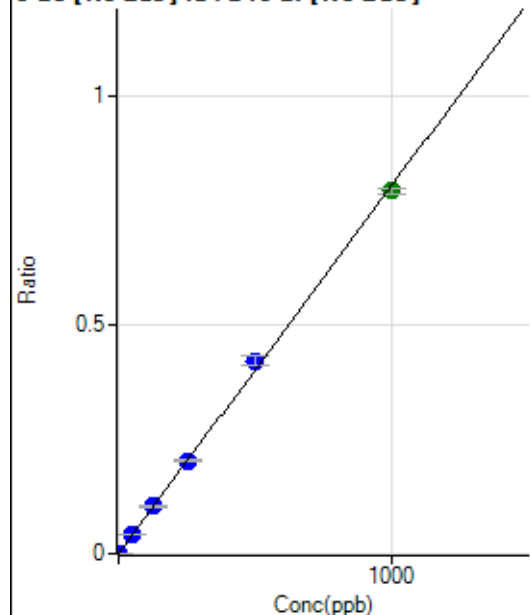


Batch Folder: D:\P8091918MS.b\
Analysis File: P8091918MS.batch.bin
DA Date-Time: 2018-09-19 15:43:48
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2018-09-19 12:46:32
2			
3	006CALS.d	S02	2018-09-19 12:54:02
4	007CALS.d	S03	2018-09-19 12:57:47
5	008CALS.d	S04	2018-09-19 13:01:31
6	009CALS.d	S05	2018-09-19 13:05:10
7	010CALS.d	S06	2018-09-19 13:08:43
8	011CALS.d	S07	2018-09-19 13:12:11
9	012CALS.d	S08	2018-09-19 13:15:36

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	66.67	0.0001	P	37.7
2	☐	0.100					
3	☐	1.000	0.893	1029.70	0.0008	P	3.9
4	☐	50.000	51.818	55594.51	0.0416	P	1.8
5	☐	125.000	128.561	142804.87	0.1032	P	1.0
6	☐	250.000	252.759	284338.38	0.2029	P	1.1
7	☐	500.000	524.679	569095.06	0.4211	P	5.1
8	☐	1000.000	986.435	1126262.27	0.7917	A	1.7
9	☐			837.09	0.0006	P	8.3

$$y = 8.0257\text{E-}004 * x + 5.1809\text{E-}005$$

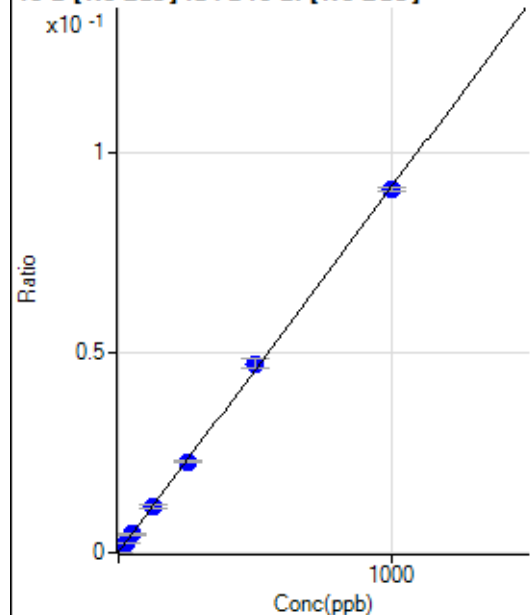
$$R = 0.9995$$

$$DL = 0.07293$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	138.90	0.0001	P	13.6
2	☐	2.500					
3	☐	25.000	24.838	3186.62	0.0024	P	5.7
4	☐	50.000	49.288	6159.89	0.0046	P	6.7
5	☐	125.000	125.678	16045.65	0.0116	P	5.7
6	☐	250.000	246.948	31797.17	0.0227	P	2.2
7	☐	500.000	516.995	64068.72	0.0474	P	4.3
8	☐	1000.000	992.220	129275.35	0.0909	P	1.2
9	☐			6604.57	0.0047	P	10.4

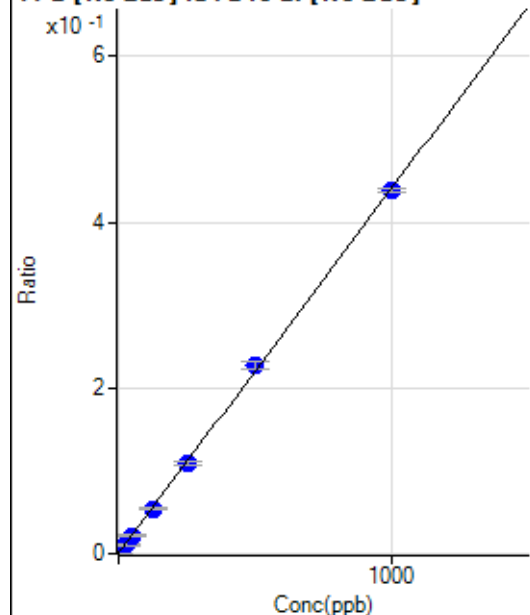
$$y = 9.1459\text{E-}005 * x + 1.0757\text{E-}004$$

$$R = 0.9998$$

$$DL = 0.4808$$

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	530.59	0.0004	P	3.2
2	☐	2.500					
3	☐	25.000	23.159	14207.60	0.0106	P	4.3
4	☐	50.000	49.035	29378.09	0.0220	P	2.1
5	☐	125.000	122.385	75119.12	0.0543	P	1.1
6	☐	250.000	245.677	152137.90	0.1086	P	3.4
7	☐	500.000	516.086	307767.76	0.2277	P	4.4
8	☐	1000.000	993.459	622925.77	0.4379	P	1.2
9	☐			31301.75	0.0223	P	10.0

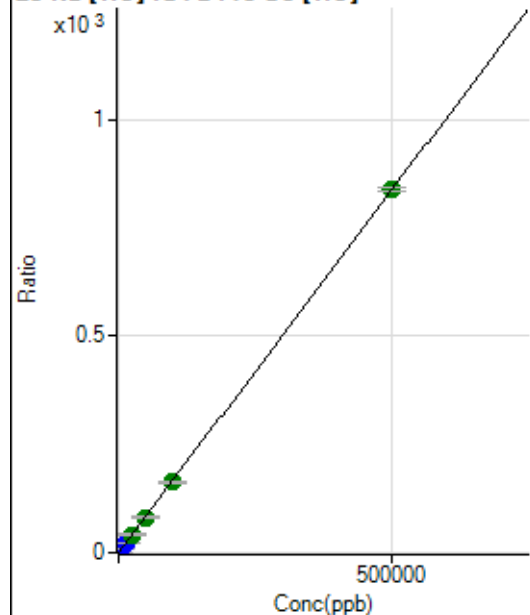
$$y = 4.4033\text{E-}004 * x + 4.1113\text{E-}004$$

$$R = 0.9998$$

$$DL = 0.08832$$

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	3197.74	0.0937	P	8.2
2	☐	50.000					
3	☐	500.000	477.239	31157.15	0.8924	P	3.1
4	☐	5000.000	4845.818	284945.61	8.2032	P	1.9
5	☐	12500.000	12195.545	721935.21	20.5030	P	0.5
6	☐	25000.000	25095.403	1450955.23	42.0909	A	2.2
7	☐	50000.000	49020.283	2819911.89	82.1293	A	1.5
8	☐	100000.00	97060.333	5475965.83	162.5244	A	1.2
9	☐	500000.00	500690.31	28048089.86	838.0000	A	1.0

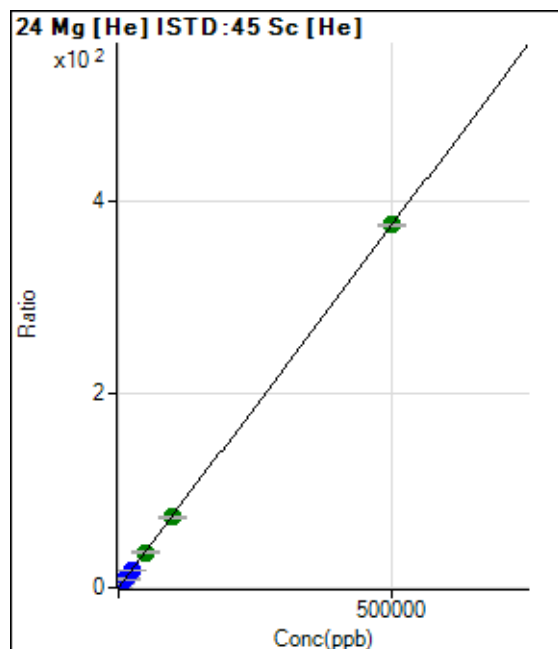
$$y = 0.0017 * x + 0.0937$$

$$R = 1.0000$$

$$DL = 13.78$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	202.79	0.0060	P	17.8
2	☐	50.000					
3	☐	500.000	457.479	12164.07	0.3483	P	3.5
4	☐	5000.000	4835.848	125889.68	3.6244	P	2.2
5	☐	12500.000	12007.480	316553.57	8.9905	P	1.3
6	☐	25000.000	24269.915	626265.94	18.1658	P	1.2
7	☐	50000.000	48804.513	1254086.52	36.5238	A	1.6
8	☐	100000.00	96928.149	2443840.64	72.5321	A	1.3
9	☐	500000.00	500784.42	12541993.68	374.7161	A	0.6

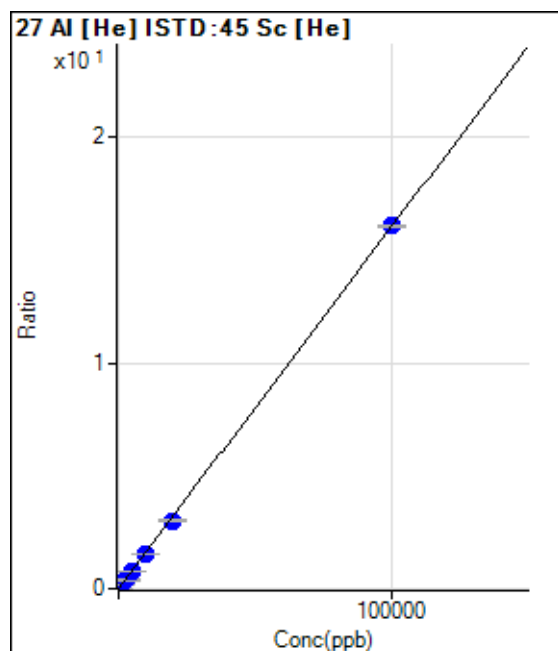
$$y = 7.4825\text{E-}004 * x + 0.0060$$

$$R = 1.0000$$

$$DL = 4.246$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	20.01	0.0006	P	23.3
2	☐	2.000					
3	☐	20.000	16.772	114.20	0.0033	P	16.0
4	☐	1000.000	957.077	5350.74	0.1541	P	4.7
5	☐	2500.000	2399.184	13568.31	0.3854	P	1.9
6	☐	5000.000	4830.602	26728.50	0.7753	P	1.4
7	☐	10000.000	9574.885	52748.65	1.5362	P	0.9
8	☐	20000.000	18833.637	101790.80	3.0211	P	1.1
9	☐	100000.00	100287.20	538364.36	16.0846	P	0.5

$$y = 1.6038\text{E-}004 * x + 5.8499\text{E-}004$$

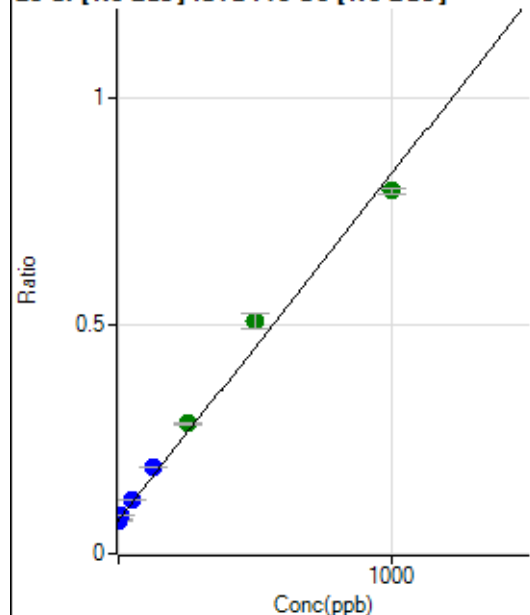
$$R = 0.9999$$

$$DL = 2.544$$

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	315376.95	0.0735	P	3.4
2	☐	1.000					
3	☐	10.000	13.608	370901.53	0.0838	P	0.8
4	☐	50.000	60.415	529104.40	0.1193	P	0.5
5	☐	125.000	153.134	856123.83	0.1897	P	2.0
6	☐	250.000	279.658	1288220.00	0.2857	A	1.3
7	☐	500.000	574.714	2187313.05	0.5095	A	6.1
8	☐	1000.000	951.155	3576741.27	0.7951	A	1.6
9	☐			465303.15	0.1077	P	1.4

$$y = 7.5864\text{E-}004 * x + 0.0735$$

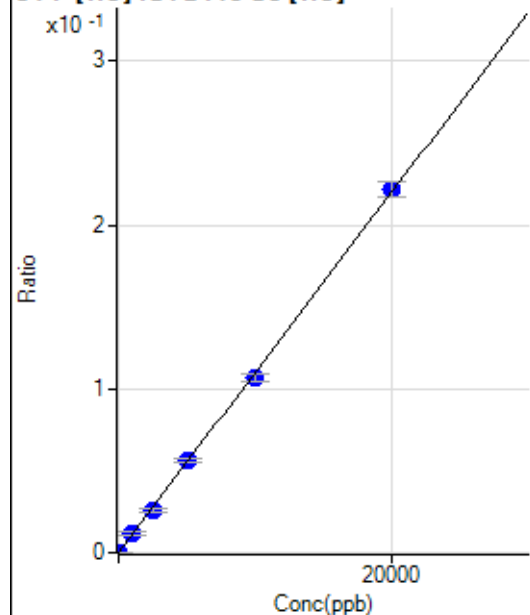
$$R = 0.9950$$

$$DL = 9.853$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.015	2.78	0.0001	P	173.
2	☐	0.000					
3	☐	0.000	-0.015	2.78	0.0001	P	173.
4	☐	1000.000	1034.341	397.25	0.0115	P	22.9
5	☐	2500.000	2374.946	922.30	0.0262	P	7.8
6	☐	5000.000	5102.081	1936.34	0.0562	P	4.5
7	☐	10000.000	9700.738	3664.54	0.1067	P	4.1
8	☐	20000.000	20138.025	7466.20	0.2215	P	4.4
9	☐			13.89	0.0004	P	69.4

