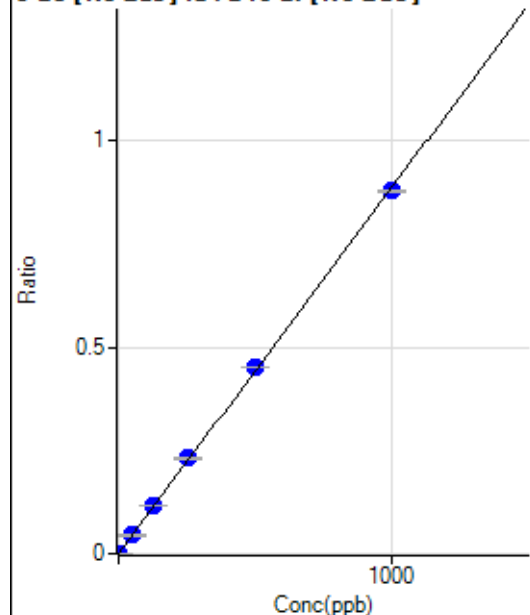


Calibration for 002CALB.d

Batch Folder: D:\ICP-MS Data\1\DATA\P7060620-MS.b\
 Analysis File: P7060620-MS.batch.bin
 DA Date-Time: 2020-06-06 17:37:39
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2020-06-06 12:28:43
2	004CALS.d	S02	2020-06-06 12:32:28
3	005CALS.d	S03	2020-06-06 12:37:01
4	006CALS.d	S04	2020-06-06 12:41:37
5	007CALS.d	S05	2020-06-06 12:45:26
6	008CALS.d	S06	2020-06-06 12:49:06
7	009CALS.d	S07	2020-06-06 12:52:42
8	010CALS.d	S08	2020-06-06 12:56:15

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38.89	0.0000	P	61.5
2	☐	1.000	0.955	3368.98	0.0009	P	4.4
3	☐	50.000	50.130	173233.83	0.0444	P	1.2
4	☐	125.000	129.826	446978.32	0.1150	P	1.1
5	☐	250.000	260.325	882154.50	0.2307	P	0.3
6	☐	500.000	509.858	1687012.36	0.4517	P	0.2
7	☐	1000.000	991.880	3259892.87	0.8788	P	0.4
8	☐			538.92	0.0002	P	17.6

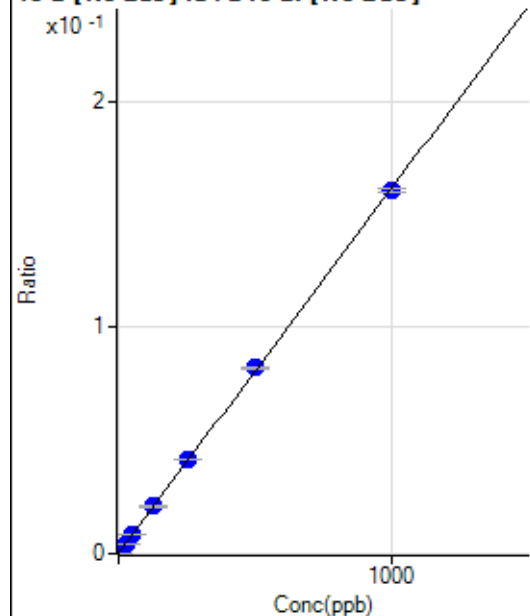
$$y = 8.8600\text{E-}004 * x + 9.8784\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.02058$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	561.15	0.0001	P	15.2
2	☐	25.000	23.200	15288.79	0.0039	P	1.8
3	☐	50.000	51.435	32923.07	0.0084	P	0.7
4	☐	125.000	129.211	81564.89	0.0210	P	1.6
5	☐	250.000	258.186	159884.89	0.0418	P	0.9
6	☐	500.000	508.150	306741.68	0.0821	P	0.9
7	☐	1000.000	993.326	595078.11	0.1604	P	0.9
8	☐			21062.64	0.0061	P	5.9

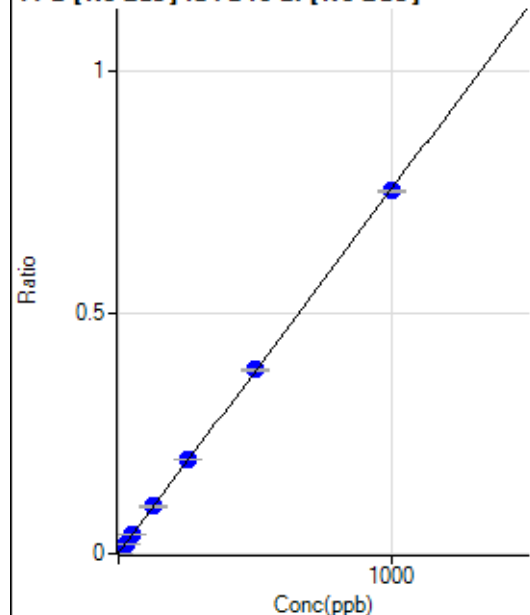
$$y = 1.6136\text{E-}004 * x + 1.4297\text{E-}004$$

$$R = 0.9999$$

$$DL = 0.403$$

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	2541.99	0.0006	P	3.1
2	☐	25.000	23.577	72594.77	0.0185	P	2.4
3	☐	50.000	50.956	152594.68	0.0391	P	0.6
4	☐	125.000	129.265	381864.60	0.0983	P	1.5
5	☐	250.000	257.285	745626.72	0.1950	P	1.2
6	☐	500.000	505.628	1428485.54	0.3825	P	1.0
7	☐	1000.000	994.819	2789322.96	0.7520	P	0.8
8	☐			97704.17	0.0285	P	4.7

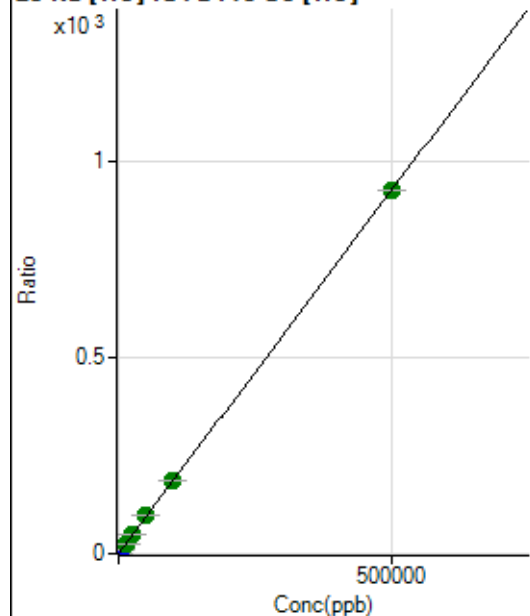
$$y = 7.5523E-004 * x + 6.4757E-004$$

$$R = 0.9999$$

$$DL = 0.07997$$

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	12361.35	0.0401	P	1.5
2	☐	500.000	497.537	300514.03	0.9611	P	0.5
3	☐	5000.000	5404.738	3193873.66	10.0444	P	0.1
4	☐	12500.000	13844.726	8012813.50	25.6669	A	0.3
5	☐	25000.000	27310.741	15851540.67	50.5927	A	0.8
6	☐	50000.000	52960.945	31308420.28	98.0715	A	0.8
7	☐	100000.00	101213.14	61510306.56	187.3869	A	0.5
8	☐	500000.00	499308.07	300218818.2	924.2656	A	0.1

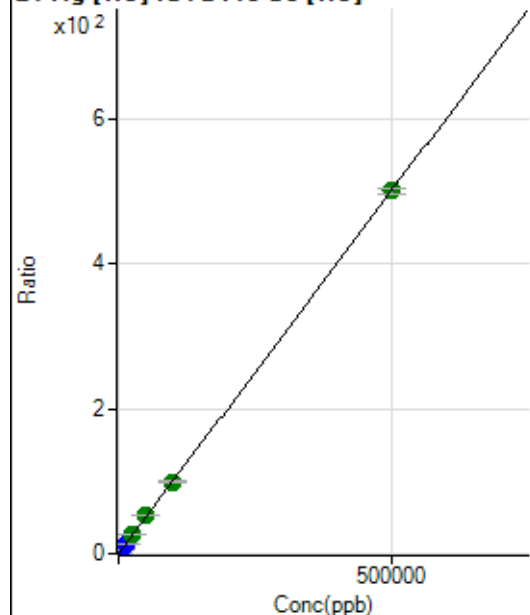
$$y = 0.0019 * x + 0.0401$$

$$R = 1.0000$$

$$DL = 0.9559$$

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	289.95	0.0009	P	6.7
2	☐	500.000	491.369	154175.91	0.4931	P	0.4
3	☐	5000.000	5342.111	1701594.54	5.3514	P	0.3
4	☐	12500.000	13868.462	4336492.56	13.8910	P	0.3
5	☐	25000.000	26951.147	8457554.54	26.9940	A	1.9
6	☐	50000.000	52127.207	16667542.44	52.2093	A	0.1
7	☐	100000.00	99206.615	32615720.10	99.3620	A	0.3
8	☐	500000.00	499810.77	162592250.8	500.5898	A	1.6

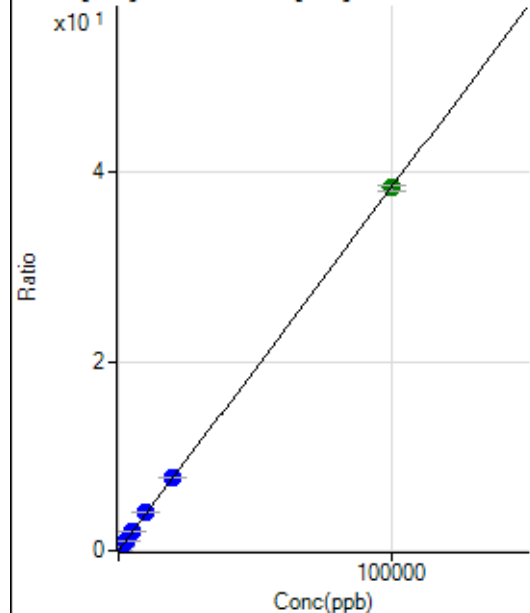
$$y = 0.0010 * x + 9.4120E-004$$

$$R = 1.0000$$

$$DL = 0.1893$$

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	57.99	0.0002	P	7.3
2	☐	20.000	19.828	2439.74	0.0078	P	2.7
3	☐	1000.000	1066.970	130337.29	0.4099	P	0.4
4	☐	2500.000	2801.017	335831.18	1.0758	P	0.3
5	☐	5000.000	5502.127	662028.04	2.1130	P	0.7
6	☐	10000.000	10656.065	1306367.52	4.0921	P	0.4
7	☐	20000.000	20203.202	2546586.22	7.7581	P	0.7
8	☐	100000.00	99860.452	12454903.19	38.3460	A	1.4

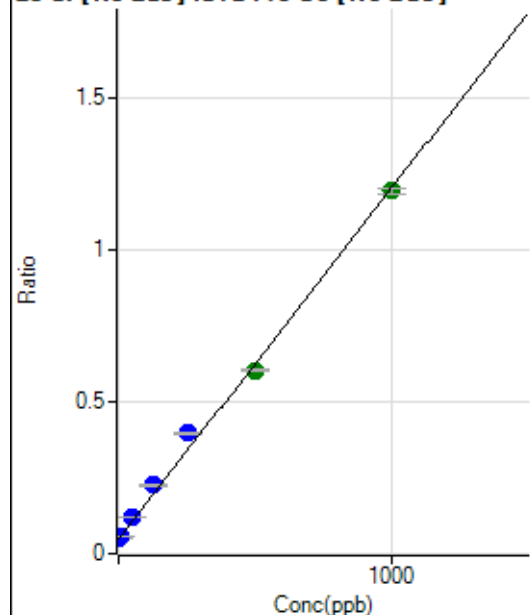
$$y = 3.8399E-004 * x + 1.8835E-004$$

$$R = 1.0000$$

$$DL = 0.1076$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	443291.42	0.0478	P	0.4
2	☐	10.000	8.117	543710.65	0.0572	P	0.9
3	☐	50.000	63.004	1152985.05	0.1206	P	0.7
4	☐	125.000	154.223	2183859.06	0.2260	P	1.1
5	☐	250.000	301.368	3836287.59	0.3961	P	0.3
6	☐	500.000	481.102	5892135.46	0.6039	A	0.9
7	☐	1000.000	992.323	11895526.57	1.1948	A	1.9
8	☐			1126171.12	0.1180	P	1.6

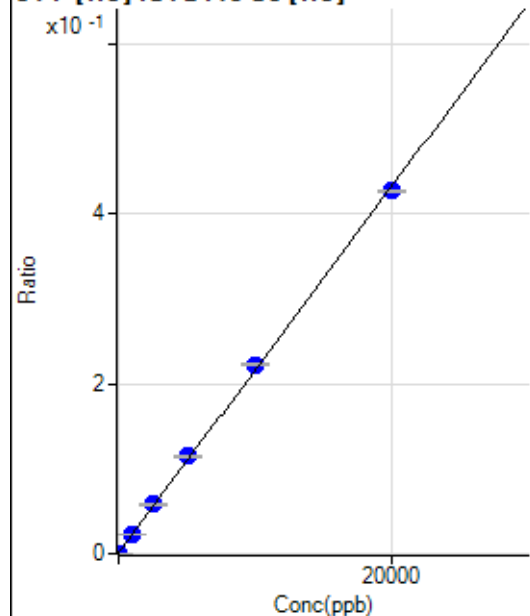
$$y = 0.0012 * x + 0.0478$$

$$R = 0.9980$$

$$DL = 0.492$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-0.955	252.79	0.0008	P	7.5
2	☐	0.000	0.955	269.46	0.0009	P	11.6
3	☐	1000.000	1020.242	7260.41	0.0228	P	5.4
4	☐	2500.000	2650.743	18097.74	0.0580	P	2.7
5	☐	5000.000	5265.498	35821.98	0.1143	P	2.8
6	☐	10000.000	10282.327	71022.45	0.2225	P	1.2
7	☐	20000.000	19772.607	140174.14	0.4270	P	0.5
8	☐			372.24	0.0011	P	10.1

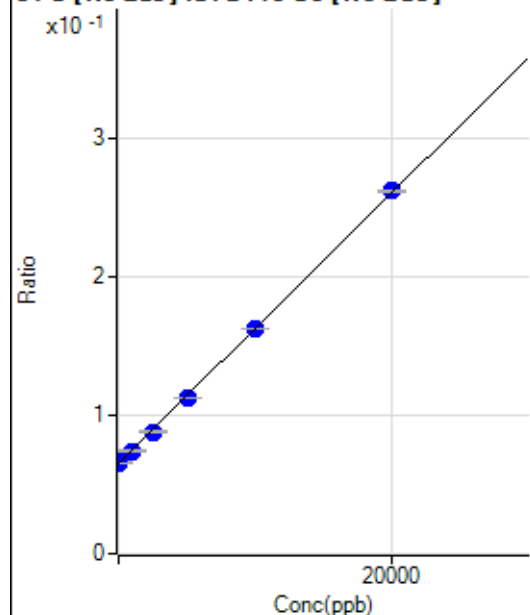
$$y = 2.1555E-005 * x + 8.4112E-004$$

$$R = 0.9997$$

$$DL = 11.24$$

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	60.759	615839.91	0.0664	P	1.6
2	☐	0.000	-60.759	620140.93	0.0652	P	0.8
3	☐	1000.000	870.881	710006.86	0.0743	P	2.1
4	☐	2500.000	2270.222	849394.65	0.0879	P	0.8
5	☐	5000.000	4801.005	1090358.26	0.1126	P	0.7
6	☐	10000.000	9920.389	1585636.57	0.1625	P	0.5
7	☐	20000.000	20124.732	2608699.54	0.2620	P	0.9
8	☐			546853.09	0.0573	P	1.6

