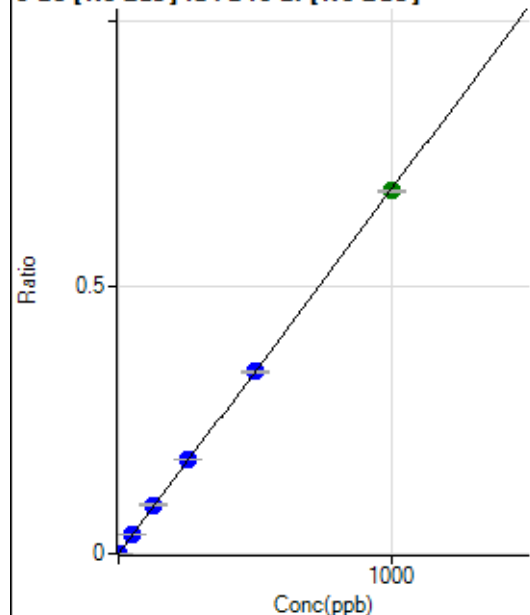


Batch Folder: D:\P8101918MS.b\
Analysis File: P8101918MS.batch.bin
DA Date-Time: 2018-10-19 18:12:53
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2018-10-19 16:02:19
2			
3	005CALS.d	S02	2018-10-19 16:09:03
4	006CALS.d	S03	2018-10-19 16:13:11
5	007CALS.d	S04	2018-10-19 16:16:54
6	008CALS.d	S05	2018-10-19 16:20:27
7	009CALS.d	S06	2018-10-19 16:23:56
8	010CALS.d	S07	2018-10-19 16:27:21
9	011CALS.d	S08	2018-10-19 16:30:42

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	140.75	0.0001	P	21.4
2	☐	0.100					
3	☐	1.000	1.109	1770.53	0.0008	P	4.8
4	☐	50.000	54.823	80381.12	0.0375	P	0.4
5	☐	125.000	133.849	196389.68	0.0916	P	1.2
6	☐	250.000	259.158	371179.48	0.1772	P	1.5
7	☐	500.000	501.193	691350.05	0.3426	P	1.1
8	☐	1000.000	995.766	1341464.95	0.6807	A	0.4
9	☐			987.10	0.0005	P	6.4

$$y = 6.8354\text{E-}004 * x + 6.4949\text{E-}005$$

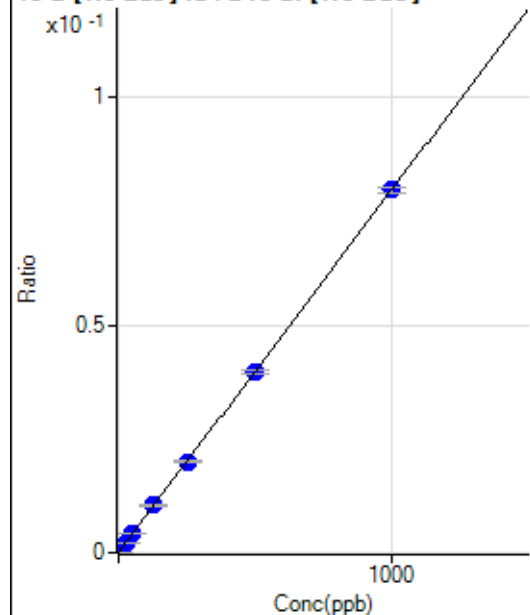
$$R = 0.9999$$

$$DL = 0.06114$$

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	130.56	0.0001	P	23.7
2	☐	2.500					
3	☐	25.000	26.240	4623.15	0.0021	P	0.6
4	☐	50.000	53.548	9250.59	0.0043	P	2.0
5	☐	125.000	131.066	22490.65	0.0105	P	4.1
6	☐	250.000	250.798	41920.60	0.0200	P	1.7
7	☐	500.000	496.657	79836.00	0.0396	P	2.3
8	☐	1000.000	1000.506	156957.81	0.0797	P	1.3
9	☐			6507.32	0.0034	P	3.5

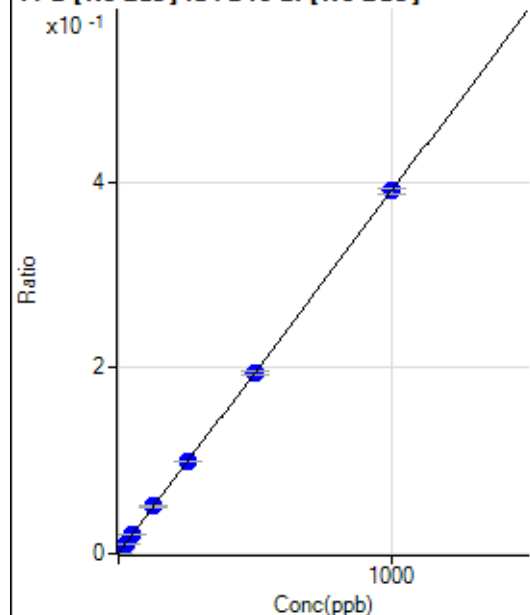
$$y = 7.9551\text{E-}005 * x + 6.0238\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.5384$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	633.38	0.0003	P	12.1
2	☐	2.500					
3	☐	25.000	25.807	22276.26	0.0104	P	3.6
4	☐	50.000	52.669	44589.95	0.0208	P	3.3
5	☐	125.000	129.838	109204.55	0.0509	P	2.0
6	☐	250.000	253.258	207433.75	0.0990	P	1.0
7	☐	500.000	496.888	391448.86	0.1940	P	1.7
8	☐	1000.000	999.983	768801.35	0.3901	P	1.9
9	☐			32022.94	0.0167	P	9.6

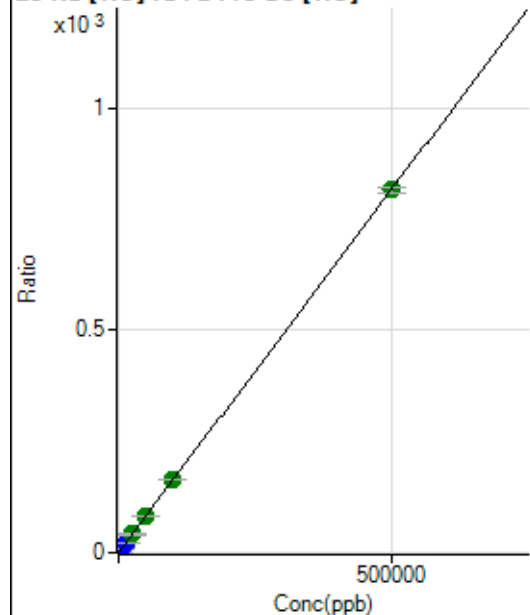
$$y = 3.8986\text{E-}004 * x + 2.9243\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.2729$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5459.65	0.1000	P	5.5
2	☐	50.000					
3	☐	500.000	473.758	49041.27	0.8731	P	2.1
4	☐	5000.000	4960.418	433392.91	8.1950	P	2.4
5	☐	12500.000	12527.661	1009322.31	20.5441	P	0.7
6	☐	25000.000	25357.768	1833848.02	41.4819	A	2.2
7	☐	50000.000	50932.194	3420121.99	83.2173	A	1.6
8	☐	100000.00	100909.91	6612538.04	164.7770	A	0.8
9	☐	500000.00	499706.63	34776768.48	815.5817	A	1.5

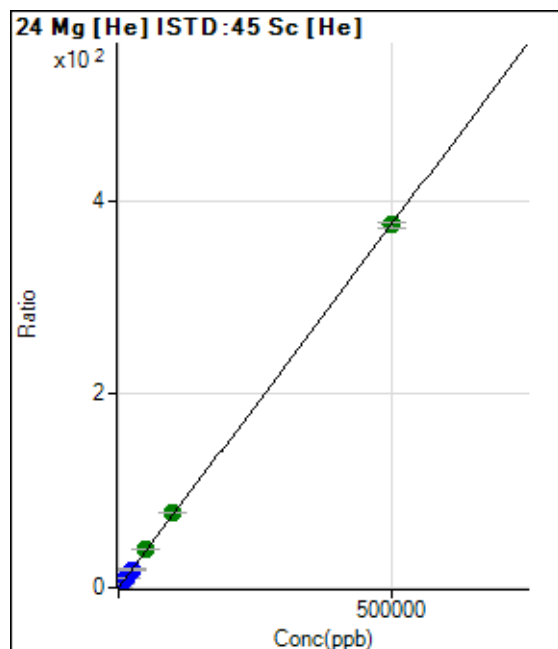
$$y = 0.0016 * x + 0.1000$$

$$R = 1.0000$$

$$DL = 10.16$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	263.90	0.0048	P	14.4
2	☐	50.000					
3	☐	500.000	475.864	20340.24	0.3621	P	2.2
4	☐	5000.000	4956.293	197063.91	3.7263	P	2.5
5	☐	12500.000	12549.763	463183.94	9.4278	P	0.8
6	☐	25000.000	25009.702	830385.14	18.7833	P	2.1
7	☐	50000.000	52365.561	1616282.06	39.3235	A	0.9
8	☐	100000.00	102442.89	3087096.71	76.9240	A	0.1
9	☐	500000.00	499273.59	15984981.61	374.8839	A	1.6

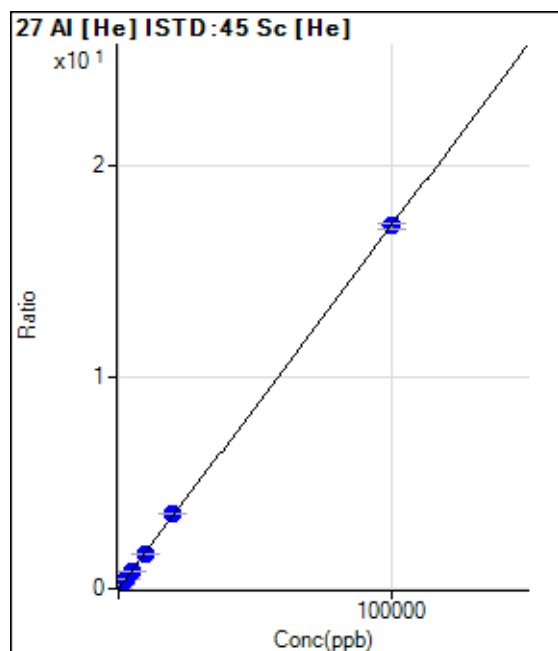
$$y = 7.5085\text{E-}004 * x + 0.0048$$

$$R = 1.0000$$

$$DL = 2.782$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.34	0.0002	P	77.6
2	☐	2.000					
3	☐	20.000	17.500	182.55	0.0033	P	7.8
4	☐	1000.000	964.984	8785.84	0.1661	P	3.0
5	☐	2500.000	2406.162	20334.71	0.4139	P	0.7
6	☐	5000.000	4772.393	36286.90	0.8207	P	1.4
7	☐	10000.000	9648.768	68183.84	1.6590	P	1.8
8	☐	20000.000	20620.742	142275.17	3.5453	P	1.0
9	☐	100000.00	99925.052	732492.60	17.1791	P	1.6

$$y = 1.7192\text{E-}004 * x + 2.4395\text{E-}004$$

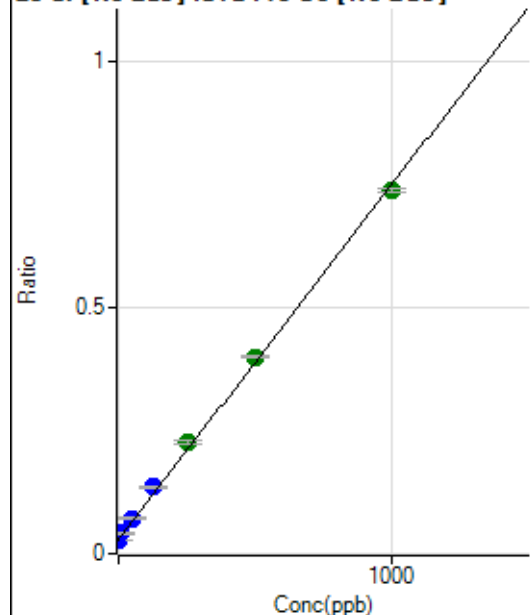
$$R = 1.0000$$

$$DL = 3.302$$

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	193127.62	0.0287	P	0.7
2	☐	1.000					
3	☐	10.000	17.117	275007.36	0.0410	P	3.8
4	☐	50.000	60.188	471933.97	0.0720	P	1.4
5	☐	125.000	147.964	849405.20	0.1352	P	2.5
6	☐	250.000	273.989	1331761.73	0.2260	A	2.6
7	☐	500.000	515.118	2202953.30	0.3996	A	0.3
8	☐	1000.000	982.993	3947493.71	0.7365	A	1.0
9	☐			247177.84	0.0461	P	1.2

$$y = 7.2013\text{E-}004 * x + 0.0287$$

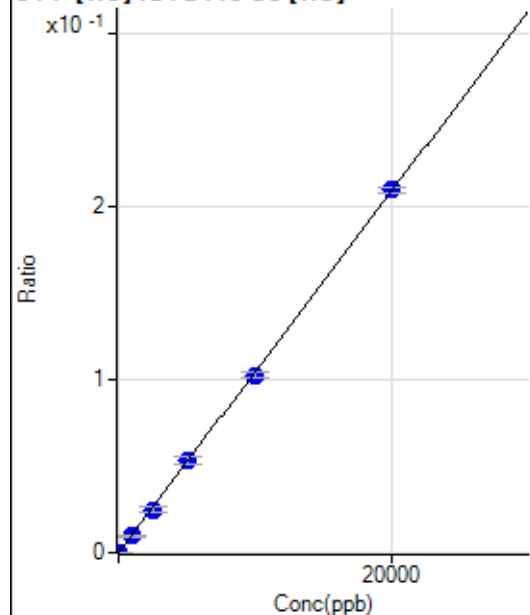
$$R = 0.9994$$

$$DL = 0.8481$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-2.170	5.56	0.0001	P	173.2
2	☐	0.000					
3	☐	0.000	2.170	8.33	0.0001	P	99.3
4	☐	1000.000	907.443	508.37	0.0096	P	15.5
5	☐	2500.000	2382.627	1227.89	0.0250	P	9.7
6	☐	5000.000	5098.201	2355.87	0.0533	P	6.9
7	☐	10000.000	9814.493	4214.69	0.1025	P	2.8
8	☐	20000.000	20087.503	8416.78	0.2097	P	1.5
9	☐			11.11	0.0003	P	44.7