$$y = 1.0995\text{E-}005 * x + 7.9371\text{E-}005$$

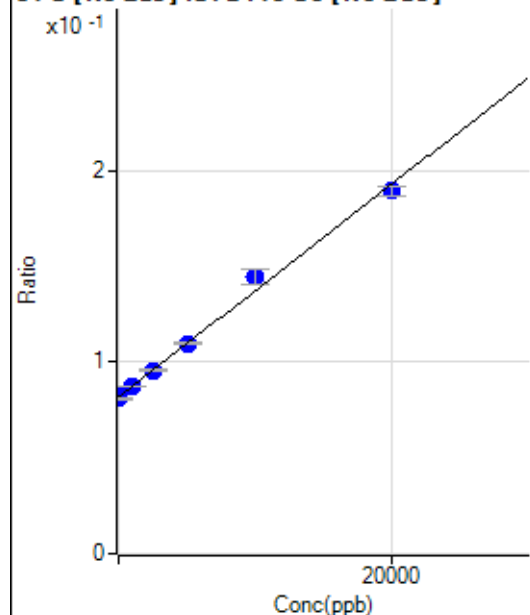
$$R = 0.9998$$

$$DL = 37.51$$

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	191.342	356219.22	0.0830	P	3.2
2	☐	0.000					
3	☐	0.000	-191.342	357914.85	0.0809	P	0.7
4	☐	1000.000	940.392	386550.34	0.0872	P	0.3
5	☐	2500.000	2511.046	432943.65	0.0959	P	1.3
6	☐	5000.000	5000.867	494914.06	0.1098	P	1.2
7	☐	10000.000	11275.503	621077.13	0.1446	P	5.3
8	☐	20000.000	19363.631	852756.74	0.1896	P	2.3
9	☐			351228.32	0.0813	P	1.1

$$y = 5.5580E-006 * x + 0.0820$$

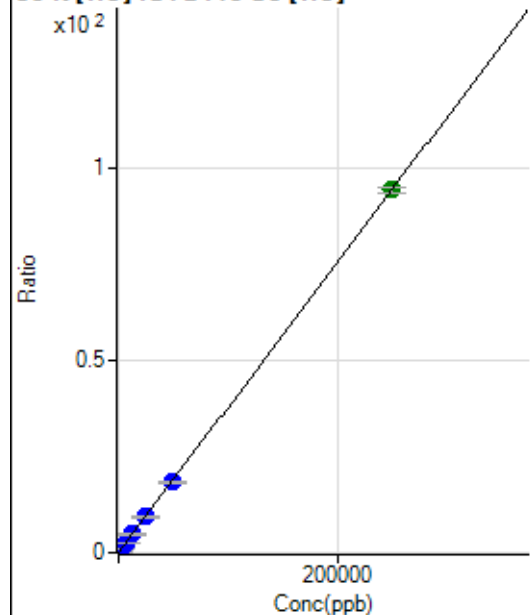
$$R = 0.9968$$

$$DL = 873$$

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	2441.99	0.0716	P	5.0
2	☐	50.000					
3	☐	500.000	486.831	8914.32	0.2553	P	3.8
4	☐	2500.000	2496.527	35214.71	1.0137	P	1.2
5	☐	6250.000	6213.049	85070.84	2.4161	P	1.5
6	☐	12500.000	12532.155	165489.77	4.8007	P	2.3
7	☐	25000.000	24534.092	320328.81	9.3296	P	1.7
8	☐	50000.000	48380.709	617534.69	18.3282	P	1.6
9	☐	250000.00	250369.82	3164549.81	94.5492	A	1.4

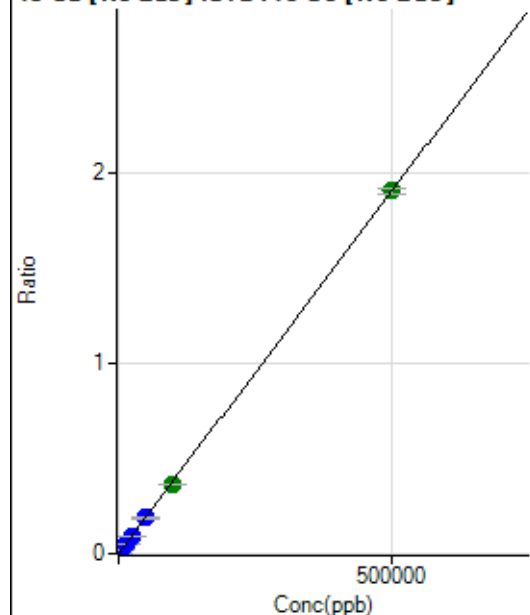
$$y = 3.7735E-004 * x + 0.0716$$

$$R = 1.0000$$

$$DL = 28.4$$

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	725.05	0.0002	P	11.7
2	☐	50.000					
3	☐	500.000	476.588	8750.33	0.0020	P	1.8
4	☐	5000.000	4847.276	82299.65	0.0186	P	1.7
5	☐	12500.000	12014.061	206558.56	0.0458	P	1.0
6	☐	25000.000	23879.093	409393.60	0.0908	P	0.7
7	☐	50000.000	49970.094	814840.64	0.1898	P	6.0
8	☐	100000.00	95547.152	1631676.33	0.3628	A	2.6
9	☐	500000.00	500963.30	8210840.72	1.9013	A	1.9

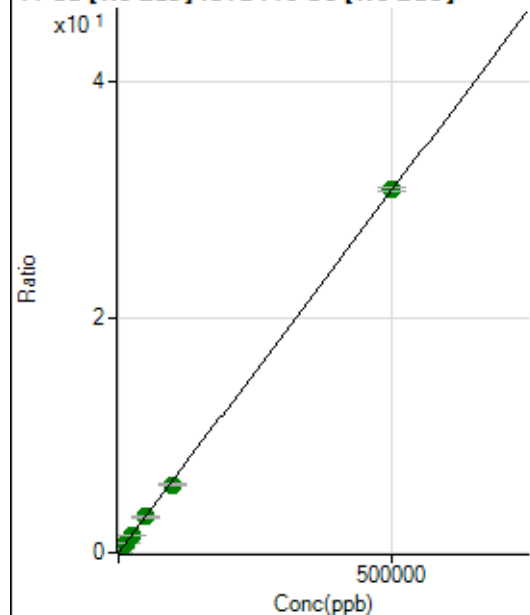
$$y = 3.7949\text{E-}006 * x + 1.6888\text{E-}004$$

$$R = 1.0000$$

$$DL = 15.56$$

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	15225.65	0.0036	P	5.3
2	☐	50.000					
3	☐	500.000	471.368	143850.26	0.0325	P	1.2
4	☐	5000.000	4936.446	1360548.81	0.3069	A	0.3
5	☐	12500.000	12081.696	3366905.46	0.7459	A	1.5
6	☐	25000.000	23933.063	6647679.62	1.4742	A	0.1
7	☐	50000.000	49992.516	13203915.49	3.0755	A	5.9
8	☐	100000.00	93562.912	25877105.09	5.7527	A	2.1
9	☐	500000.00	501352.63	133067436.3	30.8103	A	1.1

$$y = 6.1447\text{E-}005 * x + 0.0036$$

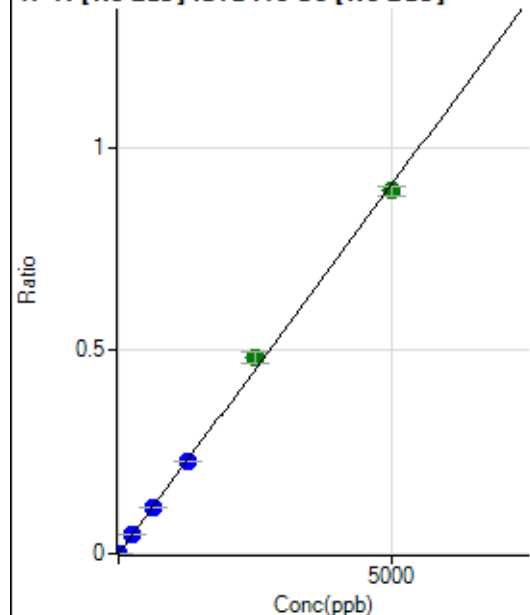
$$R = 0.9999$$

$$DL = 9.173$$

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	97.23	0.0000	P	30.3
2	☐	0.500					
3	☐	5.000	5.068	4170.29	0.0009	P	7.8
4	☐	250.000	251.487	202462.38	0.0457	P	1.1
5	☐	625.000	631.962	517840.48	0.1147	P	1.2
6	☐	1250.000	1255.816	1027943.52	0.2280	P	0.4
7	☐	2500.000	2659.229	2072005.56	0.4827	A	6.3
8	☐	5000.000	4917.987	4015032.08	0.8926	A	2.6
9	☐			2934.05	0.0007	P	39.9

$$y = 1.8150E-004 * x + 2.2805E-005$$

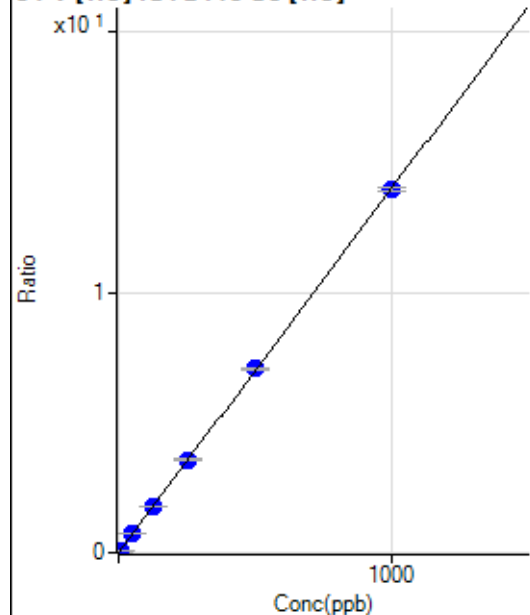
$$R = 0.9992$$

$$DL = 0.1143$$

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	2.22	0.0001	P	173.
2	☐	0.500					
3	☐	5.000	4.805	2350.24	0.0673	P	5.4
4	☐	50.000	51.082	24822.28	0.7146	P	1.4
5	☐	125.000	125.485	61804.42	1.7553	P	0.7
6	☐	250.000	255.167	123036.57	3.5692	P	2.2
7	☐	500.000	504.528	242303.71	7.0571	P	1.6
8	☐	1000.000	996.331	469548.22	13.9361	P	1.2
9	☐			212.23	0.0063	P	23.9

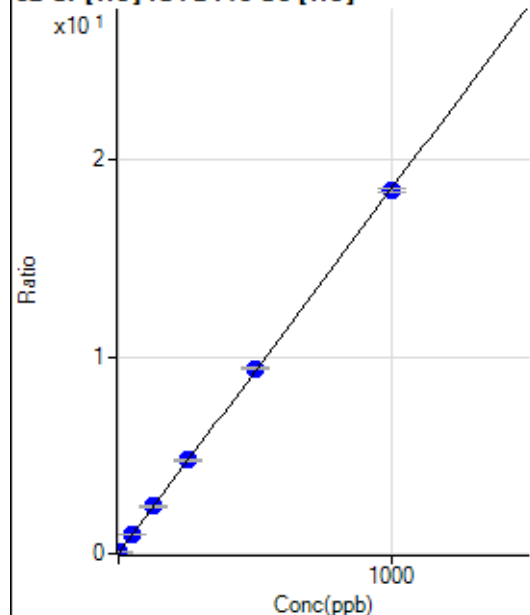
$$y = 0.0140 * x + 6.5928E-005$$

$$R = 1.0000$$

$$DL = 0.02449$$

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	414.46	0.0122	P	4.6
2	☐	0.200					
3	☐	2.000	2.101	1783.48	0.0511	P	0.7
4	☐	50.000	51.644	33646.13	0.9686	P	1.7
5	☐	125.000	128.919	84502.01	2.3998	P	0.8
6	☐	250.000	257.172	164611.41	4.7751	P	1.9
7	☐	500.000	507.140	322912.58	9.4046	P	1.5
8	☐	1000.000	994.065	620724.90	18.4227	P	1.0
9	☐			28939.01	0.8646	P	1.1

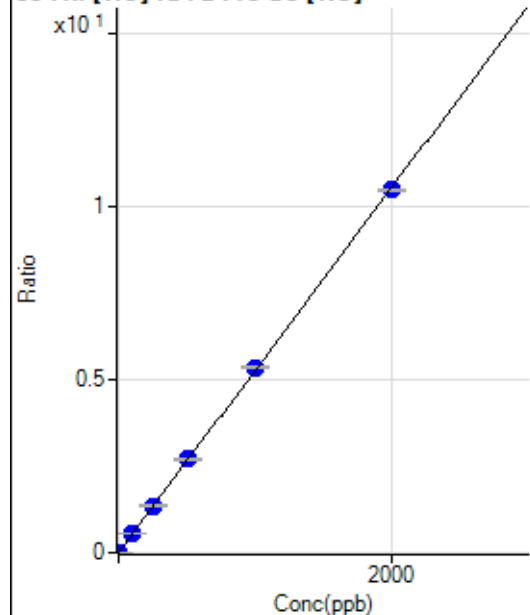
$$y = 0.0185 * x + 0.0122$$

$$R = 0.9999$$

$$DL = 0.09095$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	48.89	0.0014	P	27.1
2	☐	0.100					
3	☐	1.000	1.066	246.67	0.0071	P	11.9
4	☐	100.000	103.495	19014.26	0.5473	P	1.4
5	☐	250.000	256.866	47753.69	1.3562	P	1.1
6	☐	500.000	511.760	93104.21	2.7006	P	1.1
7	☐	1000.000	1013.558	183605.81	5.3473	P	1.2
8	☐	2000.000	1989.248	353564.28	10.4934	P	0.9
9	☐			1810.15	0.0541	P	2.8

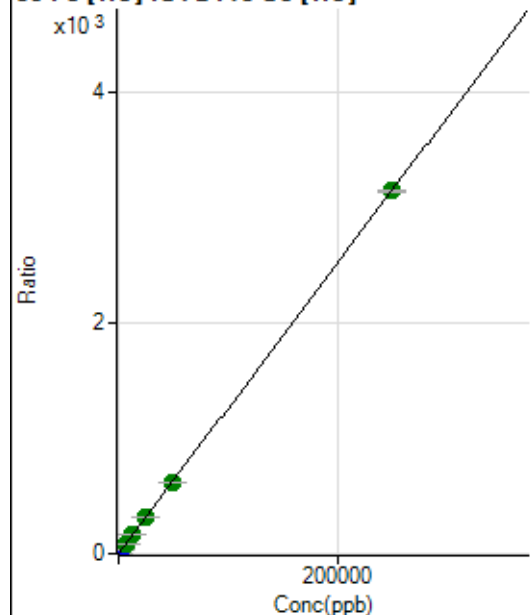
$$y = 0.0053 * x + 0.0014$$

$$R = 0.9999$$

$$DL = 0.221$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	901.91	0.0265	P	3.3
2	☐	5.000					
3	☐	50.000	50.476	23065.91	0.6604	P	1.5
4	☐	2500.000	2555.429	1115782.62	32.1211	P	1.7
5	☐	6250.000	6441.501	2849456.86	80.9278	A	1.3
6	☐	12500.000	12745.826	5519503.19	160.1063	A	1.5
7	☐	25000.000	24923.947	10749138.67	313.0561	A	1.2
8	☐	50000.000	49265.212	20848647.69	618.7677	A	0.9
9	☐	250000.00	250136.93	105150303.2	3,141.594	A	0.9

