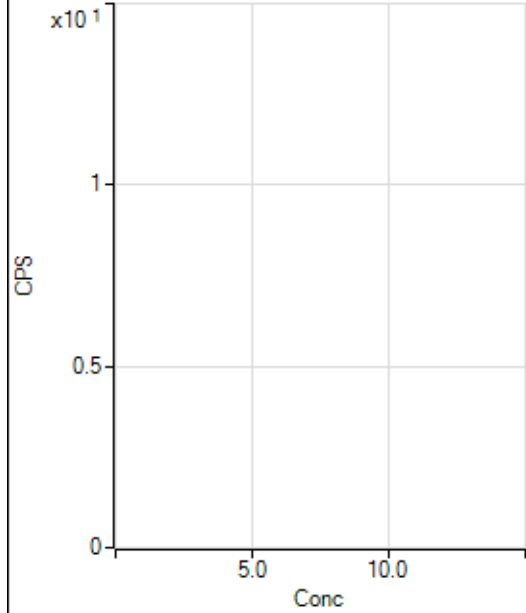
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			16.67		P	50.0
2	☐						
3	☐			13.89		P	124.
4	☐			41.67		P	52.9
5	☐			30.56		P	56.8
6	☐			50.00		P	28.9
7	☐			58.33		P	49.5
8	☐			83.34		P	26.5
9	☐			72.23		P	17.6

156 Dy [He] No available calibration points

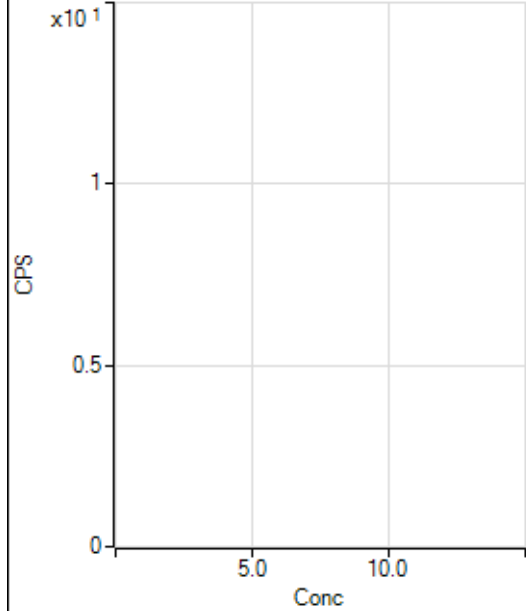
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7.78		P	65.5
2	☐						
3	☐			2.22		P	173.
4	☐			3.33		P	100.
5	☐			3.33		P	0.0
6	☐			6.67		P	50.0
7	☐			6.67		P	50.0
8	☐			10.00		P	57.7
9	☐			16.67		P	20.0

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			50.00		P	44.1
2	☐						
3	☐			58.34		P	57.1
4	☐			44.45		P	71.0
5	☐			52.78		P	50.8
6	☐			63.89		P	39.8
7	☐			80.56		P	6.0
8	☐			108.34		P	33.5
9	☐			100.01		P	57.7

160 Gd [He] No available calibration points

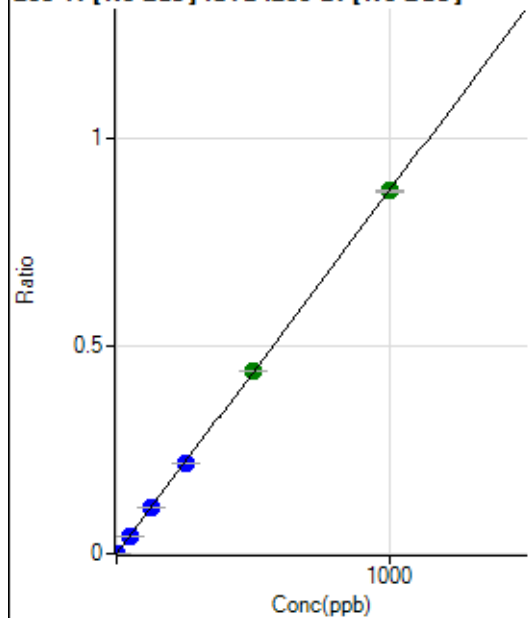
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			10.00		P	88.2
2	☐						
3	☐			10.00		P	120.
4	☐			8.89		P	78.1
5	☐			8.89		P	57.3
6	☐			15.56		P	53.9
7	☐			17.78		P	57.3
8	☐			15.55		P	44.6
9	☐			25.55		P	41.9

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			30.56		P	31.5
2	☐						
3	☐			41.67		P	34.6
4	☐			33.33		P	50.0
5	☐			30.55		P	68.6
6	☐			41.67		P	20.0
7	☐			38.89		P	68.9
8	☐			77.78		P	43.3
9	☐			44.45		P	47.2

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			12.22		P	68.7
2	☐						
3	☐			10.00		P	88.2
4	☐			6.67		P	50.0
5	☐			10.00		P	66.7
6	☐			3.33		P	0.0
7	☐			10.00		P	66.7
8	☐			5.56		P	91.6
9	☐			7.78		P	107.