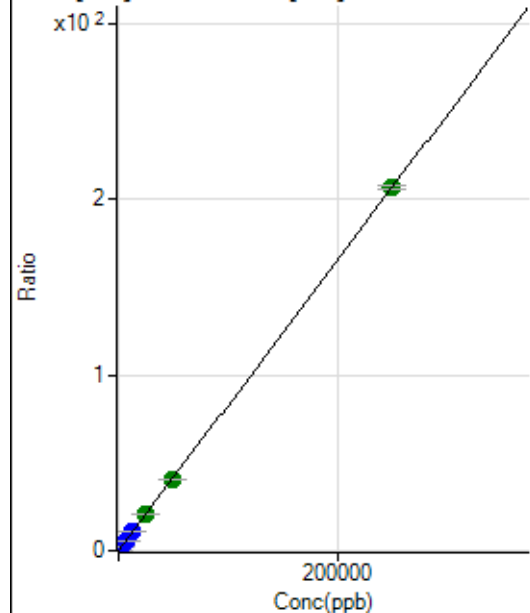
$$y = 9.7508\text{E-}006 * x + 0.0658$$

R = 0.9999

DL = 239.9

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	22229.58	0.0722	P	0.4
2	☐	500.000	460.380	141388.77	0.4522	P	0.4
3	☐	2500.000	2501.063	679360.05	2.1365	P	0.2
4	☐	6250.000	6546.062	1709245.30	5.4752	P	0.2
5	☐	12500.000	12957.508	3373555.34	10.7671	P	0.9
6	☐	25000.000	25050.686	6623725.20	20.7486	A	1.2
7	☐	50000.000	48470.104	13156124.50	40.0786	A	0.5
8	☐	250000.00	250270.70	67119283.25	206.6412	A	1.0

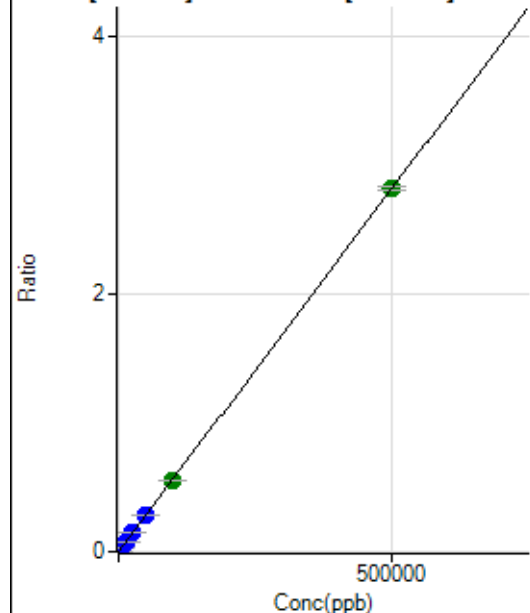
$$y = 8.2538\text{E-}004 * x + 0.0722$$

R = 1.0000

DL = 1.052

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	359.94	0.0000	P	6.4
2	☐	500.000	471.026	25550.99	0.0027	P	0.8
3	☐	5000.000	5103.969	274573.46	0.0287	P	2.1
4	☐	12500.000	13189.793	716526.36	0.0742	P	1.0
5	☐	25000.000	26118.017	1421875.22	0.1468	P	0.5
6	☐	50000.000	50477.076	2768273.21	0.2837	P	0.5
7	☐	100000.00	98333.776	5502750.93	0.5527	A	0.8
8	☐	500000.00	500211.38	26826819.08	2.8113	A	1.2

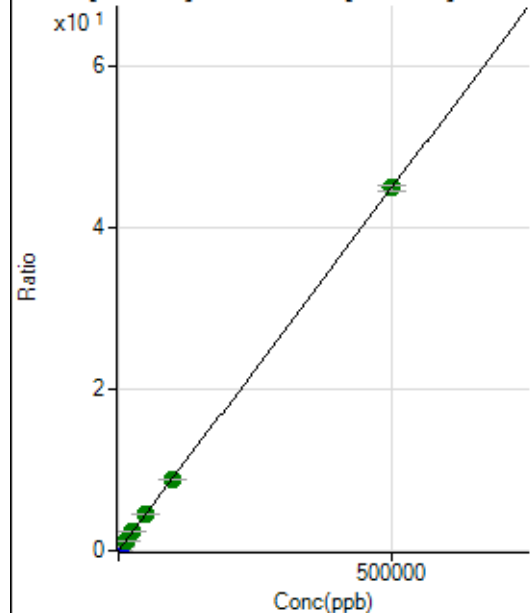
$$y = 5.6202\text{E-}006 * x + 3.8776\text{E-}005$$

$$R = 1.0000$$

$$DL = 1.33$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	23560.77	0.0025	P	1.7
2	☐	500.000	475.128	430252.18	0.0452	P	0.9
3	☐	5000.000	5144.365	4442828.33	0.4648	P	1.9
4	☐	12500.000	12963.992	11278115.25	1.1674	A	1.2
5	☐	25000.000	25739.660	22421085.20	2.3153	A	0.6
6	☐	50000.000	49877.427	43750333.15	4.4841	A	0.5
7	☐	100000.00	98816.583	88425418.65	8.8813	A	1.1
8	☐	500000.00	500198.93	428890847.6	44.9461	A	1.8

$$y = 8.9851\text{E-}005 * x + 0.0025$$

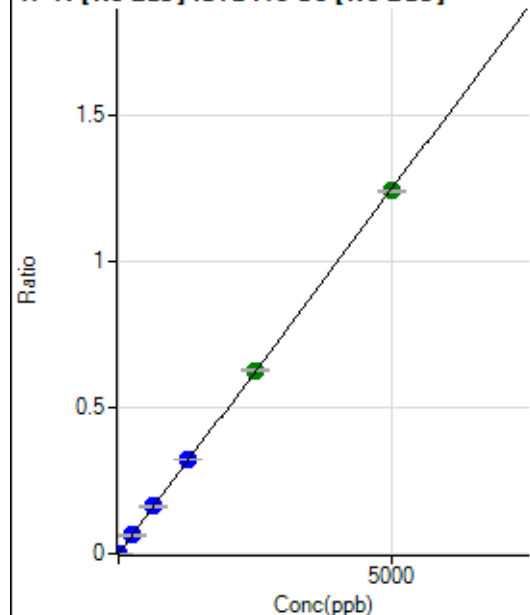
$$R = 1.0000$$

$$DL = 1.476$$

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	202.79	0.0000	P	1.2
2	☐	5.000	4.489	10846.13	0.0011	P	0.9
3	☐	250.000	251.759	599705.43	0.0627	P	2.1
4	☐	625.000	647.791	1559254.14	0.1614	P	0.5
5	☐	1250.000	1287.632	3106403.13	0.3208	P	0.9
6	☐	2500.000	2518.039	6120352.13	0.6273	A	0.7
7	☐	5000.000	4978.636	12348342.64	1.2402	A	0.8
8	☐			3870.14	0.0004	P	7.2

$$y = 2.4911E-004 * x + 2.1852E-005$$

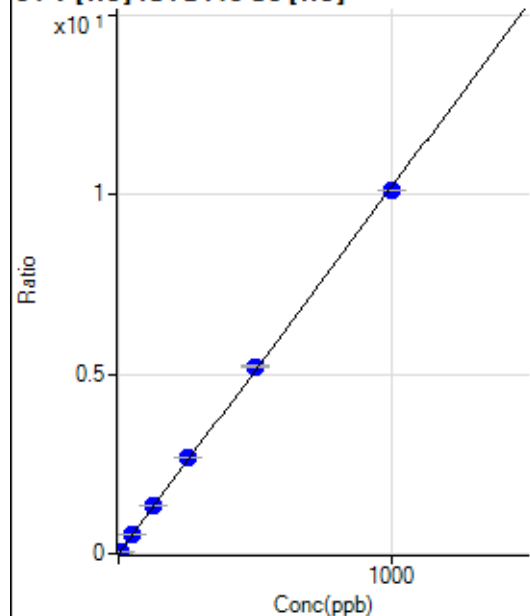
$$R = 1.0000$$

$$DL = 0.003224$$

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	2.22	0.0000	P	173.
2	☐	5.000	4.775	15252.49	0.0488	P	2.0
3	☐	50.000	50.186	162990.47	0.5126	P	0.2
4	☐	125.000	132.706	423142.43	1.3554	P	0.2
5	☐	250.000	263.051	841813.29	2.6867	P	0.1
6	☐	500.000	511.279	1667103.33	5.2221	P	0.4
7	☐	1000.000	990.126	3319603.70	10.1129	P	0.1
8	☐			1218.96	0.0038	P	9.1

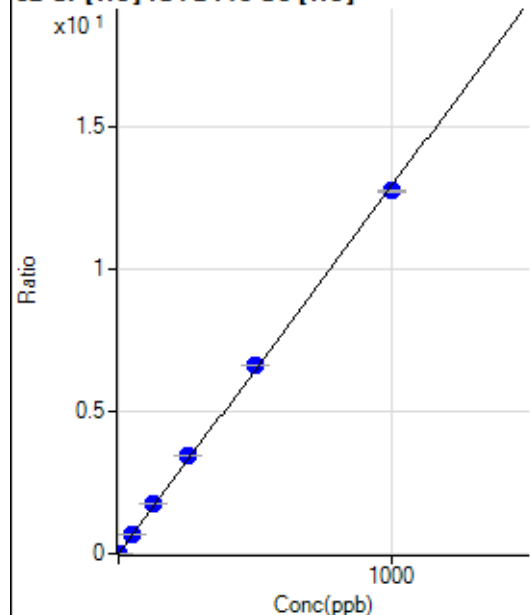
$$y = 0.0102 * x + 7.1618E-006$$

$$R = 0.9998$$

$$DL = 0.003643$$

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	535.58	0.0017	P	1.8
2	☐	2.000	1.907	8234.65	0.0263	P	3.0
3	☐	50.000	51.512	211774.00	0.6660	P	1.0
4	☐	125.000	135.554	546245.88	1.7498	P	0.4
5	☐	250.000	267.251	1080358.61	3.4481	P	0.7
6	☐	500.000	513.962	2116451.25	6.6296	P	0.5
7	☐	1000.000	987.312	4179900.46	12.7338	P	0.3
8	☐			92589.60	0.2851	P	0.6

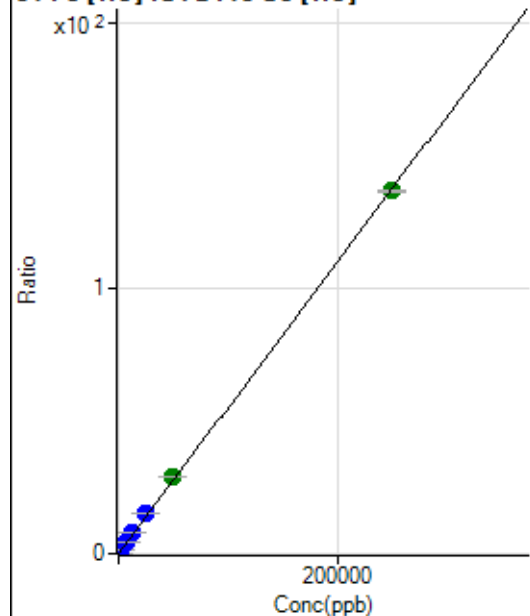
$$y = 0.0129 * x + 0.0017$$

$$R = 0.9997$$

$$DL = 0.00715$$

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	554.57	0.0018	P	3.5
2	☐	50.000	54.039	9822.05	0.0314	P	1.9
3	☐	2500.000	2790.206	486708.42	1.5307	P	0.5
4	☐	6250.000	7343.517	1256691.63	4.0256	P	0.5
5	☐	12500.000	14364.820	2466724.16	7.8728	P	0.0
6	☐	25000.000	27546.546	4819112.81	15.0956	P	0.8
7	☐	50000.000	52450.576	9434404.39	28.7415	A	0.4
8	☐	250000.00	249131.74	44340268.14	136.5106	A	0.6

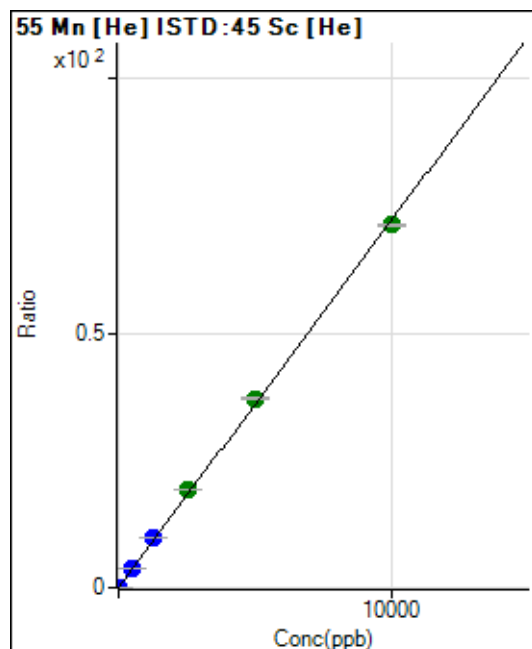
$$y = 5.4794E-004 * x + 0.0018$$

$$R = 0.9999$$

$$DL = 0.3415$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	215.56	0.0007	P	13.7
2	☐	1.000	0.938	2336.90	0.0075	P	2.0
3	☐	500.000	513.373	1178547.87	3.7064	P	0.3
4	☐	1250.000	1349.257	3040652.91	9.7401	P	0.4
5	☐	2500.000	2653.391	6001282.27	19.1537	A	0.6
6	☐	5000.000	5144.717	11855852.18	37.1369	A	0.7
7	☐	10000.000	9876.218	23400902.43	71.2904	A	0.8
8	☐			23394.36	0.0720	P	1.5

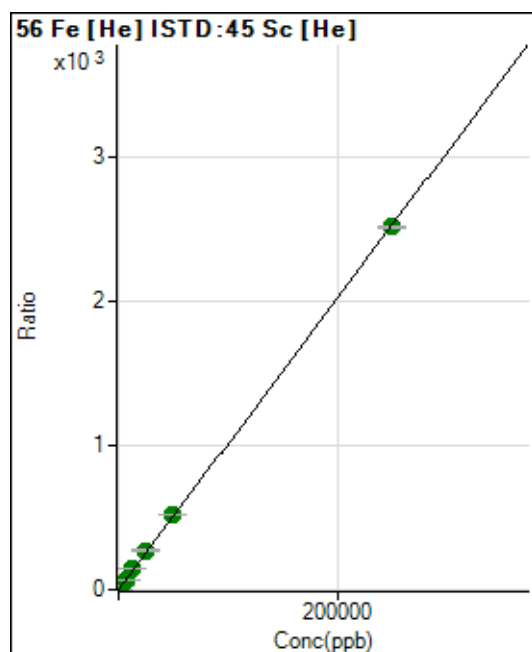
$$y = 0.0072 * x + 6.9978E-004$$

$$R = 0.9997$$

$$DL = 0.03979$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4587.17	0.0149	P	2.9
2	☐	50.000	51.400	167099.84	0.5344	P	0.5
3	☐	2500.000	2702.600	8690429.87	27.3308	A	1.1
4	☐	6250.000	7111.808	22444129.10	71.8959	A	0.8
5	☐	12500.000	13993.646	44318944.40	141.4524	A	1.0
6	☐	25000.000	27083.564	87395076.08	273.7558	A	0.1
7	☐	50000.000	51997.720	172518989.1	525.5699	A	0.5
8	☐	250000.00	249293.84	818434232.6	2.519695	A	0.4