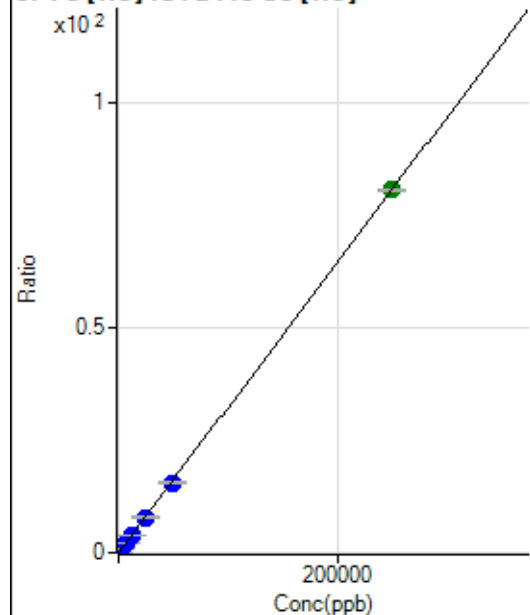
$$y = 0.0126 * x + 0.0265$$

$$R = 1.0000$$

$$DL = 0.2055$$

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	29.63	0.0009	P	53.7
2	☐	5.000					
3	☐	50.000	51.439	607.44	0.0174	P	8.4
4	☐	2500.000	2488.030	27811.60	0.8007	P	2.5
5	☐	6250.000	6225.007	70492.63	2.0021	P	1.4
6	☐	12500.000	12486.530	138416.88	4.0150	P	1.3
7	☐	25000.000	24525.552	270755.37	7.8854	P	1.3
8	☐	50000.000	48339.805	523636.63	15.5412	P	1.1
9	☐	250000.00	250380.90	2694178.51	80.4936	A	0.6

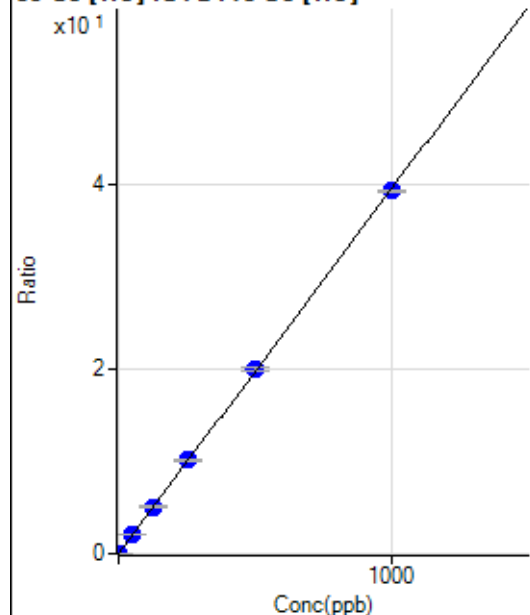
$$y = 3.2148E-004 * x + 8.6562E-004$$

$$R = 1.0000$$

$$DL = 4.335$$

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	46.67	0.0014	P	25.6
2	☐	0.100					
3	☐	1.000	0.986	1407.88	0.0403	P	4.2
4	☐	50.000	51.555	70811.16	2.0384	P	1.3
5	☐	125.000	128.823	179272.04	5.0915	P	1.1
6	☐	250.000	257.693	351062.33	10.1835	P	1.8
7	☐	500.000	505.783	686220.10	19.9861	P	1.6
8	☐	1000.000	994.630	1324236.11	39.3017	P	0.8
9	☐			16623.43	0.4967	P	4.6

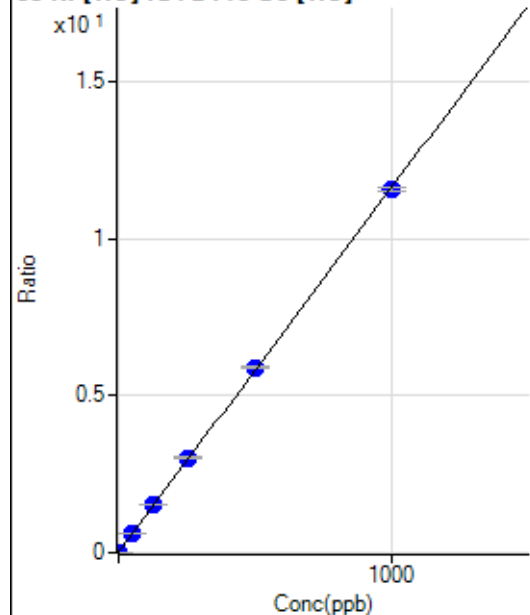
$$y = 0.0395 * x + 0.0014$$

$$R = 0.9999$$

$$DL = 0.02659$$

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	440.01	0.0129	P	5.7
2	☐	0.100					
3	☐	1.000	1.158	920.05	0.0264	P	13.0
4	☐	50.000	51.981	21452.29	0.6175	P	0.7
5	☐	125.000	130.286	53813.74	1.5283	P	0.2
6	☐	250.000	258.897	104247.63	3.0242	P	2.3
7	☐	500.000	506.509	202726.38	5.9042	P	1.2
8	☐	1000.000	993.761	389882.37	11.5714	P	1.0
9	☐			14700.20	0.4392	P	0.3

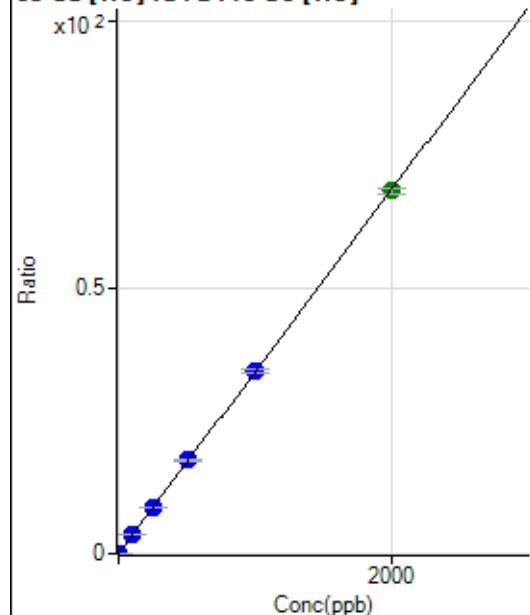
$$y = 0.0116 * x + 0.0129$$

$$R = 0.9999$$

$$DL = 0.1889$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	712.25	0.0209	P	2.1
2	☐	0.200					
3	☐	2.000	2.046	3172.64	0.0908	P	2.5
4	☐	100.000	103.107	123209.05	3.5467	P	1.1
5	☐	250.000	257.324	310566.10	8.8202	P	0.7
6	☐	500.000	513.894	606503.10	17.5937	P	1.9
7	☐	1000.000	1003.868	1179357.55	34.3487	P	1.6
8	☐	2000.000	1993.522	2297475.90	68.1904	A	1.6
9	☐			5345.56	0.1597	P	2.3

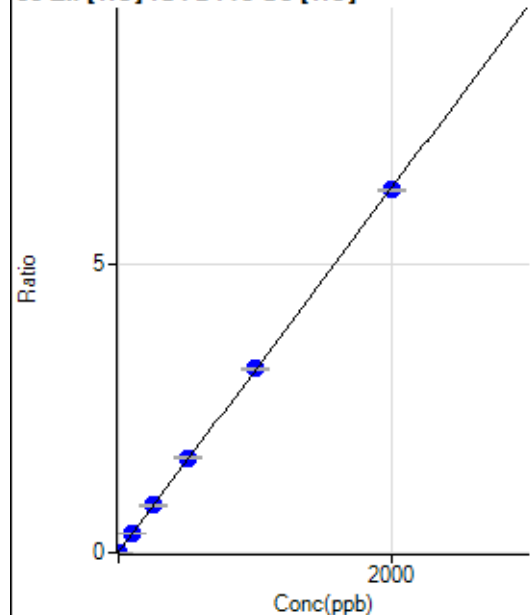
$$y = 0.0342 * x + 0.0209$$

$$R = 1.0000$$

$$DL = 0.03849$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	208.90	0.0061	P	11.2
2	☐	0.200					
3	☐	2.000	2.245	461.13	0.0132	P	8.9
4	☐	100.000	106.952	11938.64	0.3437	P	2.7
5	☐	250.000	259.313	29036.15	0.8247	P	2.2
6	☐	500.000	520.491	56851.50	1.6491	P	1.4
7	☐	1000.000	1006.478	109291.84	3.1832	P	1.9
8	☐	2000.000	1990.126	211871.45	6.2881	P	0.9
9	☐			1913.50	0.0572	P	2.5

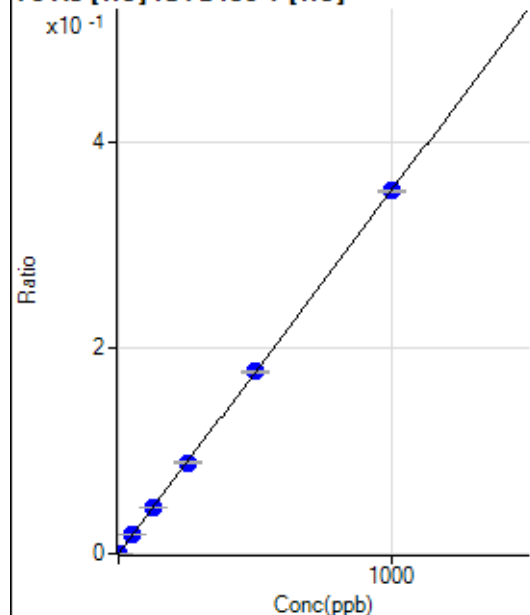
$$y = 0.0032 * x + 0.0061$$

$$R = 0.9999$$

$$DL = 0.6508$$

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	3.08	0.0000	P	34.3
2	☐	0.100					
3	☐	1.000	1.019	88.27	0.0004	P	7.3
4	☐	50.000	50.967	4260.58	0.0180	P	1.4
5	☐	125.000	125.897	10552.88	0.0444	P	2.0
6	☐	250.000	250.949	20734.20	0.0884	P	3.0
7	☐	500.000	500.551	40321.58	0.1764	P	1.0
8	☐	1000.000	999.327	78042.70	0.3522	P	0.9
9	☐			135.19	0.0006	P	12.9

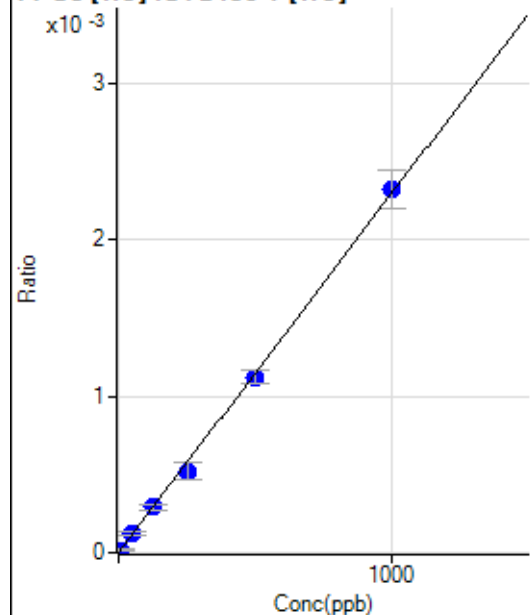
$$y = 3.5238\text{E-}004 * x + 1.3326\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.03886$$

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	6.139	3.33	0.0000	P	99.4
4	☐	50.000	53.172	28.89	0.0001	P	24.0
5	☐	125.000	126.416	68.89	0.0003	P	14.9
6	☐	250.000	227.243	122.23	0.0005	P	20.6
7	☐	500.000	489.980	256.67	0.0011	P	8.7
8	☐	1000.000	1010.358	513.35	0.0023	P	10.5
9	☐			1.11	0.0000	P	173.

$$y = 2.2919\text{E-}006 * x + 0.0000\text{E+}000$$

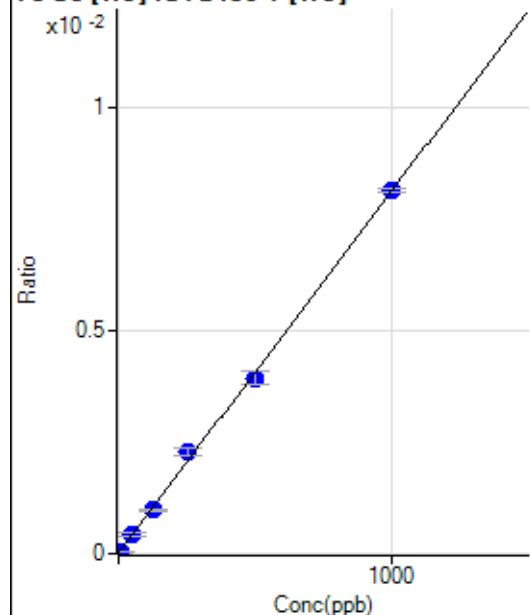
$$R = 0.9996$$

$$DL = 0$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	3.70	0.0000	P	49.5
2	☐	0.500					
3	☐	5.000	2.519	8.64	0.0000	P	43.9
4	☐	50.000	51.068	101.86	0.0004	P	15.5
5	☐	125.000	118.185	231.48	0.0010	P	6.2
6	☐	250.000	279.509	534.58	0.0023	P	8.1
7	☐	500.000	483.909	900.04	0.0039	P	8.4
8	☐	1000.000	1001.479	1801.37	0.0081	P	1.2
9	☐			1.85	0.0000	P	173.