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	219.46	0.0000	P	24.5
2	☐	0.100					
3	☐	1.000	0.924	4075.84	0.0009	P	3.3
4	☐	50.000	49.836	205830.95	0.0436	P	1.1
5	☐	125.000	125.223	527102.05	0.1095	P	0.8
6	☐	250.000	248.358	1089532.96	0.2170	P	1.3
7	☐	500.000	503.894	2266677.61	0.4403	A	0.4
8	☐	1000.000	998.444	4591162.34	0.8724	A	0.4
9	☐			2355.89	0.0005	P	9.4

$$y = 8.7375E-004 * x + 4.6865E-005$$

$$R = 1.0000$$

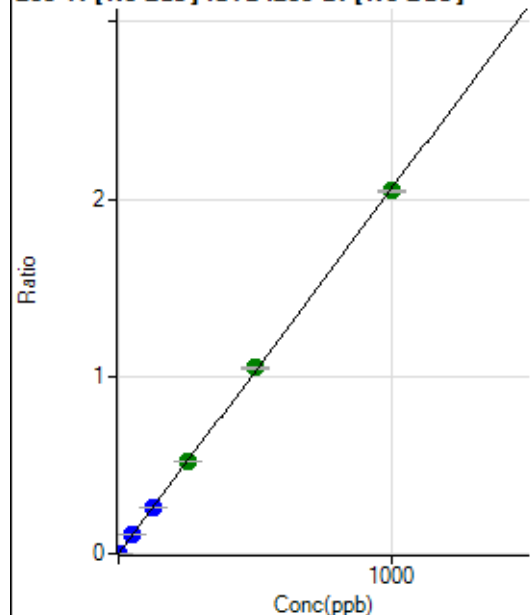
$$DL = 0.03942$$

$$BEC = 0.05364$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	400.03	0.0001	P	24.0
2	☐	0.100					
3	☐	1.000	0.906	9298.32	0.0019	P	1.9
4	☐	50.000	50.512	491067.22	0.1040	P	1.2
5	☐	125.000	126.073	1249362.34	0.2594	P	0.6
6	☐	250.000	254.043	2623909.98	0.5227	A	0.5
7	☐	500.000	508.833	5388955.37	1.0469	A	0.3
8	☐	1000.000	994.413	10766000.50	2.0458	A	0.6
9	☐			5523.70	0.0012	P	8.9

$$y = 0.0021 * x + 8.5441E-005$$

$$R = 0.9999$$

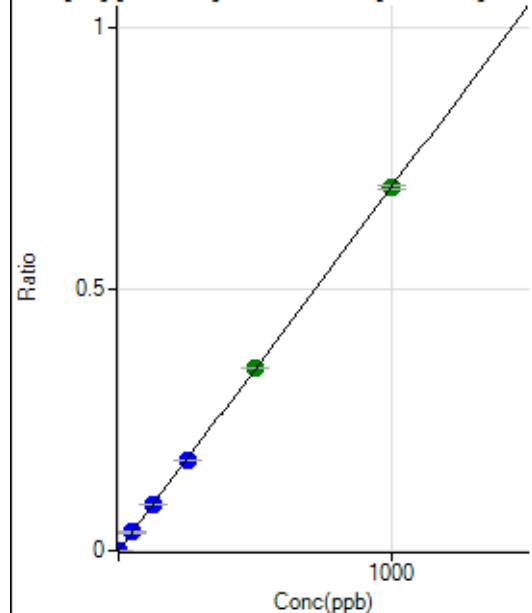
$$DL = 0.02987$$

$$BEC = 0.04153$$

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	270.38	0.0001	P	33.1
2	☐	0.100					
3	☐	1.000	0.896	3248.67	0.0007	P	3.9
4	☐	50.000	50.352	165590.27	0.0351	P	1.1
5	☐	125.000	125.608	420864.47	0.0874	P	0.5
6	☐	250.000	249.600	871499.50	0.1736	P	0.8
7	☐	500.000	503.794	1803510.23	0.3504	A	0.4
8	☐	1000.000	998.110	3652533.53	0.6941	A	1.2
9	☐			6714.95	0.0014	P	1.2

$$y = 6.9533E-004 * x + 5.7778E-005$$

$$R = 1.0000$$

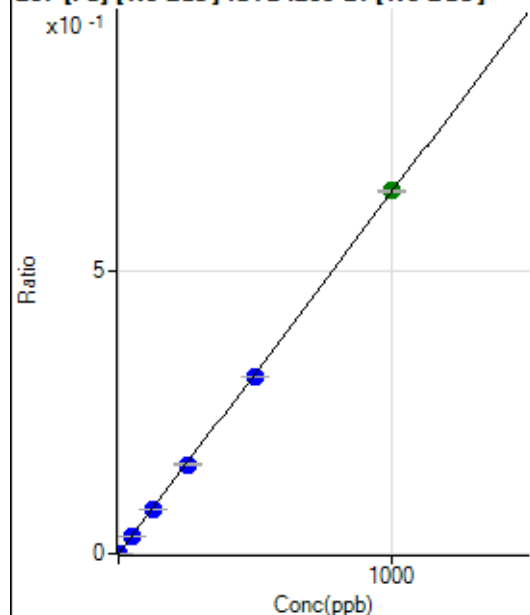
$$DL = 0.08248$$

$$BEC = 0.08309$$

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	290.75	0.0001	P	4.1
2	☐	0.100					
3	☐	1.000	0.882	2978.23	0.0006	P	5.1
4	☐	50.000	49.585	149587.25	0.0317	P	2.1
5	☐	125.000	124.103	381368.00	0.0792	P	0.6
6	☐	250.000	247.219	791618.06	0.1577	P	1.3
7	☐	500.000	491.903	1614924.53	0.3137	P	0.2
8	☐	1000.000	1004.877	3372274.70	0.6408	A	0.5
9	☐			5703.32	0.0012	P	3.7