$$y = 1.0434\text{E-}005 * x + 1.2344\text{E-}004$$

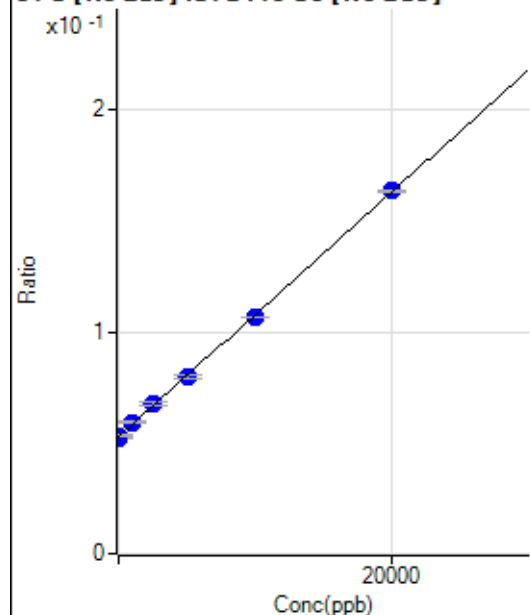
$$R = 0.9999$$

$$DL = 45.95$$

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	-61.356	353174.32	0.0524	P	1.3
2	☐	0.000					
3	☐	0.000	61.356	356295.51	0.0531	P	2.3
4	☐	1000.000	1187.116	388645.88	0.0593	P	1.3
5	☐	2500.000	2735.285	426052.45	0.0678	P	2.7
6	☐	5000.000	4881.154	469412.33	0.0796	P	1.8
7	☐	10000.000	9778.040	587745.17	0.1066	P	0.4
8	☐	20000.000	20101.925	876193.18	0.1635	P	0.6
9	☐			275780.60	0.0515	P	0.3

$$y = 5.5080\text{E-}006 * x + 0.0528$$

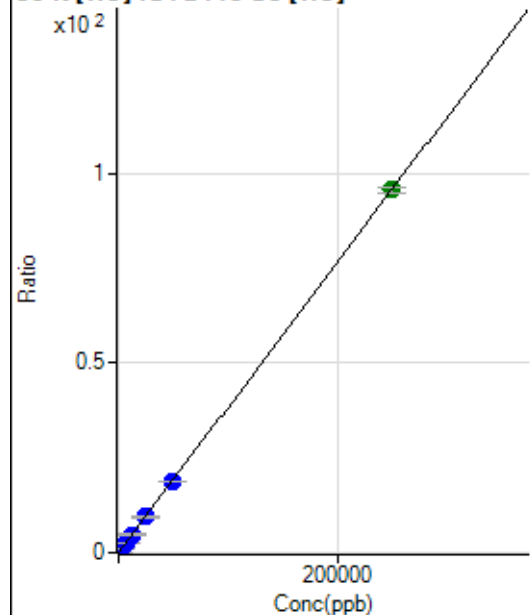
$$R = 0.9997$$

$$DL = 514.7$$

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	2711.49	0.0497	P	8.1
2	☐	50.000					
3	☐	500.000	501.989	13559.85	0.2415	P	5.0
4	☐	2500.000	2533.283	53829.02	1.0179	P	3.0
5	☐	6250.000	6342.653	121537.75	2.4739	P	1.7
6	☐	12500.000	12401.957	211771.71	4.7898	P	2.3
7	☐	25000.000	24599.888	388444.00	9.4520	P	2.1
8	☐	50000.000	48733.411	749484.96	18.6761	P	0.5
9	☐	250000.00	250295.57	4081140.98	95.7151	A	1.7

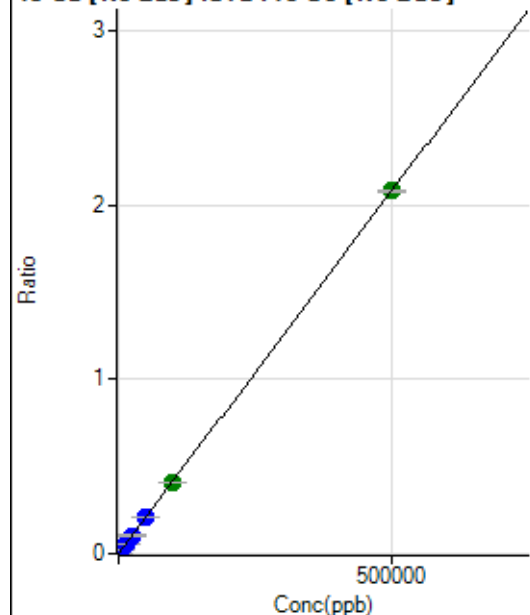
$$y = 3.8221\text{E-}004 * x + 0.0497$$

$$R = 1.0000$$

$$DL = 31.65$$

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	347.24	0.0001	P	22.2
2	☐	50.000					
3	☐	500.000	461.295	13212.26	0.0020	P	5.0
4	☐	5000.000	4917.877	134329.12	0.0205	P	1.0
5	☐	12500.000	12457.361	325660.74	0.0518	P	2.0
6	☐	25000.000	24966.808	611990.94	0.1038	P	2.2
7	☐	50000.000	49311.592	1130326.60	0.2050	P	0.5
8	☐	100000.00	98756.287	2200528.30	0.4106	A	0.6
9	☐	500000.00	500321.16	11144058.58	2.0799	A	0.7

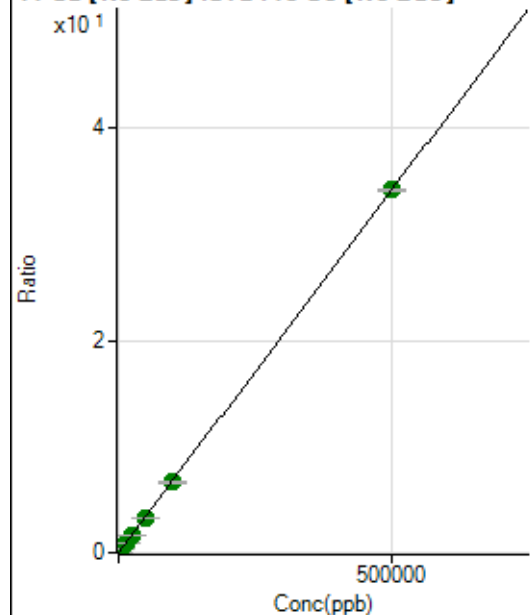
$$y = 4.1570\text{E-}006 * x + 5.1588\text{E-}005$$

$$R = 1.0000$$

$$DL = 8.282$$

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	9445.25	0.0014	P	1.1
2	☐	50.000					
3	☐	500.000	461.631	221084.24	0.0329	P	1.7
4	☐	5000.000	4957.458	2229347.32	0.3401	A	1.1
5	☐	12500.000	12312.296	5294183.54	0.8427	A	2.0
6	☐	25000.000	24494.366	9872565.07	1.6751	A	2.1
7	☐	50000.000	48551.619	18296324.89	3.3190	A	0.2
8	☐	100000.00	97197.654	35602844.89	6.6430	A	0.9
9	☐	500000.00	500735.74	183334140.2	34.2171	A	0.5

$$y = 6.8331\text{E-}005 * x + 0.0014$$

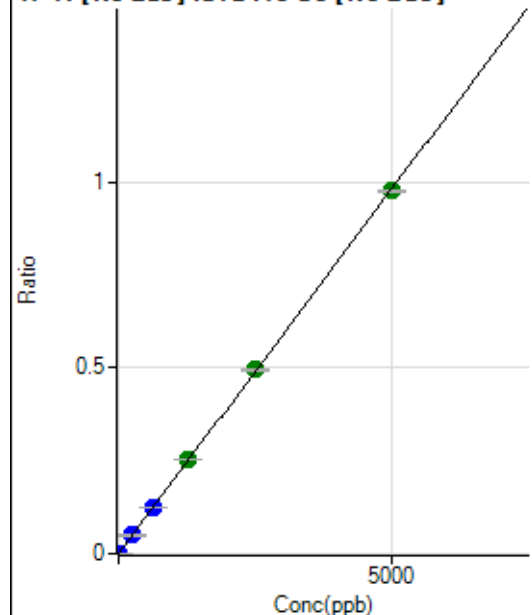
$$R = 1.0000$$

$$DL = 0.6736$$

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	88.90	0.0000	P	38.2
2	☐	0.500					
3	☐	5.000	4.943	6587.97	0.0010	P	1.1
4	☐	250.000	251.529	322965.90	0.0493	P	1.6
5	☐	625.000	635.285	781757.66	0.1244	P	2.0
6	☐	1250.000	1289.137	1488291.92	0.2525	A	0.9
7	☐	2500.000	2520.555	2721567.77	0.4937	A	0.5
8	☐	5000.000	4978.576	5226176.25	0.9751	A	0.5
9	☐			1741.86	0.0003	P	7.1

$$y = 1.9586\text{E-}004 * x + 1.3209\text{E-}005$$

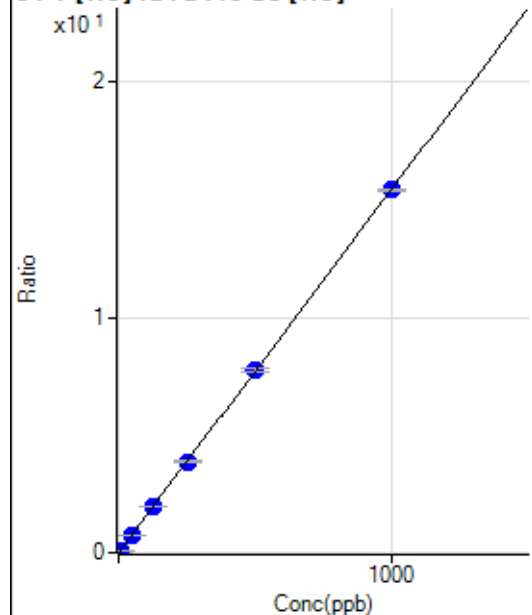
$$R = 1.0000$$

$$DL = 0.07727$$

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	3.33	0.0001	P	100.7
2	☐	0.500					
3	☐	5.000	4.629	4013.97	0.0715	P	2.4
4	☐	50.000	49.546	40419.46	0.7643	P	2.1
5	☐	125.000	125.483	95092.08	1.9355	P	0.3
6	☐	250.000	249.727	170307.21	3.8518	P	1.6
7	☐	500.000	502.360	318446.93	7.7484	P	1.7
8	☐	1000.000	998.852	618264.19	15.4063	P	0.6
9	☐			241.12	0.0057	P	13.4

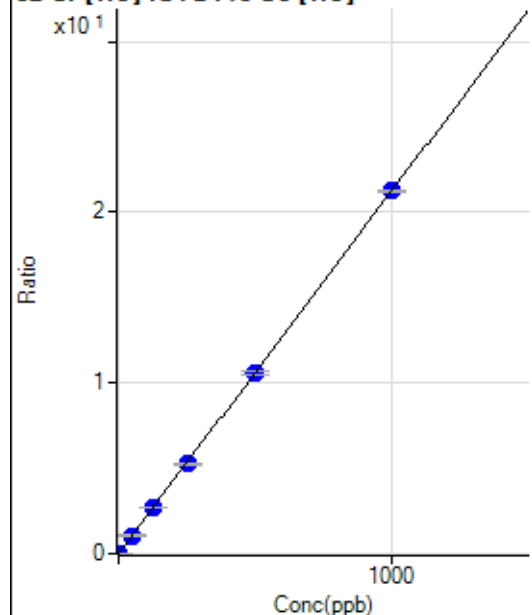
$$y = 0.0154 * x + 6.1508\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.01205$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	393.35	0.0072	P	9.9
2	☐	0.200					
3	☐	2.000	1.953	2731.42	0.0486	P	3.5
4	☐	50.000	49.772	56238.12	1.0635	P	2.9
5	☐	125.000	124.861	130536.97	2.6570	P	0.7
6	☐	250.000	248.797	233723.50	5.2871	P	2.3
7	☐	500.000	498.686	435223.39	10.5902	P	2.0
8	☐	1000.000	1000.987	852777.96	21.2500	P	0.6
9	☐			37181.76	0.8721	P	2.7

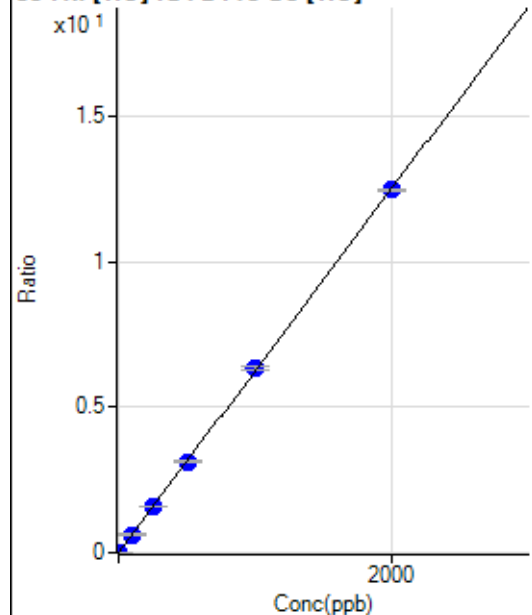
$$y = 0.0212 * x + 0.0072$$

$$R = 1.0000$$

$$DL = 0.1011$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	32.22	0.0006	P	29.3
2	☐	0.100					
3	☐	1.000	0.999	384.46	0.0068	P	1.1
4	☐	100.000	99.737	33049.24	0.6249	P	1.6
5	☐	250.000	252.334	77626.36	1.5800	P	1.3
6	☐	500.000	500.560	138520.70	3.1337	P	2.7
7	☐	1000.000	1010.982	260093.00	6.3286	P	1.8
8	☐	2000.000	1994.090	500916.47	12.4822	P	0.6
9	☐			2958.14	0.0694	P	2.3

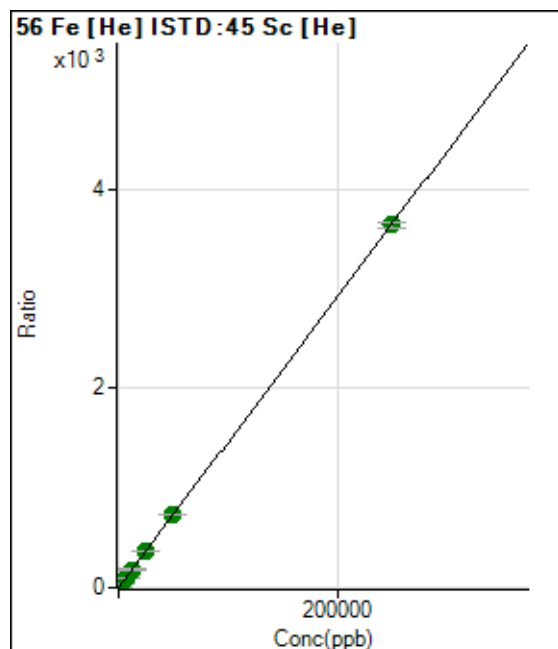
$$y = 0.0063 * x + 5.8939E-004$$

$$R = 1.0000$$

$$DL = 0.08291$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1076.00	0.0197	P	3.0
2	☐	5.000					
3	☐	50.000	48.453	40717.32	0.7250	P	2.3
4	☐	2500.000	2562.976	1973856.31	37.3250	A	2.9
5	☐	6250.000	6336.950	4532462.08	92.2570	A	1.3
6	☐	12500.000	12575.214	8091943.24	183.0578	A	2.7
7	☐	25000.000	25496.501	15252279.39	371.1332	A	2.1
8	☐	50000.000	50350.495	29411468.71	732.8948	A	0.6
9	☐	250000.00	249873.68	155083318.2	3,637.048	A	1.4

