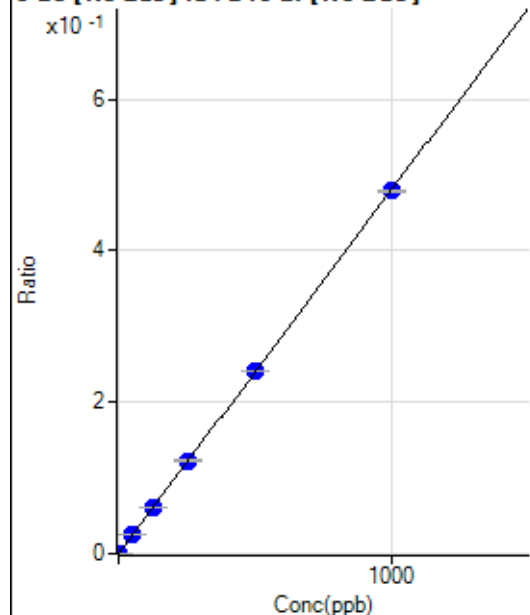


Batch Folder: D:\ICP-MS Data\P7101619 MS.b\
Analysis File: P7101619 MS.batch.bin
DA Date-Time: 2019-10-16 13:22:42
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2019-10-16 12:12:37
2	004CALS.d	S01	2019-10-16 12:16:11
3	005CALS.d	S02	2019-10-16 12:20:30
4	006CALS.d	S03	2019-10-16 12:24:24
5	007CALS.d	S04	2019-10-16 12:28:19
6	008CALS.d	S05	2019-10-16 12:32:09
7	009CALS.d	S06	2019-10-16 12:35:59
8	010CALS.d	S07	2019-10-16 12:39:46
9	011CALS.d	S08	2019-10-16 12:43:32

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	51.85	0.0000	P	16.3
2	☐	0.100	0.073	151.86	0.0001	P	4.9
3	☐	1.000	1.000	1437.14	0.0005	P	8.2
4	☐	50.000	52.050	70667.87	0.0250	P	0.7
5	☐	125.000	128.116	160908.22	0.0615	P	1.0
6	☐	250.000	255.753	291267.70	0.1228	P	0.8
7	☐	500.000	501.877	552910.94	0.2410	P	0.8
8	☐	1000.000	997.131	1037104.97	0.4789	P	0.6
9	☐			357.42	0.0002	P	7.4

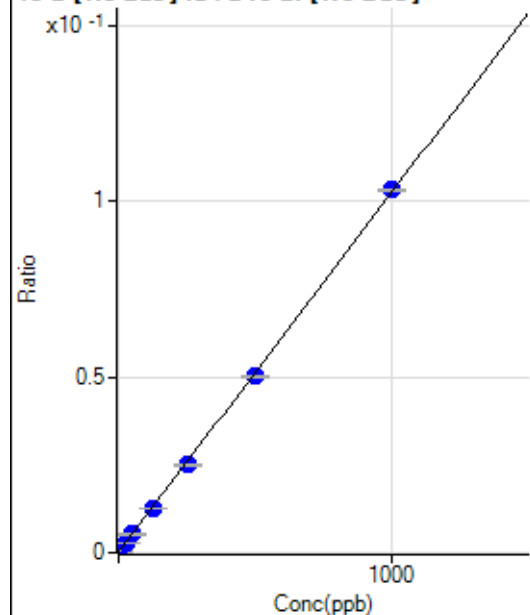
$$y = 4.8022\text{E-}004 * x + 1.8052\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.01843$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	438.92	0.0002	P	4.9
2	☐	2.500	2.173	1072.30	0.0004	P	3.6
3	☐	25.000	23.428	7349.29	0.0025	P	1.9
4	☐	50.000	49.589	14760.47	0.0052	P	2.4
5	☐	125.000	121.994	33014.66	0.0126	P	3.2
6	☐	250.000	243.179	59330.95	0.0250	P	2.3
7	☐	500.000	488.592	114981.37	0.0501	P	1.5
8	☐	1000.000	1007.846	223574.04	0.1032	P	0.2
9	☐			9856.36	0.0044	P	7.6

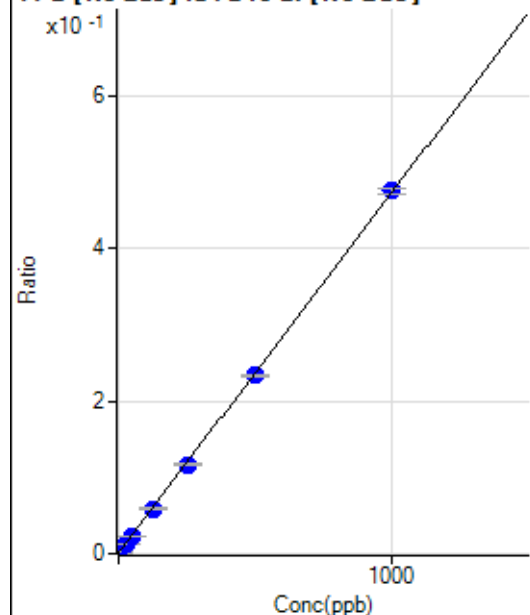
$$y = 1.0228\text{E-}004 * x + 1.5281\text{E-}004$$

$$R = 0.9999$$

$$DL = 0.2177$$

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	1905.75	0.0007	P	1.5
2	☐	2.500	2.425	5173.29	0.0018	P	5.4
3	☐	25.000	23.548	34005.94	0.0118	P	2.8
4	☐	50.000	48.262	66323.86	0.0235	P	2.1
5	☐	125.000	122.627	153248.11	0.0586	P	3.2
6	☐	250.000	245.382	276571.70	0.1167	P	2.1
7	☐	500.000	492.719	535751.37	0.2336	P	1.2
8	☐	1000.000	1005.215	1030451.52	0.4758	P	1.3
9	☐			44992.73	0.0200	P	6.0

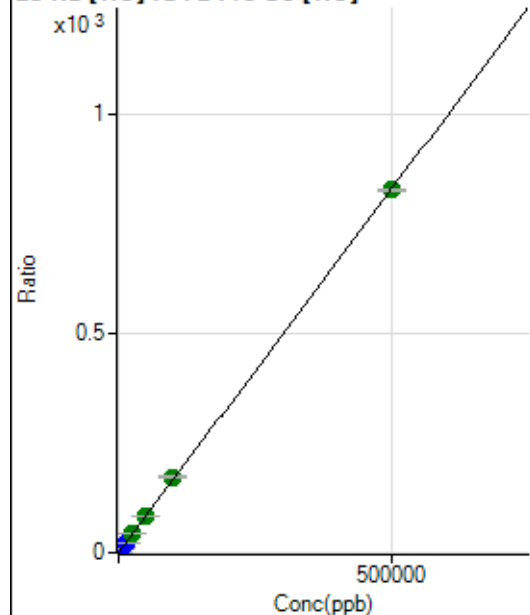
$$y = 4.7268\text{E-}004 * x + 6.6348\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.06281$$