$$y = 6.3764E-004 * x + 6.2151E-005$$

$$R = 0.9999$$

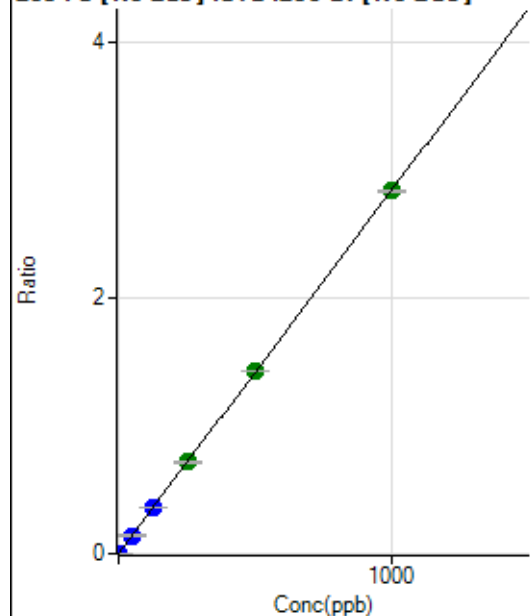
$$DL = 0.01195$$

$$BEC = 0.09747$$

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	1242.66	0.0003	P	10.5
2	☐	0.100					
3	☐	1.000	0.859	12915.93	0.0027	P	1.5
4	☐	50.000	50.120	674391.72	0.1428	P	1.3
5	☐	125.000	125.457	1719665.11	0.3571	P	0.7
6	☐	250.000	251.890	3597878.05	0.7167	A	0.7
7	☐	500.000	501.038	7337495.87	1.4254	A	0.1
8	☐	1000.000	998.946	14954011.88	2.8416	A	0.4
9	☐			26092.73	0.0055	P	2.9

$$y = 0.0028 * x + 2.6564E-004$$

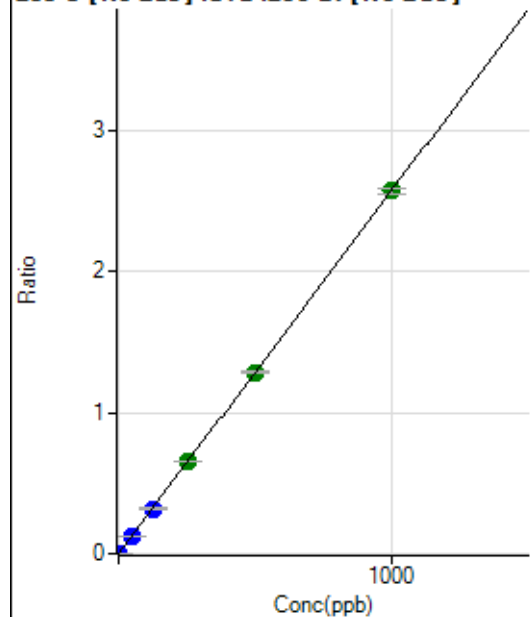
$$R = 1.0000$$

$$DL = 0.02949$$

$$BEC = 0.09339$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	513.92	0.0001	P	8.5
2	☐	0.100					
3	☐	1.000	0.860	11077.66	0.0023	P	1.0
4	☐	50.000	49.182	598069.47	0.1267	P	1.2
5	☐	125.000	124.350	1541347.50	0.3201	P	0.9
6	☐	250.000	252.939	3267740.13	0.6510	A	0.6
7	☐	500.000	499.734	6619782.70	1.2860	A	0.4
8	☐	1000.000	999.521	13535210.03	2.5720	A	1.3
9	☐			1652.96	0.0003	P	6.7