$$y = 8.1005\text{E-}006 * x + 1.6000\text{E-}005$$

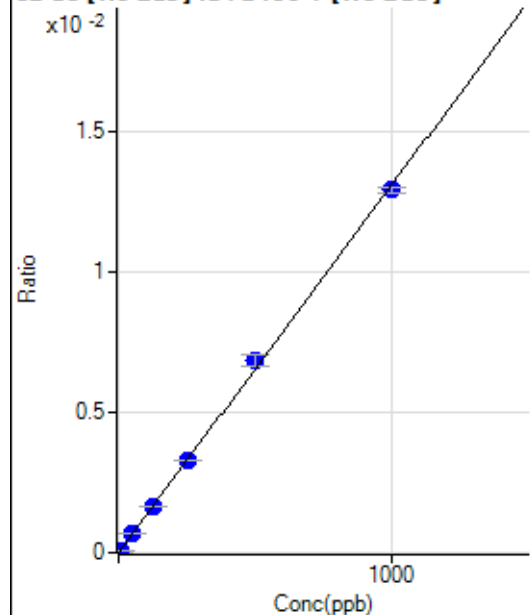
$$R = 0.9993$$

$$DL = 2.936$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	7.77	0.0000	P	352.
2	☐	0.500					
3	☐	5.000	4.758	468.37	0.0001	P	2.6
4	☐	50.000	51.927	5049.43	0.0007	P	0.7
5	☐	125.000	126.270	12727.89	0.0017	P	1.4
6	☐	250.000	252.253	25423.14	0.0033	P	0.9
7	☐	500.000	523.555	50599.78	0.0069	P	6.0
8	☐	1000.000	987.405	99446.76	0.0129	P	1.5
9	☐			103.13	0.0000	P	37.4

$$y = 1.3096\text{E-}005 * x + 1.1048\text{E-}006$$

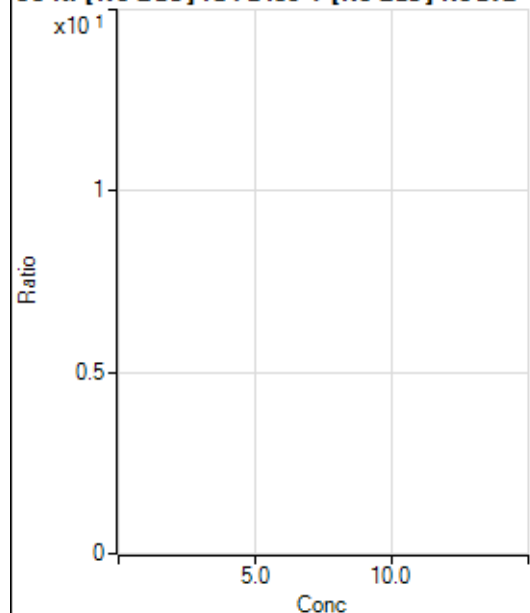
$$R = 0.9996$$

$$DL = 0.8926$$

Weight: <None>

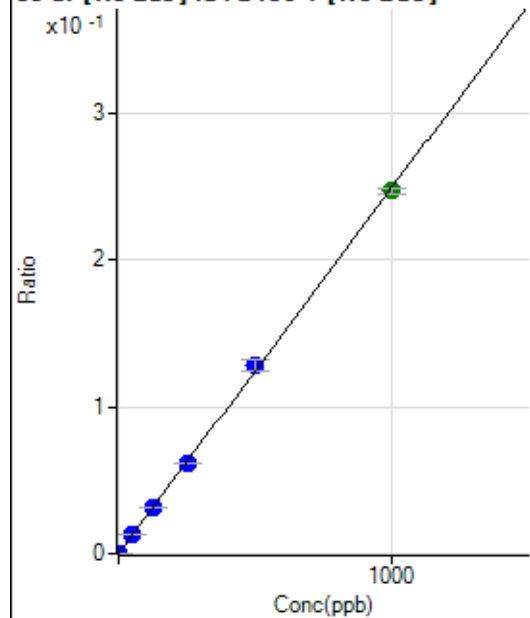
Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			347.79	0.0000	P	6.3
2	☐						
3	☐			374.46	0.0001	P	8.1
4	☐			350.01	0.0000	P	1.6
5	☐			346.68	0.0000	P	10.4
6	☐			365.57	0.0000	P	15.3
7	☐			351.12	0.0000	P	6.6
8	☐			347.79	0.0000	P	14.0
9	☐			357.79	0.0000	P	4.2

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	583.38	0.0001	P	17.5
2	☐	0.100					
3	☐	1.000	0.997	2433.68	0.0003	P	7.3
4	☐	50.000	50.541	93913.73	0.0127	P	0.1
5	☐	125.000	124.563	239253.85	0.0311	P	0.7
6	☐	250.000	248.345	476460.94	0.0619	P	0.5
7	☐	500.000	515.872	948752.65	0.1286	P	5.4
8	☐	1000.000	992.505	1901412.13	0.2473	A	1.7
9	☐			9106.17	0.0012	P	1.7

$$y = 2.4906E-004 * x + 8.1285E-005$$

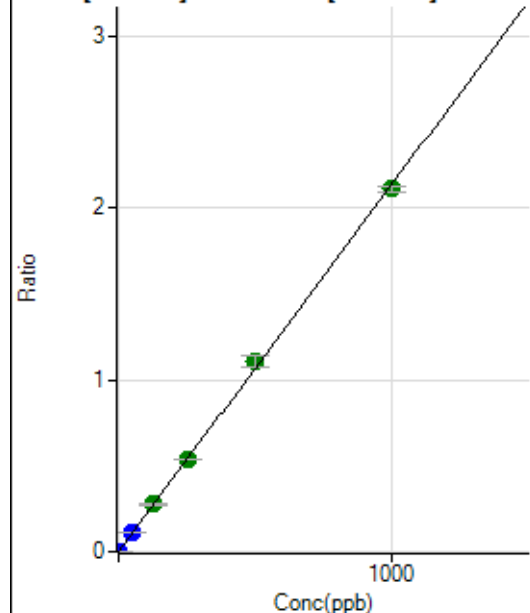
$$R = 0.9998$$

$$DL = 0.1709$$

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	447.25	0.0001	P	19.0
2	☐	0.100					
3	☐	1.000	1.007	16310.48	0.0022	P	1.7
4	☐	50.000	51.291	811055.64	0.1094	P	1.1
5	☐	125.000	128.426	2106432.34	0.2739	A	0.7
6	☐	250.000	251.550	4126204.43	0.5363	A	0.2
7	☐	500.000	520.368	8186243.50	1.1094	A	5.8
8	☐	1000.000	988.936	16212678.31	2.1084	A	1.5
9	☐			76450.67	0.0103	P	2.0

$$y = 0.0021 * x + 6.2320E-005$$

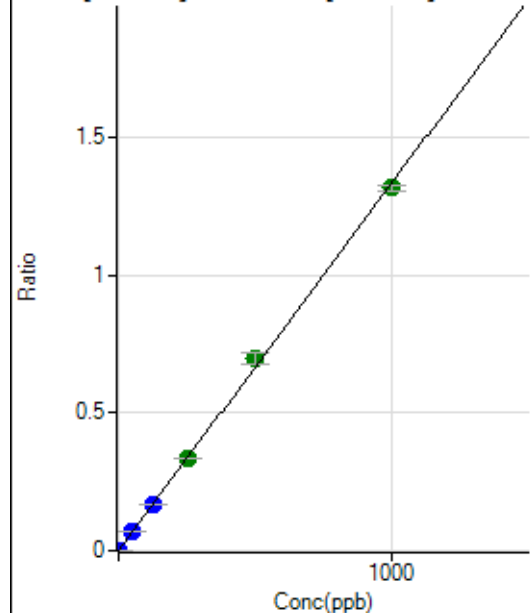
$$R = 0.9997$$

$$DL = 0.01669$$

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	547.26	0.0001	P	10.6
2	☐	0.100					
3	☐	1.000	0.957	9987.46	0.0014	P	2.4
4	☐	50.000	49.890	493831.60	0.0666	P	0.6
5	☐	125.000	124.964	1282560.04	0.1667	P	1.4
6	☐	250.000	252.544	2591944.44	0.3369	A	0.3
7	☐	500.000	522.885	5145529.84	0.6975	A	6.2
8	☐	1000.000	987.932	10132543.54	1.3177	A	1.9
9	☐			3328.34	0.0005	P	13.6

$$y = 0.0013 * x + 7.6163E-005$$

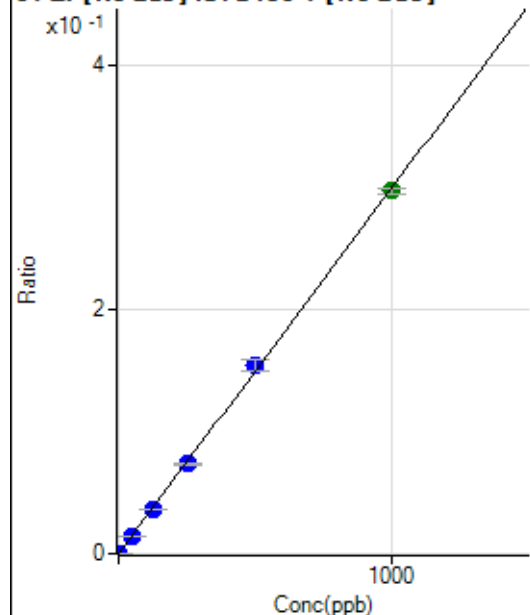
$$R = 0.9996$$

$$DL = 0.01824$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	130.56	0.0000	P	19.8
2	☐	0.100					
3	☐	1.000	0.886	2094.71	0.0003	P	6.3
4	☐	50.000	49.143	109305.53	0.0147	P	1.3
5	☐	125.000	122.258	281941.96	0.0367	P	1.1
6	☐	250.000	244.924	564781.86	0.0734	P	1.1
7	☐	500.000	516.650	1142224.55	0.1548	P	6.5
8	☐	1000.000	993.330	2289075.44	0.2977	A	1.8
9	☐			750.05	0.0001	P	14.4

$$y = 2.9967\text{E-}004 * x + 1.8165\text{E-}005$$

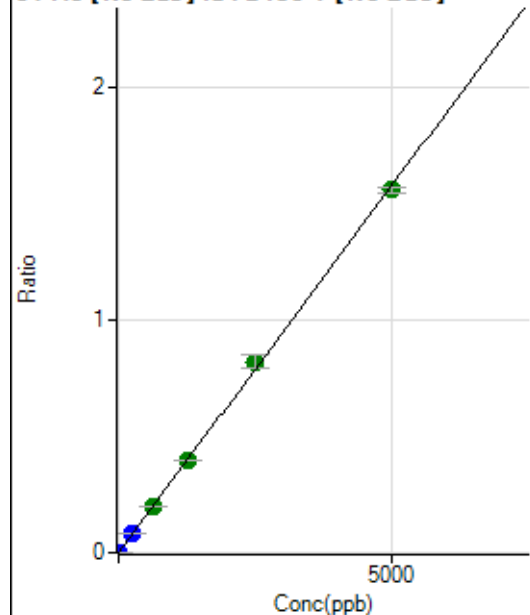
$$R = 0.9998$$

$$DL = 0.03604$$

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	277.79	0.0000	P	7.7
2	☐	0.500					
3	☐	5.000	4.791	11441.53	0.0015	P	1.5
4	☐	250.000	251.586	588205.71	0.0793	P	0.7
5	☐	625.000	632.428	1533833.24	0.1994	A	0.2
6	☐	1250.000	1257.708	3050446.38	0.3965	A	0.6
7	☐	2500.000	2603.367	6053882.21	0.8207	A	6.6
8	☐	5000.000	4945.382	11988518.76	1.5590	A	1.3
9	☐			17801.27	0.0024	P	5.8

$$y = 3.1524\text{E-}004 * x + 3.8667\text{E-}005$$

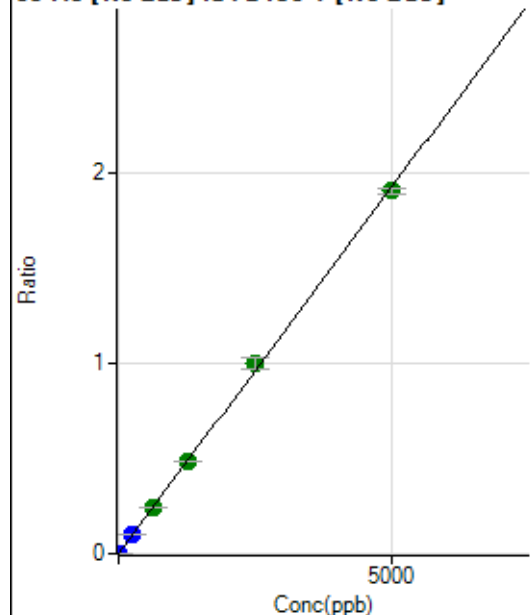
$$R = 0.9997$$

$$DL = 0.02838$$

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	41.67	0.0000	P	34.2
2	☐	0.500					
3	☐	5.000	4.978	14216.33	0.0019	P	0.1
4	☐	250.000	251.080	717547.33	0.0968	P	0.6
5	☐	625.000	624.179	1850863.43	0.2406	A	0.5
6	☐	1250.000	1253.663	3717981.51	0.4833	A	0.8
7	☐	2500.000	2595.963	7380944.17	1.0007	A	6.9
8	☐	5000.000	4951.152	14676970.12	1.9087	A	1.4
9	☐			28539.28	0.0039	P	3.1

$$y = 3.8550E-004 * x + 5.7879E-006$$

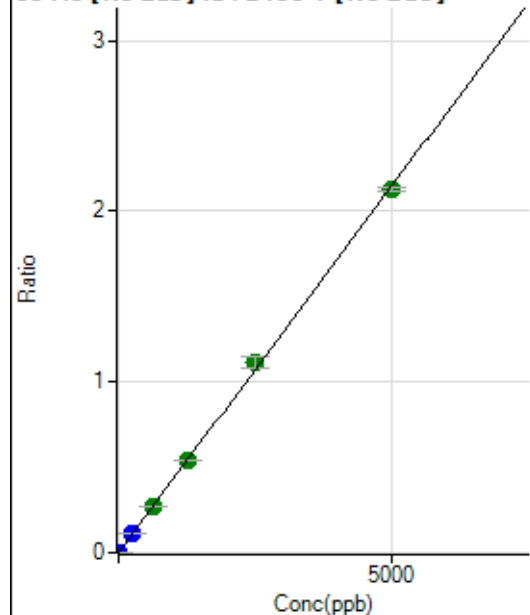
$$R = 0.9997$$

$$DL = 0.01542$$

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	75.00	0.0000	P	29.0
2	☐	0.500					
3	☐	5.000	5.133	16349.44	0.0022	P	4.0
4	☐	250.000	251.647	800617.05	0.1080	P	0.6
5	☐	625.000	625.713	2065529.97	0.2685	A	0.2
6	☐	1250.000	1253.505	4138528.48	0.5379	A	0.2
7	☐	2500.000	2594.335	8214532.13	1.1133	A	5.9
8	☐	5000.000	4951.785	16341277.80	2.1250	A	1.0
9	☐			32514.91	0.0044	P	2.9