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	4334.13	0.0274	P	6.7
2	☐	50.000	47.272	16821.06	0.1057	P	5.2
3	☐	500.000	505.559	137908.76	0.8645	P	0.6
4	☐	5000.000	5104.979	1288308.27	8.4800	P	0.4
5	☐	12500.000	12828.147	2941623.28	21.2676	P	0.5
6	☐	25000.000	25949.946	5499326.08	42.9939	A	0.5
7	☐	50000.000	51441.916	10792795.29	85.2020	A	0.2
8	☐	100000.00	104285.03	20843562.44	172.6966	A	1.0
9	☐	500000.00	498942.04	128670784.8	826.1468	A	0.8

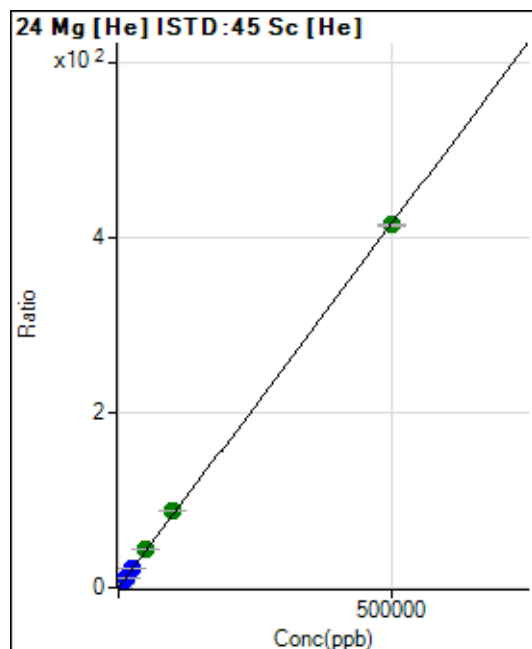
$$y = 0.0017 * x + 0.0274$$

$$R = 1.0000$$

$$DL = 3.311$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	680.60	0.0043	P	6.4
2	☐	50.000	49.282	7210.36	0.0453	P	3.4
3	☐	500.000	534.300	71612.61	0.4489	P	1.9
4	☐	5000.000	5245.202	663766.13	4.3691	P	0.4
5	☐	12500.000	13062.205	1504041.96	10.8740	P	0.2
6	☐	25000.000	26219.890	2791408.48	21.8231	P	0.5
7	☐	50000.000	52261.927	5509523.30	43.4939	A	0.0
8	☐	100000.00	105155.97	10562139.30	87.5096	A	0.6
9	☐	500000.00	498665.07	64630895.19	414.9671	A	0.4

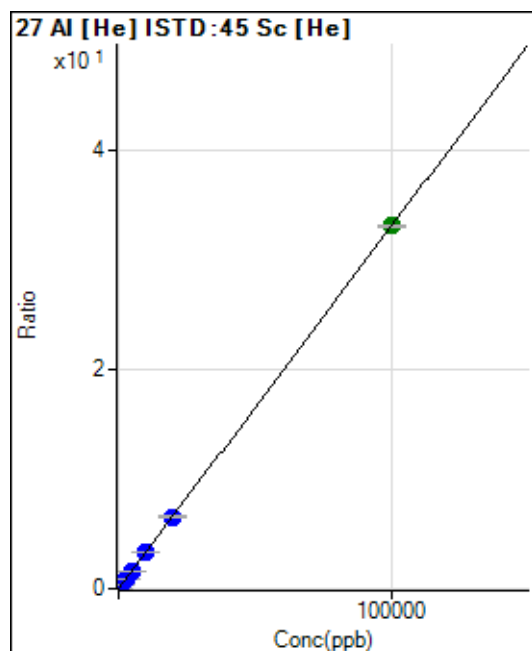
$$y = 8.3215\text{E-}004 * x + 0.0043$$

$$R = 0.9999$$

$$DL = 1.001$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	50.00	0.0003	P	16.1
2	☐	2.000	1.790	144.45	0.0009	P	42.6
3	☐	20.000	20.534	1133.42	0.0071	P	5.4
4	☐	1000.000	1011.960	50879.00	0.3349	P	1.3
5	☐	2500.000	2511.109	114877.47	0.8305	P	1.0
6	☐	5000.000	4994.424	211255.12	1.6516	P	0.9
7	☐	10000.000	9936.911	416210.16	3.2857	P	0.8
8	☐	20000.000	19859.237	792518.98	6.5662	P	0.7
9	☐	100000.00	100034.34	5151268.56	33.0738	A	0.5

$$y = 3.3062\text{E-}004 * x + 3.1639\text{E-}004$$

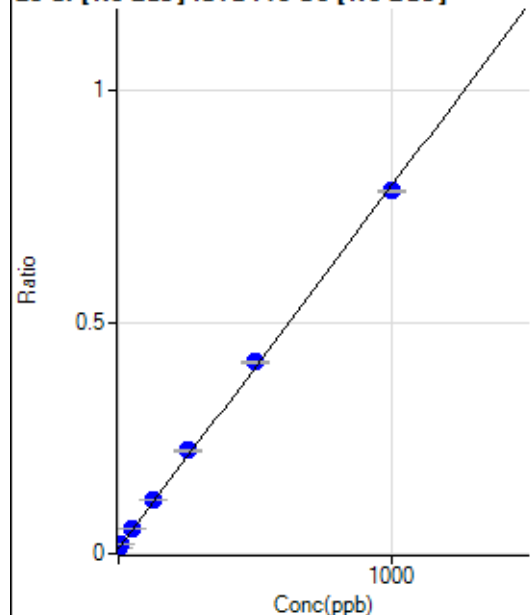
$$R = 1.0000$$

$$DL = 0.4626$$

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	45673.43	0.0112	P	1.8
2	☐	1.000	0.867	48604.80	0.0119	P	1.5
3	☐	10.000	9.963	78095.59	0.0190	P	1.0
4	☐	50.000	53.072	211235.22	0.0528	P	0.6
5	☐	125.000	134.328	433891.10	0.1164	P	2.4
6	☐	250.000	269.832	744944.79	0.2225	P	0.5
7	☐	500.000	513.996	1339076.11	0.4136	P	1.0
8	☐	1000.000	986.725	2418413.79	0.7838	P	0.5
9	☐			138613.12	0.0407	P	0.4

$$y = 7.8291E-004 * x + 0.0112$$

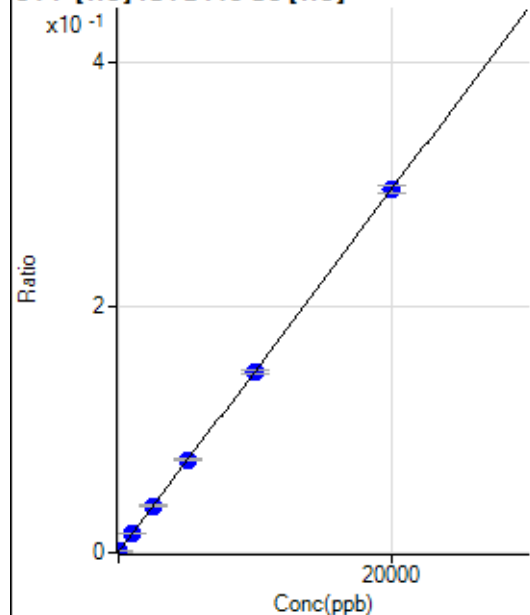
$$R = 0.9996$$

$$DL = 0.7796$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-25.134	13.89	0.0001	P	70.0
2	☐	0.000	-12.207	44.45	0.0003	P	38.7
3	☐	0.000	37.342	161.12	0.0010	P	34.0
4	☐	1000.000	1021.433	2361.39	0.0155	P	1.3
5	☐	2500.000	2551.673	5276.17	0.0381	P	4.4
6	☐	5000.000	5091.268	9675.72	0.0756	P	2.0
7	☐	10000.000	9977.955	18723.48	0.1478	P	2.1
8	☐	20000.000	19980.675	35665.91	0.2955	P	2.3
9	☐			55.56	0.0004	P	58.1