$$y = 0.0026 * x + 1.0983E-004$$

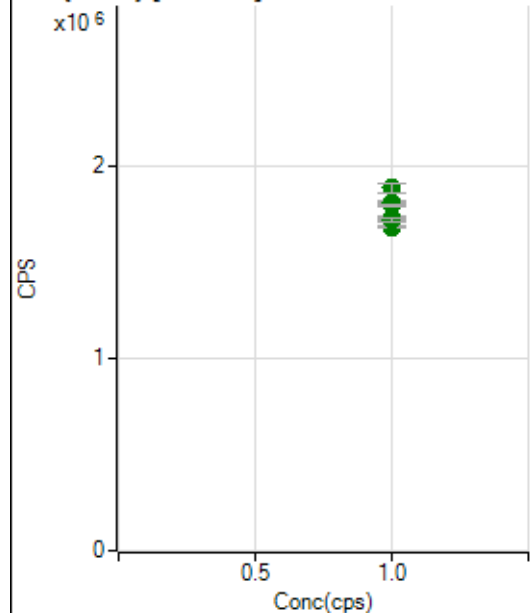
$$R = 1.0000$$

$$DL = 0.01085$$

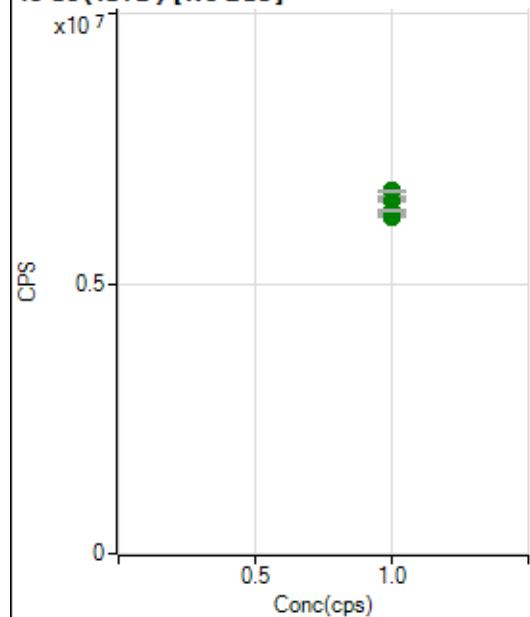
$$BEC = 0.04268$$

Weight: <None>

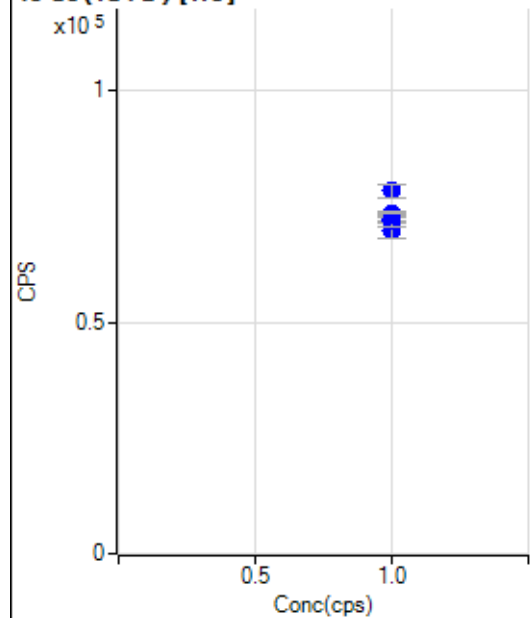
Min Conc: 0

6 Li (ISTD) [No Gas]

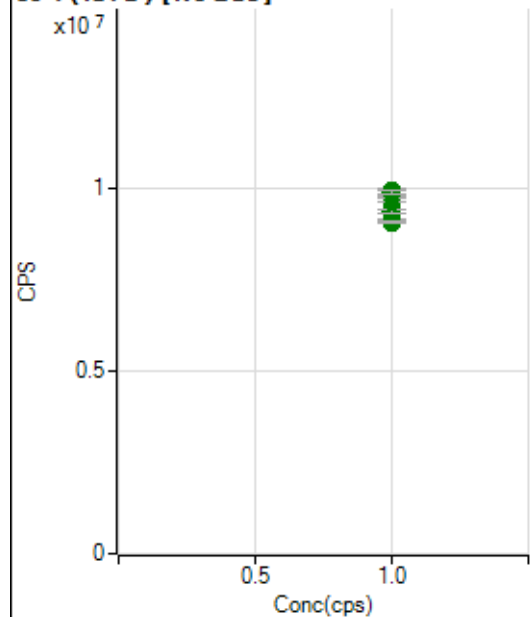
	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1681189.64		A	0.3
2	☐	1.000					
3	☐	1.000		1724434.71		A	1.1
4	☐	1.000		1678899.54		A	0.6
5	☐	1.000		1719176.33		A	1.4
6	☐	1.000		1807167.63		A	0.5
7	☐	1.000		1805986.07		A	0.6
8	☐	1.000		1792159.47		A	0.9
9	☐	1.000		1882971.27		A	2.4

45 Sc (ISTD) [No Gas]

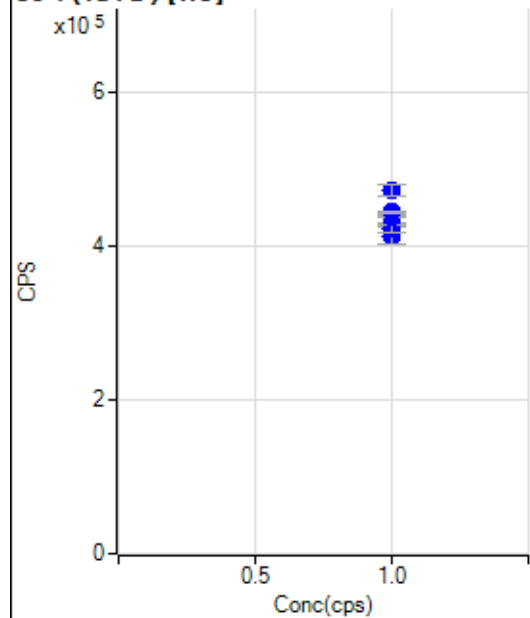
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6236187.38		A	0.2
2	☐	1.000					
3	☐	1.000		6290795.19		A	0.4
4	☐	1.000		6271267.80		A	0.1
5	☐	1.000		6357106.31		A	0.4
6	☐	1.000		6548422.54		A	0.8
7	☐	1.000		6550335.34		A	0.3
8	☐	1.000		6611339.56		A	0.1
9	☐	1.000		6720348.59		A	0.2