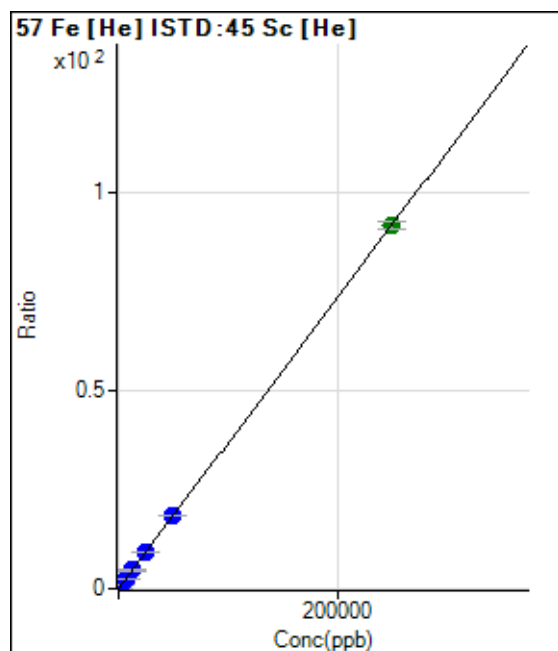
$$y = 0.0146 * x + 0.0197$$

$$R = 1.0000$$

$$DL = 0.1219$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.33	0.0006	P	33.0
2	☐	5.000					
3	☐	50.000	50.829	1081.56	0.0193	P	3.9
4	☐	2500.000	2473.737	48021.89	0.9080	P	1.9
5	☐	6250.000	6277.708	113162.74	2.3033	P	0.5
6	☐	12500.000	12594.362	204247.45	4.6203	P	2.2
7	☐	25000.000	25569.473	385492.29	9.3796	P	1.5
8	☐	50000.000	50698.699	746310.48	18.5970	P	0.6
9	☐	250000.00	249798.16	3906587.73	91.6272	A	2.2

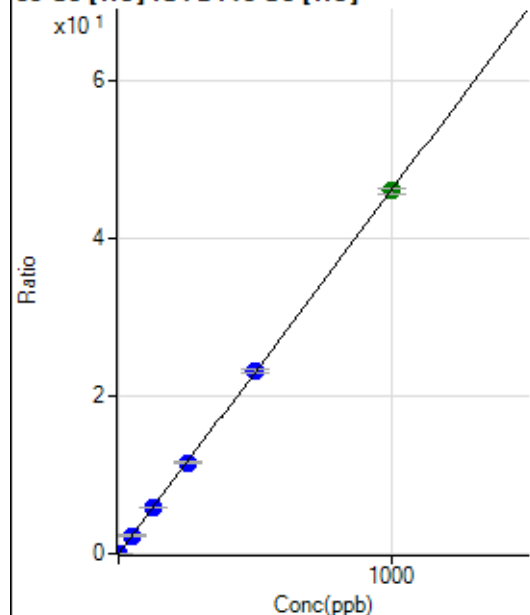
$$y = 3.6680E-004 * x + 6.0999E-004$$

$$R = 1.0000$$

$$DL = 1.644$$

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	105.56	0.0019	P	21.4
2	☐	0.100					
3	☐	1.000	1.000	2698.09	0.0481	P	4.2
4	☐	50.000	49.596	121018.28	2.2884	P	2.6
5	☐	125.000	125.269	283818.40	5.7770	P	1.2
6	☐	250.000	249.650	508885.61	11.5111	P	2.1
7	☐	500.000	503.667	954355.63	23.2216	P	1.8
8	☐	1000.000	998.241	1846822.59	46.0220	A	1.4
9	☐			3050.39	0.0715	P	3.9

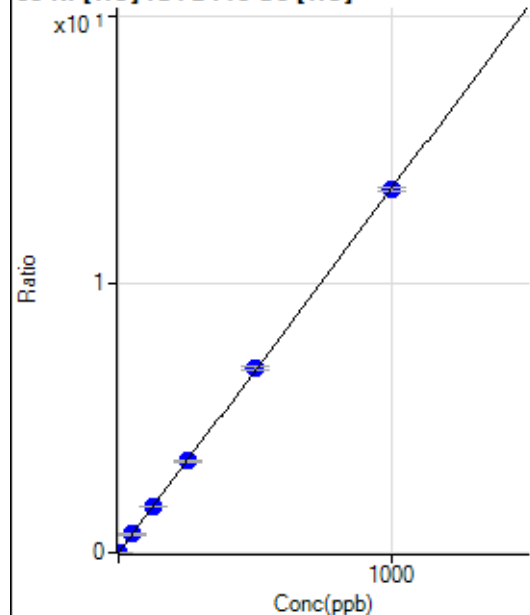
$$y = 0.0461 * x + 0.0019$$

$$R = 1.0000$$

$$DL = 0.02687$$

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	204.45	0.0037	P	17.8
2	☐	0.100					
3	☐	1.000	1.011	980.05	0.0175	P	11.7
4	☐	50.000	50.389	36316.28	0.6867	P	2.6
5	☐	125.000	126.534	84440.50	1.7188	P	0.7
6	☐	250.000	252.204	151278.90	3.4220	P	2.3
7	☐	500.000	506.032	282021.27	6.8623	P	2.0
8	☐	1000.000	996.222	542003.43	13.5062	P	0.9
9	☐			15383.10	0.3607	P	2.1

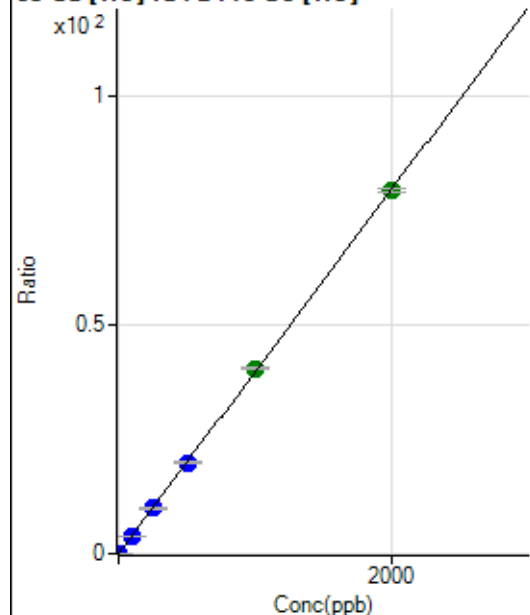
$$y = 0.0136 * x + 0.0037$$

$$R = 1.0000$$

$$DL = 0.148$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	315.56	0.0058	P	6.3
2	☐	0.200					
3	☐	2.000	1.887	4543.04	0.0809	P	1.5
4	☐	100.000	98.220	206983.21	3.9138	P	2.4
5	☐	250.000	248.880	486790.96	9.9083	P	0.8
6	☐	500.000	500.088	879949.93	19.9036	P	1.9
7	☐	1000.000	1015.622	1661083.69	40.4159	A	1.4
8	☐	2000.000	1992.396	3181492.90	79.2803	A	1.2
9	☐			8448.24	0.1982	P	3.6

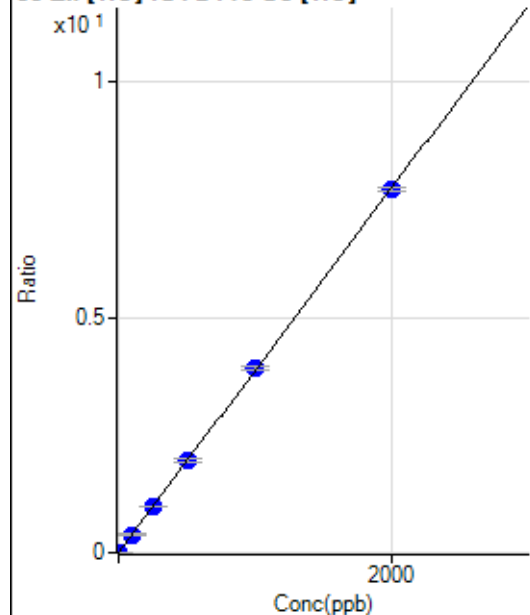
$$y = 0.0398 * x + 0.0058$$

$$R = 1.0000$$

$$DL = 0.02747$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	92.22	0.0017	P	23.6
2	☐	0.200					
3	☐	2.000	2.195	572.25	0.0102	P	13.5
4	☐	100.000	99.518	20479.78	0.3872	P	2.0
5	☐	250.000	252.489	48138.92	0.9798	P	1.1
6	☐	500.000	505.389	86623.85	1.9596	P	2.5
7	☐	1000.000	1016.394	161895.48	3.9393	P	1.9
8	☐	2000.000	1990.169	309476.33	7.7118	P	0.9
9	☐			1815.71	0.0426	P	3.0

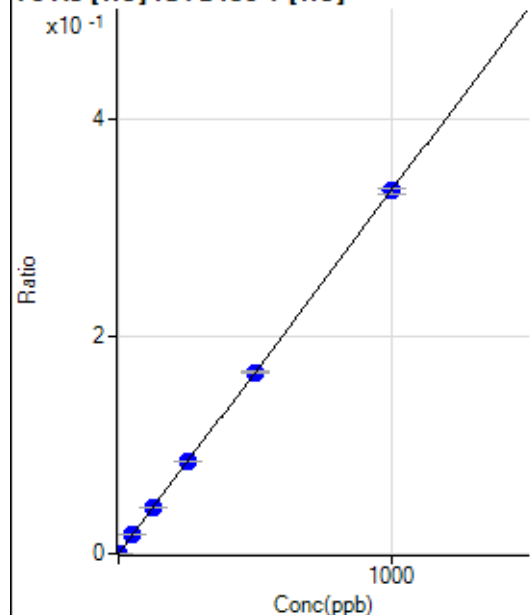
$$y = 0.0039 * x + 0.0017$$

$$R = 0.9999$$

$$DL = 0.3084$$

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	4.32	0.0000	P	99.7
2	☐	0.100					
3	☐	1.000	1.071	151.24	0.0004	P	10.2
4	☐	50.000	52.267	6924.01	0.0175	P	6.8
5	☐	125.000	126.722	15977.22	0.0423	P	1.0
6	☐	250.000	252.966	29193.79	0.0845	P	0.1
7	☐	500.000	499.941	54926.45	0.1670	P	1.6
8	☐	1000.000	998.959	106090.03	0.3337	P	1.6
9	☐			57.41	0.0002	P	3.7

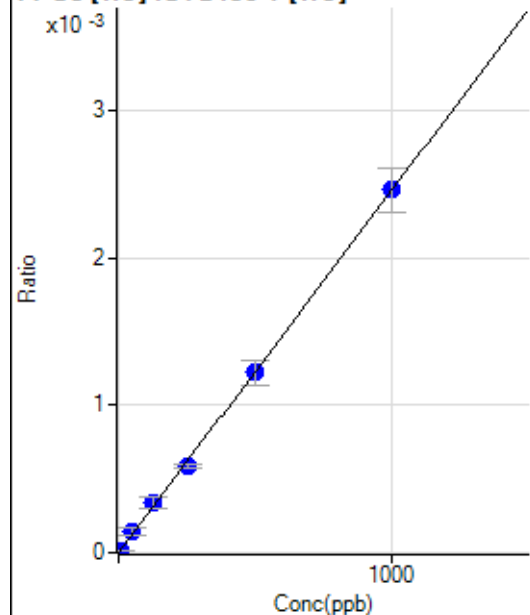
$$y = 3.3403\text{E-}004 * x + 1.0788\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.09663$$

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	3.303	3.33	0.0000	P	1.1
4	☐	50.000	57.933	56.67	0.0001	P	36.6
5	☐	125.000	139.117	128.89	0.0003	P	21.7
6	☐	250.000	238.554	202.23	0.0006	P	5.0
7	☐	500.000	497.432	401.12	0.0012	P	13.5
8	☐	1000.000	1001.993	782.26	0.0025	P	12.0
9	☐			2.22	0.0000	P	173.2

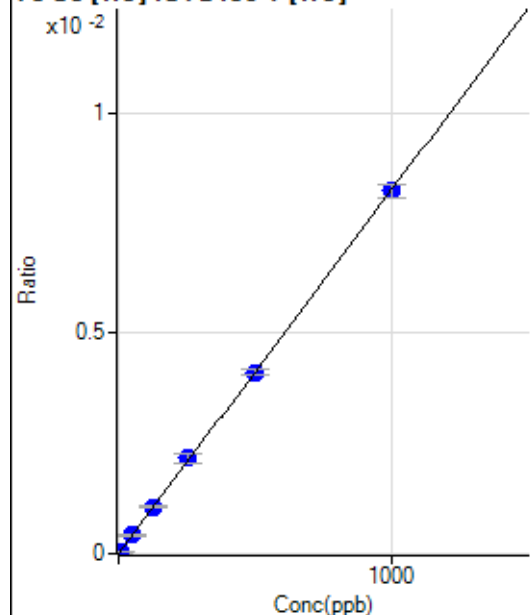
$$y = 2.4540\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9998$$

$$DL = 0$$

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	0.62	0.0000	P	173.2
2	☐	0.500					
3	☐	5.000	4.369	15.43	0.0000	P	6.4
4	☐	50.000	50.892	167.29	0.0004	P	16.4
5	☐	125.000	128.209	399.39	0.0011	P	3.8
6	☐	250.000	261.818	746.32	0.0022	P	9.5
7	☐	500.000	498.025	1350.69	0.0041	P	3.3
8	☐	1000.000	997.590	2615.71	0.0082	P	3.6
9	☐			1.23	0.0000	P	86.6