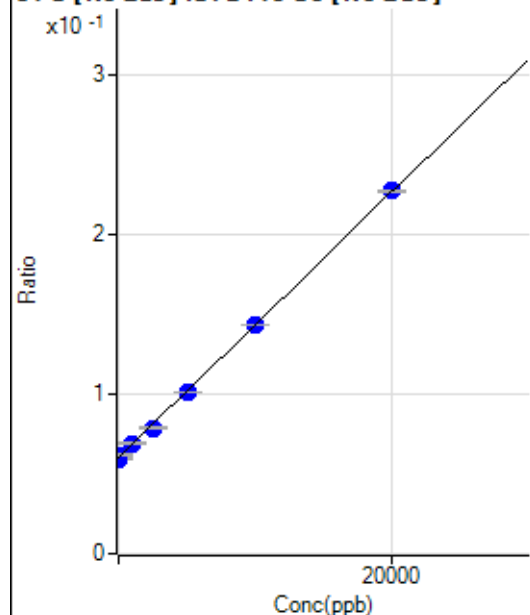
$$y = 1.4768E-005 * x + 4.5935E-004$$

$$R = 1.0000$$

$$DL = 34.75$$

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	-150.057	240077.84	0.0590	P	0.3
2	☐	0.000	-62.172	243911.20	0.0598	P	0.1
3	☐	0.000	212.229	254641.33	0.0621	P	1.3
4	☐	1000.000	1072.899	277099.68	0.0692	P	0.8
5	☐	2500.000	2224.686	293915.94	0.0788	P	2.0
6	☐	5000.000	4874.178	337939.16	0.1009	P	0.2
7	☐	10000.000	9985.051	464658.78	0.1435	P	0.5
8	☐	20000.000	20069.699	702290.52	0.2276	P	0.6
9	☐			235555.16	0.0692	P	0.7

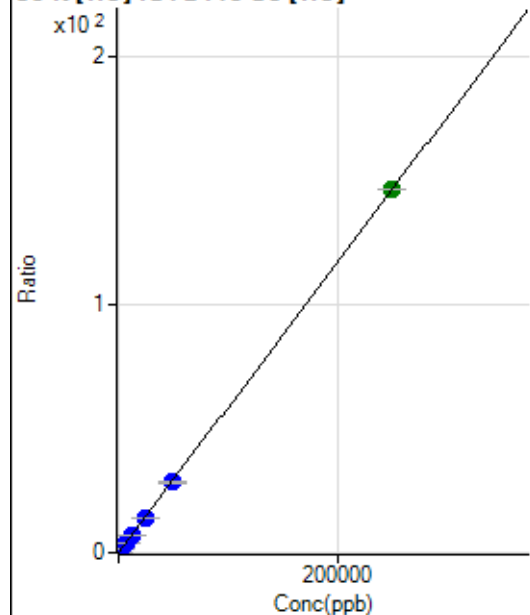
$$y = 8.3357\text{E-}006 * x + 0.0603$$

$$R = 0.9998$$

$$DL = 121.9$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4559.23	0.0289	P	4.7
2	☐	50.000	47.437	8991.97	0.0565	P	3.5
3	☐	500.000	493.054	50453.29	0.3163	P	1.3
4	☐	2500.000	2471.009	223223.65	1.4693	P	0.4
5	☐	6250.000	6194.988	503496.71	3.6402	P	0.2
6	☐	12500.000	12376.418	926558.05	7.2436	P	0.6
7	☐	25000.000	24327.545	1800090.58	14.2105	P	0.5
8	☐	50000.000	48413.832	3409957.06	28.2515	P	0.4
9	☐	250000.00	250392.33	22738462.49	145.9941	A	0.1

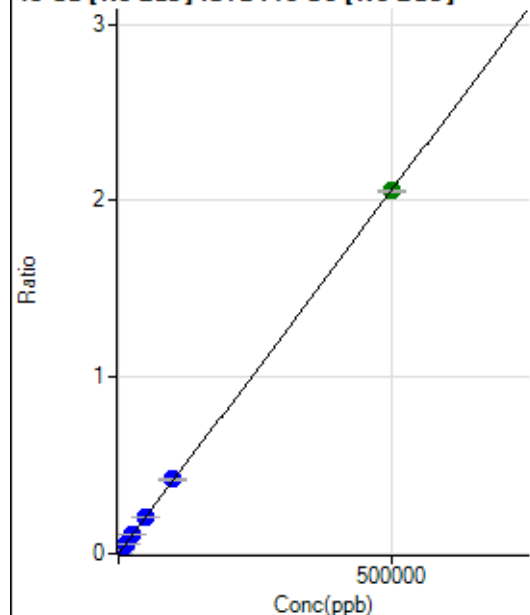
$$y = 5.8295\text{E-}004 * x + 0.0289$$

$$R = 1.0000$$

$$DL = 6.937$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	100.00	0.0000	P	8.0
2	☐	50.000	51.955	972.30	0.0002	P	3.1
3	☐	500.000	518.372	8850.23	0.0022	P	2.7
4	☐	5000.000	5140.724	84719.74	0.0212	P	1.1
5	☐	12500.000	12589.063	193126.19	0.0518	P	2.1
6	☐	25000.000	25382.576	349679.69	0.1044	P	0.6
7	☐	50000.000	50792.345	676458.95	0.2090	P	0.7
8	☐	100000.00	102047.37	1295338.51	0.4198	P	0.6
9	☐	500000.00	499488.50	6992832.97	2.0546	A	0.4