45 Sc (ISTD) [He]

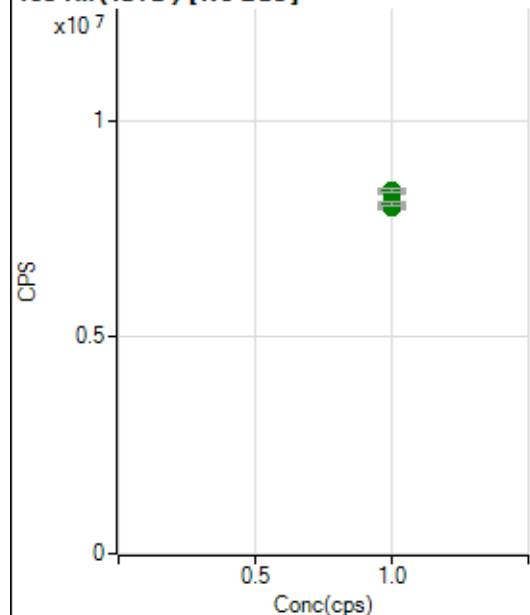
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		72237.84		P	1.2
2	☐	1.000					
3	☐	1.000		72221.11		P	1.2
4	☐	1.000		69594.41		P	4.6
5	☐	1.000		71663.25		P	2.6
6	☐	1.000		73182.63		P	1.5
7	☐	1.000		73312.16		P	0.6
8	☐	1.000		73629.35		P	0.8
9	☐	1.000		78312.60		P	3.5

89 Y (ISTD) [No Gas]

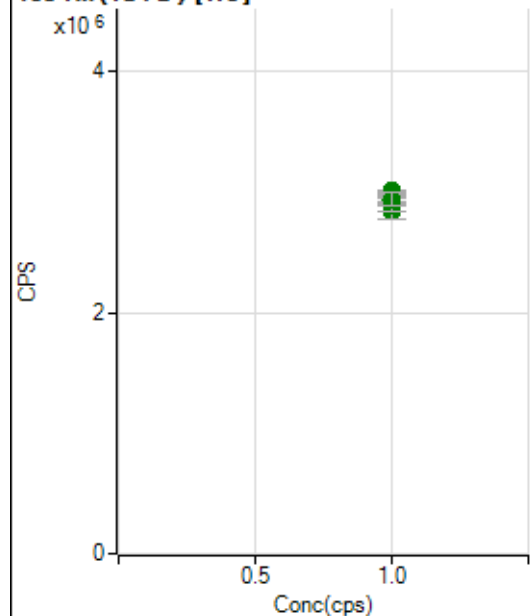
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9033942.23		A	0.3
2	☐	1.000					
3	☐	1.000		9129659.65		A	0.1
4	☐	1.000		9087620.91		A	0.7
5	☐	1.000		9347138.12		A	1.0
6	☐	1.000		9629706.38		A	0.2
7	☐	1.000		9768879.93		A	0.6
8	☐	1.000		9920349.85		A	1.4
9	☐	1.000		9880354.51		A	0.7

89 Y (ISTD) [He]

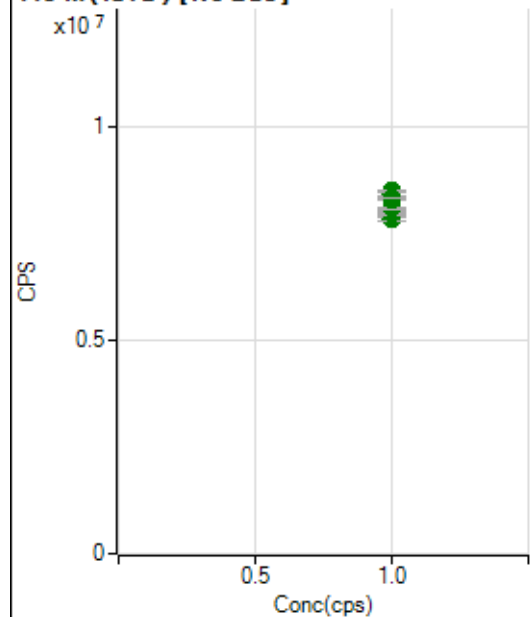
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		428114.07		P	0.3
2	☐	1.000					
3	☐	1.000		425025.99		P	0.2
4	☐	1.000		413104.19		P	5.2
5	☐	1.000		422619.88		P	2.8
6	☐	1.000		438527.24		P	0.3
7	☐	1.000		439409.69		P	0.7
8	☐	1.000		444234.97		P	0.5
9	☐	1.000		471576.04		P	3.0