$$y = 4.2914E-004 * x + 1.0420E-005$$

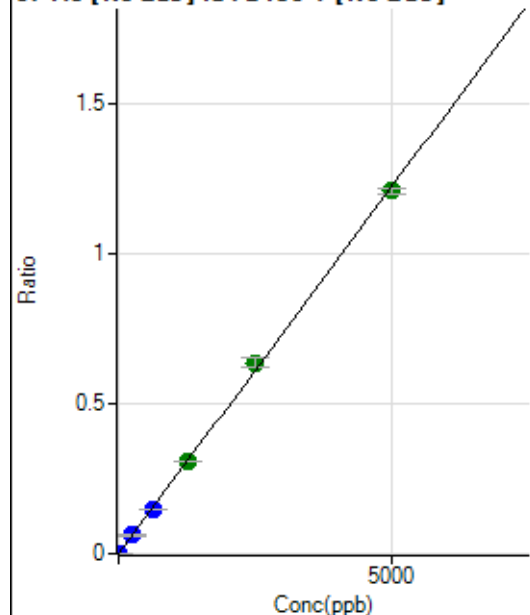
$$R = 0.9997$$

$$DL = 0.02115$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	111.11	0.0000	P	30.6
2	☐	0.500					
3	☐	5.000	4.863	8889.43	0.0012	P	4.3
4	☐	250.000	249.112	451341.74	0.0609	P	0.7
5	☐	625.000	614.124	1154374.40	0.1501	P	0.5
6	☐	1250.000	1259.772	2368281.80	0.3078	A	0.2
7	☐	2500.000	2604.411	4696747.28	0.6364	A	5.2
8	☐	5000.000	4946.756	9294879.90	1.2088	A	1.5
9	☐			18046.13	0.0024	P	6.8

$$y = 2.4435\text{E-}004 * x + 1.5455\text{E-}005$$

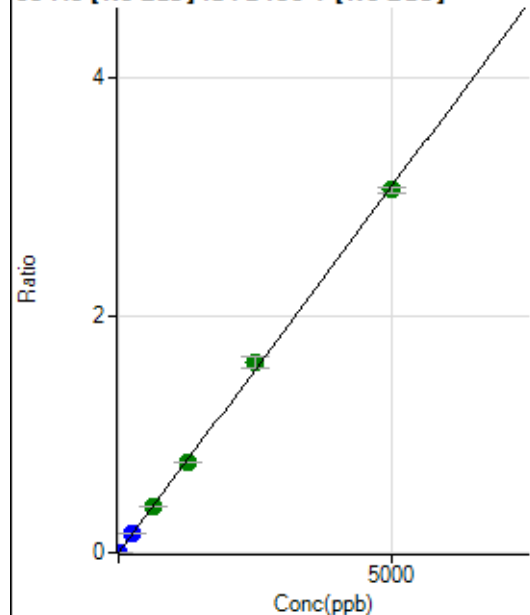
$$R = 0.9997$$

$$DL = 0.05798$$

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	33.33	0.0000	P	90.9
2	☐	0.500					
3	☐	5.000	4.922	22488.95	0.0030	P	1.7
4	☐	250.000	251.769	1152665.37	0.1555	P	0.8
5	☐	625.000	623.994	2964279.34	0.3854	A	0.5
6	☐	1250.000	1242.936	5905406.55	0.7676	A	0.6
7	☐	2500.000	2593.739	11819623.18	1.6019	A	5.7
8	☐	5000.000	4954.934	23531212.50	3.0601	A	1.4
9	☐			46773.48	0.0063	P	4.2

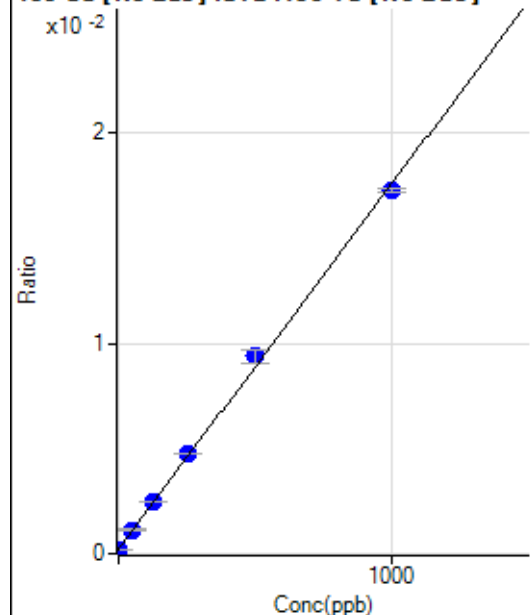
$$y = 6.1758\text{E-}004 * x + 4.6424\text{E-}006$$

$$R = 0.9997$$

$$DL = 0.0205$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1739.08	0.0002	P	8.9
2	☐	0.100					
3	☐	1.000	-0.663	1708.54	0.0002	P	13.1
4	☐	50.000	52.118	9631.63	0.0011	P	4.7
5	☐	125.000	130.802	22241.35	0.0025	P	0.8
6	☐	250.000	262.785	43345.72	0.0048	P	0.6
7	☐	500.000	528.911	83025.40	0.0094	P	6.9
8	☐	1000.000	981.518	164154.17	0.0173	P	1.0
9	☐			1630.74	0.0002	P	11.2

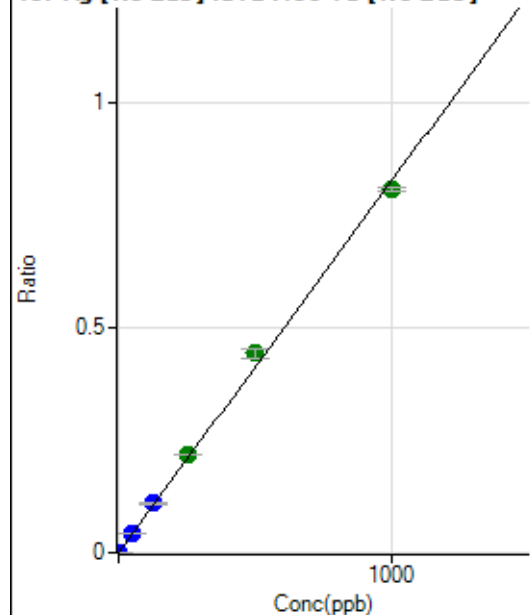
$$y = 1.7360\text{E-}005 * x + 2.1202\text{E-}004$$

$$R = 0.9993$$

$$DL = 3.254$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	72.23	0.0000	P	37.4
2	☐	0.100					
3	☐	1.000	1.053	7474.62	0.0009	P	4.8
4	☐	50.000	53.968	384079.90	0.0445	P	0.6
5	☐	125.000	132.652	980190.68	0.1094	P	1.3
6	☐	250.000	264.769	1983105.10	0.2184	A	0.4
7	☐	500.000	537.132	3918664.76	0.4431	A	5.1
8	☐	1000.000	976.587	7665632.47	0.8056	A	1.1
9	☐			1119.55	0.0001	P	20.7

$$y = 8.2489\text{E-}004 * x + 8.8463\text{E-}006$$

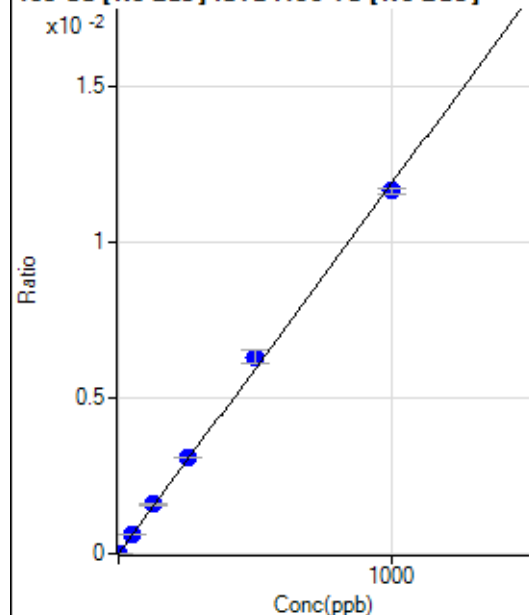
$$R = 0.9988$$

$$DL = 0.01202$$

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	6.94	0.0000	P	36.1
2	☐	0.100					
3	☐	1.000	1.220	130.56	0.0000	P	15.2
4	☐	50.000	53.183	5447.06	0.0006	P	2.9
5	☐	125.000	133.538	14189.69	0.0016	P	2.6
6	☐	250.000	258.371	27824.88	0.0031	P	0.3
7	☐	500.000	531.529	55717.60	0.0063	P	6.6
8	☐	1000.000	980.916	110683.01	0.0116	P	1.3
9	☐			30.56	0.0000	P	6.7

$$y = 1.1858\text{E-}005 * x + 8.5020\text{E-}007$$

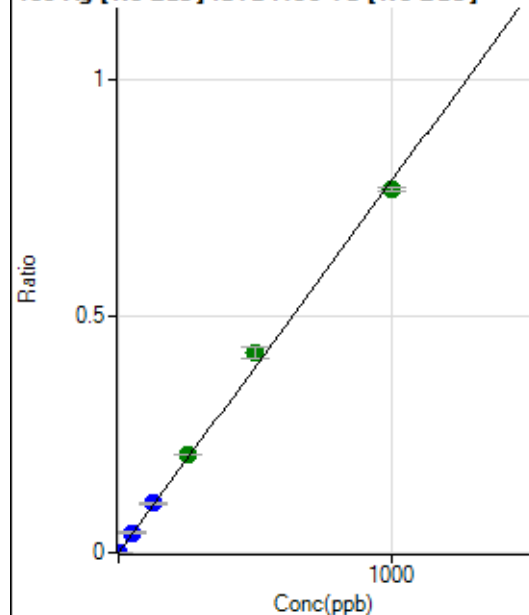
$$R = 0.9992$$

$$DL = 0.07772$$

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	33.33	0.0000	P	99.1
2	☐	0.100					
3	☐	1.000	1.092	7355.15	0.0009	P	3.7
4	☐	50.000	53.968	366357.24	0.0425	P	1.4
5	☐	125.000	132.052	930835.50	0.1039	P	0.8
6	☐	250.000	263.643	1883691.64	0.2075	A	1.1
7	☐	500.000	537.978	3742531.51	0.4233	A	6.2
8	☐	1000.000	976.520	7312225.77	0.7684	A	0.9
9	☐			1061.20	0.0001	P	12.5

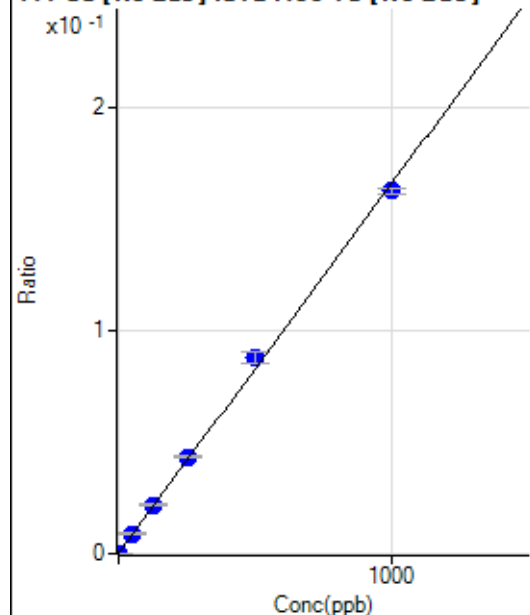
$$y = 7.8692\text{E-}004 * x + 3.9997\text{E-}006$$

$$R = 0.9988$$

$$DL = 0.01511$$

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	1216.67	0.0001	P	9.4
2	☐	0.100					
3	☐	1.000	0.909	2546.36	0.0003	P	5.0
4	☐	50.000	53.428	77572.26	0.0090	P	3.1
5	☐	125.000	131.620	196516.04	0.0219	P	1.0
6	☐	250.000	260.627	393114.83	0.0433	P	1.2
7	☐	500.000	530.991	778674.62	0.0881	P	5.5
8	☐	1000.000	980.849	1546583.83	0.1625	P	1.4
9	☐			1559.04	0.0002	P	10.4

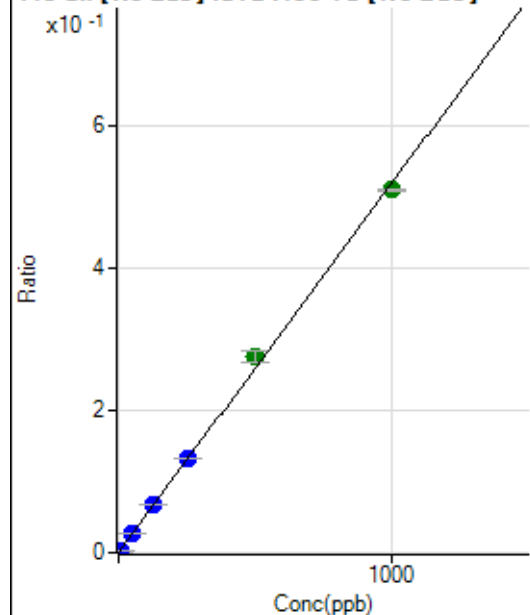
$$y = 1.6556E-004 * x + 1.4834E-004$$

$$R = 0.9992$$

$$DL = 0.2535$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1750.20	0.0002	P	3.1
2	☐	0.500					
3	☐	5.000	5.146	24531.68	0.0029	P	3.0
4	☐	50.000	51.947	234038.34	0.0271	P	0.9
5	☐	125.000	129.053	600922.86	0.0671	P	1.2
6	☐	250.000	254.931	1201406.39	0.1323	P	0.6
7	☐	500.000	530.523	2433199.84	0.2751	A	5.2
8	☐	1000.000	982.901	4848785.74	0.5096	A	0.7
9	☐			12806.70	0.0014	P	2.8

$$y = 5.1821E-004 * x + 2.1327E-004$$

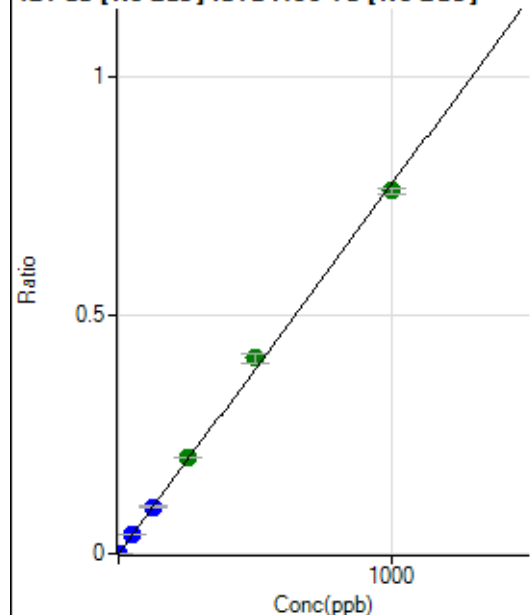
$$R = 0.9993$$

$$DL = 0.03834$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	61.11	0.0000	P	15.7
2	☐	0.200					
3	☐	2.000	2.003	13257.09	0.0016	P	3.1
4	☐	50.000	50.708	338387.90	0.0392	P	0.7
5	☐	125.000	127.166	881045.52	0.0984	P	1.2
6	☐	250.000	260.162	1827026.89	0.2012	A	0.8
7	☐	500.000	528.913	3618129.59	0.4091	A	5.0
8	☐	1000.000	982.697	7232018.22	0.7601	A	1.7
9	☐			20430.45	0.0022	P	6.6

$$y = 7.7344\text{E-}004 * x + 7.4444\text{E-}006$$

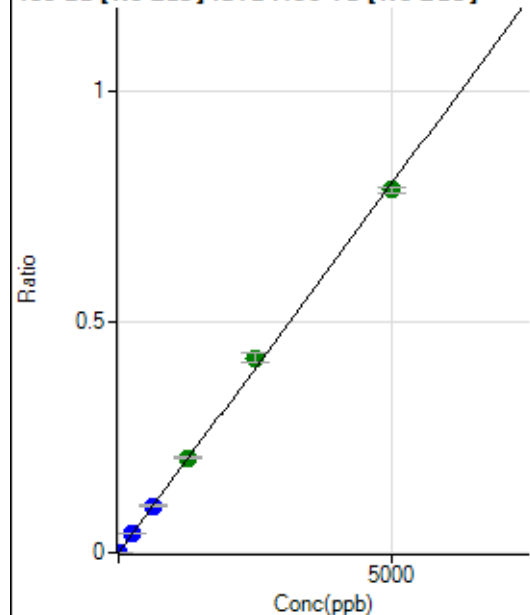
$$R = 0.9993$$

$$DL = 0.00453$$

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	30.56	0.0000	P	79.0
2	☐	1.000					
3	☐	10.000	10.252	14005.19	0.0016	P	0.6
4	☐	250.000	259.475	358183.33	0.0415	P	0.4
5	☐	625.000	637.847	914278.54	0.1021	P	0.8
6	☐	1250.000	1288.475	1872010.59	0.2062	A	0.8
7	☐	2500.000	2642.296	3738662.50	0.4228	A	5.6
8	☐	5000.000	4917.153	7486780.72	0.7868	A	1.5
9	☐			1889.11	0.0002	P	3.3