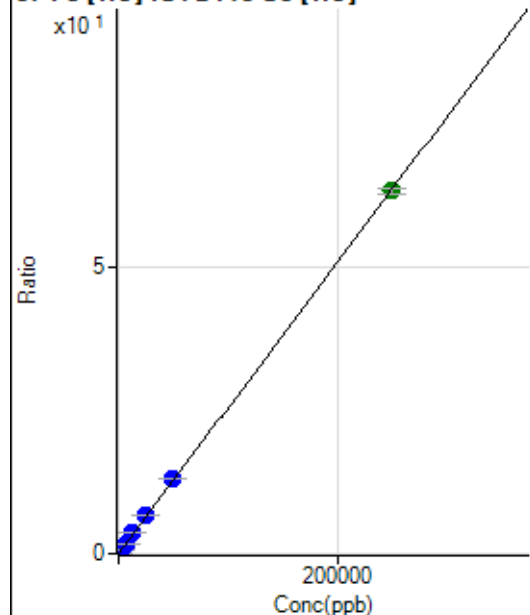
$$y = 0.0101 * x + 0.0149$$

$$R = 0.9999$$

$$DL = 0.1262$$

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	183.30	0.0006	P	5.7
2	☐	50.000	52.236	4344.48	0.0139	P	2.3
3	☐	2500.000	2718.590	220257.06	0.6927	P	0.0
4	☐	6250.000	7138.063	567476.52	1.8178	P	0.2
5	☐	12500.000	13976.603	1115002.05	3.5587	P	0.6
6	☐	25000.000	26883.662	2185083.64	6.8445	P	0.4
7	☐	50000.000	51275.477	4285055.51	13.0541	P	0.2
8	☐	250000.00	249458.32	20629067.67	63.5069	A	1.4

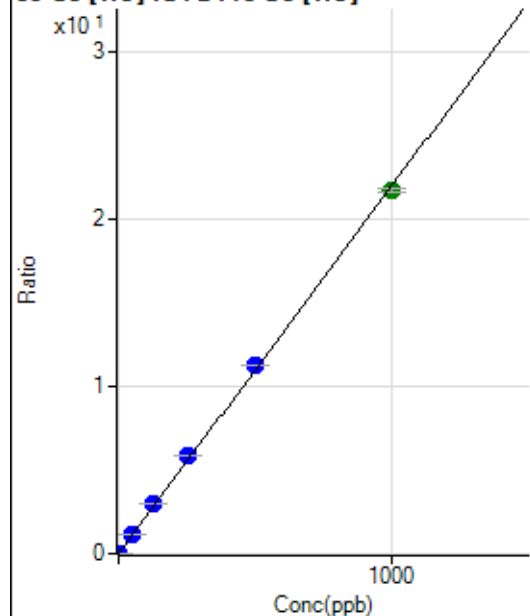
$$y = 2.5458\text{E-}004 * x + 5.9538\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.4034$$

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	120.01	0.0004	P	18.1
2	☐	1.000	1.004	7024.02	0.0225	P	1.6
3	☐	50.000	52.246	365203.11	1.1485	P	0.2
4	☐	125.000	136.977	939839.18	3.0106	P	0.4
5	☐	250.000	267.847	1844370.32	5.8865	P	0.5
6	☐	500.000	512.996	3599113.38	11.2738	P	0.0
7	☐	1000.000	987.431	7122845.03	21.6998	A	1.2
8	☐			13558.63	0.0417	P	0.7

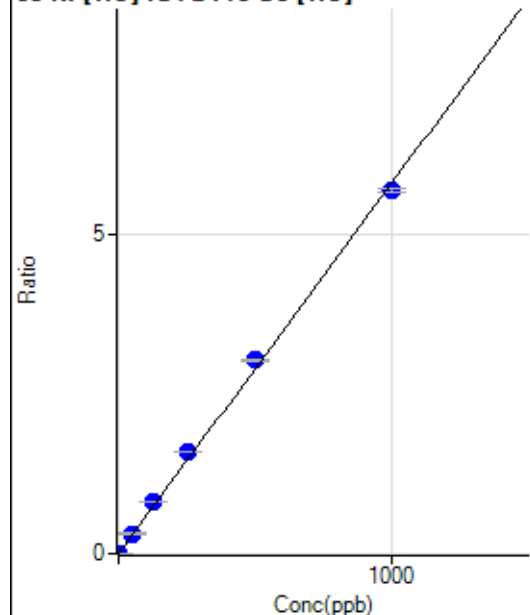
$$y = 0.0220 * x + 3.9005\text{E-}004$$

$$R = 0.9997$$

$$DL = 0.009655$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	126.67	0.0004	P	14.7
2	☐	1.000	1.043	2021.29	0.0065	P	4.8
3	☐	50.000	54.403	100522.96	0.3161	P	0.5
4	☐	125.000	140.864	255334.49	0.8179	P	0.4
5	☐	250.000	276.341	502605.38	1.6041	P	0.3
6	☐	500.000	522.224	967653.04	3.0311	P	0.5
7	☐	1000.000	980.099	1867195.07	5.6883	P	0.9
8	☐			26337.17	0.0811	P	0.8

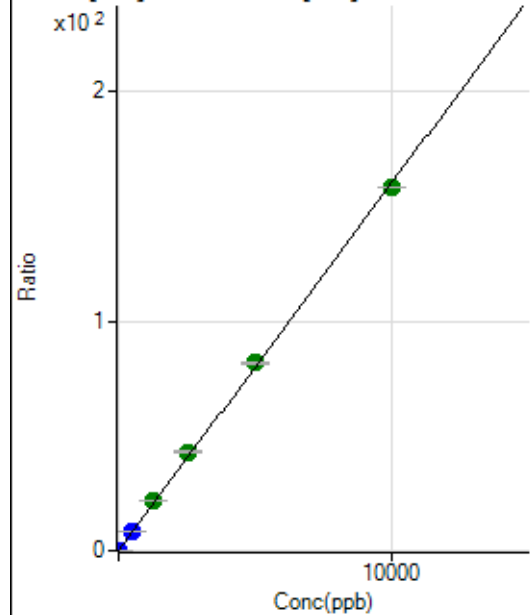
$$y = 0.0058 * x + 4.1163E-004$$

$$R = 0.9992$$

$$DL = 0.03128$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	462.24	0.0015	P	2.3
2	☐	2.000	2.205	11502.45	0.0368	P	1.0
3	☐	500.000	528.329	2689029.79	8.4568	P	0.4
4	☐	1250.000	1369.003	6840336.29	21.9107	A	0.5
5	☐	2500.000	2685.370	13465265.91	42.9776	A	1.6
6	☐	5000.000	5125.758	26188125.72	82.0331	A	0.9
7	☐	10000.000	9874.487	51874285.34	158.0308	A	0.0
8	☐			17059.03	0.0525	P	1.9

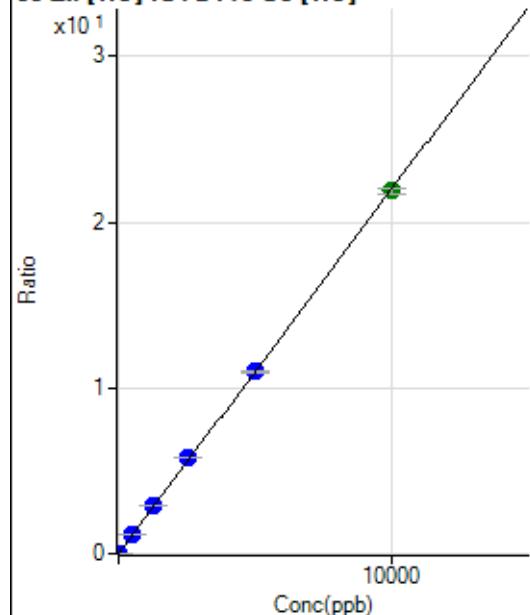
$$y = 0.0160 * x + 0.0015$$

$$R = 0.9997$$

$$DL = 0.00651$$

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	282.23	0.0009	P	12.2
2	☐	2.000	2.053	1696.79	0.0054	P	3.5
3	☐	500.000	509.269	356111.94	1.1199	P	0.3
4	☐	1250.000	1339.444	919105.95	2.9441	P	0.4
5	☐	2500.000	2635.499	1814731.81	5.7919	P	0.4
6	☐	5000.000	4990.622	3501120.26	10.9669	P	0.2
7	☐	10000.000	9959.170	7183431.91	21.8843	A	1.3
8	☐			34828.34	0.1072	P	0.9

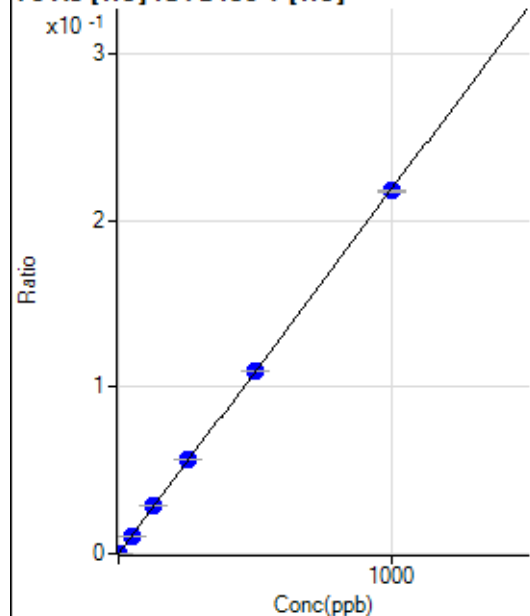
$$y = 0.0022 * x + 9.1657E-004$$

$$R = 0.9999$$

$$DL = 0.1528$$

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	6.18	0.0000	P	16.9
2	☐	1.000	0.878	349.39	0.0002	P	7.3
3	☐	50.000	49.845	19838.90	0.0109	P	0.5
4	☐	125.000	130.617	51281.35	0.0286	P	1.0
5	☐	250.000	258.671	102916.97	0.0566	P	0.7
6	☐	500.000	502.466	201966.54	0.1099	P	0.6
7	☐	1000.000	995.905	405504.02	0.2178	P	0.4
8	☐			180.25	0.0001	P	3.5

$$y = 2.1872E-004 * x + 3.5102E-006$$

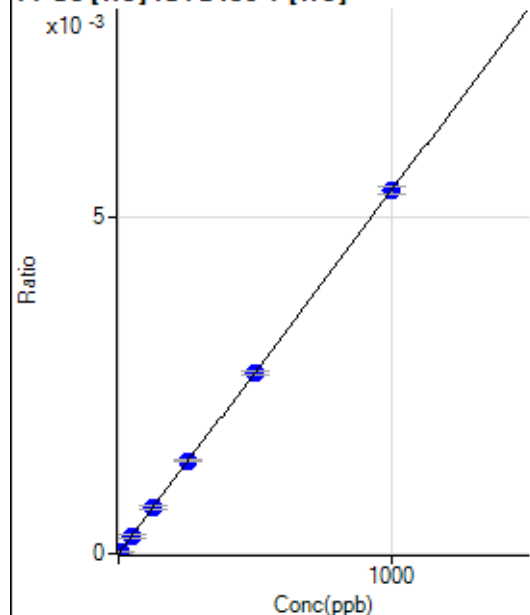
$$R = 0.9999$$

$$DL = 0.008123$$

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	1.11	0.0000	P	173.
2	☐	5.000	4.167	41.11	0.0000	P	45.1
3	☐	50.000	47.212	463.35	0.0003	P	14.0
4	☐	125.000	128.283	1240.08	0.0007	P	8.2
5	☐	250.000	256.231	2509.15	0.0014	P	1.2
6	☐	500.000	497.793	4923.13	0.0027	P	3.1
7	☐	1000.000	999.279	10011.39	0.0054	P	2.1
8	☐			1.11	0.0000	P	173.

$$y = 5.3807E-006 * x + 6.3214E-007$$

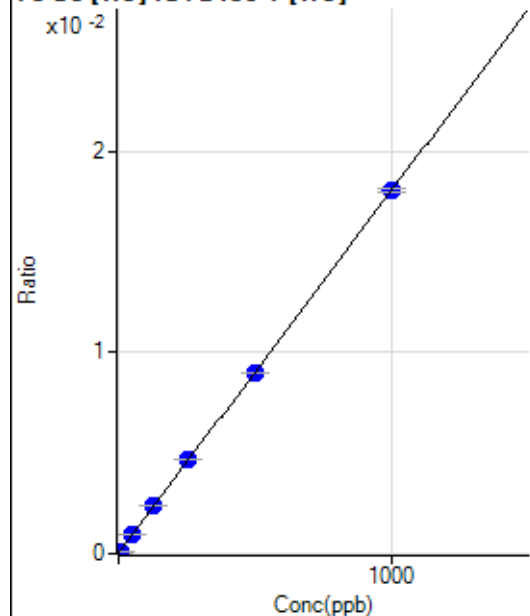
$$R = 1.0000$$

$$DL = 0.6105$$

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	42.59	0.0000	P	15.3
2	☐	5.000	5.109	208.03	0.0001	P	4.9
3	☐	50.000	50.627	1705.67	0.0009	P	2.1
4	☐	125.000	129.827	4247.57	0.0024	P	0.1
5	☐	250.000	256.966	8477.23	0.0047	P	0.9
6	☐	500.000	497.620	16544.08	0.0090	P	0.4
7	☐	1000.000	998.813	33594.47	0.0180	P	1.2
8	☐			73.46	0.0000	P	3.9

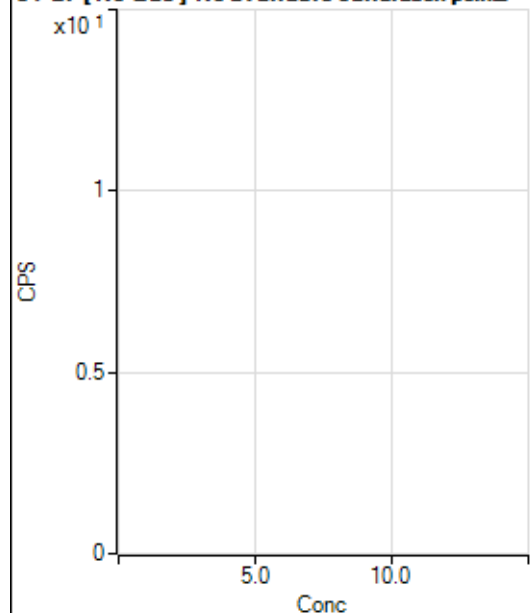
$$y = 1.8042E-005 * x + 2.4207E-005$$

$$R = 1.0000$$

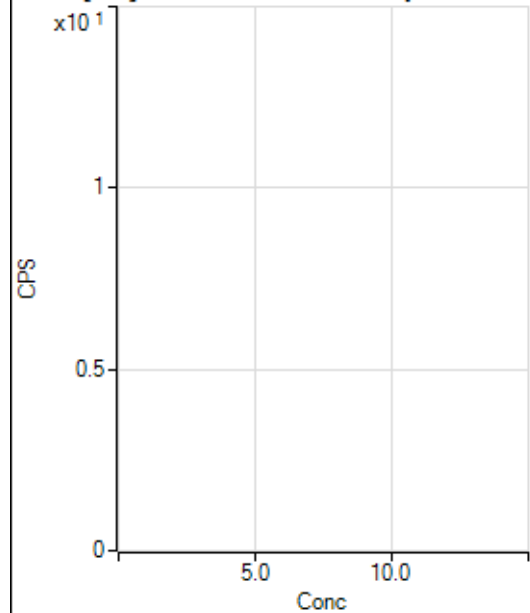
$$DL = 0.6154$$

Weight: <None>

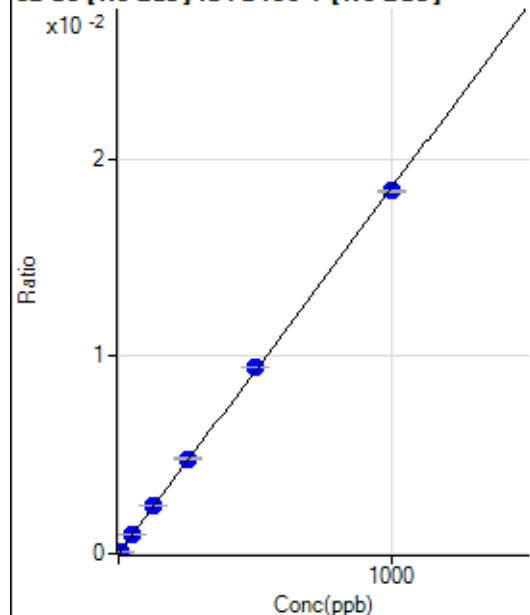
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			51136.45		P	2.4
2	☐			51856.79		P	2.0
3	☐			52053.84		P	2.0
4	☐			51538.13		P	2.6
5	☐			51468.08		P	2.4
6	☐			52610.47		P	2.0
7	☐			53354.04		P	0.2
8	☐			52365.13		P	1.7