103 Rh (ISTD) [No Gas]

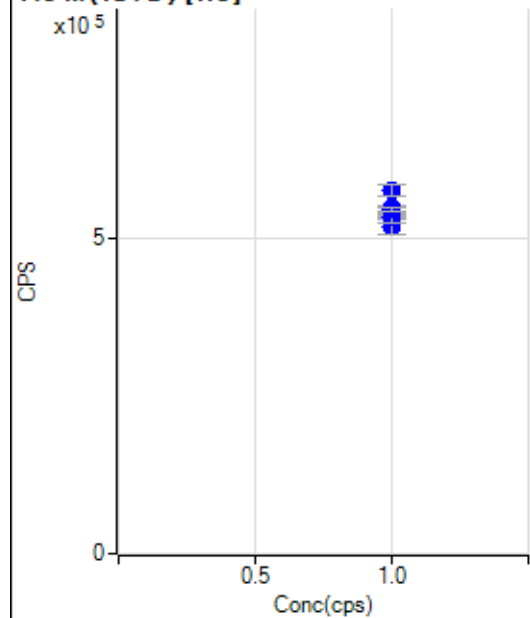
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7968727.43		A	0.7
2	☐	1.000					
3	☐	1.000		8050761.03		A	0.3
4	☐	1.000		7995897.84		A	0.4
5	☐	1.000		8099485.86		A	0.2
6	☐	1.000		8321904.53		A	0.5
7	☐	1.000		8331665.55		A	0.9
8	☐	1.000		8369719.63		A	1.2
9	☐	1.000		8072648.53		A	1.0

103 Rh (ISTD) [He]

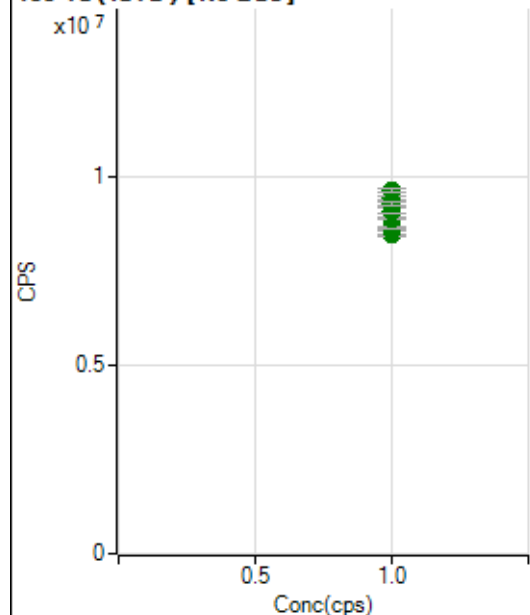
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2918263.74		A	0.6
2	☐	1.000					
3	☐	1.000		2932902.56		A	1.0
4	☐	1.000		2835800.03		A	4.6
5	☐	1.000		2884121.24		A	2.6
6	☐	1.000		3010368.08		A	0.6
7	☐	1.000		2985842.87		A	0.8
8	☐	1.000		2991007.01		A	0.5
9	☐	1.000		2939082.59		A	3.7

115 In (ISTD) [No Gas]

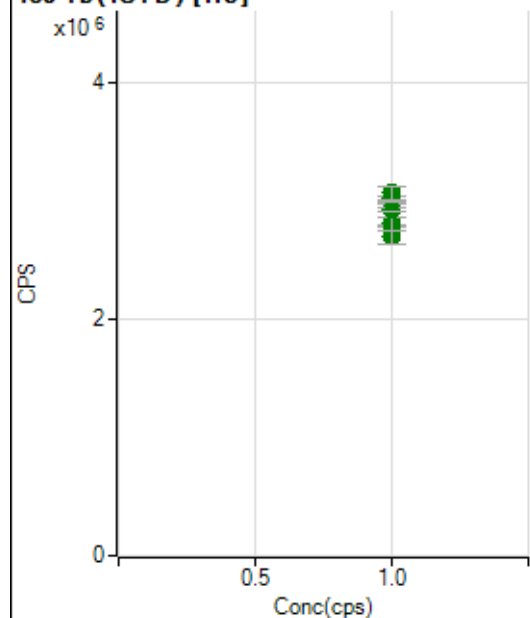
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7840749.11		A	1.0
2	☐	1.000					
3	☐	1.000		7988000.82		A	0.6
4	☐	1.000		7958555.36		A	0.2
5	☐	1.000		8091639.32		A	0.9
6	☐	1.000		8309068.59		A	0.6
7	☐	1.000		8424982.09		A	0.6
8	☐	1.000		8500579.22		A	0.3
9	☐	1.000		8333448.34		A	0.4