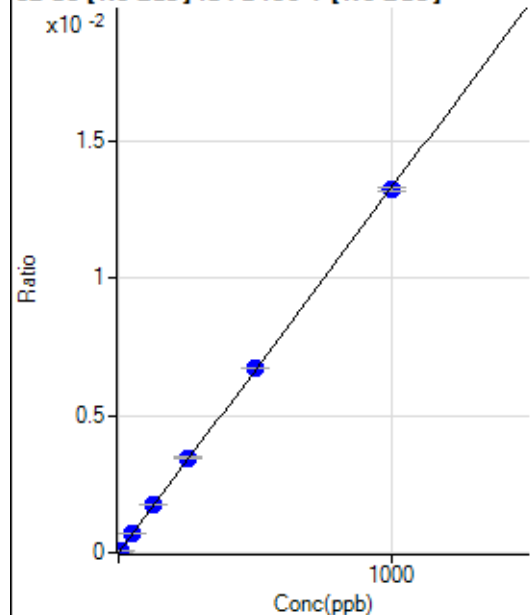
$$y = 8.2441\text{E-}006 * x + 1.5298\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.9642$$

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	-12.51	0.0000	P	-295.
2	☐	0.500					
3	☐	5.000	5.448	883.39	0.0001	P	11.3
4	☐	50.000	51.748	8430.36	0.0007	P	1.7
5	☐	125.000	130.721	20884.53	0.0017	P	2.3
6	☐	250.000	259.890	40100.21	0.0035	P	2.2
7	☐	500.000	505.764	75060.30	0.0067	P	0.9
8	☐	1000.000	993.840	145313.09	0.0132	P	1.1
9	☐			132.92	0.0000	P	10.4

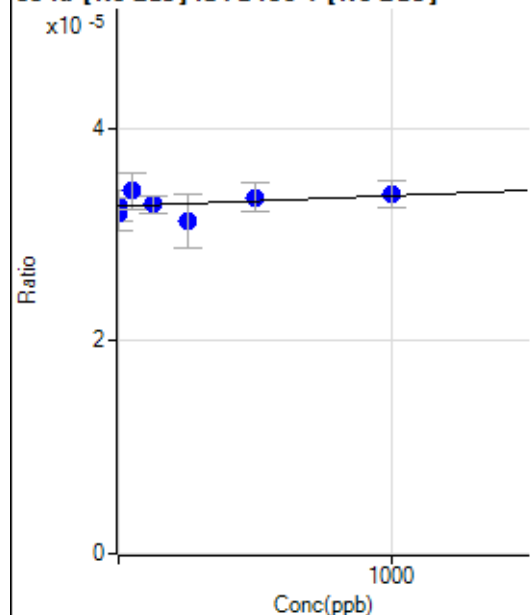
$$y = 1.3315\text{E-}005 * x - 9.9525\text{E-}007$$

$$R = 0.9999$$

$$DL = 0.6618$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	413.34	0.0000	P	8.9
2	☐	0.100					
3	☐	1.000	-685.866	394.46	0.0000	P	9.4
4	☐	50.000	1441.866	417.79	0.0000	P	9.7
5	☐	125.000	215.076	394.46	0.0000	P	4.9
6	☐	250.000	-1338.553	362.23	0.0000	P	16.4
7	☐	500.000	824.752	373.35	0.0000	P	8.3
8	☐	1000.000	1154.596	371.12	0.0000	P	7.9
9	☐			366.68	0.0000	P	3.8

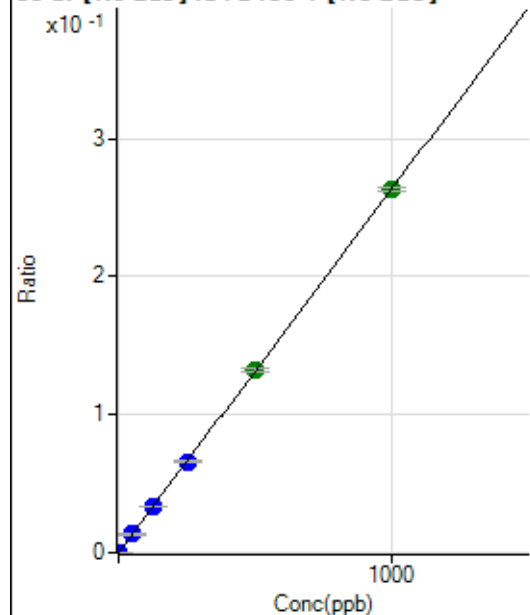
$$y = 1.0055\text{E-}009 * x + 3.2644\text{E-}005$$

$$R = 0.4037$$

$$DL = 8635$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	694.49	0.0001	P	7.0
2	☐	0.100					
3	☐	1.000	0.983	3867.42	0.0003	P	9.0
4	☐	50.000	50.163	162483.29	0.0133	P	0.7
5	☐	125.000	126.474	400350.24	0.0333	P	2.6
6	☐	250.000	251.060	766747.01	0.0661	P	2.1
7	☐	500.000	502.315	1474676.51	0.1323	A	1.5
8	☐	1000.000	998.385	2886912.20	0.2629	A	1.1
9	☐			15450.97	0.0014	P	2.9

$$y = 2.6324\text{E-}004 * x + 5.4830\text{E-}005$$

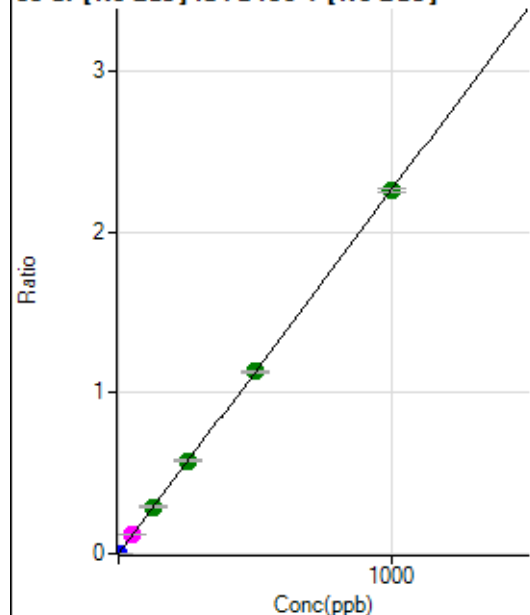
$$R = 1.0000$$

$$DL = 0.04352$$

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	158.34	0.0000	P	13.8
2	☐	0.100					
3	☐	1.000	1.023	28747.95	0.0023	P	3.3
4	☐	50.000	51.020	1416207.53	0.1156	M	1.3
5	☐	125.000	128.401	3492354.20	0.2909	A	1.8
6	☐	250.000	255.007	6695796.90	0.5776	A	2.4
7	☐	500.000	501.602	12666369.81	1.1362	A	0.8
8	☐	1000.000	997.471	24813515.66	2.2594	A	0.9
9	☐			131208.72	0.0123	P	0.3

$$y = 0.0023 * x + 1.2501E-005$$

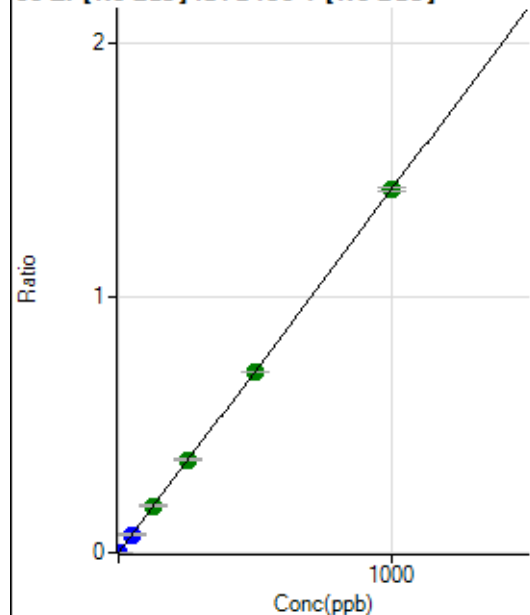
$$R = 1.0000$$

$$DL = 0.002283$$

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	1011.19	0.0001	P	6.0
2	☐	0.100					
3	☐	1.000	0.909	16961.27	0.0014	P	4.8
4	☐	50.000	50.012	873422.38	0.0713	P	1.2
5	☐	125.000	128.506	2197668.30	0.1830	A	1.9
6	☐	250.000	255.556	4218547.75	0.3639	A	2.0
7	☐	500.000	498.195	7908127.52	0.7094	A	0.7
8	☐	1000.000	999.074	15621897.57	1.4225	A	0.9
9	☐			9787.23	0.0009	P	1.1

$$y = 0.0014 * x + 7.9841E-005$$

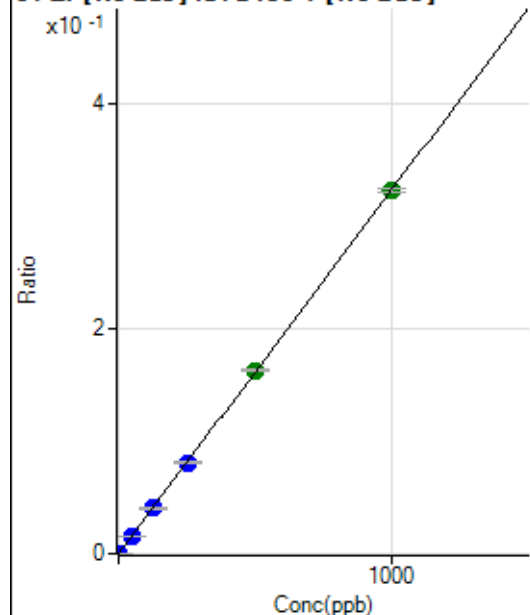
$$R = 1.0000$$

$$DL = 0.01014$$

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	186.12	0.0000	P	10.6
2	☐	0.100					
3	☐	1.000	0.924	3870.16	0.0003	P	7.7
4	☐	50.000	48.822	193642.60	0.0158	P	1.6
5	☐	125.000	125.270	486550.12	0.0405	P	2.5
6	☐	250.000	250.708	940004.22	0.0811	P	2.5
7	☐	500.000	503.860	1816664.04	0.1630	A	1.3
8	☐	1000.000	997.918	3544421.61	0.3227	A	1.1
9	☐			2147.48	0.0002	P	3.1

$$y = 3.2340\text{E-}004 * x + 1.4698\text{E-}005$$

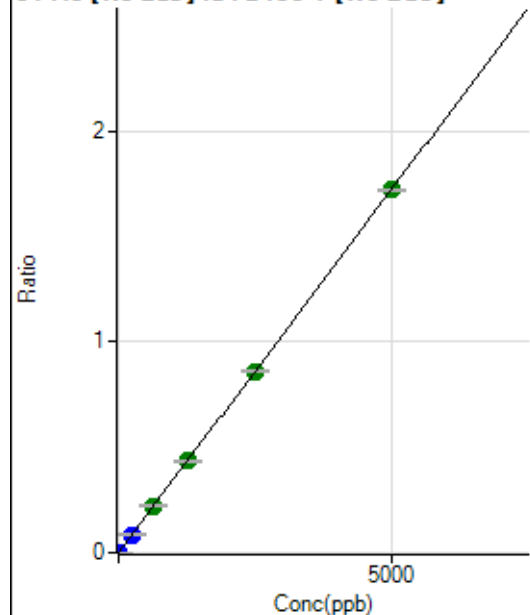
$$R = 1.0000$$

$$DL = 0.01443$$

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	416.69	0.0000	P	24.2
2	☐	0.500					
3	☐	5.000	4.856	21072.64	0.0017	P	1.9
4	☐	250.000	251.432	1062158.96	0.0867	P	1.5
5	☐	625.000	643.544	2663236.37	0.2218	A	2.0
6	☐	1250.000	1268.748	5069073.60	0.4373	A	2.3
7	☐	2500.000	2495.079	9586593.53	0.8599	A	1.0
8	☐	5000.000	4995.384	18907524.21	1.7216	A	0.7
9	☐			23899.62	0.0022	P	3.2

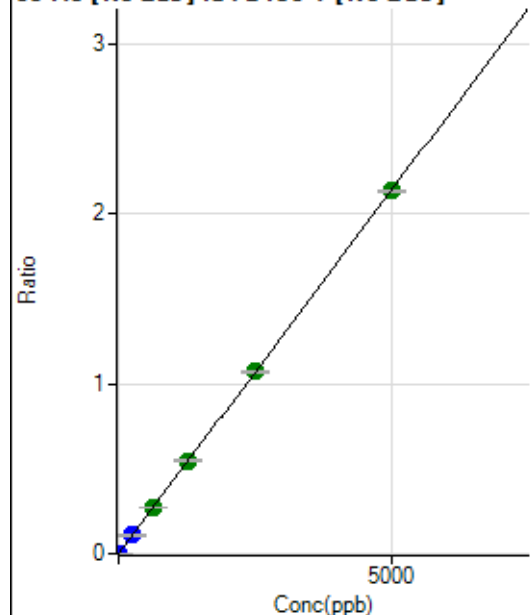
$$y = 3.4464\text{E-}004 * x + 3.2883\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.06923$$

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	227.79	0.0000	P	13.1
2	☐	0.500					
3	☐	5.000	4.939	26329.15	0.0021	P	1.3
4	☐	250.000	252.128	1322909.27	0.1080	P	1.4
5	☐	625.000	638.204	3280858.04	0.2733	A	2.0
6	☐	1250.000	1271.029	6308311.77	0.5442	A	2.2
7	☐	2500.000	2504.401	11953671.45	1.0723	A	0.7
8	☐	5000.000	4990.785	23467155.39	2.1368	A	0.8
9	☐			37165.77	0.0035	P	2.3

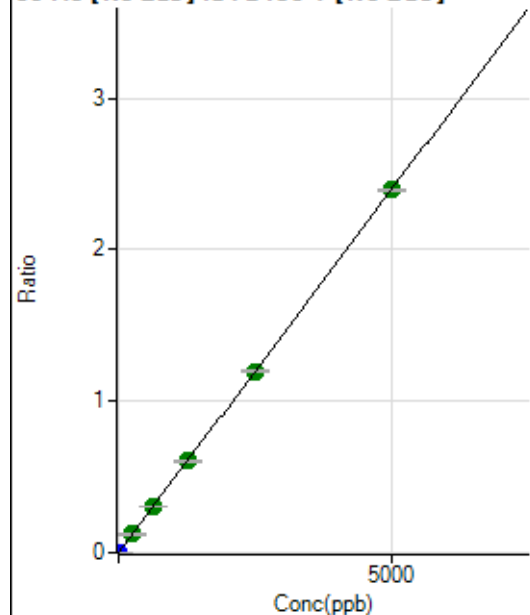
$$y = 4.2814\text{E-}004 * x + 1.7990\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.01652$$