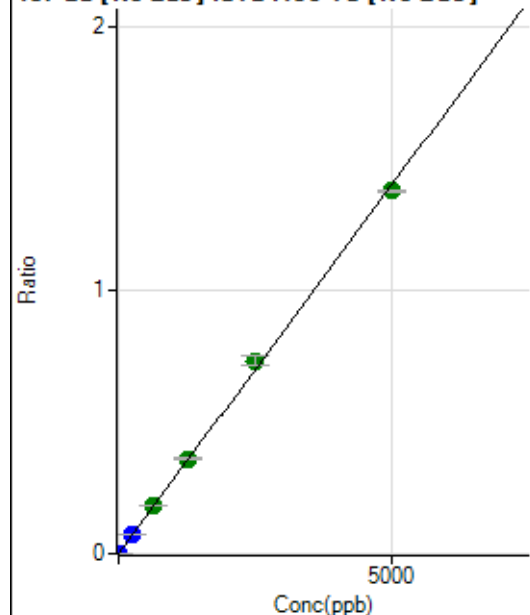
$$y = 1.6002\text{E-}004 * x + 3.7294\text{E-}006$$

$$R = 0.9994$$

$$DL = 0.05526$$

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	33.33	0.0000	P	66.6
2	☐	1.000					
3	☐	10.000	10.270	24529.27	0.0029	P	2.6
4	☐	250.000	259.013	625669.90	0.0725	P	0.9
5	☐	625.000	650.231	1631015.07	0.1821	A	1.1
6	☐	1250.000	1291.557	3283851.31	0.3617	A	0.7
7	☐	2500.000	2622.981	6495559.69	0.7345	A	5.3
8	☐	5000.000	4924.515	13122025.03	1.3790	A	0.9
9	☐			3389.49	0.0004	P	3.7

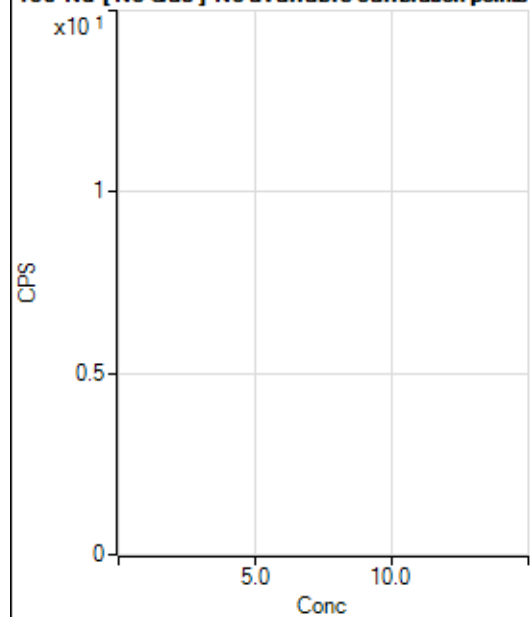
$$y = 2.8003E-004 * x + 4.0961E-006$$

$$R = 0.9995$$

$$DL = 0.02924$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			6.67		P	0.0
2	☐						
3	☐			8.89		P	114.
4	☐			26.67		P	43.3
5	☐			37.78		P	36.7
6	☐			82.23		P	32.8
7	☐			191.12		P	20.1
8	☐			277.79		P	5.5
9	☐			126.67		P	29.3

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			0.00		P	
4	☐			0.00		P	
5	☐			2.22		P	86.6
6	☐			3.33		P	173.
7	☐			2.22		P	86.6
8	☐			2.22		P	86.6
9	☐			10.00		P	33.3

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			16.67		P	132.
2	☐						
3	☐			19.45		P	65.5
4	☐			25.00		P	33.3
5	☐			22.22		P	78.1
6	☐			41.67		P	40.0
7	☐			77.78		P	27.0
8	☐			75.00		P	29.4
9	☐			100.00		P	50.0

156 Dy [He] No available calibration points

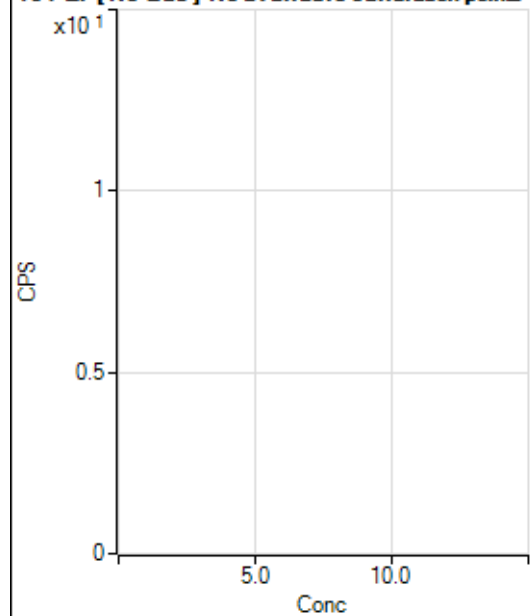
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			0.00		P	
4	☐			4.44		P	114.
5	☐			4.44		P	114.
6	☐			5.55		P	69.3
7	☐			3.33		P	100.
8	☐			3.33		P	100.
9	☐			11.11		P	45.8

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			63.89		P	19.9
2	☐						
3	☐			47.22		P	27.0
4	☐			47.22		P	36.7
5	☐			80.56		P	36.3
6	☐			55.56		P	37.8
7	☐			80.56		P	29.9
8	☐			88.89		P	14.3
9	☐			113.90		P	23.5

160 Gd [He] No available calibration points

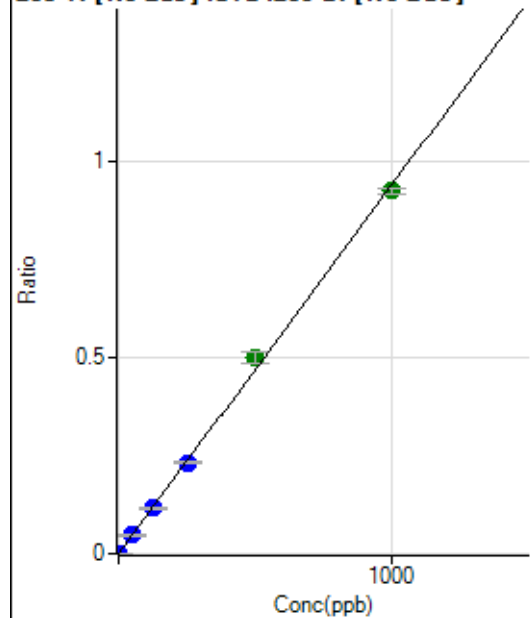
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			18.89		P	36.7
2	☐						
3	☐			10.00		P	33.3
4	☐			5.55		P	69.3
5	☐			7.78		P	49.5
6	☐			6.67		P	50.0
7	☐			12.22		P	56.8
8	☐			17.78		P	65.8
9	☐			26.67		P	87.5

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			30.56		P	63.0
2	☐						
3	☐			61.12		P	20.8
4	☐			16.67		P	50.0
5	☐			44.45		P	47.2
6	☐			41.67		P	52.9
7	☐			38.89		P	49.5
8	☐			52.78		P	36.5
9	☐			50.00		P	57.7

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.45		P	86.6
2	☐						
3	☐			8.89		P	78.1
4	☐			4.45		P	86.6
5	☐			7.78		P	89.2
6	☐			5.56		P	34.7
7	☐			4.44		P	114.
8	☐			4.45		P	86.6
9	☐			11.11		P	96.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	122.23	0.0000	P	30.3
2	☐	0.100					
3	☐	1.000	0.949	4917.85	0.0009	P	3.9
4	☐	50.000	49.769	254395.96	0.0468	P	0.8
5	☐	125.000	123.369	656465.31	0.1161	P	1.6
6	☐	250.000	247.851	1326322.24	0.2331	P	1.3
7	☐	500.000	531.671	2767919.46	0.5001	A	5.3
8	☐	1000.000	984.917	5506800.69	0.9264	A	1.3
9	☐			4120.31	0.0008	P	8.6

$$y = 9.4056E-004 * x + 2.3991E-005$$

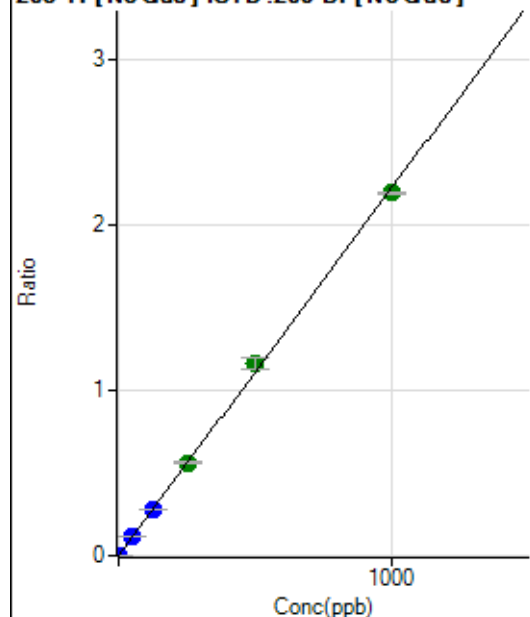
$$R = 0.9992$$

$$DL = 0.02319$$

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	158.34	0.0000	P	3.7
2	☐	0.100					
3	☐	1.000	1.005	12153.62	0.0023	P	0.6
4	☐	50.000	50.281	607205.80	0.1118	P	0.7
5	☐	125.000	124.958	1570972.32	0.2778	P	2.1
6	☐	250.000	253.434	3204589.24	0.5633	A	1.3
7	☐	500.000	523.597	6440236.43	1.1638	A	5.7
8	☐	1000.000	987.335	13044957.84	2.1944	A	0.7
9	☐			9645.78	0.0018	P	5.8

$$y = 0.0022 * x + 3.0910E-005$$

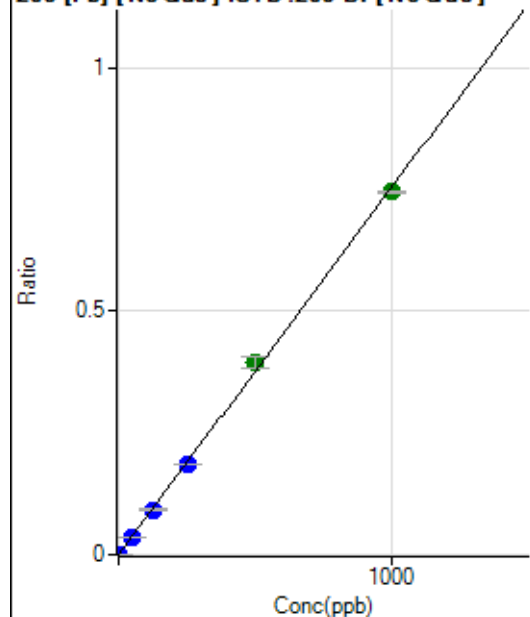
$$R = 0.9996$$

$$DL = 0.001523$$

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	131.49	0.0000	P	12.1
2	☐	0.100					
3	☐	1.000	0.943	3954.44	0.0007	P	2.1
4	☐	50.000	49.446	202689.96	0.0373	P	0.7
5	☐	125.000	122.335	521930.05	0.0923	P	2.4
6	☐	250.000	246.959	1059681.08	0.1863	P	0.5
7	☐	500.000	525.163	2191683.17	0.3961	A	5.9
8	☐	1000.000	988.540	4431819.31	0.7455	A	0.7
9	☐			25244.24	0.0046	P	1.7

$$y = 7.5414E-004 * x + 2.5568E-005$$

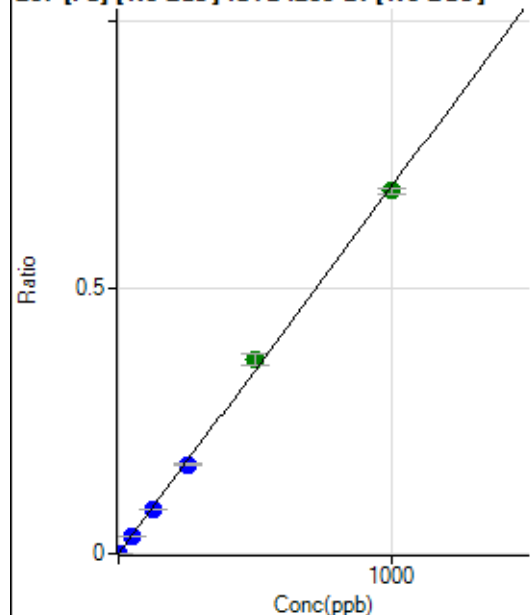
$$R = 0.9995$$

$$DL = 0.0123$$

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	122.23	0.0000	P	12.8
2	☐	0.100					
3	☐	1.000	0.980	3759.94	0.0007	P	1.7
4	☐	50.000	48.532	182096.87	0.0335	P	0.4
5	☐	125.000	120.729	471476.99	0.0834	P	1.8
6	☐	250.000	243.161	954967.38	0.1679	P	1.2
7	☐	500.000	528.553	2018330.60	0.3649	A	6.7
8	☐	1000.000	988.041	4054096.13	0.6820	A	1.3
9	☐			21565.23	0.0040	P	3.6