115 In (ISTD) [He]

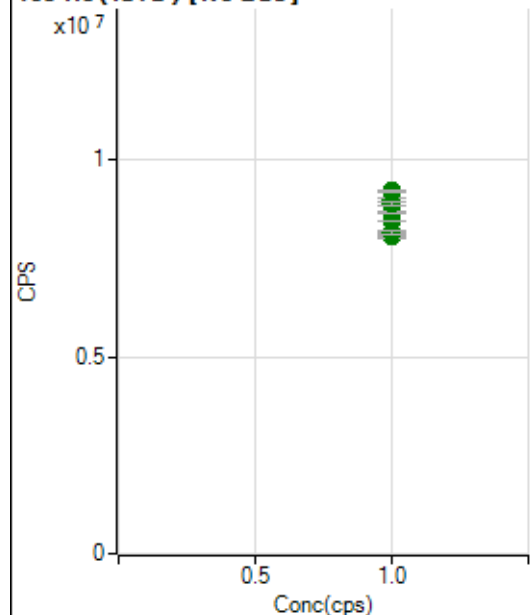
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		537750.22		P	0.8
2	☐	1.000					
3	☐	1.000		535807.74		P	0.2
4	☐	1.000		518420.70		P	5.0
5	☐	1.000		532779.30		P	2.9
6	☐	1.000		549681.80		P	0.8
7	☐	1.000		549933.55		P	0.5
8	☐	1.000		546492.08		P	0.9
9	☐	1.000		575430.02		P	3.2

159 Tb (ISTD) [No Gas]

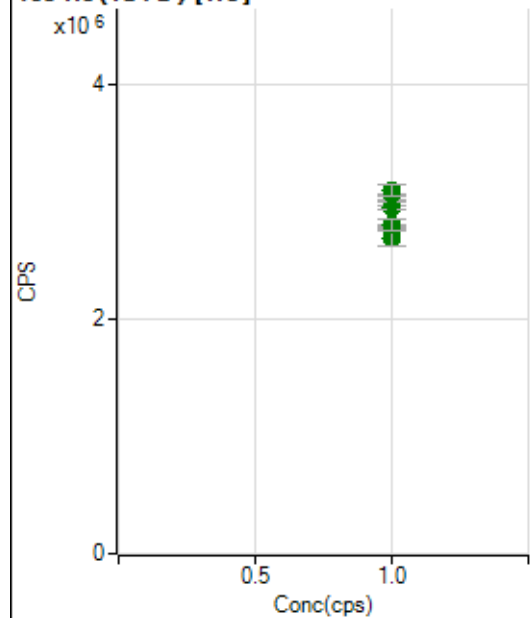
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8472482.93		A	0.6
2	☐	1.000					
3	☐	1.000		8603816.95		A	0.2
4	☐	1.000		8649754.18		A	0.7
5	☐	1.000		8903157.85		A	0.5
6	☐	1.000		9124868.41		A	1.2
7	☐	1.000		9453751.32		A	0.7
8	☐	1.000		9645313.05		A	1.2
9	☐	1.000		9308937.29		A	0.8

159 Tb (ISTD) [He]

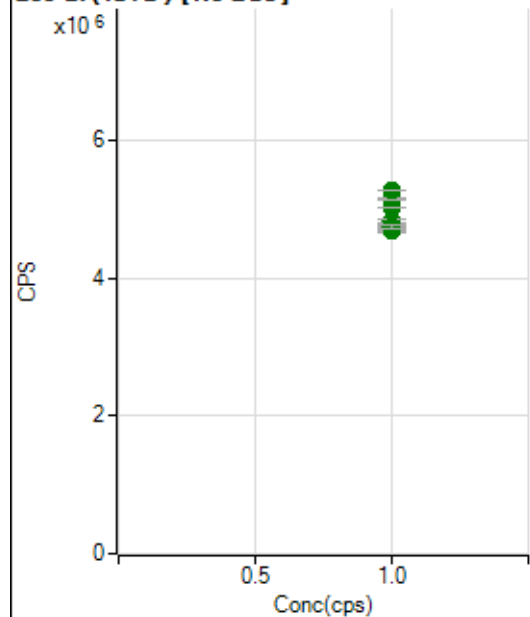
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2789207.77		A	0.5
2	☐	1.000					
3	☐	1.000		2776605.62		A	0.1
4	☐	1.000		2688367.01		A	4.6
5	☐	1.000		2800641.28		A	3.7
6	☐	1.000		2925841.94		A	1.0
7	☐	1.000		2983737.46		A	0.6
8	☐	1.000		3012108.88		A	1.6
9	☐	1.000		3062628.91		A	3.5

165 Ho (ISTD) [No Gas]

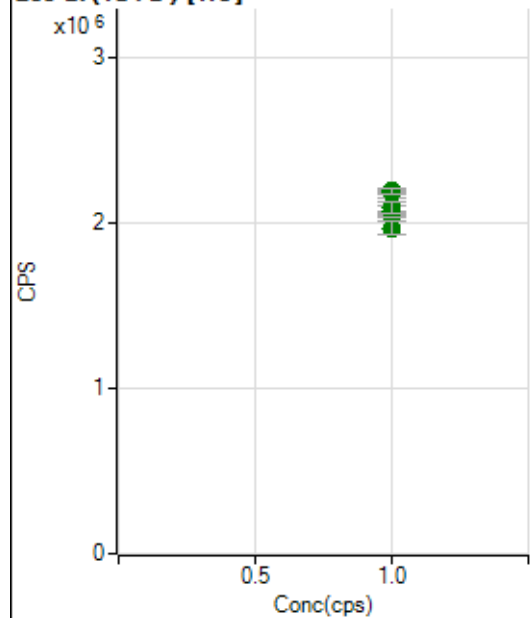
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8032719.36		A	1.0
2	☐	1.000					
3	☐	1.000		8142232.30		A	0.8
4	☐	1.000		8156713.46		A	1.0
5	☐	1.000		8451121.37		A	0.3
6	☐	1.000		8665752.36		A	0.3
7	☐	1.000		8980498.55		A	1.1
8	☐	1.000		9209577.63		A	0.9
9	☐	1.000		8873346.73		A	1.0