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	277.80	0.0000	P	4.2
2	☐	0.500					
3	☐	5.000	4.907	29293.80	0.0024	P	1.1
4	☐	250.000	252.901	1484763.10	0.1212	A	1.1
5	☐	625.000	634.135	3647731.94	0.3038	A	1.6
6	☐	1250.000	1262.250	7009719.69	0.6047	A	2.1
7	☐	2500.000	2497.383	13337385.02	1.1964	A	0.6
8	☐	5000.000	4996.959	26289393.47	2.3938	A	0.8
9	☐			42428.45	0.0040	P	2.6

$$y = 4.7905\text{E-}004 * x + 2.1932\text{E-}005$$

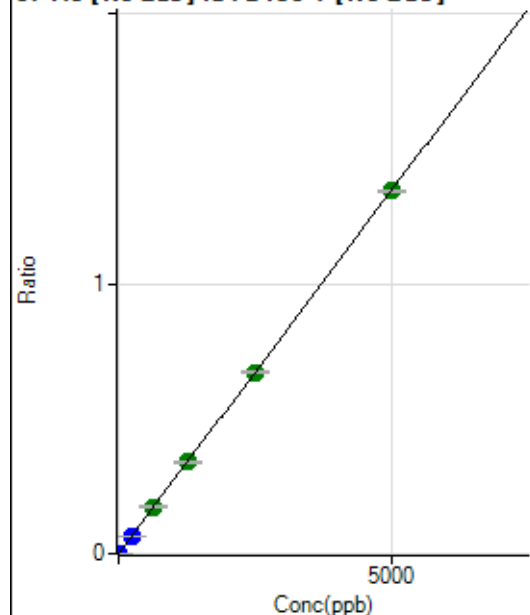
$$R = 1.0000$$

$$DL = 0.005792$$

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	122.23	0.0000	P	25.9
2	☐	0.500					
3	☐	5.000	4.984	16669.11	0.0014	P	4.2
4	☐	250.000	249.334	822094.86	0.0671	P	1.5
5	☐	625.000	647.641	2092084.70	0.1743	A	2.4
6	☐	1250.000	1269.740	3960206.73	0.3416	A	2.2
7	☐	2500.000	2495.516	7485004.94	0.6714	A	1.1
8	☐	5000.000	4994.510	14758130.88	1.3438	A	0.6
9	☐			23025.93	0.0022	P	2.4

$$y = 2.6905E-004 * x + 9.6527E-006$$

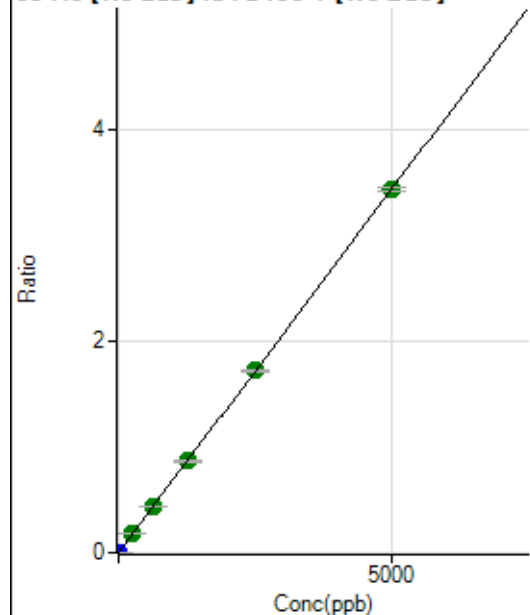
$$R = 1.0000$$

$$DL = 0.02791$$

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	316.69	0.0000	P	4.3
2	☐	0.500					
3	☐	5.000	4.881	41682.03	0.0034	P	1.0
4	☐	250.000	254.172	2138547.03	0.1745	A	0.9
5	☐	625.000	632.078	5210308.88	0.4340	A	2.2
6	☐	1250.000	1261.254	10038115.94	0.8659	A	2.0
7	☐	2500.000	2504.432	19168183.76	1.7194	A	0.9
8	☐	5000.000	4993.877	37653989.73	3.4286	A	0.9
9	☐			59297.01	0.0056	P	1.6

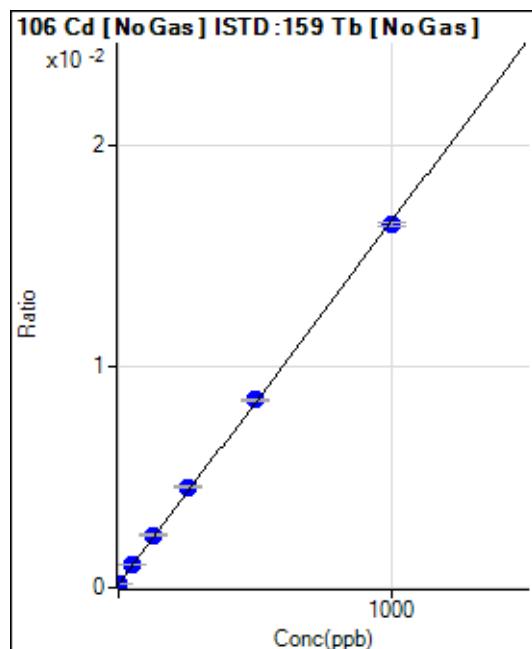
$$y = 6.8655E-004 * x + 2.5004E-005$$

$$R = 1.0000$$

$$DL = 0.004751$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2650.38	0.0002	P	2.4
2	☐	0.100					
3	☐	1.000	1.179	2925.46	0.0002	P	7.4
4	☐	50.000	54.529	17567.57	0.0011	P	1.3
5	☐	125.000	135.000	39804.49	0.0024	P	2.4
6	☐	250.000	267.599	76006.11	0.0046	P	2.5
7	☐	500.000	508.153	141512.90	0.0085	P	0.5
8	☐	1000.000	990.047	271594.44	0.0164	P	1.1
9	☐			2308.64	0.0001	P	0.4

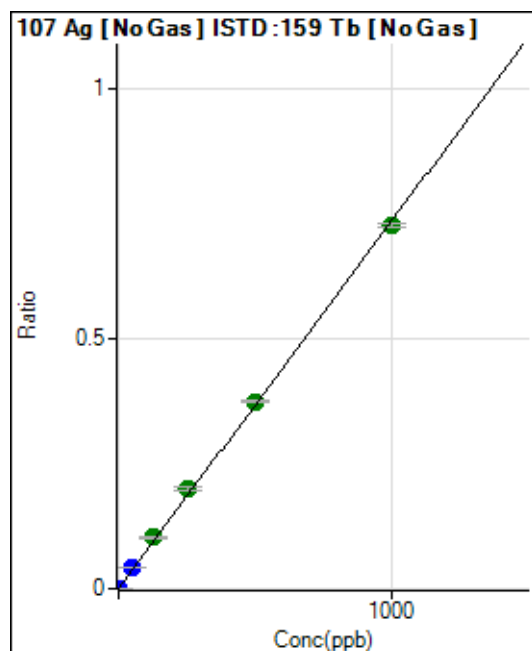
$$y = 1.6439\text{E-}005 * x + 1.5730\text{E-}004$$

$$R = 0.9998$$

$$DL = 0.677$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	105.56	0.0000	P	20.2
2	☐	0.100					
3	☐	1.000	1.122	13774.28	0.0008	P	0.9
4	☐	50.000	56.475	692767.34	0.0416	P	1.1
5	☐	125.000	139.656	1720734.35	0.1027	A	2.7
6	☐	250.000	271.888	3335972.95	0.2000	A	3.1
7	☐	500.000	509.943	6237412.77	0.3751	A	0.8
8	☐	1000.000	987.401	12005250.96	0.7264	A	0.9
9	☐			1527.94	0.0001	P	5.3

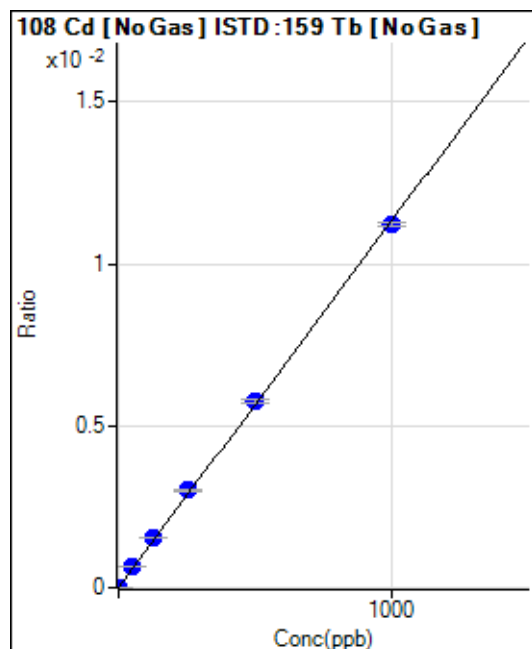
$$y = 7.3563\text{E-}004 * x + 6.2683\text{E-}006$$

$$R = 0.9996$$

$$DL = 0.005154$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	15.28	0.0000	P	102.9
2	☐	0.100					
3	☐	1.000	1.140	229.18	0.0000	P	16.1
4	☐	50.000	56.029	10591.87	0.0006	P	2.9
5	☐	125.000	137.156	26028.31	0.0016	P	2.0
6	☐	250.000	266.196	50292.22	0.0030	P	2.6
7	☐	500.000	508.952	95834.81	0.0058	P	1.1
8	☐	1000.000	989.654	185228.94	0.0112	P	1.0
9	☐			51.39	0.0000	P	12.8

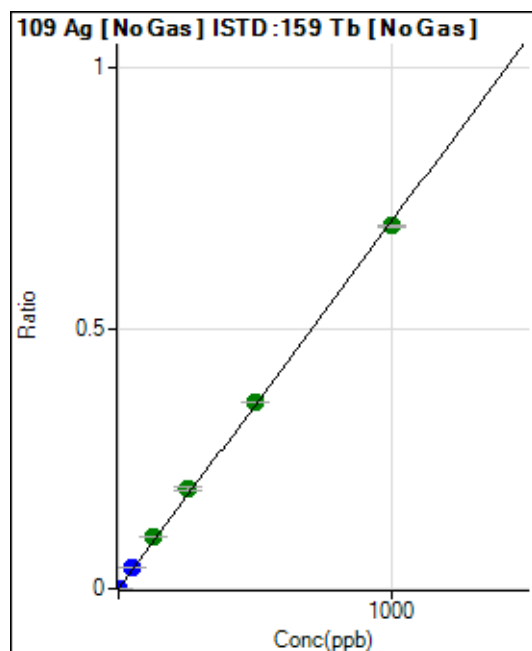
$$y = 1.1323\text{E-}005 * x + 9.0416\text{E-}007$$

$$R = 0.9998$$

$$DL = 0.2464$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44.44	0.0000	P	43.7
2	☐	0.100					
3	☐	1.000	1.120	13126.41	0.0008	P	2.3
4	☐	50.000	56.164	660316.01	0.0396	P	1.4
5	☐	125.000	140.448	1658875.82	0.0990	A	1.8
6	☐	250.000	272.518	3205408.95	0.1922	A	2.4
7	☐	500.000	508.222	5958403.09	0.3584	A	0.9
8	☐	1000.000	988.020	11514993.40	0.6967	A	0.7
9	☐			1569.61	0.0001	P	1.3

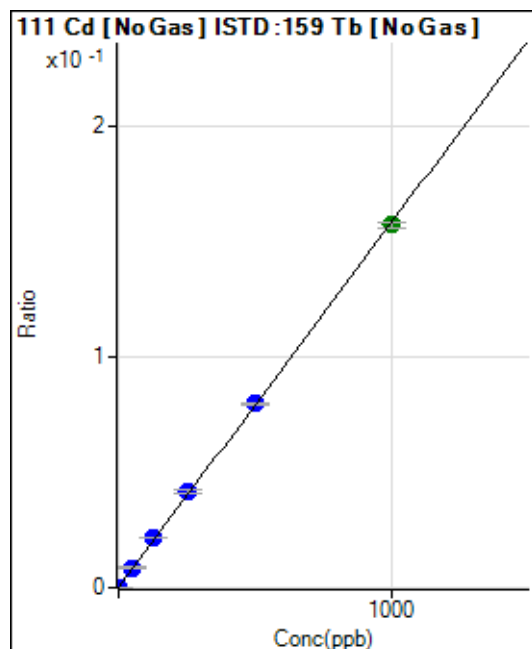
$$y = 7.0513\text{E-}004 * x + 2.6403\text{E-}006$$

$$R = 0.9996$$

$$DL = 0.004905$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1852.91	0.0001	P	1.9
2	☐	0.100					
3	☐	1.000	1.061	4597.46	0.0003	P	1.4
4	☐	50.000	54.600	145547.09	0.0087	P	0.6
5	☐	125.000	135.097	359071.14	0.0214	P	1.7
6	☐	250.000	263.301	695123.51	0.0417	P	2.9
7	☐	500.000	503.722	1323963.88	0.0796	P	0.9
8	☐	1000.000	993.321	2593492.22	0.1569	A	1.4
9	☐			2024.54	0.0001	P	0.7