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			43.38		P	66.6
2	☐			46.71		P	32.7
3	☐			56.72		P	62.0
4	☐			30.03		P	88.2
5	☐			40.04		P	66.1
6	☐			53.39		P	21.7
7	☐			56.72		P	36.7
8	☐			80.08		P	21.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	13.33	0.0000	P	45.8
2	☐	5.000	4.506	1557.68	0.0001	P	5.5
3	☐	50.000	50.738	17539.99	0.0009	P	1.9
4	☐	125.000	130.255	45179.41	0.0024	P	0.5
5	☐	250.000	258.707	91102.71	0.0048	P	1.4
6	☐	500.000	509.566	180064.33	0.0095	P	0.7
7	☐	1000.000	992.349	362520.42	0.0184	P	0.4
8	☐			415.90	0.0000	P	5.5

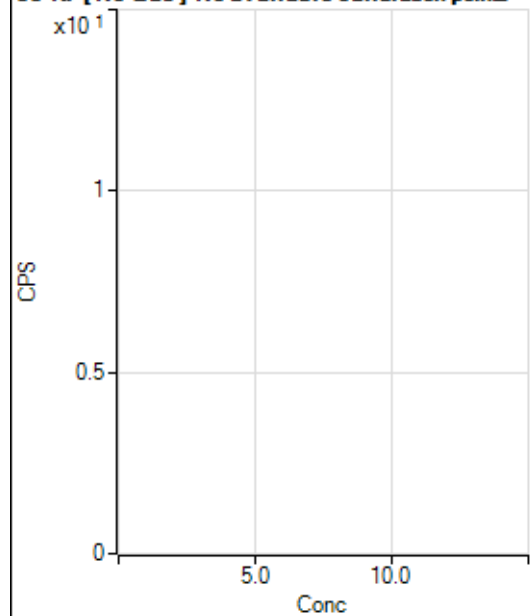
$$y = 1.8548E-005 * x + 7.4078E-007$$

$$R = 0.9999$$

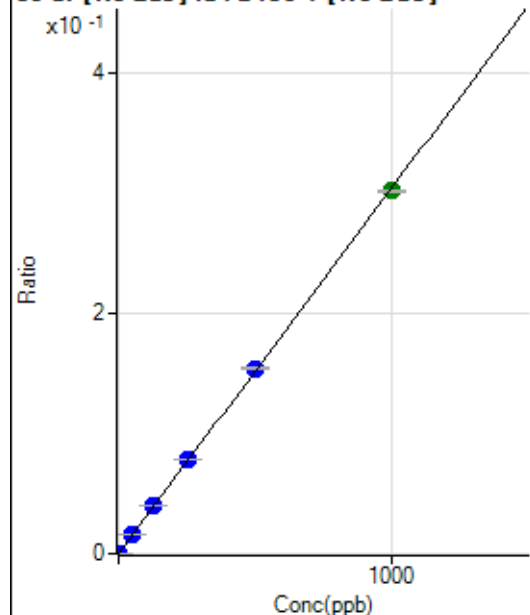
$$DL = 0.05485$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			520.02		P	2.8
2	☐			540.02		P	12.3
3	☐			492.24		P	5.0
4	☐			567.80		P	2.1
5	☐			584.47		P	4.2
6	☐			514.46		P	7.5
7	☐			581.13		P	3.2
8	☐			535.58		P	5.3

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	827.84	0.0000	P	6.3
2	☐	1.000	0.966	6268.29	0.0003	P	1.5
3	☐	50.000	50.916	288545.69	0.0155	P	1.8
4	☐	125.000	131.735	748030.21	0.0400	P	0.3
5	☐	250.000	259.238	1494066.84	0.0787	P	0.5
6	☐	500.000	507.119	2931847.55	0.1539	P	0.9
7	☐	1000.000	993.243	5935903.95	0.3014	A	0.6
8	☐			30717.30	0.0017	P	1.2

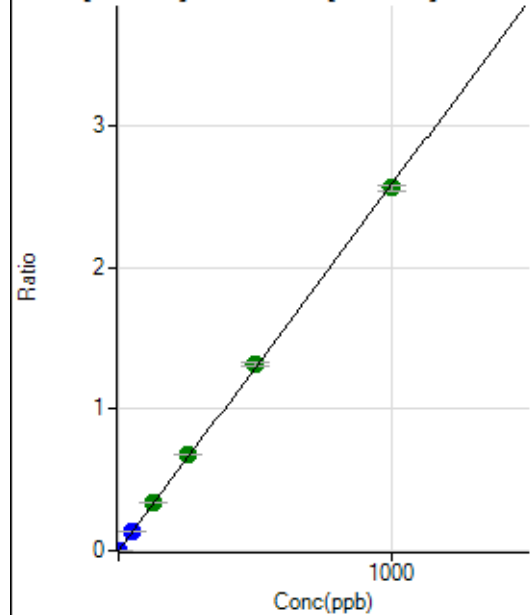
$$y = 3.0339E-004 * x + 4.6099E-005$$

$$R = 0.9999$$

$$DL = 0.02893$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	266.68	0.0000	P	8.2
2	☐	1.000	0.941	45272.53	0.0025	P	2.3
3	☐	50.000	51.621	2489575.53	0.1337	P	1.9
4	☐	125.000	131.983	6389129.83	0.3418	A	1.3
5	☐	250.000	261.259	12843115.83	0.6765	A	0.8
6	☐	500.000	509.896	25153065.32	1.3203	A	1.2
7	☐	1000.000	991.283	50552671.27	2.5668	A	1.3
8	☐			263701.91	0.0142	P	0.7

$$y = 0.0026 * x + 1.4837E-005$$

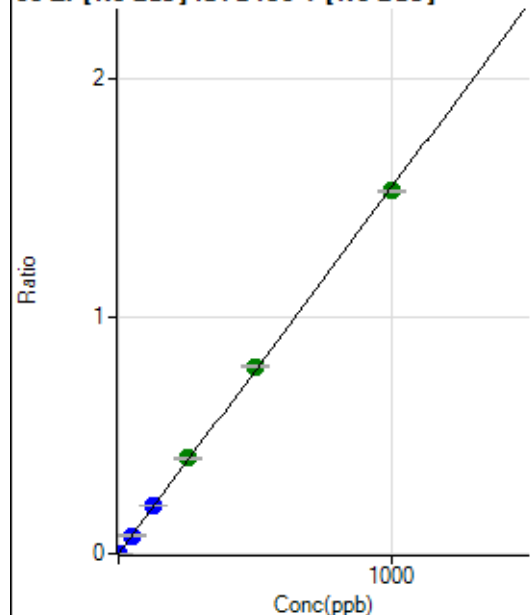
$$R = 0.9998$$

$$DL = 0.001407$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1294.56	0.0001	P	15.4
2	☐	1.000	0.847	25493.01	0.0014	P	0.7
3	☐	50.000	49.822	1434414.46	0.0770	P	2.8
4	☐	125.000	132.139	3816852.04	0.2042	P	0.5
5	☐	250.000	260.024	7625853.99	0.4017	A	0.8
6	☐	500.000	511.665	15056888.88	0.7904	A	0.9
7	☐	1000.000	990.778	30141477.41	1.5304	A	0.3
8	☐			10579.32	0.0006	P	5.6

$$y = 0.0015 * x + 7.1996E-005$$

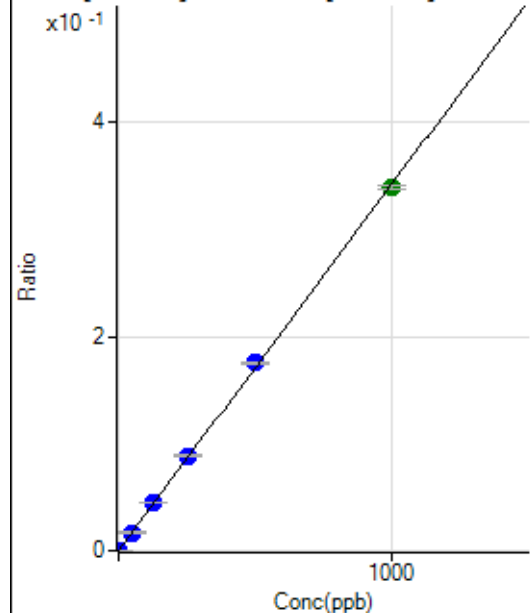
$$R = 0.9998$$

$$DL = 0.02153$$

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	263.90	0.0000	P	24.4
2	☐	1.000	0.842	5590.20	0.0003	P	6.3
3	☐	50.000	49.836	317620.41	0.0171	P	2.7
4	☐	125.000	132.402	846639.31	0.0453	P	0.9
5	☐	250.000	259.374	1683970.33	0.0887	P	1.0
6	☐	500.000	511.985	3335370.39	0.1751	P	0.6
7	☐	1000.000	990.747	6672463.08	0.3388	A	1.0
8	☐			2369.75	0.0001	P	7.5

$$y = 3.4194E-004 * x + 1.4663E-005$$

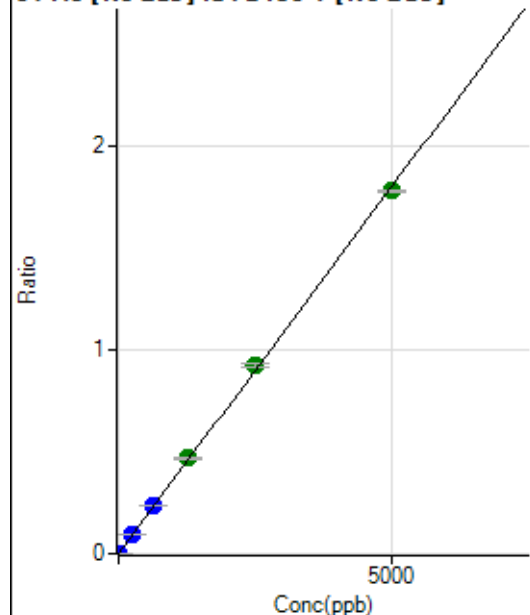
$$R = 0.9998$$

$$DL = 0.03137$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	483.37	0.0000	P	18.6
2	☐	5.000	4.715	31897.65	0.0017	P	2.0
3	☐	250.000	253.776	1704447.28	0.0915	P	1.1
4	☐	625.000	661.243	4457019.11	0.2384	P	0.8
5	☐	1250.000	1301.448	8906995.34	0.4692	A	1.5
6	☐	2500.000	2570.009	17650078.17	0.9265	A	1.8
7	☐	5000.000	4947.414	35129204.95	1.7836	A	0.5
8	☐			26055.27	0.0014	P	1.8

$$y = 3.6051E-004 * x + 2.6869E-005$$

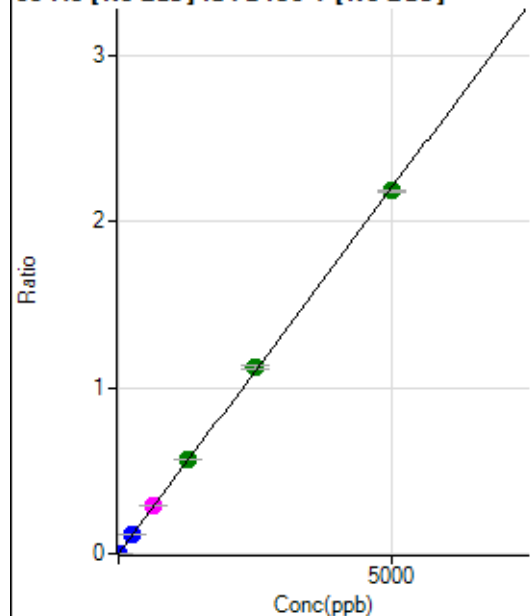
$$R = 0.9998$$

$$DL = 0.04167$$

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	55.56	0.0000	P	24.0
2	☐	5.000	4.812	39204.87	0.0021	P	0.9
3	☐	250.000	254.970	2091184.83	0.1123	P	2.0
4	☐	625.000	659.305	5428059.54	0.2904	M	0.5
5	☐	1250.000	1292.793	10808664.56	0.5693	A	0.8
6	☐	2500.000	2545.576	21354688.15	1.1210	A	1.9
7	☐	5000.000	4961.977	43037598.53	2.1852	A	0.7
8	☐			37784.23	0.0020	P	2.0

$$y = 4.4039E-004 * x + 3.0993E-006$$

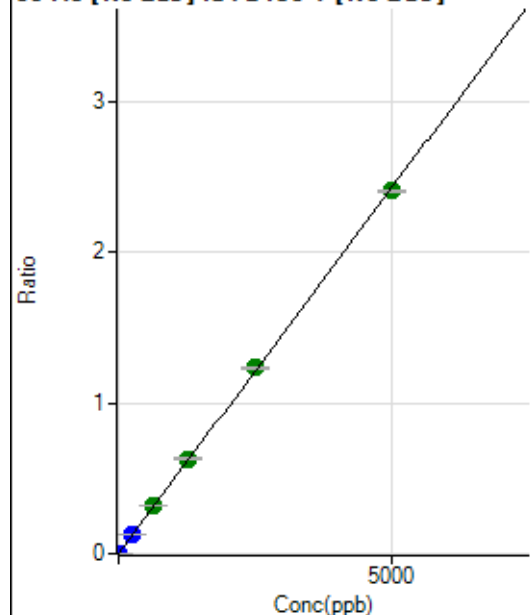
$$R = 0.9999$$

$$DL = 0.005068$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	161.12	0.0000	P	30.7
2	☐	5.000	4.820	43414.40	0.0024	P	2.2
3	☐	250.000	254.341	2301202.15	0.1236	P	0.6
4	☐	625.000	659.346	5987795.92	0.3203	A	1.0
5	☐	1250.000	1300.938	11996615.37	0.6319	A	1.2
6	☐	2500.000	2540.372	23507052.26	1.2340	A	1.5
7	☐	5000.000	4962.569	47478240.99	2.4106	A	0.8
8	☐			59583.81	0.0032	P	2.8

$$y = 4.8575E-004 * x + 8.9743E-006$$

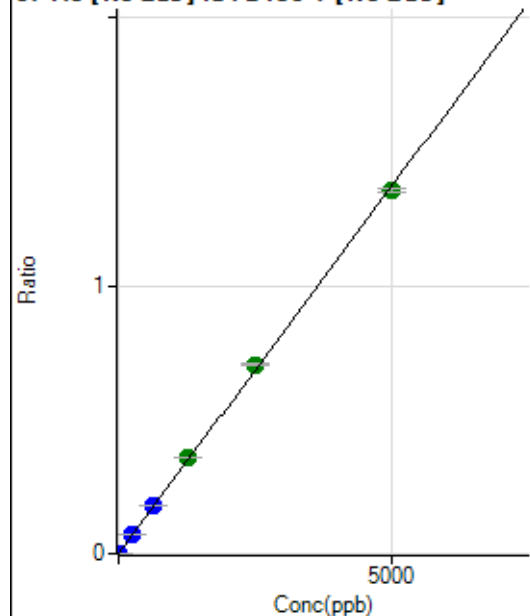
$$R = 0.9999$$

$$DL = 0.01699$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	80.56	0.0000	P	5.7
2	☐	5.000	4.778	24271.63	0.0013	P	1.6
3	☐	250.000	253.568	1294141.02	0.0695	P	1.9
4	☐	625.000	662.469	3393870.65	0.1815	P	0.6
5	☐	1250.000	1309.786	6813584.96	0.3589	A	1.4
6	☐	2500.000	2578.636	13461547.70	0.7066	A	1.2
7	☐	5000.000	4940.874	26667573.86	1.3540	A	1.2
8	☐			23436.71	0.0013	P	2.2