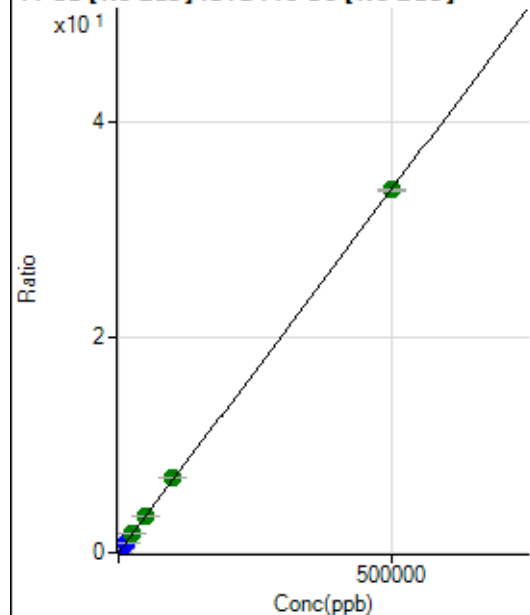
$$y = 4.1134\text{E-}006 * x + 2.4592\text{E-}005$$

$$R = 1.0000$$

$$DL = 1.429$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3244.94	0.0008	P	7.4
2	☐	50.000	51.012	17277.35	0.0042	P	3.3
3	☐	500.000	499.063	141226.62	0.0344	P	0.7
4	☐	5000.000	5037.344	1361361.36	0.3402	P	0.9
5	☐	12500.000	12311.567	3095132.73	0.8303	P	1.9
6	☐	25000.000	25253.177	5699521.65	1.7022	A	0.1
7	☐	50000.000	50744.613	11070780.54	3.4197	A	0.2
8	☐	100000.00	102840.38	21382774.44	6.9296	A	0.1
9	☐	500000.00	499349.14	114523459.5	33.6443	A	0.2

$$y = 6.7375\text{E-}005 * x + 7.9808\text{E-}004$$

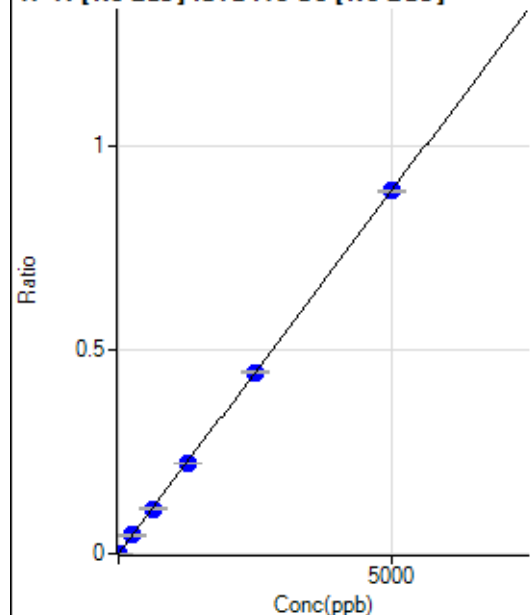
$$R = 1.0000$$

$$DL = 2.613$$

Weight: <None>

Min Conc: 0

47 Ti [No Gas] ISTD:45 Sc [No Gas]



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	77.78	0.0000	P	16.4
2	☐	0.500	0.504	444.47	0.0001	P	22.2
3	☐	5.000	5.557	4136.85	0.0010	P	2.5
4	☐	250.000	252.633	180021.72	0.0450	P	1.4
5	☐	625.000	620.788	411955.19	0.1105	P	2.2
6	☐	1250.000	1249.520	744732.35	0.2224	P	0.1
7	☐	2500.000	2501.433	1441450.54	0.4453	P	0.4
8	☐	5000.000	4999.798	2746074.65	0.8899	P	0.3
9	☐			1777.95	0.0005	P	1.1

$$y = 1.7799\text{E-}004 * x + 1.9131\text{E-}005$$

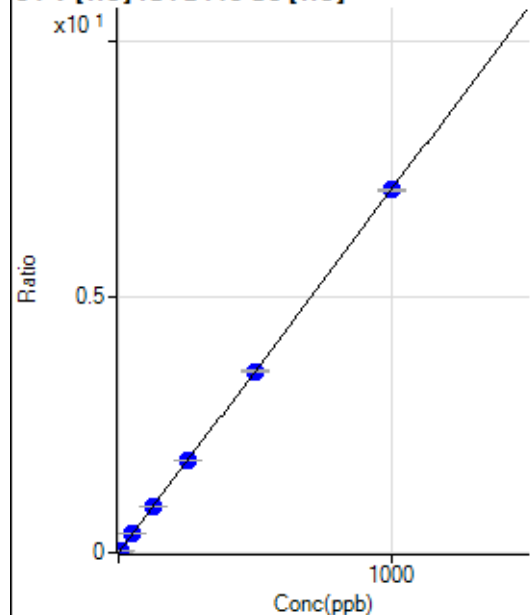
$$R = 1.0000$$

$$DL = 0.05274$$

Weight: <None>

Min Conc: 0

51 V [He] ISTD:45 Sc [He]



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.33	0.0001	P	74.8
2	☐	0.500	0.535	617.80	0.0039	P	8.3
3	☐	5.000	5.398	6132.48	0.0384	P	1.2
4	☐	50.000	51.106	55186.25	0.3632	P	1.9
5	☐	125.000	126.360	124209.06	0.8980	P	0.3
6	☐	250.000	252.509	229526.35	1.7944	P	0.1
7	☐	500.000	500.029	450113.17	3.5533	P	0.2
8	☐	1000.000	999.131	856940.64	7.1000	P	0.8
9	☐			336.68	0.0022	P	7.3

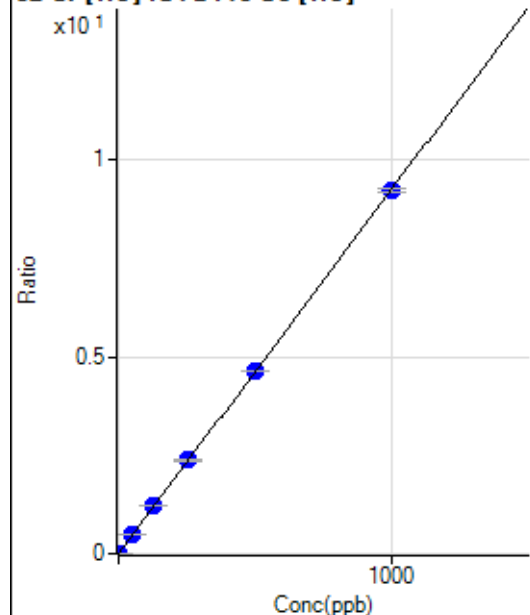
$$y = 0.0071 * x + 8.4149\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.02656$$

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	270.00	0.0017	P	4.6
2	☐	0.200	0.194	557.80	0.0035	P	5.5
3	☐	2.000	2.081	3341.53	0.0209	P	4.4
4	☐	50.000	51.971	73253.09	0.4822	P	1.2
5	☐	125.000	129.504	165834.18	1.1990	P	0.3
6	☐	250.000	256.282	303268.29	2.3710	P	0.4
7	☐	500.000	503.222	589530.42	4.6539	P	0.2
8	☐	1000.000	996.157	1111733.31	9.2111	P	1.2
9	☐			51432.73	0.3302	P	0.4