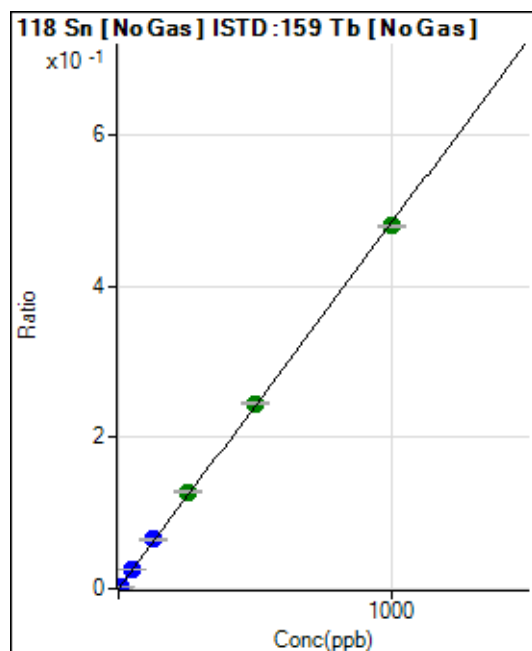
$$y = 1.5786\text{E-}004 * x + 1.0997\text{E-}004$$

$$R = 0.9999$$

$$DL = 0.03966$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	808.40	0.0000	P	10.4
2	☐	0.500					
3	☐	5.000	5.330	43538.34	0.0026	P	3.3
4	☐	50.000	54.067	437256.05	0.0262	P	1.3
5	☐	125.000	134.129	1088546.48	0.0650	P	2.2
6	☐	250.000	264.851	2139694.17	0.1283	A	3.0
7	☐	500.000	506.872	4081299.31	0.2455	A	0.9
8	☐	1000.000	991.505	7935432.99	0.4801	A	0.8
9	☐			11549.88	0.0007	P	3.8

$$y = 4.8419\text{E-}004 * x + 4.7988\text{E-}005$$

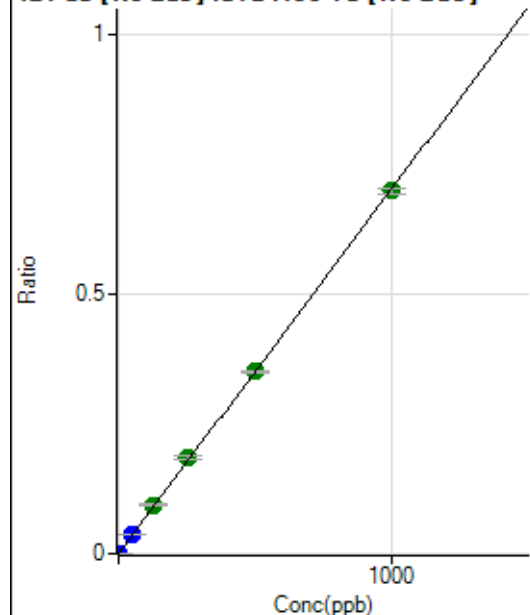
$$R = 0.9998$$

$$DL = 0.03083$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	111.12	0.0000	P	33.4
2	☐	0.200					
3	☐	2.000	2.105	24584.68	0.0015	P	1.4
4	☐	50.000	52.811	618148.24	0.0371	P	1.7
5	☐	125.000	133.587	1570557.22	0.0938	A	2.9
6	☐	250.000	263.678	3087059.96	0.1851	A	3.3
7	☐	500.000	499.979	5835329.34	0.3510	A	0.9
8	☐	1000.000	995.377	11547890.54	0.6987	A	1.5
9	☐			29792.60	0.0019	P	1.6

$$y = 7.0195\text{E-}004 * x + 6.5901\text{E-}006$$

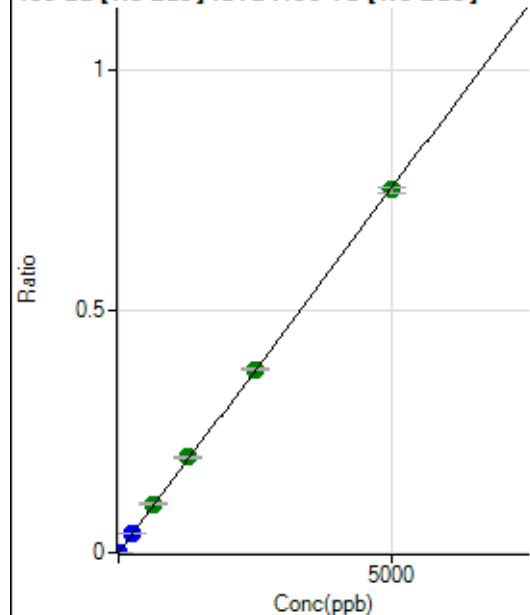
$$R = 0.9999$$

$$DL = 0.009421$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	52.78	0.0000	P	32.5
2	☐	1.000					
3	☐	10.000	10.491	26285.35	0.0016	P	0.5
4	☐	250.000	267.884	674080.53	0.0404	P	1.3
5	☐	625.000	668.632	1690220.31	0.1009	A	1.8
6	☐	1250.000	1308.071	3292528.07	0.1974	A	3.1
7	☐	2500.000	2506.799	6290062.64	0.3783	A	1.0
8	☐	5000.000	4975.734	12410869.38	0.7509	A	1.3
9	☐			3686.81	0.0002	P	3.6

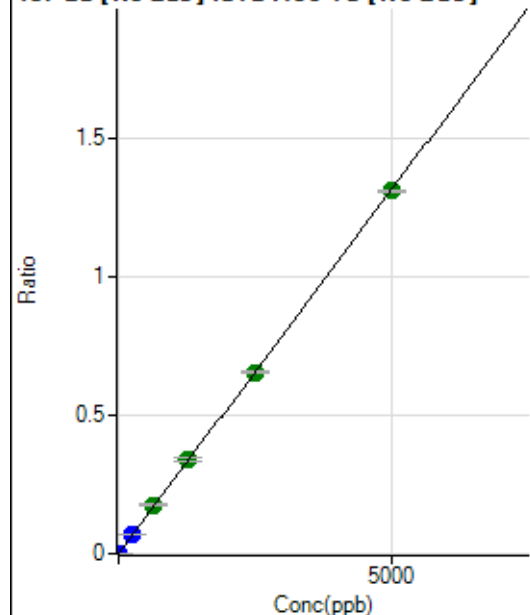
$$y = 1.5091\text{E-}004 * x + 3.1302\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.02024$$

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	97.23	0.0000	P	13.2
2	☐	1.000					
3	☐	10.000	10.540	46050.65	0.0028	P	2.3
4	☐	250.000	266.592	1170057.81	0.0702	P	1.3
5	☐	625.000	671.936	2962310.35	0.1769	A	2.8
6	☐	1250.000	1298.364	5700364.28	0.3418	A	2.9
7	☐	2500.000	2494.292	10916334.88	0.6566	A	1.0
8	☐	5000.000	4984.065	21683987.98	1.3119	A	0.5
9	☐			6157.28	0.0004	P	3.0

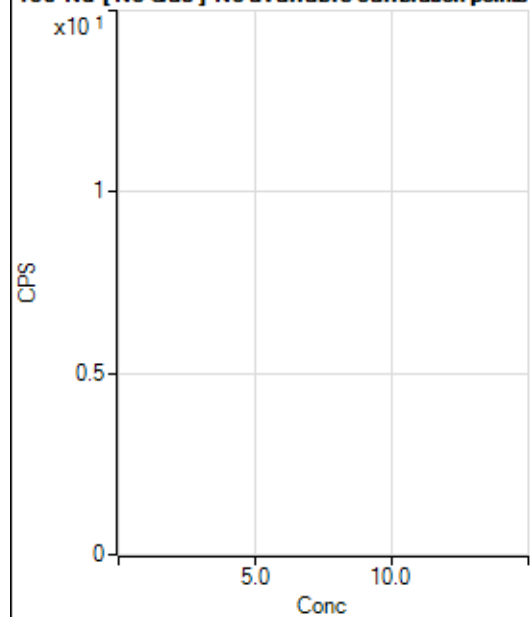
$$y = 2.6322E-004 * x + 5.7710E-006$$

$$R = 0.9999$$

$$DL = 0.008658$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	43.3
2	☐						
3	☐			6.67		P	0.0
4	☐			35.56		P	75.8
5	☐			97.78		P	17.2
6	☐			220.01		P	10.9
7	☐			324.46		P	22.7
8	☐			671.15		P	5.6
9	☐			215.57		P	12.9

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			1.11		P	173.2
4	☐			2.22		P	173.2
5	☐			2.22		P	173.2
6	☐			1.11		P	173.2
7	☐			3.33		P	100.1
8	☐			13.33		P	66.1
9	☐			26.67		P	33.1

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			19.44		P	89.2
2	☐						
3	☐			11.11		P	43.3
4	☐			11.11		P	114.6
5	☐			38.89		P	32.7
6	☐			44.45		P	54.1
7	☐			69.45		P	38.6
8	☐			150.01		P	5.6
9	☐			127.79		P	35.9

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.1
2	☐						
3	☐			1.11		P	173.2
4	☐			5.55		P	124.9
5	☐			2.22		P	86.6
6	☐			6.67		P	50.0
7	☐			10.00		P	33.3
8	☐			20.00		P	44.1
9	☐			15.56		P	32.7

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			75.01		P	29.4
2	☐						
3	☐			83.34		P	10.0
4	☐			72.23		P	29.0
5	☐			75.01		P	29.4
6	☐			91.67		P	9.1
7	☐			116.67		P	32.7
8	☐			100.01		P	14.4
9	☐			172.23		P	15.6

160 Gd [He] No available calibration points

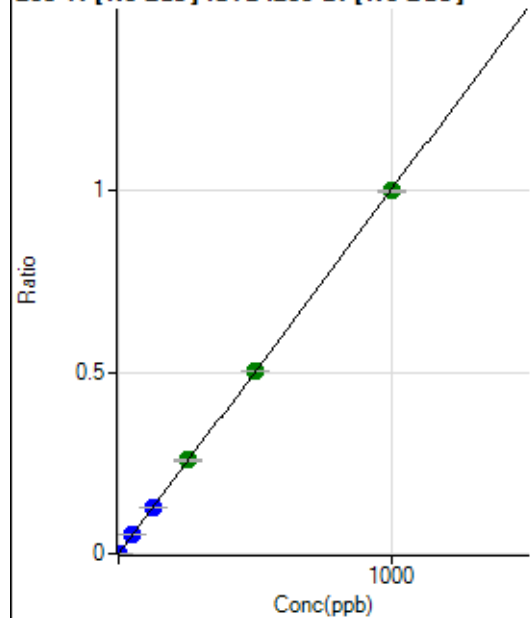
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.33		P	NaN
2	☐						
3	☐			11.11		P	34.6
4	☐			13.33		P	25.0
5	☐			8.89		P	43.3
6	☐			12.22		P	31.5
7	☐			21.11		P	50.8
8	☐			24.44		P	34.3
9	☐			22.22		P	22.9

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			86.12		P	36.6
2	☐						
3	☐			88.89		P	5.4
4	☐			58.34		P	28.6
5	☐			30.56		P	41.7
6	☐			58.34		P	24.7
7	☐			75.01		P	38.5
8	☐			86.11		P	39.1
9	☐			108.34		P	26.7

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			11.11		P	62.5
2	☐						
3	☐			10.00		P	88.2
4	☐			6.67		P	50.0
5	☐			5.56		P	91.6
6	☐			5.55		P	69.3
7	☐			15.56		P	53.9
8	☐			17.78		P	47.2
9	☐			6.67		P	50.0

203 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	4.5
2	☐	0.100					
3	☐	1.000	0.994	11158.18	0.0010	P	3.3
4	☐	50.000	50.574	562883.21	0.0507	P	1.5
5	☐	125.000	127.567	1442604.60	0.1279	P	2.5
6	☐	250.000	256.611	2916684.53	0.2572	A	2.4
7	☐	500.000	503.582	5752160.15	0.5047	A	0.1
8	☐	1000.000	996.207	11235467.27	0.9985	A	0.7
9	☐			5595.94	0.0005	P	4.5

$$y = 0.0010 * x + 1.4142E-005$$

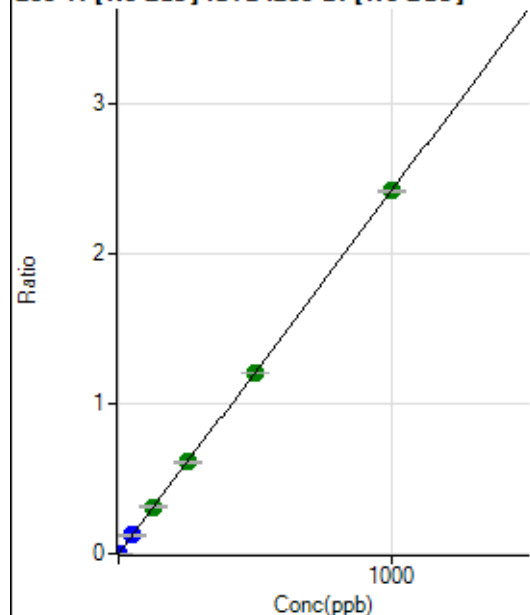
$$R = 1.0000$$

$$DL = 0.00191$$

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	541.71	0.0000	P	16.1
2	☐	0.100					
3	☐	1.000	1.008	27433.47	0.0025	P	2.2
4	☐	50.000	50.385	1352380.77	0.1218	P	2.3
5	☐	125.000	128.241	3497083.50	0.3100	A	3.0
6	☐	250.000	252.649	6925385.05	0.6107	A	2.3
7	☐	500.000	497.861	13713873.57	1.2034	A	0.9
8	☐	1000.000	999.983	27196983.25	2.4171	A	0.8
9	☐			13655.13	0.0013	P	5.6

$$y = 0.0024 * x + 4.8434E-005$$

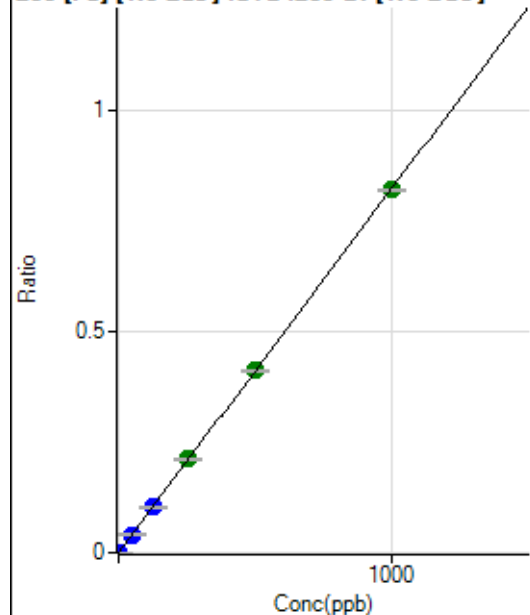
$$R = 1.0000$$

$$DL = 0.009679$$

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	512.99	0.0000	P	12.4
2	☐	0.100					
3	☐	1.000	1.002	9615.03	0.0009	P	3.9
4	☐	50.000	49.660	454620.80	0.0410	P	2.3
5	☐	125.000	125.195	1163988.03	0.1032	P	2.8
6	☐	250.000	257.803	2408814.84	0.2124	A	2.5
7	☐	500.000	501.242	4706199.01	0.4130	A	0.9
8	☐	1000.000	997.421	9246199.98	0.8217	A	0.8
9	☐			17093.39	0.0017	P	2.1

$$y = 8.2381E-004 * x + 4.5860E-005$$

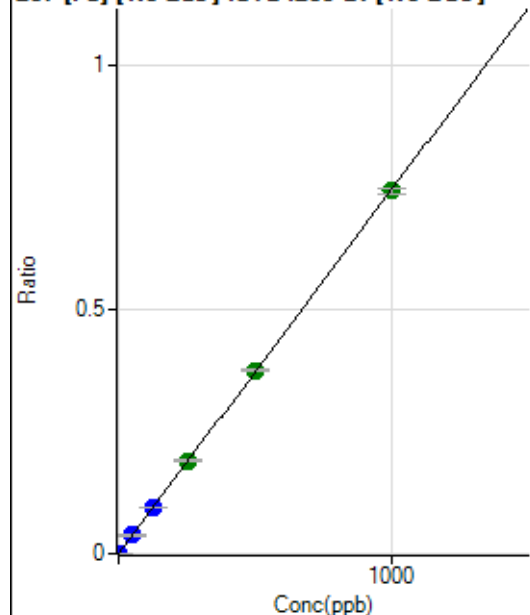
$$R = 1.0000$$

$$DL = 0.02079$$

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	462.98	0.0000	P	19.3
2	☐	0.100					
3	☐	1.000	0.990	8592.04	0.0008	P	4.3
4	☐	50.000	50.319	416615.53	0.0375	P	1.9
5	☐	125.000	126.128	1060512.20	0.0940	P	2.7
6	☐	250.000	255.325	2157705.97	0.1903	A	1.7
7	☐	500.000	502.735	4268726.46	0.3746	A	0.8
8	☐	1000.000	997.145	8359258.52	0.7429	A	1.3
9	☐			14497.54	0.0014	P	1.4