$$y = 2.7403E-004 * x + 4.4845E-006$$

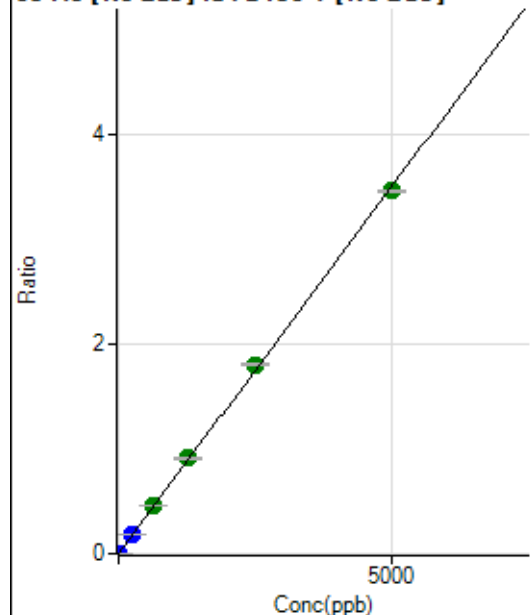
$$R = 0.9997$$

$$DL = 0.002803$$

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	58.33	0.0000	P	38.6
2	☐	5.000	4.893	63361.45	0.0034	P	0.9
3	☐	250.000	256.123	3340472.21	0.1794	P	1.7
4	☐	625.000	654.800	8572687.17	0.4586	A	0.3
5	☐	1250.000	1306.496	17367719.83	0.9149	A	1.9
6	☐	2500.000	2570.921	34297776.81	1.8004	A	1.1
7	☐	5000.000	4946.384	68225036.94	3.4639	A	0.5
8	☐			58889.69	0.0032	P	2.0

$$y = 7.0030E-004 * x + 3.2574E-006$$

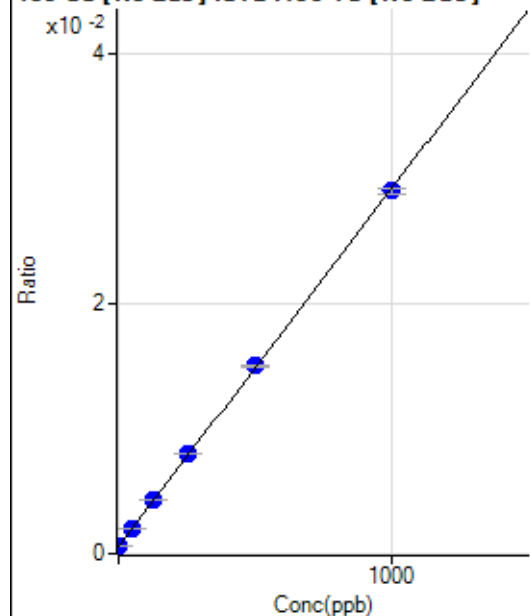
$$R = 0.9998$$

$$DL = 0.005385$$

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	10053.98	0.0006	P	3.6
2	☐	1.000	0.955	10818.43	0.0006	P	1.3
3	☐	50.000	50.203	36952.08	0.0020	P	1.4
4	☐	125.000	131.082	80957.01	0.0043	P	1.8
5	☐	250.000	259.358	149577.69	0.0080	P	0.5
6	☐	500.000	505.604	282515.44	0.0151	P	1.1
7	☐	1000.000	994.088	556863.05	0.0291	P	1.4
8	☐			10621.07	0.0006	P	3.2

$$y = 2.8652E-005 * x + 5.7013E-004$$

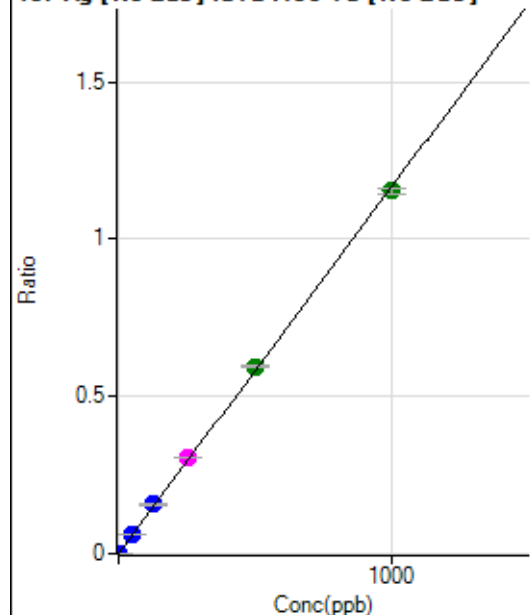
$$R = 0.9999$$

$$DL = 2.173$$

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	194.45	0.0000	P	13.4
2	☐	1.000	1.012	21550.54	0.0012	P	4.1
3	☐	50.000	53.288	1142879.94	0.0621	P	0.1
4	☐	125.000	133.955	2922289.87	0.1561	P	1.3
5	☐	250.000	263.740	5746849.09	0.3074	M	0.7
6	☐	500.000	510.991	11175693.13	0.5956	A	1.1
7	☐	1000.000	989.786	22112938.17	1.1537	A	1.3
8	☐			6132.15	0.0003	P	2.3

$$y = 0.0012 * x + 1.1024E-005$$

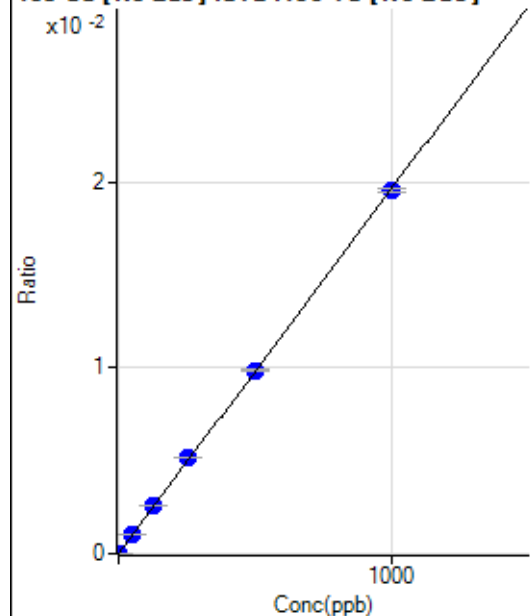
$$R = 0.9998$$

$$DL = 0.003798$$

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	25.00	0.0000	P	17.0
2	☐	1.000	0.904	347.23	0.0000	P	10.0
3	☐	50.000	51.433	18618.09	0.0010	P	0.6
4	☐	125.000	132.405	48719.83	0.0026	P	1.3
5	☐	250.000	262.244	96351.23	0.0052	P	1.0
6	☐	500.000	502.876	185425.02	0.0099	P	1.2
7	☐	1000.000	994.504	374576.54	0.0195	P	1.2
8	☐			565.30	0.0000	P	13.2

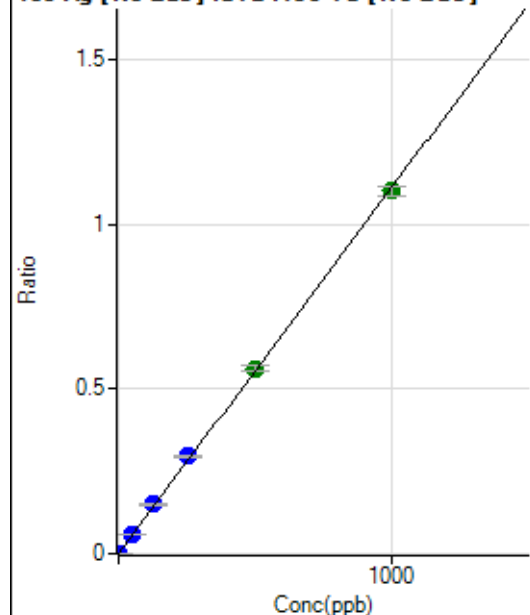
$$y = 1.9649E-005 * x + 1.4183E-006$$

$$R = 0.9999$$

$$DL = 0.03691$$

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	25.00	0.0000	P	33.3
2	☐	1.000	1.004	20248.50	0.0011	P	3.1
3	☐	50.000	53.324	1090988.26	0.0593	P	0.8
4	☐	125.000	134.223	2793659.29	0.1493	P	1.2
5	☐	250.000	265.422	5517808.28	0.2952	P	1.0
6	☐	500.000	506.439	10566800.24	0.5632	A	2.5
7	☐	1000.000	991.606	21136193.53	1.1028	A	2.3
8	☐			5490.18	0.0003	P	3.4

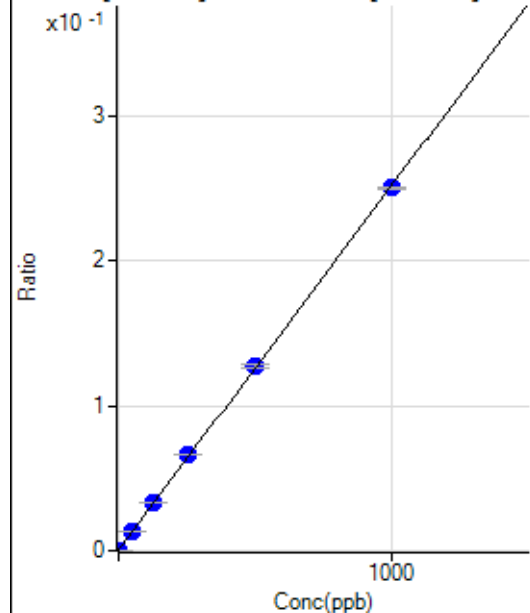
$$y = 0.0011 * x + 1.4173E-006$$

$$R = 0.9998$$

$$DL = 0.001272$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7032.79	0.0004	P	3.7
2	☐	1.000	0.983	11687.54	0.0006	P	1.7
3	☐	50.000	51.749	246366.61	0.0134	P	1.1
4	☐	125.000	131.631	625970.12	0.0334	P	1.7
5	☐	250.000	262.692	1240310.20	0.0664	P	1.5
6	☐	500.000	503.517	2379390.84	0.1268	P	1.8
7	☐	1000.000	994.152	4791967.28	0.2500	P	0.8
8	☐			9100.34	0.0005	P	3.7

$$y = 2.5107E-004 * x + 3.9880E-004$$

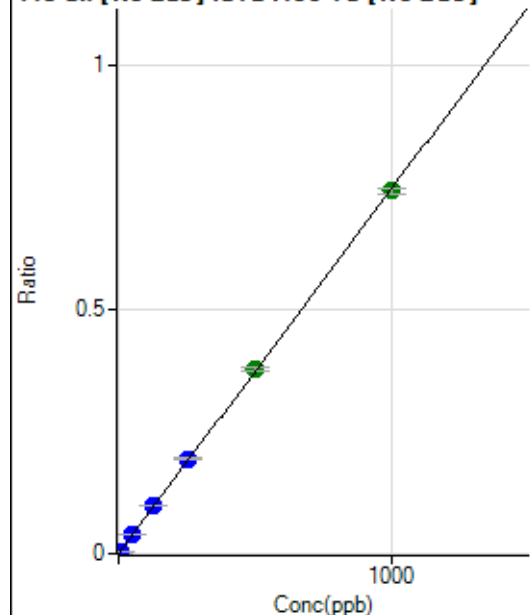
$$R = 0.9999$$

$$DL = 0.1782$$

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	2275.29	0.0001	P	3.5
2	☐	5.000	4.849	67876.00	0.0037	P	1.0
3	☐	50.000	50.873	701025.59	0.0381	P	0.5
4	☐	125.000	130.652	1827743.75	0.0977	P	1.0
5	☐	250.000	259.801	3627552.60	0.1941	P	1.5
6	☐	500.000	504.453	7068113.96	0.3767	A	1.7
7	☐	1000.000	994.574	14233373.75	0.7426	A	1.3
8	☐			14424.63	0.0008	P	2.7

$$y = 7.4648\text{E-}004 * x + 1.2904\text{E-}004$$

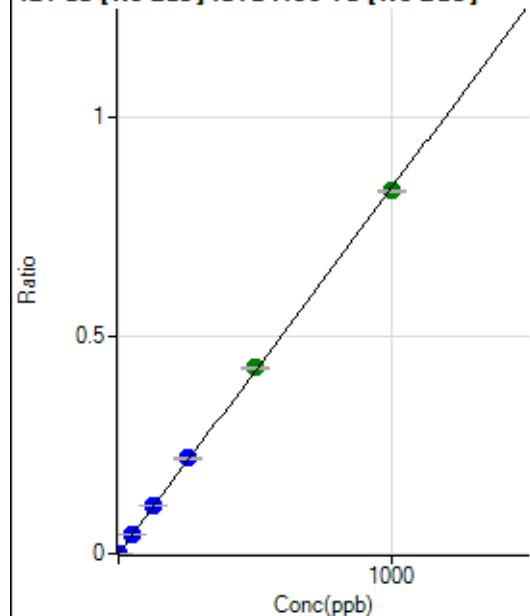
$$R = 0.9999$$

$$DL = 0.01805$$

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	69.45	0.0000	P	17.9
2	☐	2.000	1.814	27633.73	0.0015	P	1.5
3	☐	50.000	50.524	780123.75	0.0424	P	0.8
4	☐	125.000	130.253	2045986.03	0.1093	P	0.7
5	☐	250.000	261.485	4102094.49	0.2194	P	1.3
6	☐	500.000	507.853	7996837.07	0.4262	A	1.6
7	☐	1000.000	992.520	15965919.98	0.8329	A	0.5
8	☐			17828.69	0.0010	P	8.9

$$y = 8.3922\text{E-}004 * x + 3.9366\text{E-}006$$

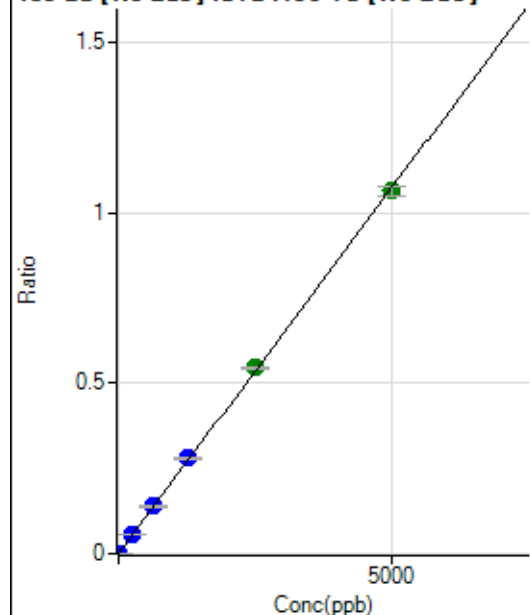
$$R = 0.9999$$

$$DL = 0.002524$$

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	111.12	0.0000	P	15.4
2	☐	10.000	9.594	37334.65	0.0021	P	1.5
3	☐	250.000	254.051	1001558.67	0.0544	P	0.6
4	☐	625.000	645.568	2589046.69	0.1383	P	0.8
5	☐	1250.000	1302.290	5216119.21	0.2790	P	1.4
6	☐	2500.000	2544.103	10228210.91	0.5451	A	1.5
7	☐	5000.000	4962.103	20378117.64	1.0632	A	2.7
8	☐			36512.88	0.0021	P	1.4

$$y = 2.1427E-004 * x + 6.2998E-006$$

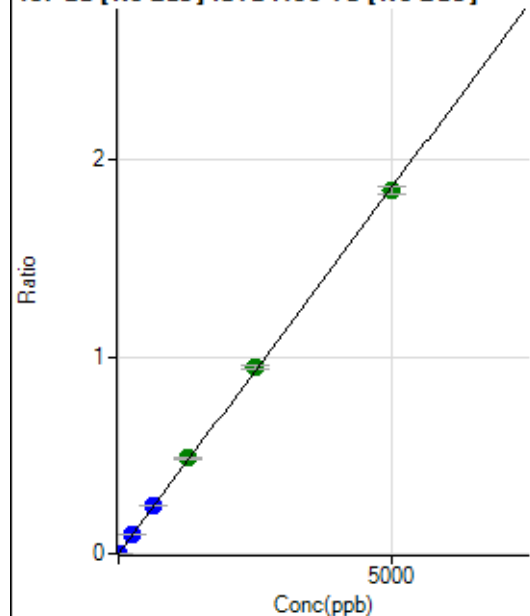
$$R = 0.9999$$

$$DL = 0.0136$$

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	161.12	0.0000	P	15.3
2	☐	10.000	9.511	64168.73	0.0035	P	3.2
3	☐	250.000	253.805	1735672.33	0.0943	P	0.5
4	☐	625.000	650.193	4523109.52	0.2417	P	1.0
5	☐	1250.000	1304.597	9064312.62	0.4849	A	1.3
6	☐	2500.000	2549.837	17781250.57	0.9477	A	2.3
7	☐	5000.000	4958.094	35321809.12	1.8429	A	2.0
8	☐			64115.44	0.0037	P	1.6