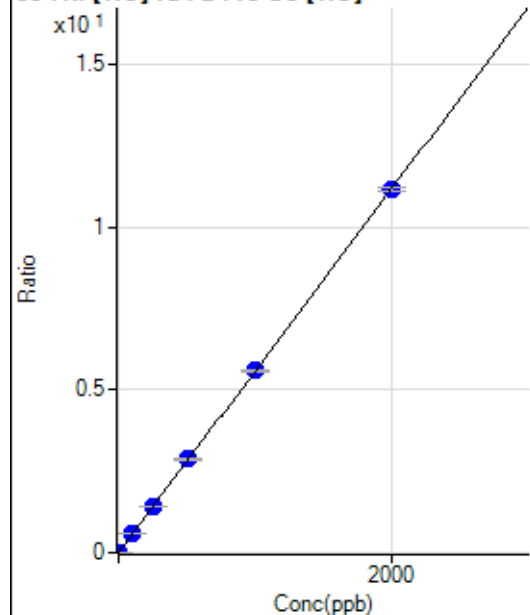
$$y = 0.0092 * x + 0.0017$$

$$R = 1.0000$$

$$DL = 0.02529$$

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	46.66	0.0003	P	25.0
2	☐	0.100	0.087	124.45	0.0008	P	7.9
3	☐	1.000	1.114	1041.16	0.0065	P	3.1
4	☐	100.000	102.927	87503.78	0.5760	P	0.4
5	☐	250.000	255.784	197920.43	1.4309	P	0.3
6	☐	500.000	513.693	367526.99	2.8734	P	0.6
7	☐	1000.000	1000.458	708857.90	5.5959	P	0.2
8	☐	2000.000	1995.478	1347091.21	11.1612	P	1.1
9	☐			6166.95	0.0396	P	3.4

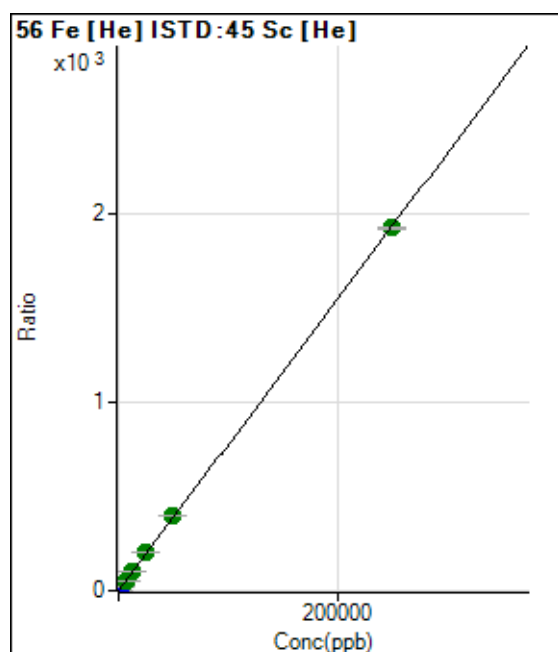
$$y = 0.0056 * x + 2.9557E-004$$

$$R = 1.0000$$

$$DL = 0.03957$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3189.33	0.0202	P	2.9
2	☐	5.000	3.930	8026.48	0.0505	P	0.4
3	☐	50.000	55.935	71923.98	0.4509	P	1.1
4	☐	2500.000	2689.542	3149226.75	20.7291	P	0.6
5	☐	6250.000	6646.467	7081149.35	51.1966	A	0.6
6	☐	12500.000	13327.006	13127469.16	102.6354	A	0.9
7	☐	25000.000	26115.907	25474914.69	201.1072	A	0.2
8	☐	50000.000	51966.527	48296664.97	400.1516	A	0.9
9	☐	250000.00	249441.94	299146358.5	1,920.671	A	0.6

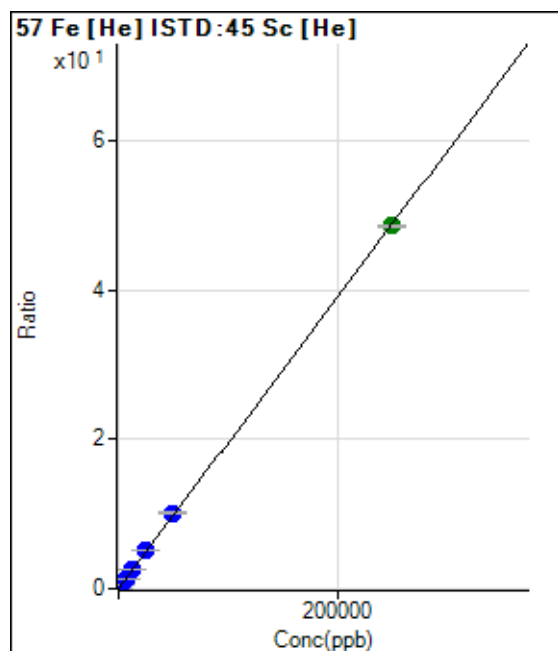
$$y = 0.0077 * x + 0.0202$$

$$R = 1.0000$$

$$DL = 0.2319$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	92.60	0.0006	P	38.9
2	☐	5.000	3.624	205.56	0.0013	P	9.5
3	☐	50.000	54.932	1800.16	0.0113	P	6.5
4	☐	2500.000	2699.606	79961.37	0.5263	P	0.6
5	☐	6250.000	6745.830	181790.81	1.3143	P	0.2
6	☐	12500.000	13475.207	335730.47	2.6249	P	0.9
7	☐	25000.000	26362.640	650427.17	5.1347	P	0.3
8	☐	50000.000	52200.520	1227078.54	10.1666	P	0.7
9	☐	250000.00	249360.47	7563347.57	48.5631	A	0.4

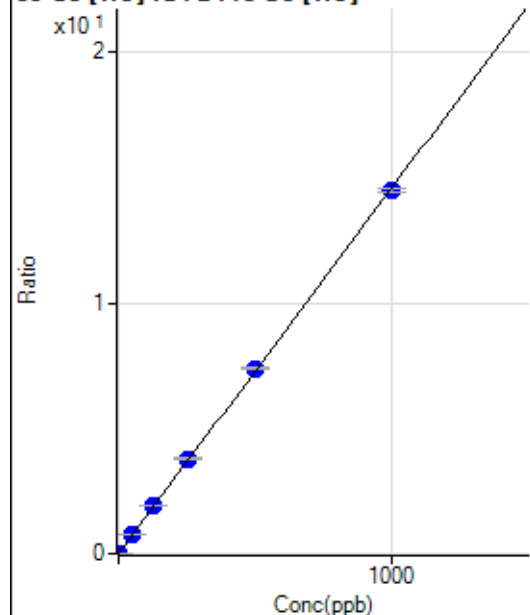
$$y = 1.9475E-004 * x + 5.8619E-004$$

$$R = 0.9999$$

$$DL = 3.508$$

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	43.33	0.0003	P	15.9
2	☐	0.100	0.087	244.45	0.0015	P	10.6
3	☐	1.000	1.032	2442.47	0.0153	P	3.6
4	☐	50.000	53.253	117936.78	0.7763	P	1.1
5	☐	125.000	131.776	265637.99	1.9205	P	0.5
6	☐	250.000	260.428	485440.15	3.7953	P	0.7
7	☐	500.000	506.577	935140.64	7.3822	P	0.6
8	☐	1000.000	993.095	1746672.42	14.4719	P	1.2
9	☐			27424.72	0.1761	P	1.3