$$y = 7.4501E-004 * x + 4.1389E-005$$

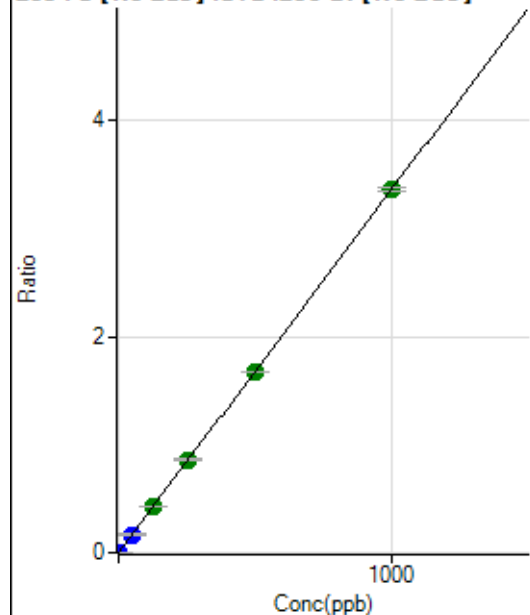
$$R = 1.0000$$

$$DL = 0.03221$$

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	2046.42	0.0002	P	7.0
2	☐	0.100					
3	☐	1.000	0.997	38965.23	0.0035	P	2.1
4	☐	50.000	49.858	1860592.02	0.1676	P	1.8
5	☐	125.000	126.209	4783110.12	0.4240	A	2.7
6	☐	250.000	254.766	9703497.19	0.8557	A	2.1
7	☐	500.000	498.348	19072542.70	1.6736	A	0.8
8	☐	1000.000	999.490	37766718.21	3.3565	A	1.0
9	☐			67622.36	0.0066	P	0.6

$$y = 0.0034 * x + 1.8286E-004$$

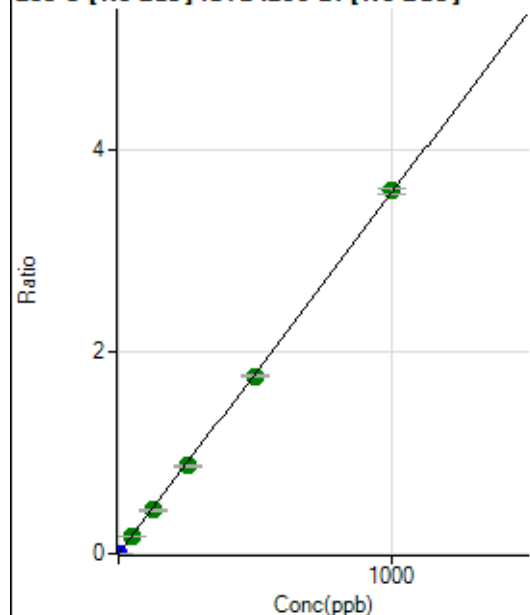
$$R = 1.0000$$

$$DL = 0.01143$$

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	47.22	0.0000	P	37.3
2	☐	0.100					
3	☐	1.000	0.930	36727.34	0.0033	P	2.2
4	☐	50.000	47.441	1881241.34	0.1695	A	1.3
5	☐	125.000	120.429	4852847.16	0.4302	A	2.4
6	☐	250.000	243.223	9852058.73	0.8688	A	1.9
7	☐	500.000	492.967	20065742.46	1.7608	A	1.1
8	☐	1000.000	1005.910	40426957.85	3.5930	A	1.2
9	☐			8597.83	0.0008	P	3.5

$$y = 0.0036 * x + 4.2255E-006$$

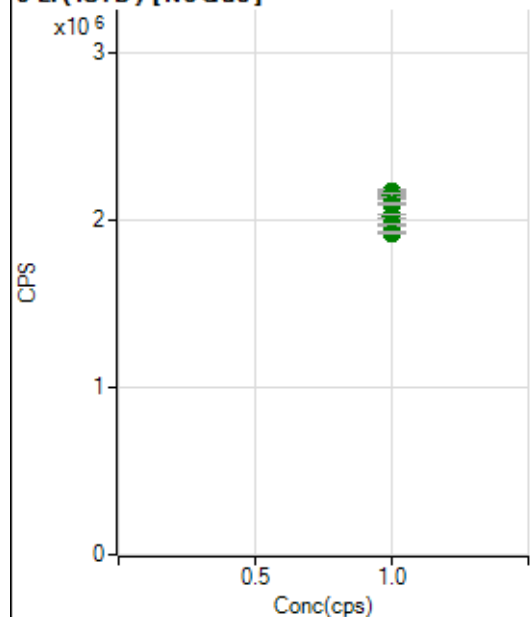
$$R = 0.9999$$

$$DL = 0.001325$$

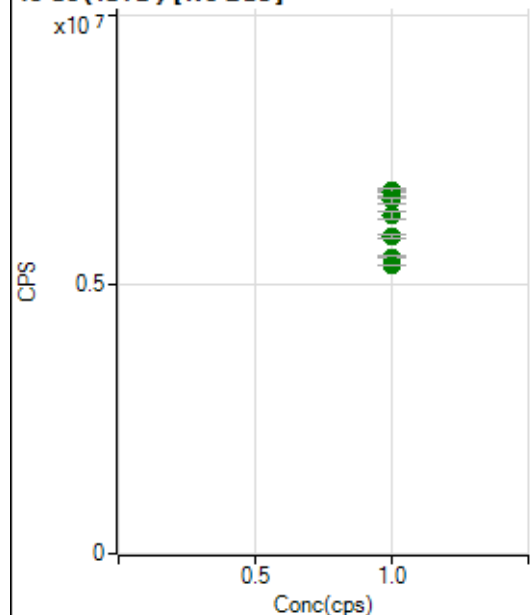
Weight: <None>

Min Conc: 0

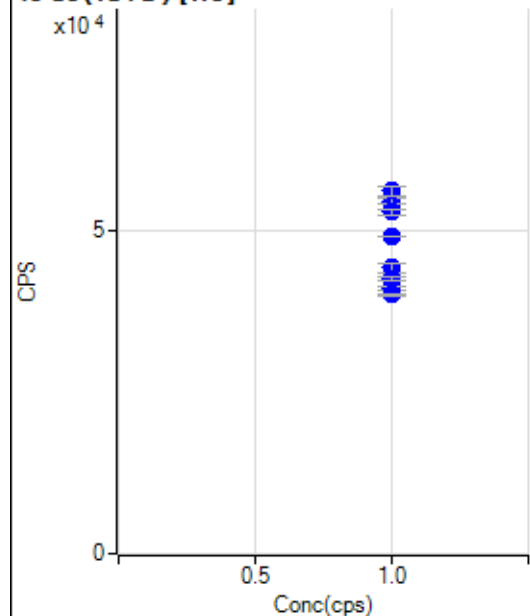
6 Li (ISTD) [No Gas]



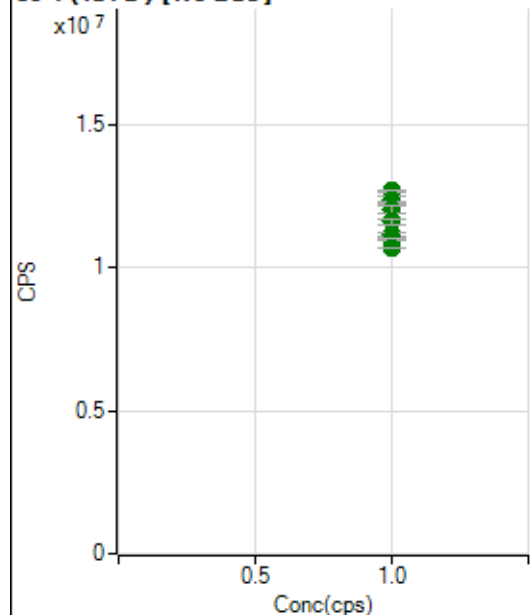
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2165994.71		A	0.4
2	☐	1.000					
3	☐	1.000		2152522.88		A	2.3
4	☐	1.000		2141338.42		A	0.6
5	☐	1.000		2145195.26		A	1.0
6	☐	1.000		2094698.13		A	0.7
7	☐	1.000		2017827.65		A	1.1
8	☐	1.000		1970666.76		A	0.6
9	☐	1.000		1921974.37		A	0.8

45 Sc (ISTD) [No Gas]

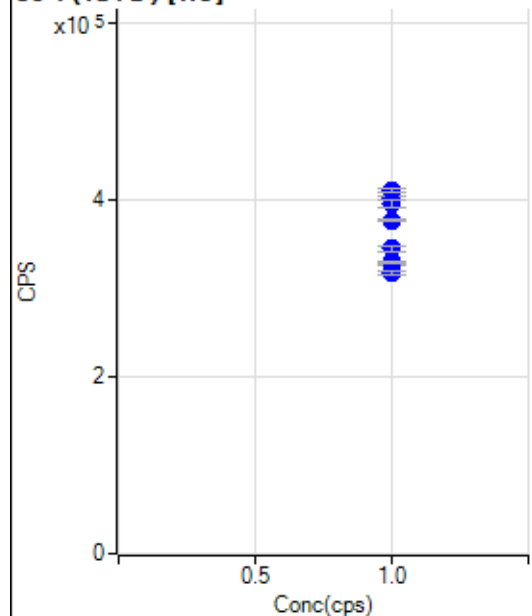
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6737480.71		A	0.7
2	☐	1.000					
3	☐	1.000		6711996.29		A	1.9
4	☐	1.000		6554688.64		A	1.4
5	☐	1.000		6284107.08		A	2.3
6	☐	1.000		5894400.44		A	0.9
7	☐	1.000		5512662.23		A	0.2
8	☐	1.000		5359544.48		A	0.3
9	☐	1.000		5357983.71		A	0.3

45 Sc (ISTD) [He]

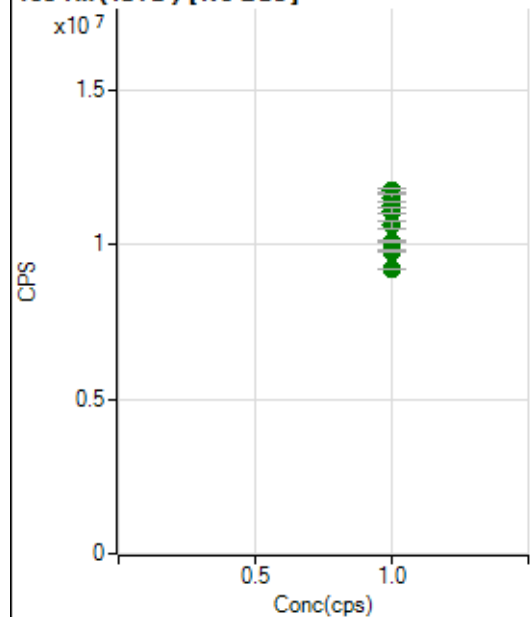
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		54628.00		P	1.3
2	☐	1.000					
3	☐	1.000		56185.20		P	2.3
4	☐	1.000		52900.49		P	1.8
5	☐	1.000		49130.14		P	0.5
6	☐	1.000		44227.35		P	3.1
7	☐	1.000		41106.79		P	1.8
8	☐	1.000		40131.76		P	0.7
9	☐	1.000		42645.85		P	1.7

89 Y (ISTD) [No Gas]

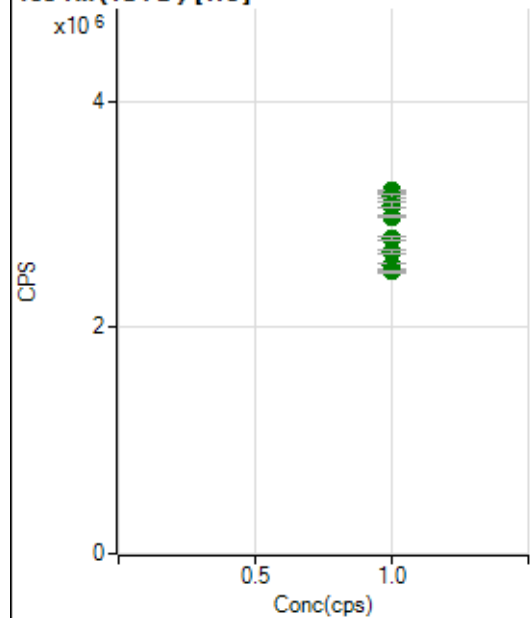
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12664885.92		A	0.4
2	☐	1.000					
3	☐	1.000		12347456.90		A	1.8
4	☐	1.000		12253907.46		A	0.7
5	☐	1.000		12009520.65		A	2.1
6	☐	1.000		11594545.94		A	1.6
7	☐	1.000		11148534.14		A	1.0
8	☐	1.000		10982832.48		A	0.9
9	☐	1.000		10676411.37		A	0.4

89 Y (ISTD) [He]

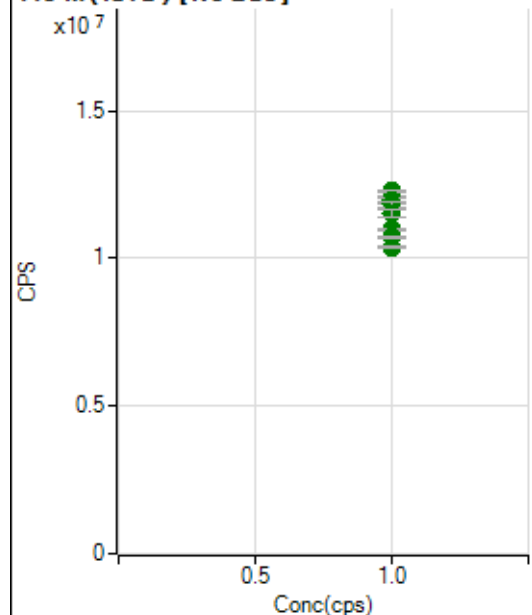
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		402520.76		P	0.8
2	☐	1.000					
3	☐	1.000		410841.40		P	1.1
4	☐	1.000		396674.05		P	2.0
5	☐	1.000		377344.08		P	0.4
6	☐	1.000		345442.88		P	1.8
7	☐	1.000		328925.25		P	1.2
8	☐	1.000		317974.26		P	1.5
9	☐	1.000		330280.53		P	0.8