$$y = 6.9025\text{E-}004 * x + 2.3770\text{E-}005$$

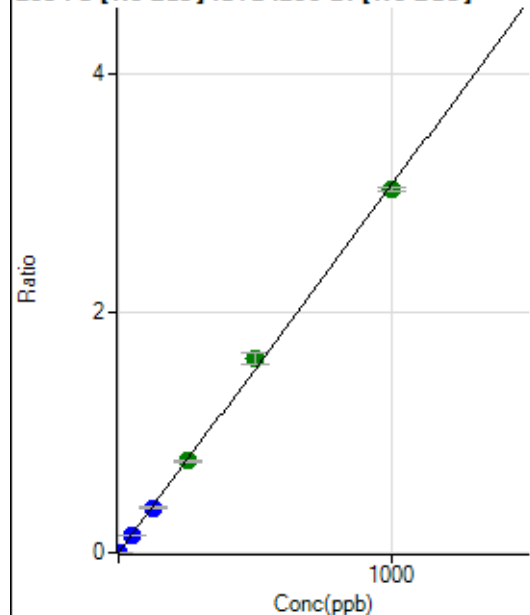
$$R = 0.9994$$

$$DL = 0.01318$$

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	488.91	0.0001	P	5.0
2	☐	0.100					
3	☐	1.000	0.998	16951.35	0.0032	P	1.8
4	☐	50.000	49.320	822379.63	0.1514	P	0.8
5	☐	125.000	122.700	2129537.43	0.3765	P	2.0
6	☐	250.000	249.461	4354175.02	0.7654	A	1.1
7	☐	500.000	526.898	8944833.84	1.6165	A	6.0
8	☐	1000.000	987.007	17999723.52	3.0280	A	1.1
9	☐			98963.21	0.0182	P	2.0

$$y = 0.0031 * x + 9.5299\text{E-}005$$

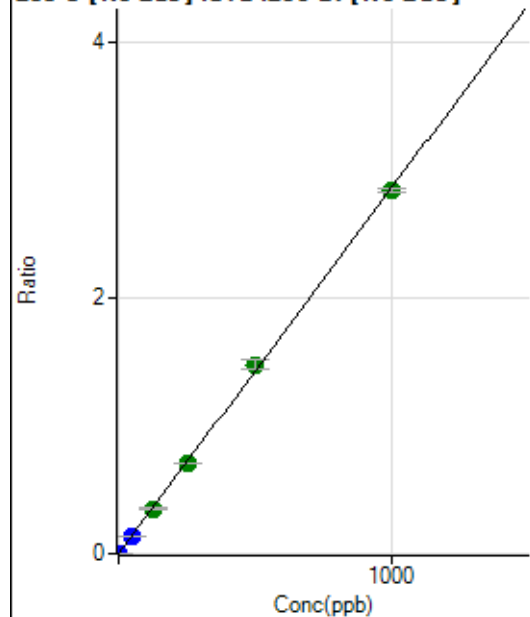
$$R = 0.9995$$

$$DL = 0.004616$$

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	16.66	0.0000	P	88.3
2	☐	0.100					
3	☐	1.000	0.986	15126.57	0.0028	P	2.6
4	☐	50.000	48.809	757316.16	0.1394	P	0.4
5	☐	125.000	123.009	1987476.89	0.3514	A	1.2
6	☐	250.000	247.048	4014506.30	0.7057	A	0.5
7	☐	500.000	517.613	8183286.90	1.4785	A	5.3
8	☐	1000.000	992.240	16847694.13	2.8342	A	0.9
9	☐			2639.29	0.0005	P	1.8

$$y = 0.0029 * x + 3.2841E-006$$

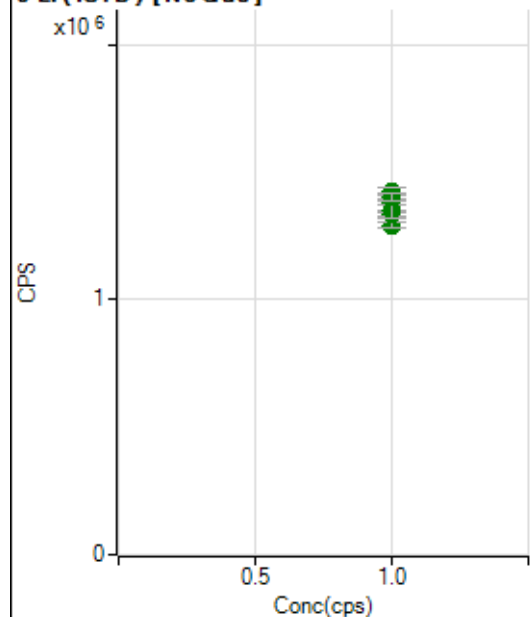
$$R = 0.9998$$

$$DL = 0.003045$$

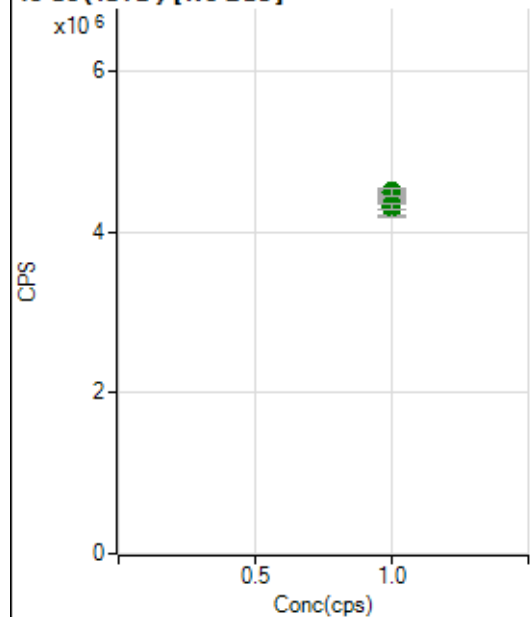
Weight: <None>

Min Conc: 0

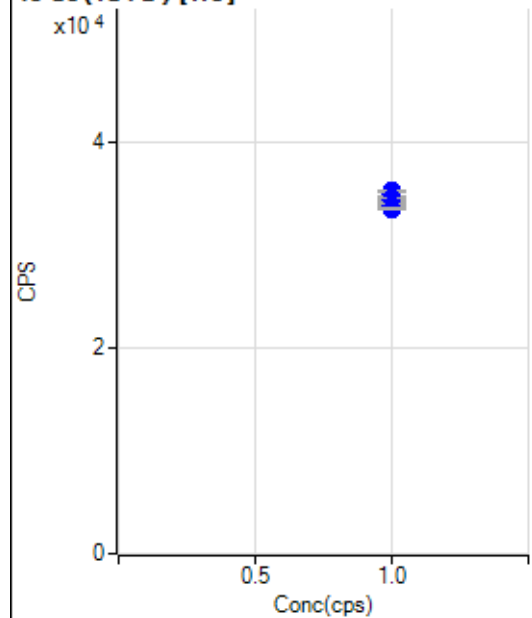
6 Li (ISTD) [No Gas]



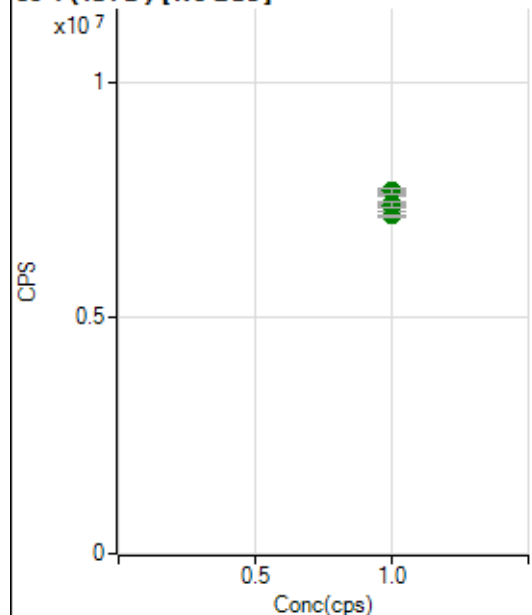
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1290967.35		A	1.6
2	☐	1.000					
3	☐	1.000		1339740.10		A	2.0
4	☐	1.000		1335342.82		A	1.3
5	☐	1.000		1383438.47		A	1.1
6	☐	1.000		1401406.05		A	1.3
7	☐	1.000		1353452.53		A	4.7
8	☐	1.000		1422778.69		A	2.2
9	☐	1.000		1404105.69		A	2.3

45 Sc (ISTD) [No Gas]

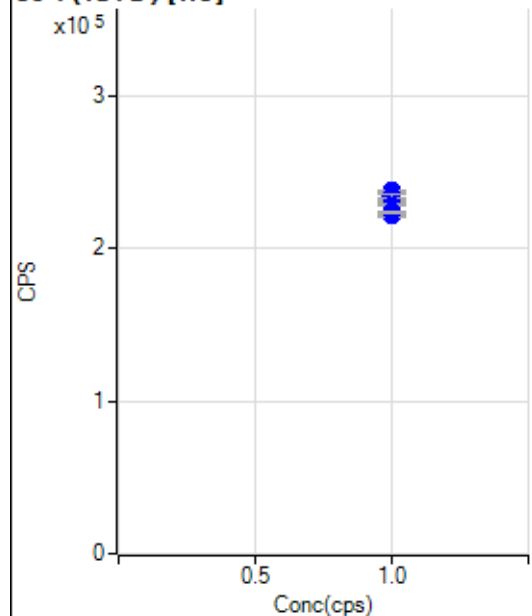
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4293650.18		A	3.5
2	☐	1.000					
3	☐	1.000		4424506.00		A	1.0
4	☐	1.000		4433514.29		A	0.5
5	☐	1.000		4514205.66		A	1.3
6	☐	1.000		4509452.79		A	0.6
7	☐	1.000		4302584.47		A	5.5
8	☐	1.000		4499475.23		A	2.0
9	☐	1.000		4319394.67		A	1.5

45 Sc (ISTD) [He]

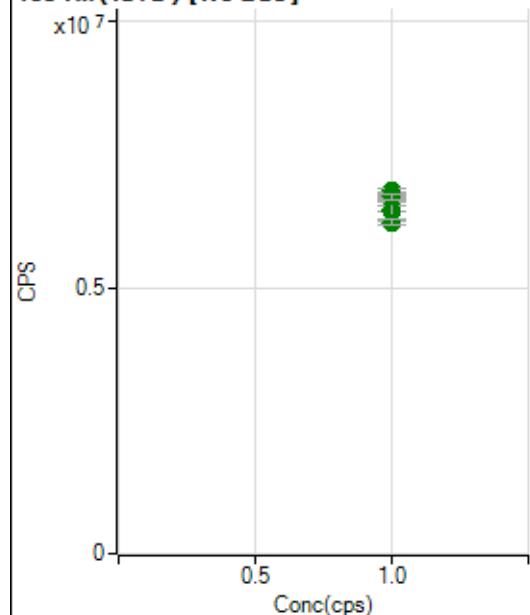
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		34111.47		P	2.0
2	☐	1.000					
3	☐	1.000		34923.53		P	1.4
4	☐	1.000		34743.06		P	1.7
5	☐	1.000		35212.02		P	0.8
6	☐	1.000		34478.05		P	1.2
7	☐	1.000		34339.90		P	1.4
8	☐	1.000		33696.09		P	1.2
9	☐	1.000		33471.13		P	0.4

89 Y (ISTD) [No Gas]

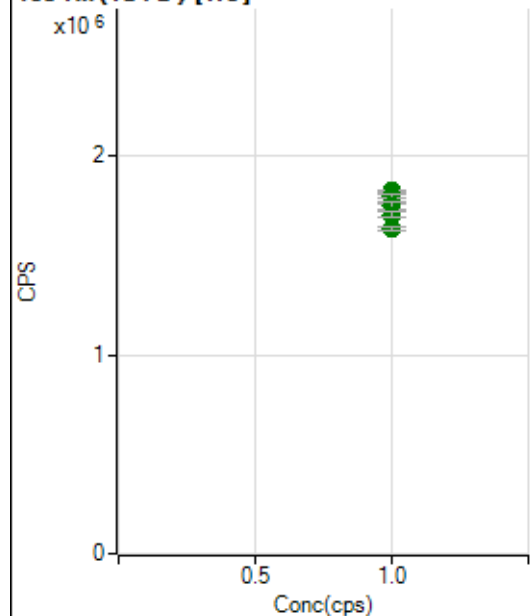
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7189840.45		A	1.5
2	☐	1.000					
3	☐	1.000		7386368.29		A	0.4
4	☐	1.000		7412950.86		A	0.1
5	☐	1.000		7692033.57		A	0.7
6	☐	1.000		7693217.11		A	0.6
7	☐	1.000		7394176.42		A	5.5
8	☐	1.000		7690535.51		A	1.3
9	☐	1.000		7395901.42		A	1.6

89 Y (ISTD) [He]

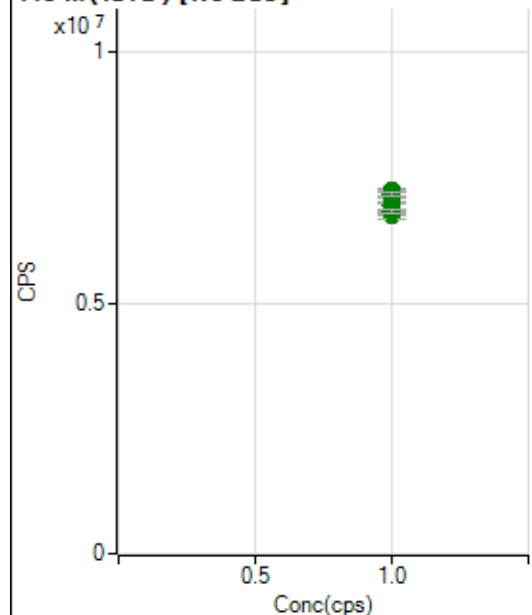
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		231100.79		P	0.7
2	☐	1.000					
3	☐	1.000		236899.21		P	1.1
4	☐	1.000		237054.14		P	0.1
5	☐	1.000		237802.63		P	0.2
6	☐	1.000		234463.12		P	0.7
7	☐	1.000		228588.46		P	0.7
8	☐	1.000		221622.11		P	0.7
9	☐	1.000		223886.39		P	0.6