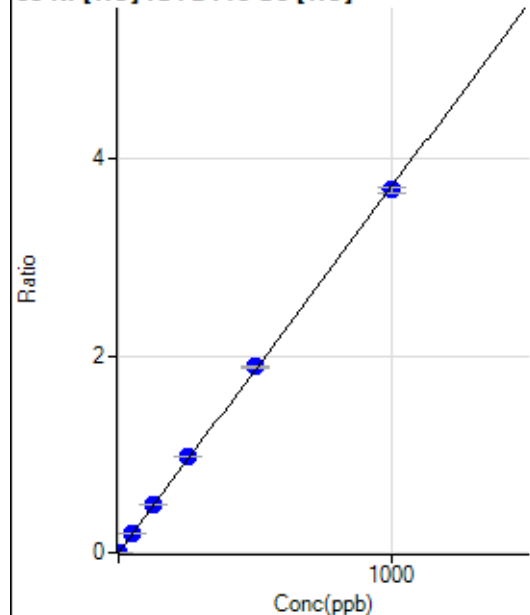
$$y = 0.0146 * x + 2.7451E-004$$

$$R = 0.9999$$

$$DL = 0.008999$$

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	73.33	0.0005	P	4.0
2	☐	0.100	0.116	142.23	0.0009	P	9.4
3	☐	1.000	1.138	748.92	0.0047	P	4.0
4	☐	50.000	54.608	30908.36	0.2034	P	1.3
5	☐	125.000	133.017	68452.09	0.4949	P	0.4
6	☐	250.000	262.384	124810.69	0.9758	P	0.3
7	☐	500.000	507.874	239197.15	1.8883	P	0.4
8	☐	1000.000	991.734	444978.74	3.6869	P	1.4
9	☐			18314.97	0.1176	P	0.6

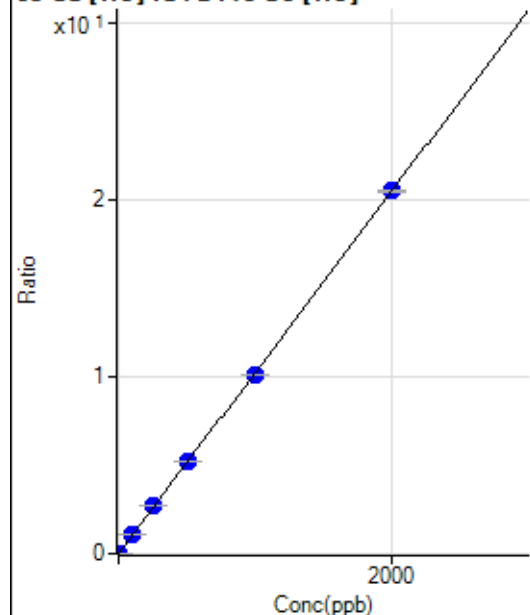
$$y = 0.0037 * x + 4.6423E-004$$

$$R = 0.9999$$

$$DL = 0.01488$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	475.57	0.0030	P	9.6
2	☐	0.200	0.216	830.04	0.0052	P	2.8
3	☐	2.000	2.127	3953.93	0.0248	P	3.7
4	☐	100.000	105.664	164799.12	1.0847	P	0.9
5	☐	250.000	260.467	369240.16	2.6695	P	0.2
6	☐	500.000	512.169	671029.71	5.2463	P	0.9
7	☐	1000.000	984.258	1276786.76	10.0793	P	0.3
8	☐	2000.000	2003.237	2475636.07	20.5111	P	0.8
9	☐			6204.74	0.0398	P	3.4

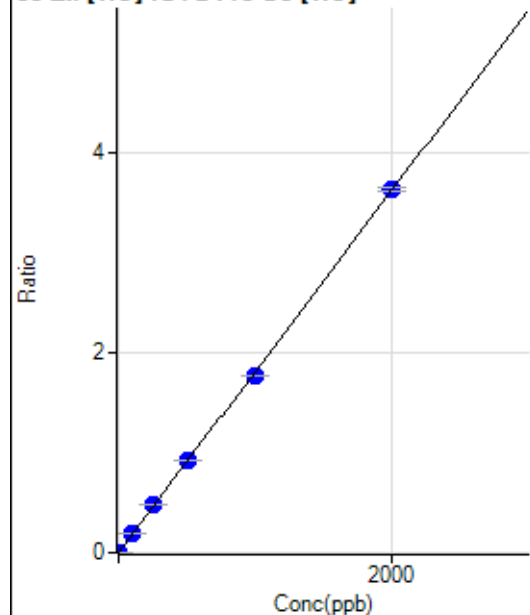
$$y = 0.0102 * x + 0.0030$$

$$R = 0.9999$$

$$DL = 0.08509$$

Weight: <None>

Min Conc: 0

66 Zn [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	218.89	0.0014	P	6.8
2	☐	0.200	0.176	271.12	0.0017	P	1.6
3	☐	2.000	2.316	887.82	0.0056	P	3.5
4	☐	100.000	103.813	28676.07	0.1887	P	2.0
5	☐	250.000	261.728	65526.31	0.4738	P	1.1
6	☐	500.000	512.462	118473.47	0.9263	P	0.9
7	☐	1000.000	979.083	224013.99	1.7684	P	0.6
8	☐	2000.000	2005.686	437066.32	3.6212	P	1.2
9	☐			6544.89	0.0420	P	0.7

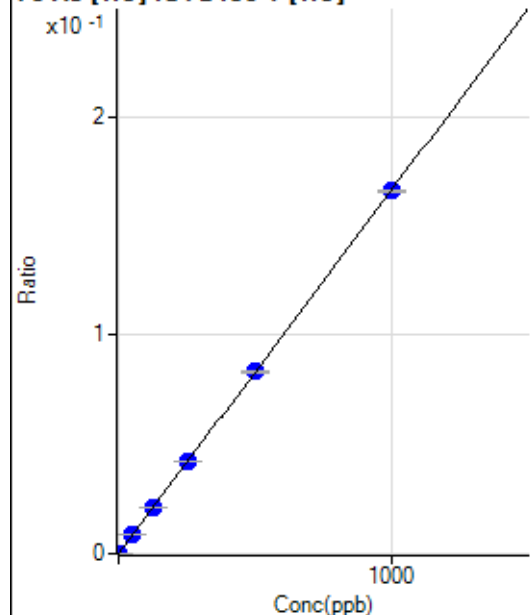
$$y = 0.0018 * x + 0.0014$$

$$R = 0.9999$$

$$DL = 0.1566$$

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	35.0
2	☐	0.100	0.077	13.58	0.0000	P	29.1
3	☐	1.000	1.077	150.00	0.0002	P	5.7
4	☐	50.000	51.882	6751.62	0.0086	P	0.6
5	☐	125.000	128.360	15426.16	0.0214	P	1.1
6	☐	250.000	254.056	28437.02	0.0423	P	0.2
7	☐	500.000	500.925	54785.93	0.0834	P	1.2
8	☐	1000.000	998.009	103463.19	0.1661	P	0.4
9	☐			181.49	0.0002	P	5.4

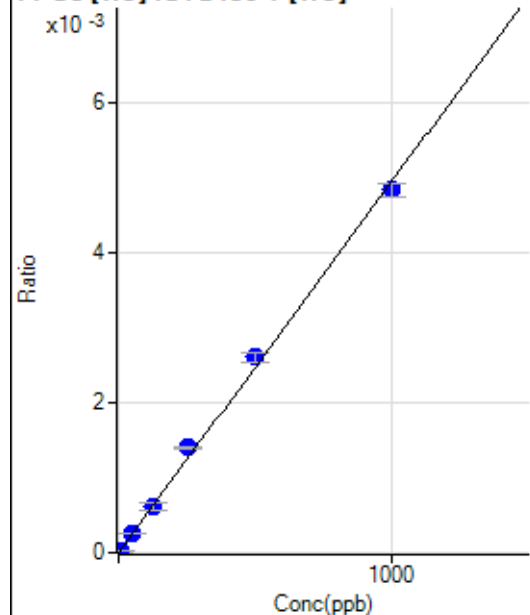
$$y = 1.6647\text{E-}004 * x + 3.8153\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.02405$$