103 Rh (ISTD) [No Gas]

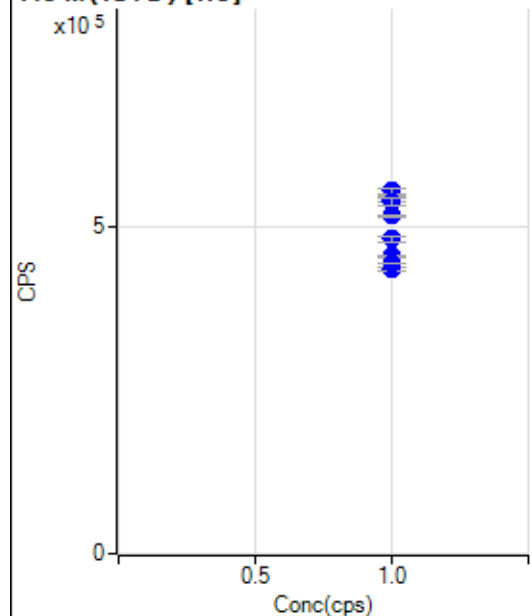
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11750383.51		A	1.1
2	☐	1.000					
3	☐	1.000		11509047.05		A	2.0
4	☐	1.000		11303206.76		A	1.1
5	☐	1.000		11102051.29		A	1.8
6	☐	1.000		10665541.90		A	2.1
7	☐	1.000		10111339.89		A	0.5
8	☐	1.000		9788772.88		A	0.5
9	☐	1.000		9230286.41		A	0.4

103 Rh (ISTD) [He]

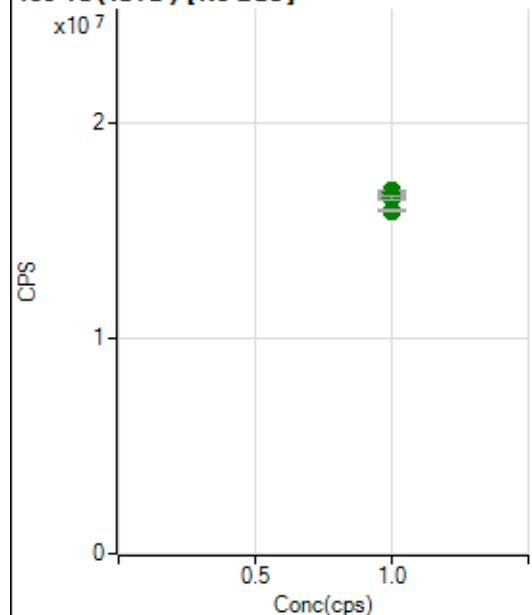
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3206485.26		A	0.9
2	☐	1.000					
3	☐	1.000		3156315.68		A	1.3
4	☐	1.000		3084502.25		A	1.6
5	☐	1.000		2982388.46		A	0.5
6	☐	1.000		2792025.41		A	1.3
7	☐	1.000		2663211.23		A	1.3
8	☐	1.000		2547705.19		A	1.9
9	☐	1.000		2495721.23		A	0.7

115 In (ISTD) [No Gas]

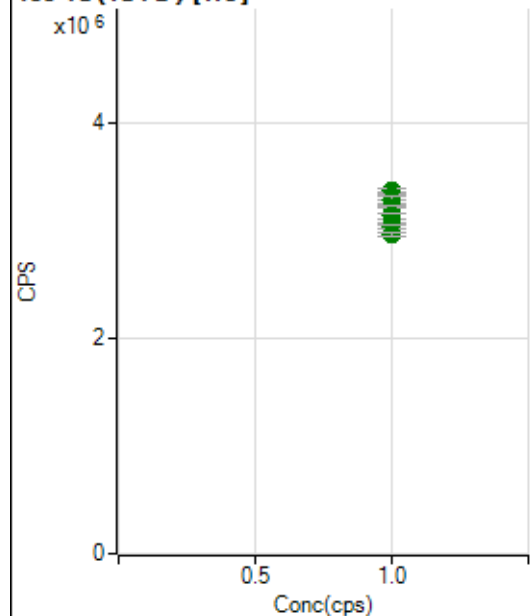
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12281831.22		A	0.3
2	☐	1.000					
3	☐	1.000		11980145.07		A	2.2
4	☐	1.000		11963155.47		A	0.9
5	☐	1.000		11821134.80		A	2.0
6	☐	1.000		11524201.62		A	1.9
7	☐	1.000		10995111.63		A	0.6
8	☐	1.000		10733829.98		A	0.7
9	☐	1.000		10376724.65		A	0.5

115 In (ISTD) [He]

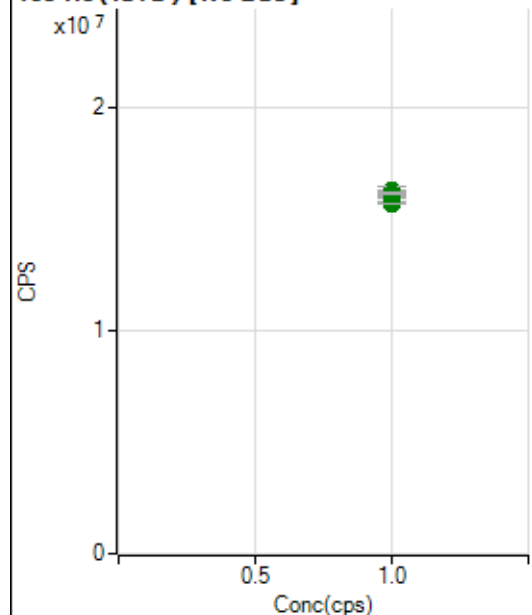
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		541326.81		P	1.4
2	☐	1.000					
3	☐	1.000		553895.60		P	1.4
4	☐	1.000		537375.41		P	1.9
5	☐	1.000		515326.57		P	0.6
6	☐	1.000		480252.17		P	2.1
7	☐	1.000		454553.83		P	0.7
8	☐	1.000		435271.64		P	1.3
9	☐	1.000		443440.09		P	0.6

159 Tb (ISTD) [No Gas]

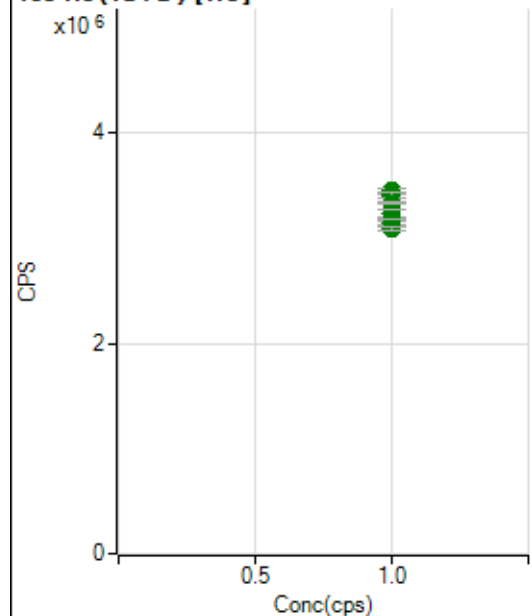
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16848662.94		A	0.4
2	☐	1.000					
3	☐	1.000		16569445.45		A	2.2
4	☐	1.000		16673956.28		A	1.1
5	☐	1.000		16753363.36		A	1.7
6	☐	1.000		16686470.45		A	2.3
7	☐	1.000		16627370.31		A	0.8
8	☐	1.000		16528581.15		A	0.7
9	☐	1.000		15933408.93		A	0.7

159 Tb (ISTD) [He]

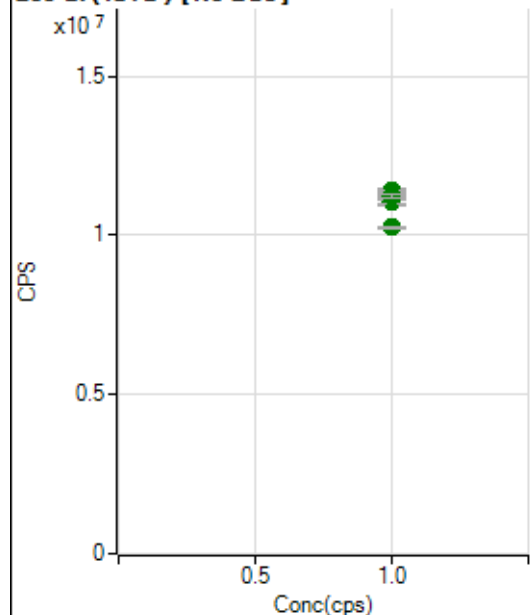
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3373631.23		A	1.0
2	☐	1.000					
3	☐	1.000		3319866.76		A	1.3
4	☐	1.000		3293831.55		A	2.0
5	☐	1.000		3225949.16		A	0.9
6	☐	1.000		3140984.95		A	1.3
7	☐	1.000		3071933.15		A	0.8
8	☐	1.000		3039261.79		A	1.4
9	☐	1.000		2966533.29		A	1.0

165 Ho (ISTD) [No Gas]

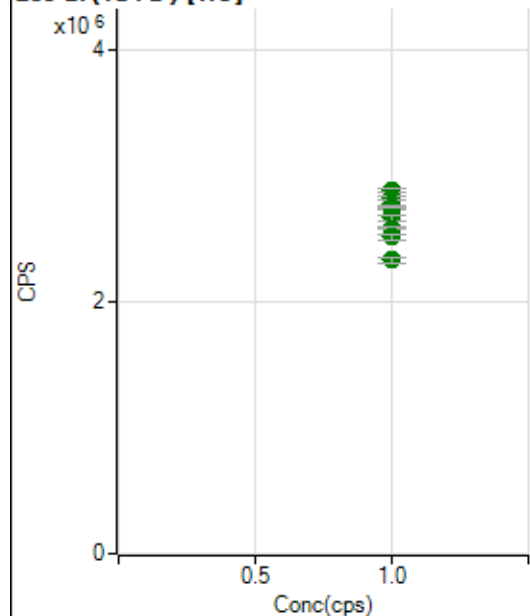
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16177013.38		A	1.1
2	☐	1.000					
3	☐	1.000		15979019.63		A	2.0
4	☐	1.000		16102291.50		A	1.2
5	☐	1.000		16278264.95		A	2.4
6	☐	1.000		16164179.01		A	1.4
7	☐	1.000		16122734.91		A	0.6
8	☐	1.000		16167667.72		A	0.7
9	☐	1.000		15697937.68		A	0.4

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3447714.95		A	1.6
2	☐	1.000					
3	☐	1.000		3416241.65		A	1.6
4	☐	1.000		3405887.28		A	1.9
5	☐	1.000		3334273.73		A	0.8
6	☐	1.000		3237513.88		A	1.9
7	☐	1.000		3178582.80		A	0.5
8	☐	1.000		3147260.96		A	1.8
9	☐	1.000		3092027.90		A	1.1

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11193658.03		A	0.8
2	☐	1.000					
3	☐	1.000		11039965.53		A	1.9
4	☐	1.000		11103663.31		A	2.1
5	☐	1.000		11286341.78		A	2.6
6	☐	1.000		11343107.89		A	1.9
7	☐	1.000		11396173.30		A	0.5
8	☐	1.000		11252644.00		A	1.0
9	☐	1.000		10244048.11		A	0.8

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2881836.21		A	1.1
2	☐	1.000					
3	☐	1.000		2829870.72		A	1.3
4	☐	1.000		2774149.89		A	2.5
5	☐	1.000		2754497.25		A	0.9
6	☐	1.000		2668761.84		A	1.7
7	☐	1.000		2584430.71		A	0.8
8	☐	1.000		2512833.97		A	1.7
9	☐	1.000		2330485.63		A	2.0

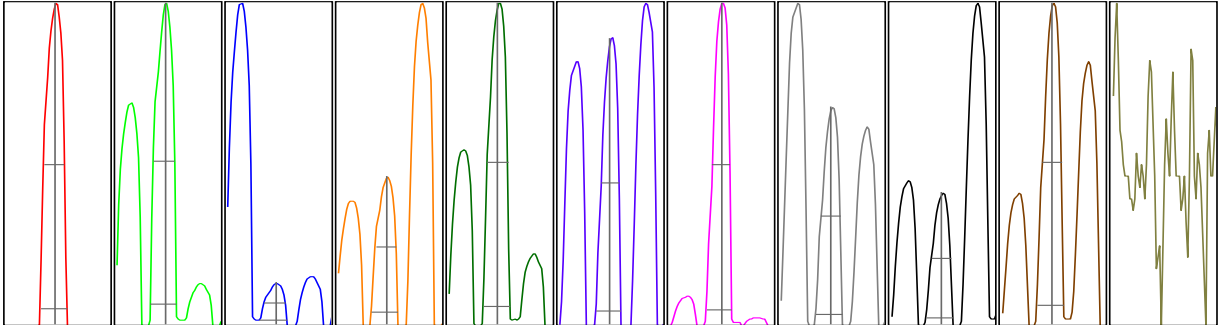
US EPA Tune Check Sample Report

Batch Folder D:\P8101918MS.b
Report Comment
Instrument Name G8403A JP17141814

[No Gas]				
Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	7823	1.57	5.00	
24	75943	1.67	5.00	
25	9930	1.60	5.00	
26	11744	1.55	5.00	
59	87582	1.92	5.00	
113	12596	1.50	5.00	
115	157095	1.68	5.00	
206	41800	1.60	5.00	
207	38552	1.45	5.00	
208	94242	1.58	5.00	
220	1	32.16		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	7857	7869	7952	7622	7817
24	76021	76518	77183	73824	76170
25	10007	9992	10078	9668	9907
26	11864	11815	11865	11429	11749
59	88375	88509	88437	84599	87992
113	12709	12651	12751	12274	12598
115	159151	158730	158167	152668	156757
206	41715	41726	42526	40780	42254
207	38348	38603	39194	37727	38890
208	92666	94747	96090	92754	94955
220	1	1	1	1	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	13888	8.95	8.9 - 9.1		0.776	0.900	
24	132487	23.95	23.9 - 24.1		0.738	0.900	
25	17255	24.95	24.9 - 25.1		0.784	0.900	
26	20419	25.95	25.9 - 26.1		0.755	0.900	
59	157817	58.95	58.9 - 59.1		0.771	0.900	
113	24583	113.00	112.9 - 113.1		0.712	0.900	
115	302709	115.05	114.9 - 115.1		0.727	0.900	
206	79145	206.00	205.9 - 206.1		0.759	0.900	
207	72274	207.00	206.9 - 207.1		0.771	0.900	
208	175756	208.00	207.9 - 208.1		0.771	0.900	
220			-				

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	10.6	V	Deflect	14.6	V
Extract 2	-220.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-90	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	10626	0.72	
89	3111	1.01	
205	17047	0.78	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	10736	10653	10632	10575	10536
89	3163	3107	3111	3087	3086
205	17271	16988	16932	16984	17058

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	10.6	V	Deflect	1.0	V
Extract 2	-220.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-90	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	190	V			