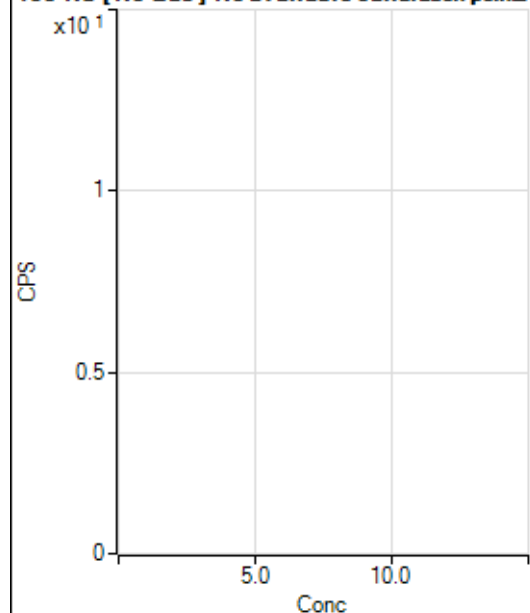
$$y = 3.7169E-004 * x + 9.1402E-006$$

$$R = 0.9999$$

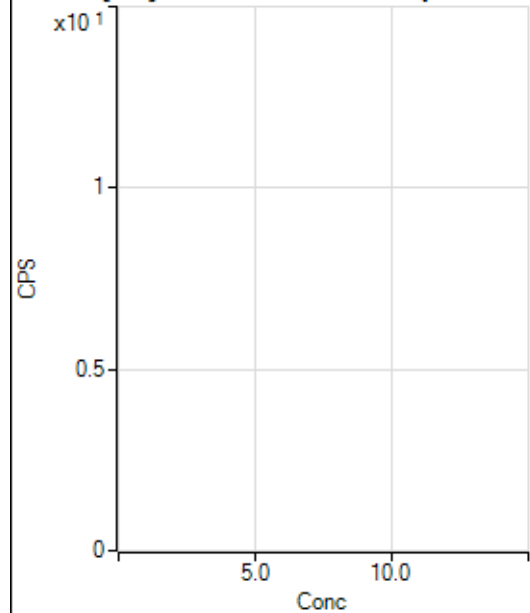
$$DL = 0.01125$$

Weight: <None>

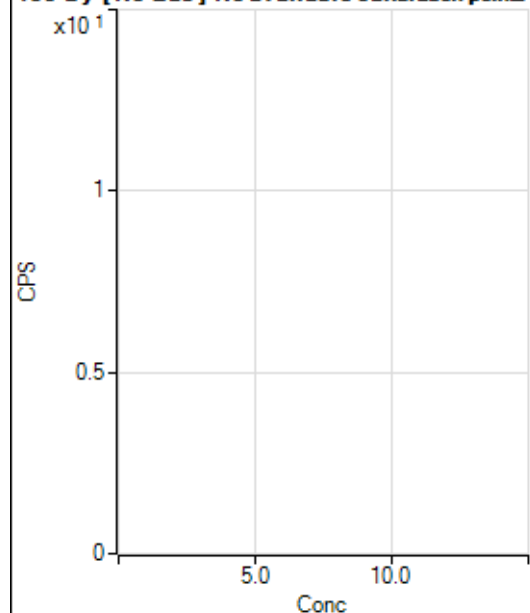
Min Conc: 0

150 Nd [No Gas] No available calibration points

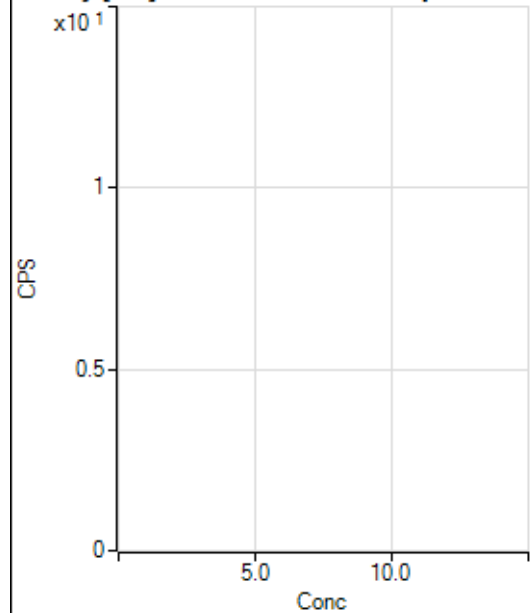
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			17.78		P	57.3
2	☐			22.23		P	62.4
3	☐			128.89		P	19.6
4	☐			297.79		P	18.8
5	☐			615.59		P	7.0
6	☐			1057.86		P	6.9
7	☐			2022.44		P	4.6
8	☐			66.67		P	17.3

150 Nd [He] No available calibration points

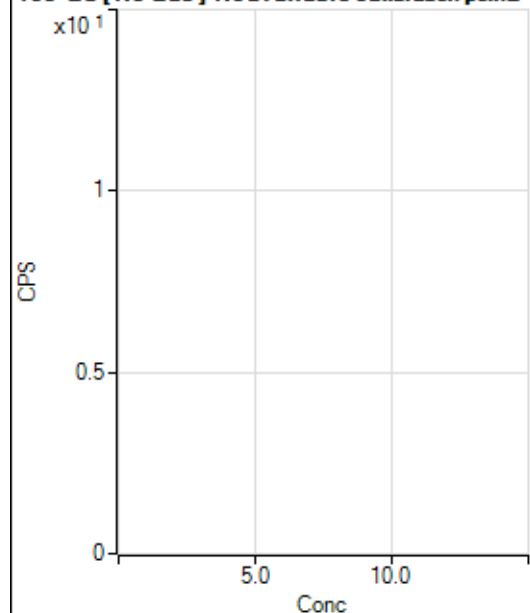
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.
2	☐			1.11		P	173.
3	☐			11.11		P	45.8
4	☐			20.00		P	16.7
5	☐			31.11		P	27.0
6	☐			47.78		P	52.8
7	☐			108.89		P	18.5
8	☐			22.22		P	8.7

156 Dy [No Gas] No available calibration points

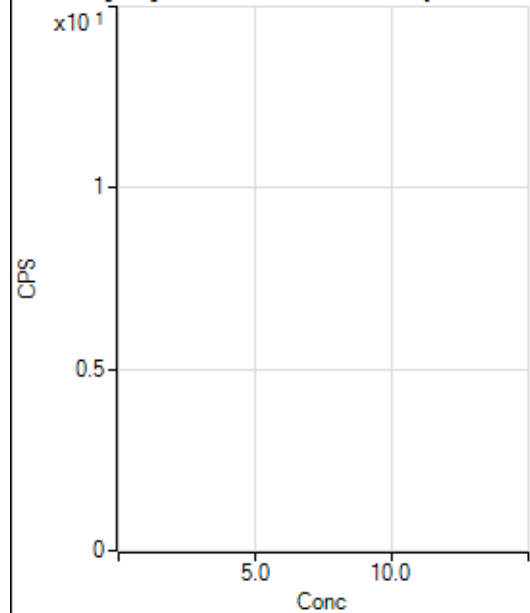
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			61.11		P	39.4
2	☐			30.56		P	41.7
3	☐			111.12		P	43.3
4	☐			133.34		P	21.7
5	☐			188.90		P	17.8
6	☐			377.80		P	27.6
7	☐			586.15		P	0.8
8	☐			1258.44		P	7.5

156 Dy [He] No available calibration points

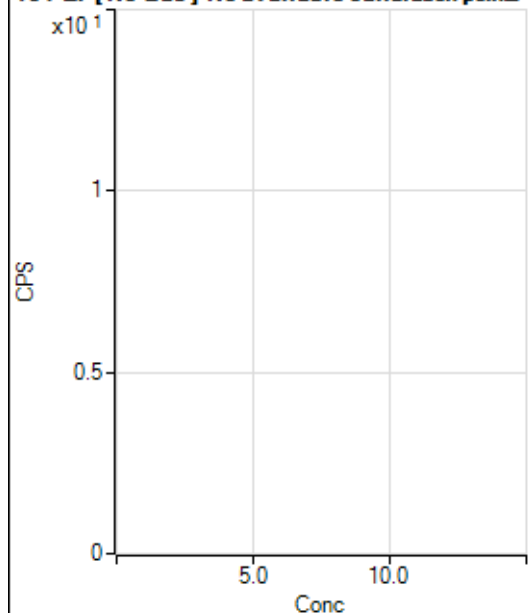
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	100.
2	☐			14.44		P	87.4
3	☐			25.56		P	7.5
4	☐			32.22		P	21.5
5	☐			71.11		P	17.7
6	☐			158.89		P	2.4
7	☐			313.34		P	12.0
8	☐			477.80		P	2.8

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

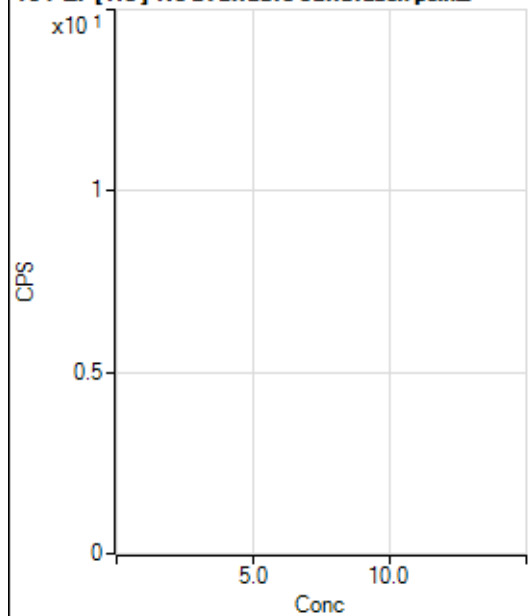
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			136.12		P	17.7
2	☐			155.57		P	40.9
3	☐			152.78		P	11.4
4	☐			169.45		P	27.1
5	☐			213.90		P	19.2
6	☐			263.90		P	22.8
7	☐			477.81		P	16.2
8	☐			1389.03		P	7.2

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			171.12		P	17.0
2	☐			166.67		P	19.1
3	☐			151.11		P	1.3
4	☐			193.34		P	15.0
5	☐			225.56		P	18.7
6	☐			254.45		P	15.8
7	☐			285.56		P	10.5
8	☐			690.03		P	13.5

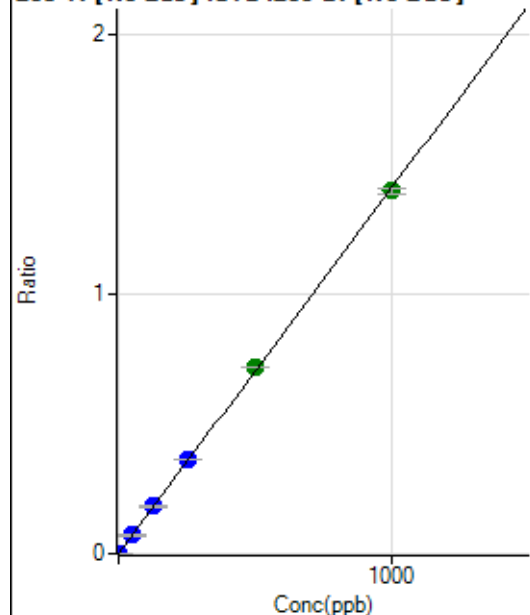
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			94.45		P	28.4
2	☐			100.01		P	14.4
3	☐			94.45		P	5.1
4	☐			100.01		P	38.2
5	☐			94.45		P	18.4
6	☐			158.34		P	18.2
7	☐			175.01		P	24.7
8	☐			241.68		P	11.9

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			41.11		P	44.7
2	☐			36.67		P	24.0
3	☐			28.89		P	63.6
4	☐			36.67		P	15.7
5	☐			47.78		P	17.6
6	☐			33.33		P	43.6
7	☐			60.00		P	24.2
8	☐			83.33		P	16.0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	94.45	0.0000	P	20.5
2	☐	1.000	0.906	13540.78	0.0013	P	2.8
3	☐	50.000	50.024	729073.71	0.0704	P	1.2
4	☐	125.000	128.903	1876004.32	0.1814	P	1.5
5	☐	250.000	257.835	3771526.78	0.3628	P	0.6
6	☐	500.000	509.738	7335059.10	0.7173	A	0.7
7	☐	1000.000	992.683	14217134.17	1.3969	A	1.4
8	☐			3772.94	0.0005	P	5.7

$$y = 0.0014 * x + 9.2865E-006$$

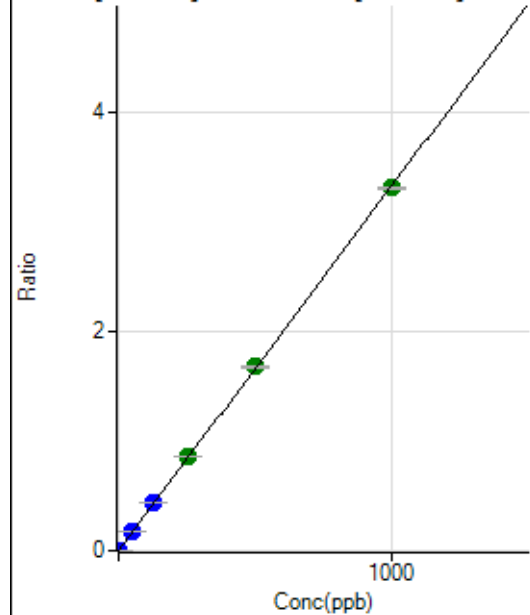
$$R = 0.9999$$

$$DL = 0.004058$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	238.90	0.0000	P	16.2
2	☐	1.000	0.913	32315.32	0.0031	P	1.1
3	☐	50.000	50.614	1746867.07	0.1687	P	1.1
4	☐	125.000	130.801	4507863.99	0.4359	P	1.0
5	☐	250.000	256.775	8894221.64	0.8556	A	0.1
6	☐	500.000	504.400	17186862.71	1.6807	A	0.6
7	☐	1000.000	995.351	33756450.75	3.3166	A	0.9
8	☐			9097.94	0.0011	P	3.1

$$y = 0.0033 * x + 2.3489E-005$$

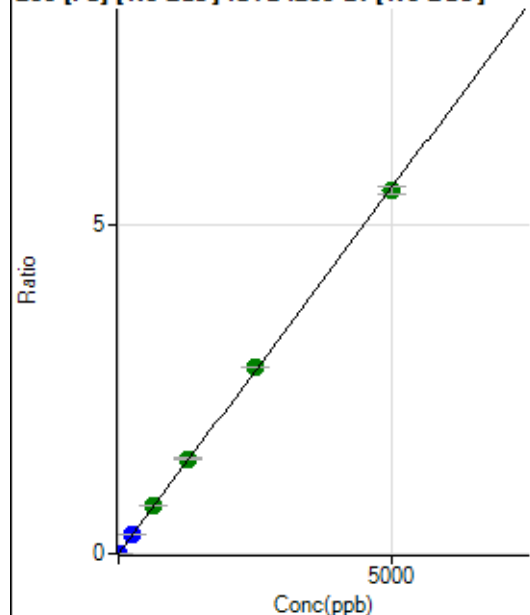
$$R = 0.9999$$

$$DL = 0.003433$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	433.35	0.0000	P	8.8
2	☐	1.000	0.932	11379.23	0.0011	P	1.0
3	☐	250.000	252.183	2905110.68	0.2805	P	1.5
4	☐	625.000	656.580	7553718.74	0.7303	A	0.3
5	☐	1250.000	1294.375	14965010.17	1.4397	A	1.2
6	☐	2500.000	2550.617	29010196.94	2.8369	A	0.8
7	☐	5000.000	4959.541	56141290.60	5.5161	A	2.1
8	☐			46626.58	0.0056	P	1.1