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	0.553	2.22	0.0000	P	173.2
3	☐	5.000	5.482	22.22	0.0000	P	23.1
4	☐	50.000	52.569	203.34	0.0003	P	7.1
5	☐	125.000	125.070	446.68	0.0006	P	15.0
6	☐	250.000	282.807	941.16	0.0014	P	2.5
7	☐	500.000	526.598	1712.35	0.0026	P	4.3
8	☐	1000.000	978.360	3015.92	0.0048	P	3.8
9	☐			3.33	0.0000	P	1.2

$$y = 4.9501\text{E-}006 * x + 0.0000\text{E+}000$$

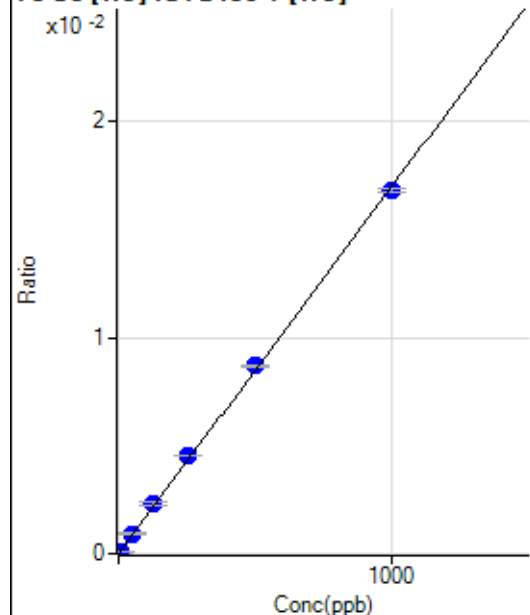
$$R = 0.9989$$

$$DL = 0$$

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	5.55	0.0000	P	58.4
2	☐	0.500	0.850	17.28	0.0000	P	45.3
3	☐	5.000	6.039	89.51	0.0001	P	2.9
4	☐	50.000	53.560	714.84	0.0009	P	6.3
5	☐	125.000	135.539	1663.69	0.0023	P	6.5
6	☐	250.000	264.961	3024.41	0.0045	P	0.4
7	☐	500.000	511.397	5699.92	0.0087	P	0.3
8	☐	1000.000	989.060	10445.19	0.0168	P	1.2
9	☐			14.81	0.0000	P	49.2

$$y = 1.6951\text{E-}005 * x + 6.8781\text{E-}006$$

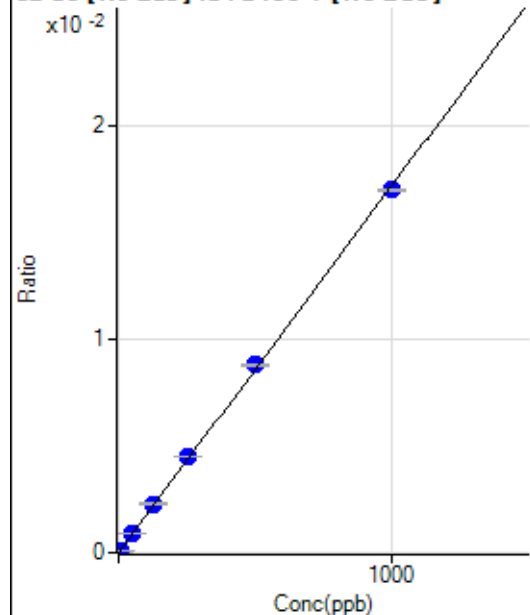
$$R = 0.9998$$

$$DL = 0.7107$$

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	-20.95	0.0000	P	-134.
2	☒	0.500					
3	☐	5.000	5.568	663.41	0.0001	P	11.2
4	☐	50.000	53.311	6391.53	0.0009	P	3.3
5	☐	125.000	132.605	15012.91	0.0023	P	2.1
6	☐	250.000	262.299	27309.90	0.0045	P	0.7
7	☐	500.000	511.797	51833.19	0.0088	P	0.9
8	☐	1000.000	989.908	96241.82	0.0170	P	0.5
9	☐			34.89	0.0000	P	177.6

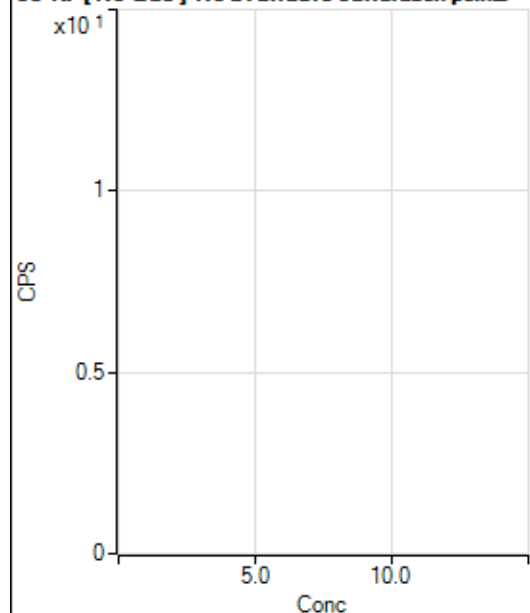
$$y = 1.7185\text{E-}005 * x - 2.8837\text{E-}006$$

$$R = 0.9998$$

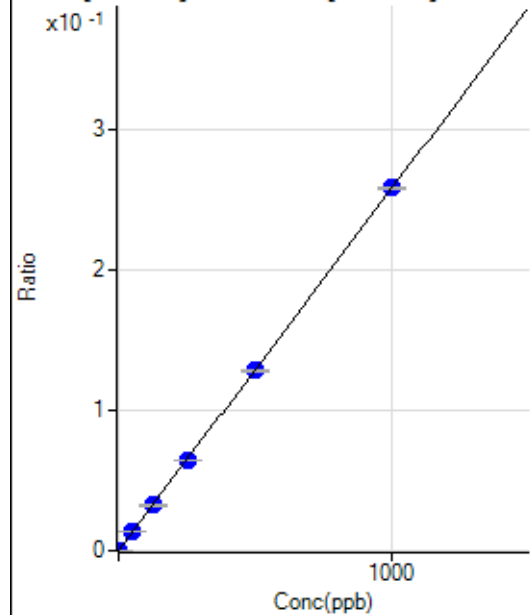
$$DL = 0.6773$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			563.35		P	2.6
2	☐			553.35		P	4.5
3	☐			611.14		P	1.4
4	☐			590.02		P	10.4
5	☐			518.91		P	0.7
6	☐			457.79		P	10.2
7	☐			436.68		P	12.8
8	☐			465.57		P	9.5
9	☐			528.91		P	15.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	991.74	0.0001	P	7.9
2	☐	0.100	0.071	1100.09	0.0002	P	3.5
3	☐	1.000	0.990	2800.39	0.0004	P	6.5
4	☐	50.000	50.504	92052.67	0.0132	P	0.7
5	☐	125.000	124.577	212659.59	0.0322	P	2.8
6	☐	250.000	247.978	388297.19	0.0640	P	0.6
7	☐	500.000	496.500	755178.31	0.1281	P	0.6
8	☐	1000.000	1002.283	1462401.04	0.2584	P	0.5
9	☐			7329.98	0.0012	P	4.7