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2770743.09		A	1.3
2	☐	1.000					
3	☐	1.000		2799714.33		A	0.6
4	☐	1.000		2698469.72		A	5.7
5	☐	1.000		2812057.29		A	3.5
6	☐	1.000		2955291.41		A	1.5
7	☐	1.000		3009079.19		A	0.7
8	☐	1.000		3064773.32		A	0.6
9	☐	1.000		3097095.79		A	3.2

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4677269.10		A	0.7
2	☐	1.000					
3	☐	1.000		4769895.59		A	0.5
4	☐	1.000		4721965.52		A	0.7
5	☐	1.000		4815714.41		A	1.0
6	☐	1.000		5019913.54		A	0.4
7	☐	1.000		5147669.51		A	0.6
8	☐	1.000		5262471.52		A	0.0
9	☐	1.000		4745722.54		A	0.8

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2051379.43		A	1.7
2	☐	1.000					
3	☐	1.000		2058313.77		A	0.7
4	☐	1.000		1969239.60		A	4.3
5	☐	1.000		2075182.85		A	3.2
6	☐	1.000		2172089.74		A	1.6
7	☐	1.000		2191868.98		A	1.1
8	☐	1.000		2195596.06		A	1.3
9	☐	1.000		2096085.02		A	3.0

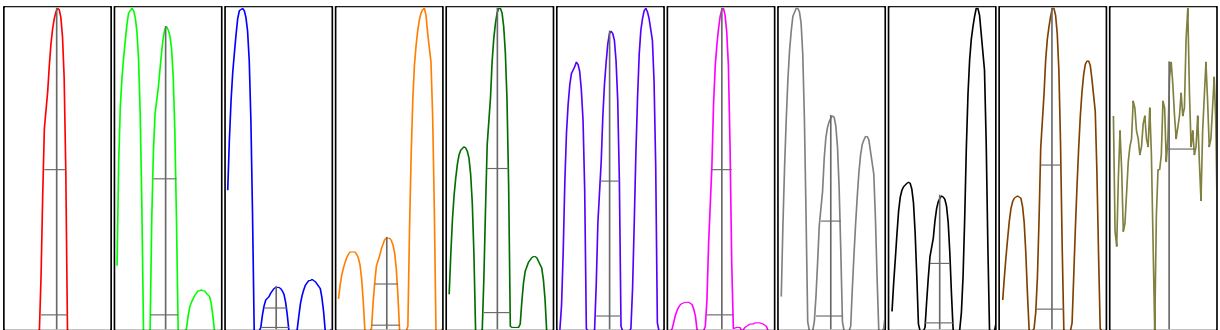
US EPA Tune Check Sample Report

Batch Folder D:\P8050118- MS.b
Report Comment
Instrument Name G8403A JP17141814

[No Gas]				
Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	8290	1.47	5.00	
24	57434	0.71	5.00	
25	7742	0.56	5.00	
26	9033	0.92	5.00	
59	81949	2.36	5.00	
113	9002	1.05	5.00	
115	108778	1.10	5.00	
206	19329	1.01	5.00	
207	17581	0.75	5.00	
208	41531	0.88	5.00	
220	1	29.14		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	8212	8199	8204	8368	8467
24	57763	57014	56978	57592	57825
25	7771	7756	7709	7686	7789
26	9022	9126	8901	9042	9073
59	80597	83804	79268	83271	82802
113	9046	9090	8842	9027	9005
115	109601	109318	106686	109426	108858
206	19433	19332	18997	19388	19495
207	17560	17690	17366	17606	17684
208	41270	41554	41064	41920	41848
220	1	2	1	1	1

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	13954	9.00	8.9 - 9.1		0.780	0.900	
24	94358	23.95	23.9 - 24.1		0.786	0.900	
25	12674	24.95	24.9 - 25.1		0.787	0.900	
26	14923	25.95	25.9 - 26.1		0.785	0.900	
59	140011	58.95	58.9 - 59.1		0.779	0.900	
113	16667	113.00	112.9 - 113.1		0.731	0.900	
115	201757	115.05	114.9 - 115.1		0.767	0.900	
206	34371	206.00	205.9 - 206.1		0.784	0.900	
207	31083	206.95	206.9 - 207.1		0.780	0.900	
208	74552	208.00	207.9 - 208.1		0.783	0.900	
220	2	220.20	-				

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
Plasma Mode		HMI	Aerosol Dilution		HMI-8			

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.9	V	Deflect	13.4	V
Extract 2	-250.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-120	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	200	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	13200	0.32	
89	3796	0.60	
205	14558	0.29	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	13269	13205	13195	13173	13161
89	3823	3798	3808	3792	3762
205	14551	14597	14578	14575	14488

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Plasma Mode		HMI	Aerosol Dilution		HMI-8			

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.9	V	Deflect	2.0	V
Extract 2	-250.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-120	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	5.0	mL/min	OctP RF	200	V			