$$y = 0.0011 * x + 4.2598E-005$$

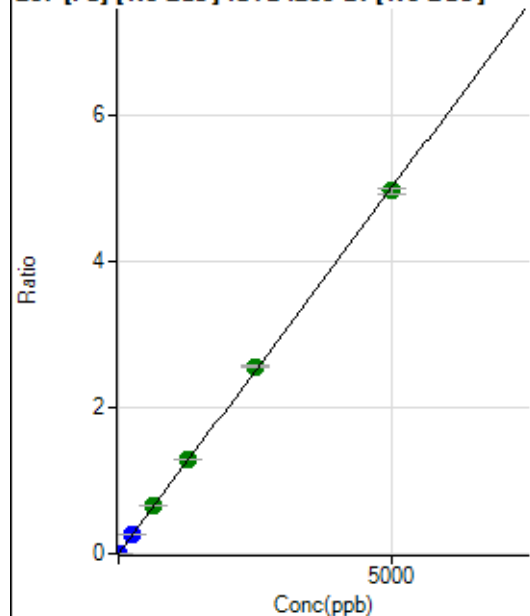
$$R = 0.9999$$

$$DL = 0.01016$$

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	387.05	0.0000	P	8.9
2	☐	1.000	0.892	9829.79	0.0009	P	3.3
3	☐	250.000	252.592	2624348.90	0.2534	P	1.0
4	☐	625.000	660.927	6856334.70	0.6630	A	1.5
5	☐	1250.000	1289.056	13440587.91	1.2930	A	1.3
6	☐	2500.000	2552.225	26178825.35	2.5600	A	1.1
7	☐	5000.000	4959.503	50630698.35	4.9746	A	1.3
8	☐			40774.23	0.0049	P	2.0

$$y = 0.0010 * x + 3.8056E-005$$

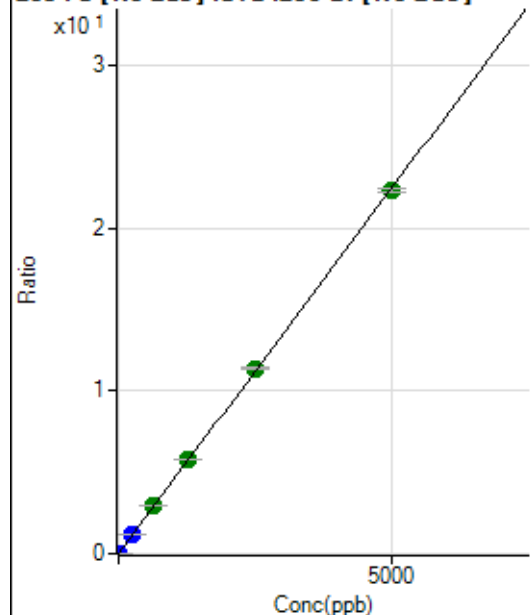
$$R = 0.9999$$

$$DL = 0.01015$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1731.58	0.0002	P	3.4
2	☐	1.000	0.925	45576.44	0.0043	P	1.8
3	☐	250.000	252.859	11765138.89	1.1360	P	1.1
4	☐	625.000	654.650	30415752.76	2.9409	A	1.2
5	☐	1250.000	1291.296	60299331.44	5.8008	A	0.7
6	☐	2500.000	2537.445	116565406.0	11.3987	A	0.5
7	☐	5000.000	4967.105	227101365.7	22.3131	A	1.0
8	☐			184582.09	0.0222	P	1.3

$$y = 0.0045 * x + 1.7023E-004$$

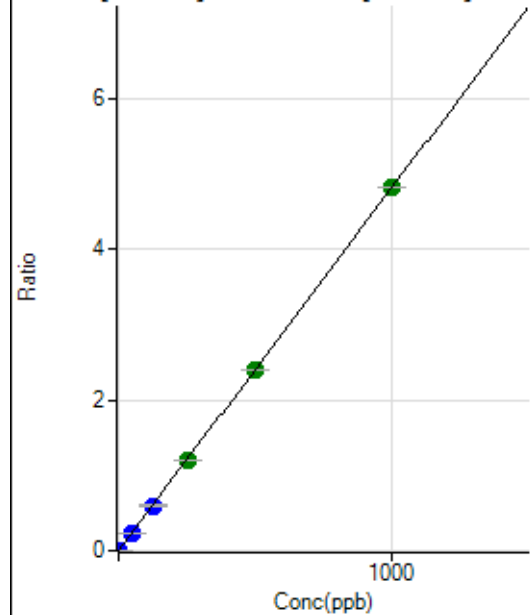
$$R = 0.9999$$

$$DL = 0.003855$$

Weight: <None>

Min Conc: 0

232 Th [No Gas] ISTD :209 Bi [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	663.00	0.0001	P	15.0
2	☐	1.000	0.001	718.56	0.0001	P	3.4
3	☐	50.000	46.865	2332322.85	0.2252	P	1.4
4	☐	125.000	123.896	6156563.97	0.5953	P	1.5
5	☐	250.000	250.784	12525254.22	1.2049	A	0.4
6	☐	500.000	498.370	24486430.41	2.3944	A	0.7
7	☐	1000.000	1000.915	48944454.34	4.8088	A	0.1
8	☐			11423.83	0.0014	P	4.4

$$y = 0.0048 * x + 6.5158E-005$$

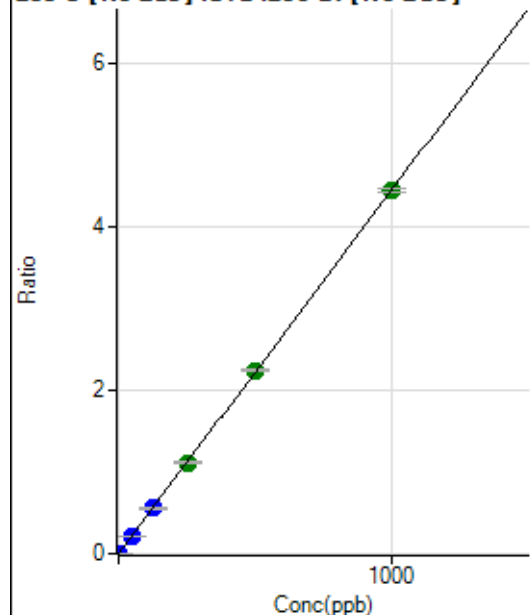
$$R = 1.0000$$

$$DL = 0.006089$$

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	13.89	0.0000	P	34.9
2	☐	1.000	0.887	41560.19	0.0039	P	1.6
3	☐	50.000	47.557	2189741.65	0.2114	P	0.4
4	☐	125.000	124.659	5732107.33	0.5542	P	1.0
5	☐	250.000	250.754	11588603.12	1.1148	A	1.2
6	☐	500.000	503.104	22873237.49	2.2368	A	1.2
7	☐	1000.000	998.424	45180417.68	4.4390	A	1.1
8	☐			5784.93	0.0007	P	5.5

$$y = 0.0044 * x + 1.3664E-006$$

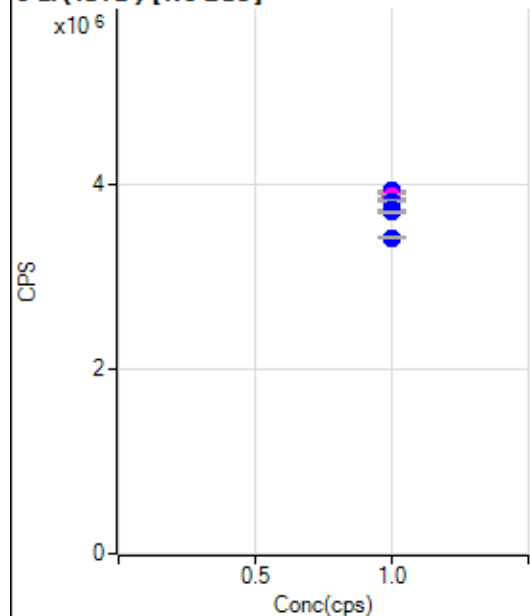
$$R = 1.0000$$

$$DL = 0.0003216$$

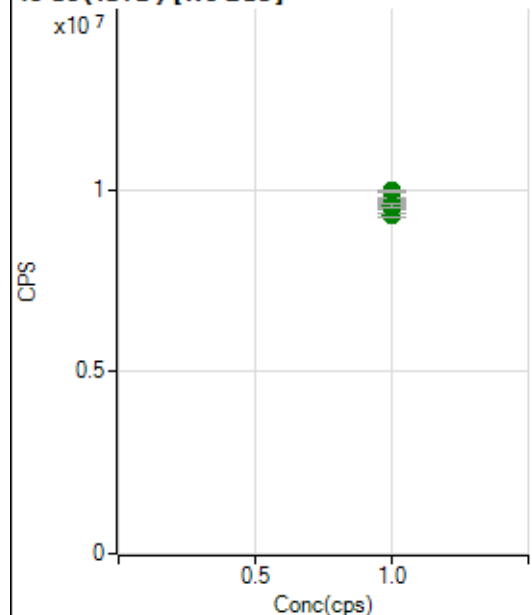
Weight: <None>

Min Conc: 0

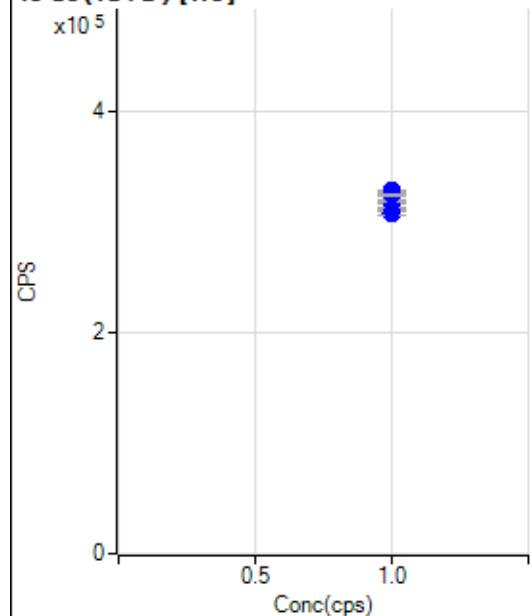
6 Li (ISTD) [No Gas]



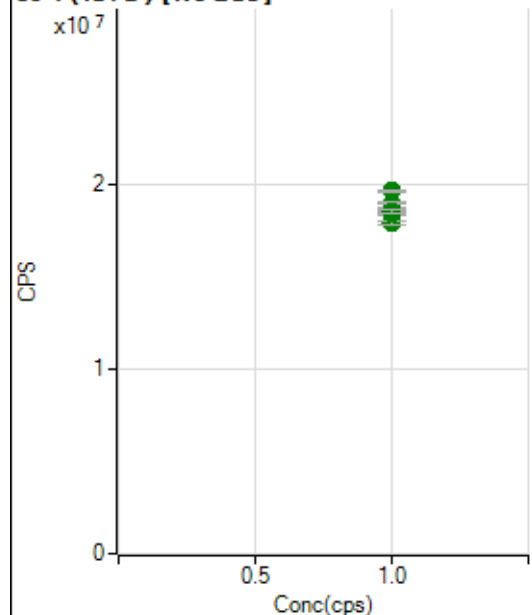
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3925005.05		P	0.9
2	☐	1.000		3933972.58		P	0.3
3	☐	1.000		3899585.67		P	0.5
4	☐	1.000		3885820.74		M	1.0
5	☐	1.000		3824486.37		P	0.6
6	☐	1.000		3734445.64		P	0.1
7	☐	1.000		3709450.78		P	0.5
8	☐	1.000		3427900.85		P	0.8

45 Sc (ISTD) [No Gas]

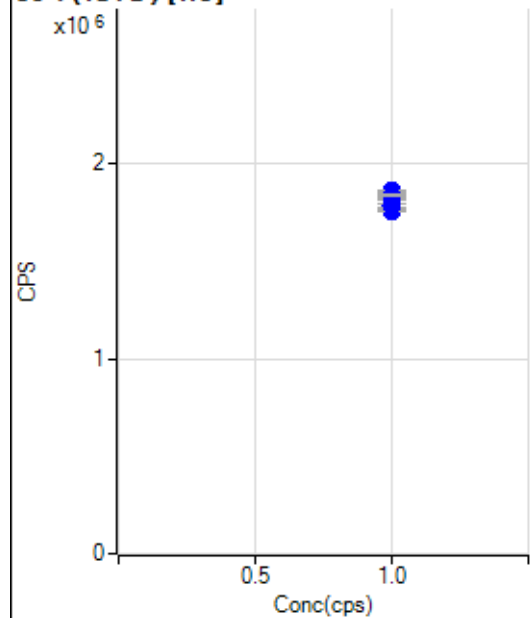
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9279155.42		A	1.2
2	☐	1.000		9513161.38		A	1.2
3	☐	1.000		9560758.26		A	1.3
4	☐	1.000		9661421.94		A	1.0
5	☐	1.000		9684025.06		A	0.8
6	☐	1.000		9756797.28		A	0.1
7	☐	1.000		9956761.80		A	0.9
8	☐	1.000		9543148.89		A	0.9

45 Sc (ISTD) [He]

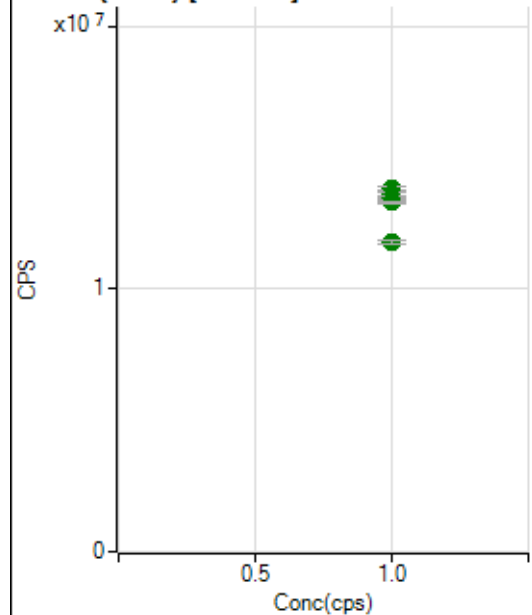
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		307954.64		P	0.8
2	☐	1.000		312684.15		P	0.5
3	☐	1.000		317975.82		P	0.3
4	☐	1.000		312183.30		P	0.7
5	☐	1.000		313321.02		P	0.4
6	☐	1.000		319244.84		P	0.3
7	☐	1.000		328254.14		P	0.4
8	☐	1.000		324819.05		P	0.5

89 Y (ISTD) [No Gas]

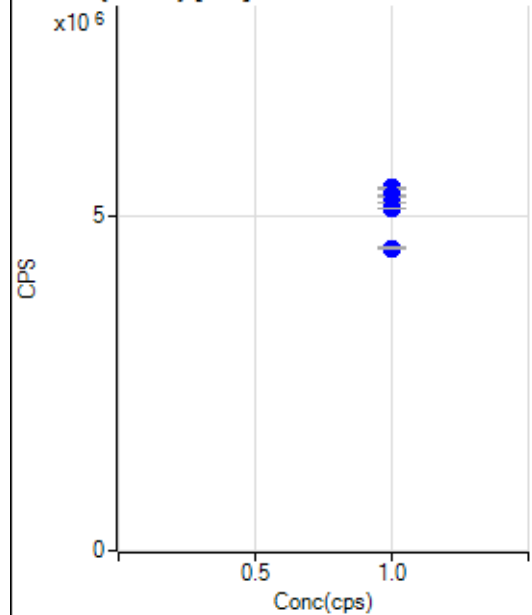
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		17962859.18		A	1.3
2	☐	1.000		18474686.25		A	1.1
3	☐	1.000		18625705.83		A	0.9
4	☐	1.000		18694925.28		A	0.2
5	☐	1.000		18985994.58		A	1.6
6	☐	1.000		19051141.52		A	0.9
7	☐	1.000		19695486.65		A	0.4
8	☐	1.000		18613680.83		A	1.3