103 Rh (ISTD) [No Gas]

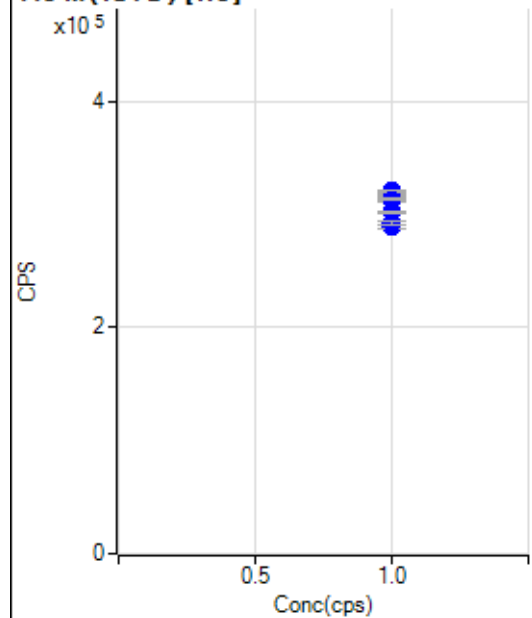
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6484769.46		A	1.4
2	☐	1.000					
3	☐	1.000		6679693.72		A	0.8
4	☐	1.000		6640808.83		A	0.8
5	☐	1.000		6816573.77		A	1.0
6	☐	1.000		6757432.35		A	0.3
7	☐	1.000		6432282.39		A	5.2
8	☐	1.000		6707898.41		A	1.5
9	☐	1.000		6221151.53		A	1.7

103 Rh (ISTD) [He]

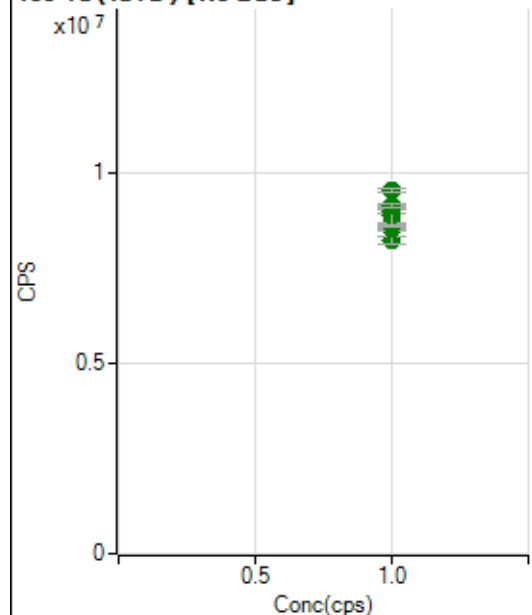
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1773297.04		A	1.7
2	☐	1.000					
3	☐	1.000		1818942.58		A	0.7
4	☐	1.000		1809061.55		A	0.6
5	☐	1.000		1823834.73		A	0.8
6	☐	1.000		1800309.54		A	0.9
7	☐	1.000		1750775.30		A	1.8
8	☐	1.000		1702660.29		A	1.6
9	☐	1.000		1637158.48		A	1.1

115 In (ISTD) [No Gas]

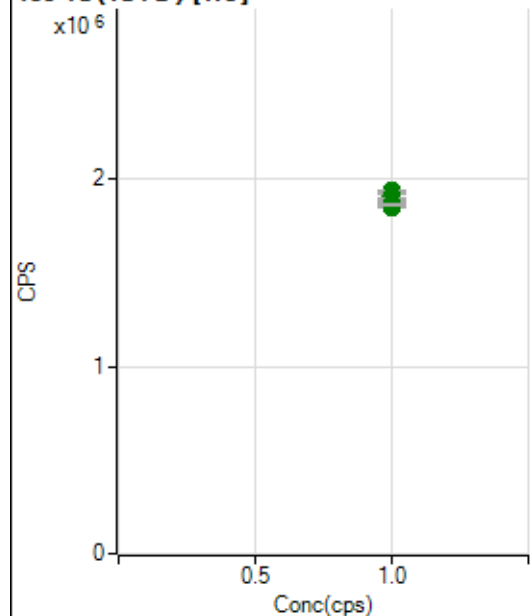
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6742596.57		A	2.2
2	☐	1.000					
3	☐	1.000		6982197.14		A	0.5
4	☐	1.000		6999581.28		A	0.5
5	☐	1.000		7233103.10		A	1.0
6	☐	1.000		7226570.27		A	0.5
7	☐	1.000		6925833.05		A	5.0
8	☐	1.000		7167899.16		A	0.8
9	☐	1.000		6840779.40		A	1.1

115 In (ISTD) [He]

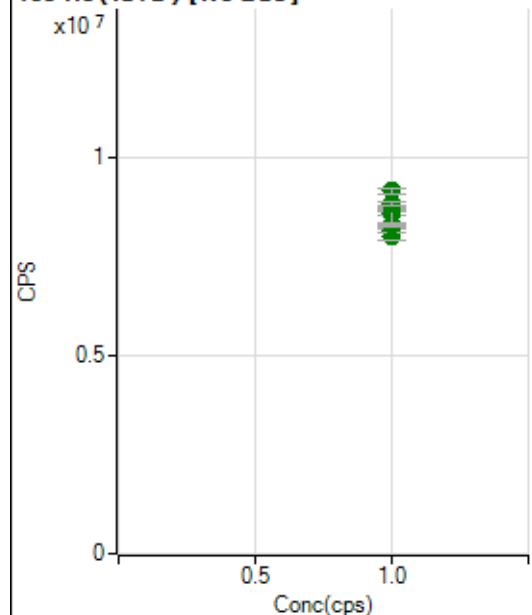
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		313150.88		P	1.9
2	☐	1.000					
3	☐	1.000		320107.21		P	0.9
4	☐	1.000		318571.07		P	0.4
5	☐	1.000		320533.64		P	0.3
6	☐	1.000		313330.18		P	0.6
7	☐	1.000		302032.99		P	0.6
8	☐	1.000		288285.79		P	1.1
9	☐	1.000		292379.22		P	0.8

159 Tb (ISTD) [No Gas]

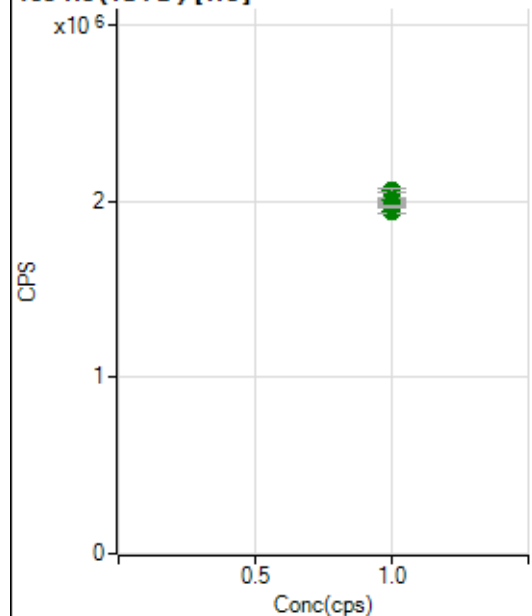
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8209708.07		A	2.3
2	☐	1.000					
3	☐	1.000		8518347.93		A	0.5
4	☐	1.000		8626094.73		A	0.9
5	☐	1.000		8957860.14		A	1.1
6	☐	1.000		9079721.26		A	0.6
7	☐	1.000		8860406.32		A	5.5
8	☐	1.000		9516168.19		A	1.2
9	☐	1.000		9149362.09		A	1.2

159 Tb (ISTD) [He]

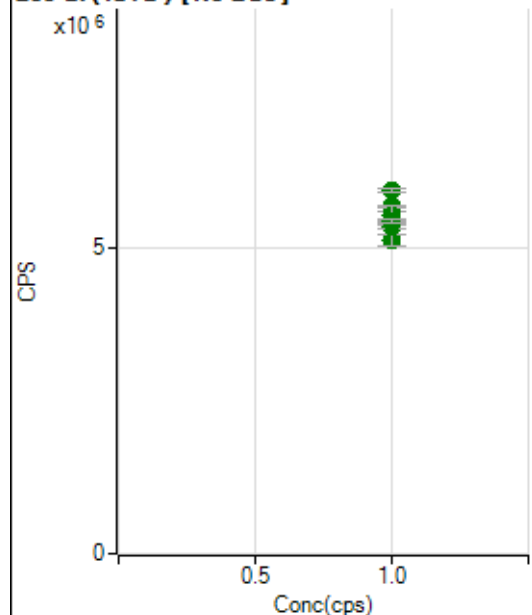
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1853026.90		A	0.8
2	☐	1.000					
3	☐	1.000		1884248.93		A	0.9
4	☐	1.000		1892394.24		A	0.2
5	☐	1.000		1939536.46		A	0.7
6	☐	1.000		1913296.48		A	1.3
7	☐	1.000		1897929.59		A	0.8
8	☐	1.000		1868041.26		A	1.2
9	☐	1.000		1863873.44		A	0.6

165 Ho (ISTD) [No Gas]

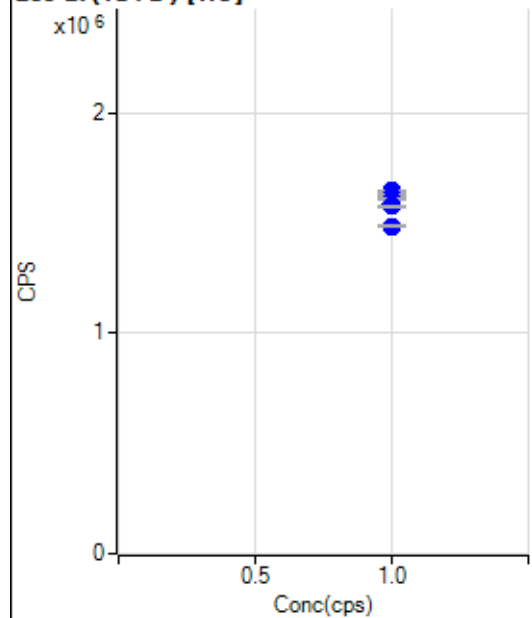
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8026058.86		A	2.7
2	☐	1.000					
3	☐	1.000		8192131.00		A	1.1
4	☐	1.000		8305784.30		A	0.4
5	☐	1.000		8598531.01		A	0.9
6	☐	1.000		8739587.09		A	0.8
7	☐	1.000		8588845.76		A	5.5
8	☐	1.000		9176508.62		A	1.3
9	☐	1.000		8859676.67		A	1.4

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1947303.34		A	1.7
2	☐	1.000					
3	☐	1.000		1994506.81		A	0.5
4	☐	1.000		1999762.28		A	1.1
5	☐	1.000		2061178.25		A	1.0
6	☐	1.000		2009089.74		A	0.8
7	☐	1.000		1990604.88		A	0.7
8	☐	1.000		1979948.32		A	0.9
9	☐	1.000		1972787.89		A	0.6

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5127262.18		A	3.7
2	☐	1.000					
3	☐	1.000		5366495.72		A	1.2
4	☐	1.000		5432117.07		A	1.1
5	☐	1.000		5657279.92		A	1.7
6	☐	1.000		5689154.08		A	0.7
7	☐	1.000		5545617.56		A	5.6
8	☐	1.000		5944871.51		A	1.2
9	☐	1.000		5442425.89		A	1.0

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1590144.38		P	2.0
2	☐	1.000					
3	☐	1.000		1615434.56		M	1.4
4	☐	1.000		1624001.76		P	0.9
5	☐	1.000		1645204.16		P	0.3
6	☐	1.000		1626306.38		P	0.7
7	☐	1.000		1605014.54		P	0.6
8	☐	1.000		1575601.47		P	0.6
9	☐	1.000		1483722.63		P	0.5

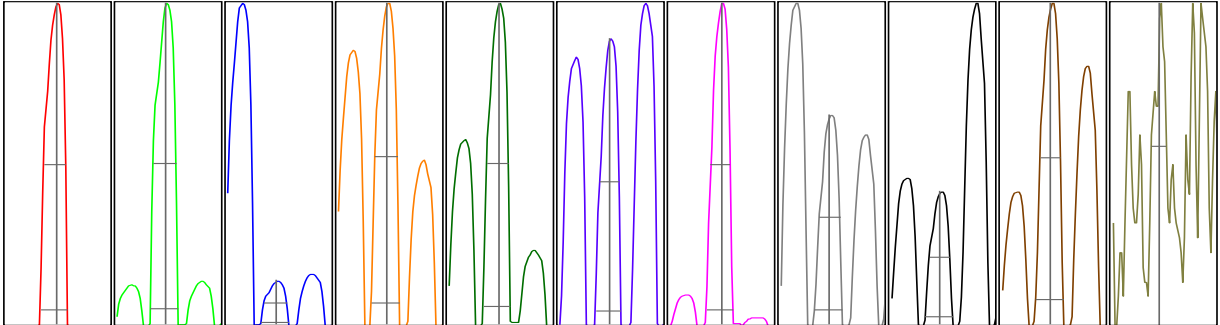
US EPA Tune Check Sample Report

Batch Folder D:\P8091918MS.b
Report Comment
Instrument Name G8403A JP17141814

[No Gas]				
Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	8690	0.49	5.00	
24	408323	0.29	5.00	
25	56130	0.59	5.00	
26	65331	0.79	5.00	
59	83114	0.60	5.00	
113	10973	0.78	5.00	
115	130604	1.13	5.00	
206	29984	0.83	5.00	
207	27502	0.85	5.00	
208	65045	0.84	5.00	
220	1	46.23		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	8618	8688	8702	8723	8719
24	407987	408585	406982	407912	410147
25	56080	55753	55922	56298	56598
26	65309	65036	64680	65624	66006
59	83313	82621	82534	83623	83479
113	10963	10902	10928	10952	11120
115	132198	128873	129254	131651	131043
206	29829	29766	29844	30351	30130
207	27513	27180	27388	27787	27641
208	64671	64436	64894	65728	65494
220	1	1	1	2	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	14722	9.00	8.9 - 9.1		0.781	0.900	
24	677538	23.95	23.9 - 24.1		0.786	0.900	
25	93023	24.95	24.9 - 25.1		0.786	0.900	
26	108929	25.95	25.9 - 26.1		0.808	0.900	
59	142362	59.00	58.9 - 59.1		0.780	0.900	
113	20324	113.00	112.9 - 113.1		0.731	0.900	
115	240467	115.05	114.9 - 115.1		0.770	0.900	
206	53232	205.95	205.9 - 206.1		0.787	0.900	
207	48538	206.95	206.9 - 207.1		0.777	0.900	
208	116528	207.95	207.9 - 208.1		0.785	0.900	
220	2	219.90	-				

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	9.8	V	Deflect	13.8	V
Extract 2	-210.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-95	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	10006	0.47	
89	8043	0.65	
205	15465	0.36	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	9955	9998	9967	10056	10054
89	7971	8073	8005	8092	8077
205	15368	15480	15504	15479	15493

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	9.8	V	Deflect	2.2	V
Extract 2	-210.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-95	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	170	V			