89 Y (ISTD) [He]

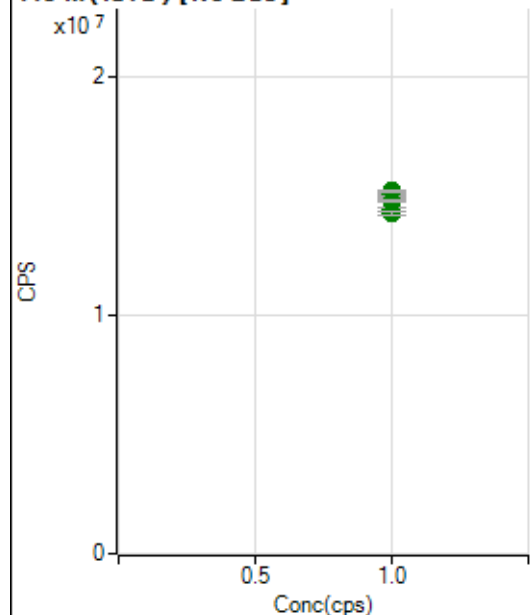
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1758875.48		P	0.4
2	☐	1.000		1787808.31		P	0.8
3	☐	1.000		1819126.10		P	0.5
4	☐	1.000		1794798.31		P	0.4
5	☐	1.000		1819019.97		P	0.7
6	☐	1.000		1837702.39		P	0.3
7	☐	1.000		1861599.38		P	0.5
8	☐	1.000		1837365.54		P	0.4

103 Rh (ISTD) [No Gas]

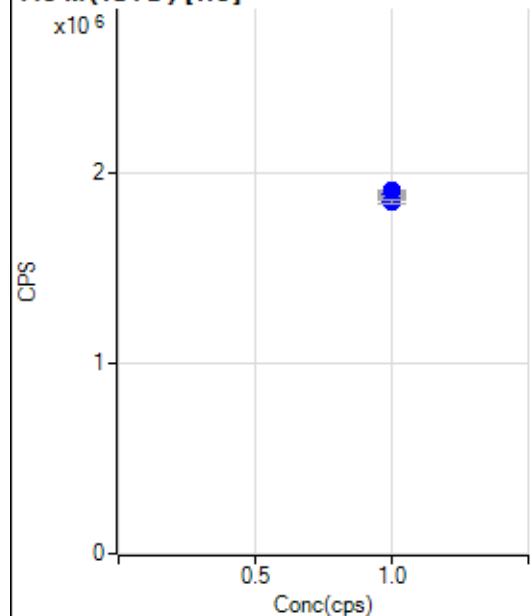
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13328907.44		A	0.3
2	☐	1.000		13812721.18		A	0.9
3	☐	1.000		13474400.63		A	0.5
4	☐	1.000		13610656.60		A	0.8
5	☐	1.000		13597357.02		A	0.9
6	☐	1.000		13465890.63		A	1.1
7	☐	1.000		13292459.94		A	0.6
8	☐	1.000		11778611.36		A	1.4

103 Rh (ISTD) [He]

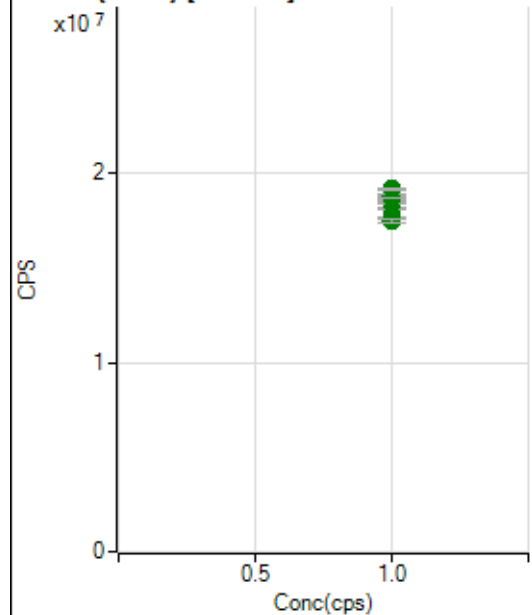
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5314750.09		P	0.3
2	☐	1.000		5403167.91		P	0.4
3	☐	1.000		5418679.50		P	0.2
4	☐	1.000		5309973.95		P	0.6
5	☐	1.000		5276610.93		P	0.2
6	☐	1.000		5194006.17		P	0.4
7	☐	1.000		5125384.23		P	0.0
8	☐	1.000		4523400.70		P	1.0

115 In (ISTD) [No Gas]

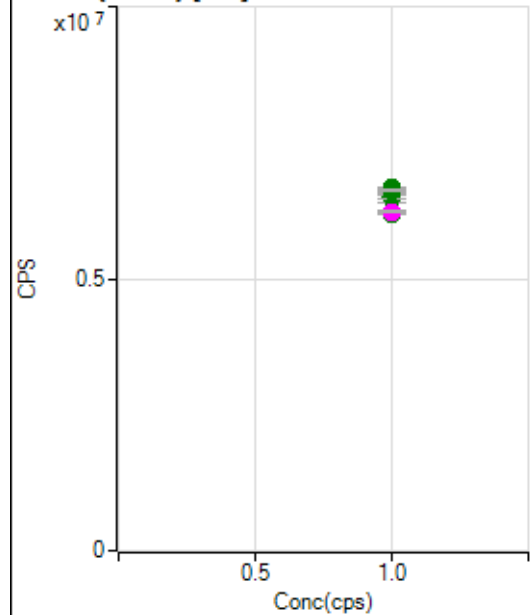
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14430268.26		A	1.3
2	☐	1.000		14804769.36		A	0.4
3	☐	1.000		14873522.41		A	0.6
4	☐	1.000		15007164.82		A	0.6
5	☐	1.000		15054350.90		A	0.9
6	☐	1.000		14764852.66		A	0.6
7	☐	1.000		15193010.62		A	0.6
8	☐	1.000		14236629.21		A	1.0

115 In (ISTD) [He]

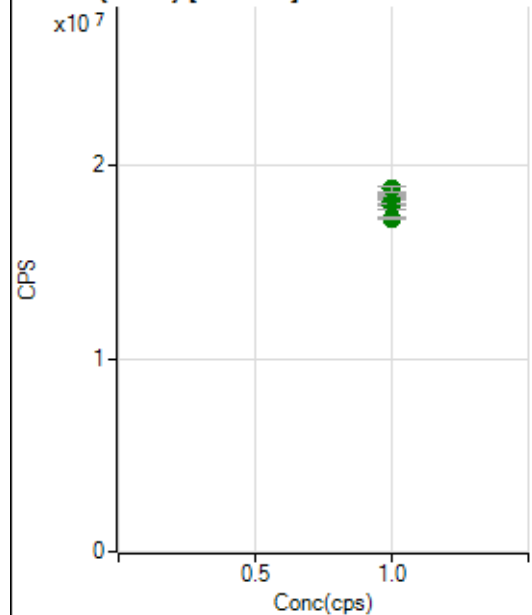
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1866484.74		P	0.5
2	☐	1.000		1891793.24		P	0.3
3	☐	1.000		1908209.00		P	0.5
4	☐	1.000		1891168.38		P	0.6
5	☐	1.000		1881299.40		P	0.3
6	☐	1.000		1876650.58		P	0.2
7	☐	1.000		1874429.61		P	0.7
8	☐	1.000		1852622.41		P	0.8

159 Tb (ISTD) [No Gas]

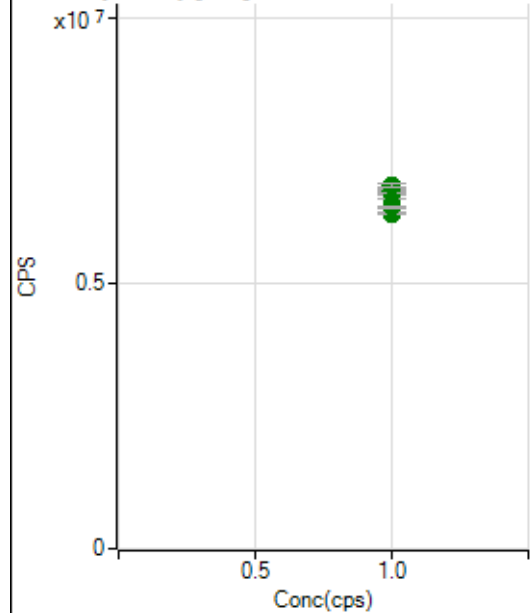
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		17634009.74		A	0.4
2	☐	1.000		18107063.90		A	0.8
3	☐	1.000		18397338.61		A	0.6
4	☐	1.000		18716781.80		A	1.0
5	☐	1.000		18694979.16		A	1.4
6	☐	1.000		18765103.47		A	1.2
7	☐	1.000		19168302.21		A	0.6
8	☐	1.000		17524185.16		A	1.2

159 Tb (ISTD) [He]

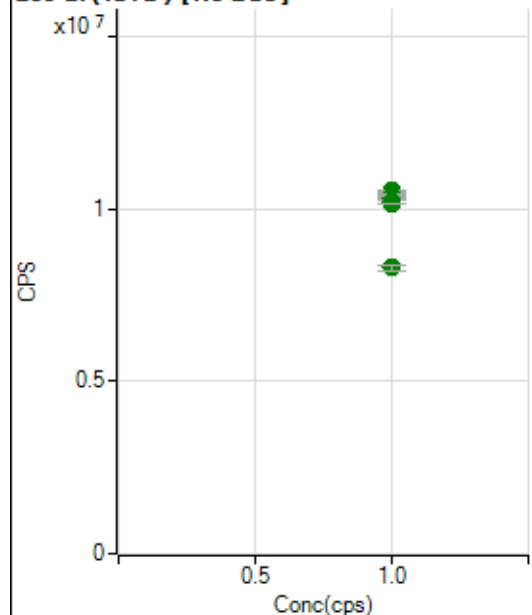
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6203639.56		A	0.6
2	☐	1.000		6474058.79		A	2.1
3	☐	1.000		6587746.57		A	1.3
4	☐	1.000		6503225.94		A	0.9
5	☐	1.000		6613684.90		A	1.1
6	☐	1.000		6670898.86		A	0.7
7	☐	1.000		6640783.44		A	0.7
8	☐	1.000		6238941.85		M	0.1

165 Ho (ISTD) [No Gas]

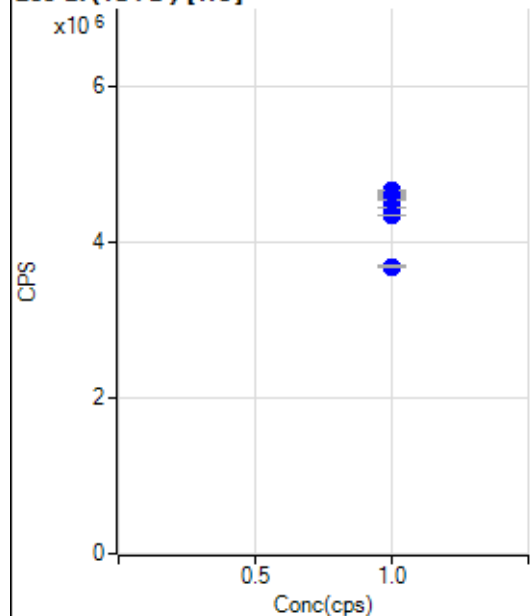
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		17268472.93		A	0.8
2	☐	1.000		17971456.40		A	0.2
3	☐	1.000		17895647.51		A	1.6
4	☐	1.000		18165196.81		A	1.1
5	☐	1.000		18410554.17		A	0.8
6	☐	1.000		18437221.53		A	0.6
7	☐	1.000		18795348.05		A	1.7
8	☐	1.000		17262962.38		A	0.6

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6317494.70		A	0.3
2	☐	1.000		6594029.49		A	0.2
3	☐	1.000		6698207.68		A	1.3
4	☐	1.000		6692186.08		A	1.1
5	☐	1.000		6694009.55		A	0.4
6	☐	1.000		6727937.47		A	1.0
7	☐	1.000		6835045.80		A	0.9
8	☐	1.000		6432442.54		A	0.9

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10172250.26		A	0.3
2	☐	1.000		10539141.93		A	0.5
3	☐	1.000		10356606.65		A	0.9
4	☐	1.000		10343294.08		A	1.4
5	☐	1.000		10395137.28		A	0.5
6	☐	1.000		10226229.50		A	0.8
7	☐	1.000		10178108.67		A	0.3
8	☐	1.000		8316953.83		A	1.9

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4578191.84		P	0.3
2	☐	1.000		4641093.23		P	0.5
3	☐	1.000		4665993.23		P	0.6
4	☐	1.000		4590799.48		P	0.5
5	☐	1.000		4548623.40		P	0.1
6	☐	1.000		4456910.18		P	0.2
7	☐	1.000		4357172.64		P	0.3
8	☐	1.000		3688700.81		P	0.6

US EPA Tune Check Sample Report

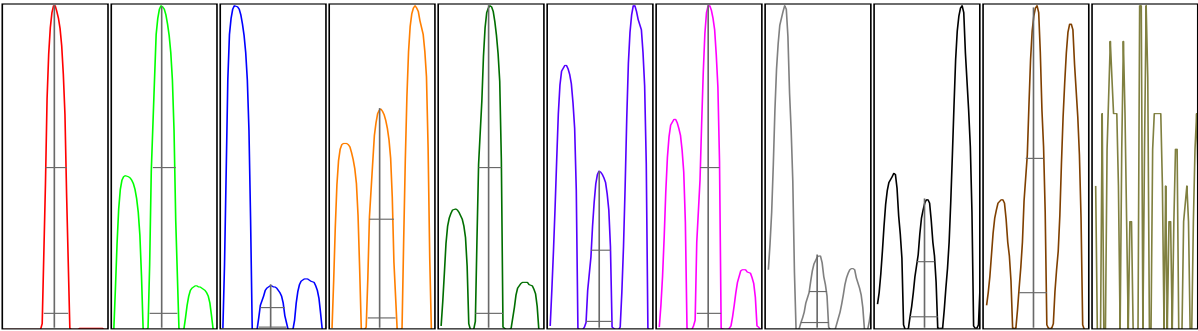
Batch Folder D:\ICP-MS Data\1\DATA\P7060620-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	13395	0.33	5.00	
24	119331	0.63	5.00	
25	16098	0.41	5.00	
26	18705	0.74	5.00	
59	103590	0.48	5.00	
113	19663	0.66	5.00	
115	61872	2.68	5.00	
206	20533	0.44	5.00	
207	17808	0.69	5.00	
208	42529	0.63	5.00	
220	0	54.57		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	13324	13387	13425	13402	13437
24	118400	118899	119539	119406	120410
25	16042	16046	16168	16060	16171
26	18499	18627	18810	18766	18824
59	103017	103102	103842	104072	103916
113	19578	19605	19684	19571	19880
115	61925	61614	60663	60524	64632
206	20414	20606	20472	20543	20632
207	17597	17852	17886	17809	17894
208	42140	42377	42780	42597	42751
220	0	0	0	0	0

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	22651	9.00	8.9 - 9.1		0.741	0.900	
24	185457	23.95	23.9 - 24.1		0.831	0.900	
25	24760	24.95	24.9 - 25.1		0.833	0.900	
26	29254	25.95	25.9 - 26.1		0.833	0.900	
59	166109	58.95	58.9 - 59.1		0.790	0.900	
113	34562	113.00	112.9 - 113.1		0.745	0.900	
115	109420	115.00	114.9 - 115.1		0.740	0.900	
206	39011	206.00	205.9 - 206.1		0.791	0.900	
207	32419	206.95	206.9 - 207.1		0.785	0.900	
208	80290	207.95	207.9 - 208.1		0.797	0.900	
220	0	219.90	-		0.350		

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

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.76	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.7	V	Deflect	12.4	V
Extract 2	-145.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-60	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination		5.0 V
He Flow	0.0	mL/min	OctP RF	190	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	22736	0.75	
89	40495	0.60	
205	41786	0.27	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	22513	22716	22649	22937	22866
89	40177	40540	40329	40786	40642
205	41926	41729	41830	41816	41628

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.76	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.8	V	Deflect	2.2	V
Extract 2	-145.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-65	V	Cell Exit	-60	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	Yes		OctP Bias	-18.0	V	Energy Discrimination		5.0 V
He Flow	4.1	mL/min	OctP RF	200	V			