$$y = 2.5772\text{E-}004 * x + 1.3621\text{E-}004$$

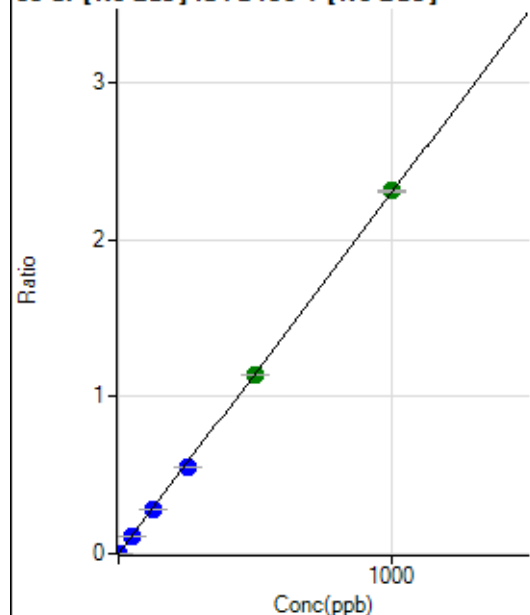
$$R = 1.0000$$

$$DL = 0.1254$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	169.46	0.0000	P	12.5
2	☐	0.100	0.095	1722.40	0.0002	P	6.8
3	☐	1.000	0.962	15967.78	0.0022	P	2.1
4	☐	50.000	49.311	792795.94	0.1133	P	0.9
5	☐	125.000	121.419	1839465.19	0.2789	P	2.6
6	☐	250.000	240.840	3353548.29	0.5531	P	0.6
7	☐	500.000	495.272	6706186.87	1.1375	A	0.4
8	☐	1000.000	1005.136	13062410.19	2.3084	A	0.5
9	☐			58020.88	0.0096	P	2.0

$$y = 0.0023 * x + 2.3279E-005$$

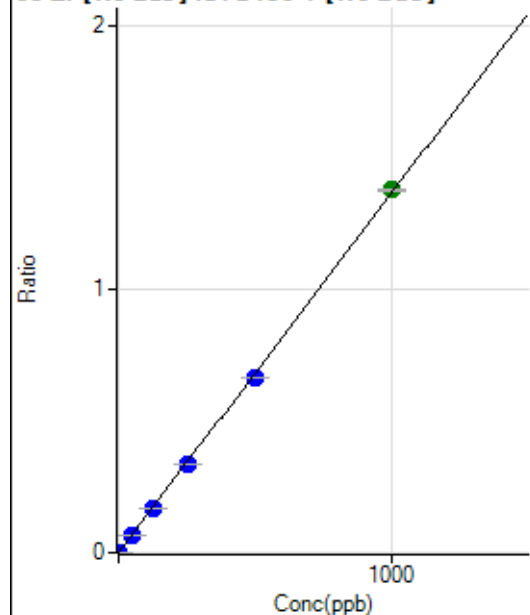
$$R = 0.9999$$

$$DL = 0.00381$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	550.03	0.0001	P	8.2
2	☐	0.100	0.080	1319.57	0.0002	P	4.0
3	☐	1.000	0.910	9414.54	0.0013	P	3.5
4	☐	50.000	50.111	479038.36	0.0684	P	0.8
5	☐	125.000	122.617	1104045.90	0.1674	P	1.9
6	☐	250.000	245.259	2029102.06	0.3347	P	0.4
7	☐	500.000	484.848	3900272.22	0.6616	P	0.3
8	☐	1000.000	1009.054	7790232.29	1.3767	A	0.3
9	☐			3667.29	0.0006	P	3.2

$$y = 0.0014 * x + 7.5563E-005$$

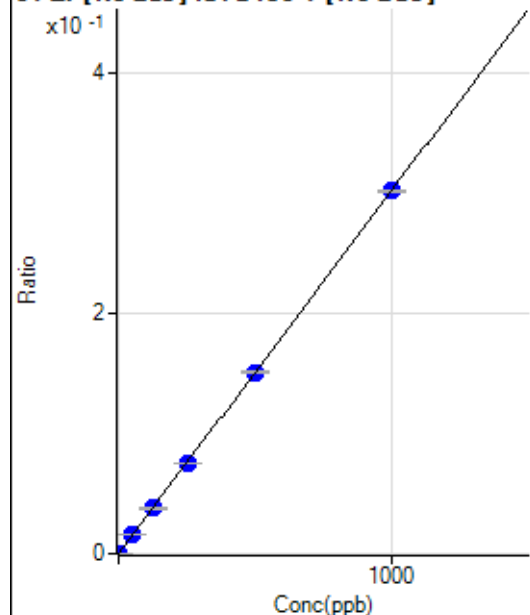
$$R = 0.9998$$

$$DL = 0.0136$$

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	136.12	0.0000	P	20.0
2	☐	0.100	0.061	263.90	0.0000	P	5.2
3	☐	1.000	0.858	1983.56	0.0003	P	5.8
4	☐	50.000	50.886	107501.01	0.0154	P	1.0
5	☐	125.000	124.997	248744.24	0.0377	P	1.2
6	☐	250.000	250.908	458704.89	0.0757	P	0.6
7	☐	500.000	499.834	888473.64	0.1507	P	0.6
8	☐	1000.000	999.812	1705694.87	0.3014	P	0.5
9	☐			877.84	0.0001	P	6.5

$$y = 3.0147\text{E-}004 * x + 1.8703\text{E-}005$$

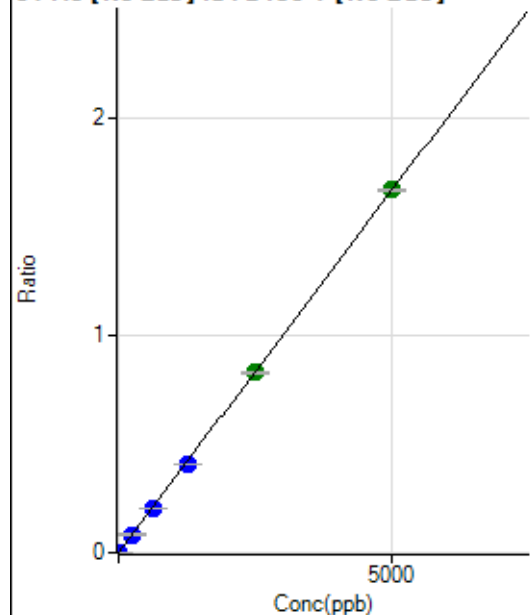
$$R = 1.0000$$

$$DL = 0.03718$$

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	261.12	0.0000	P	18.0
2	☐	0.500	0.467	1361.23	0.0002	P	5.3
3	☐	5.000	4.931	11980.41	0.0017	P	4.5
4	☐	250.000	251.603	585685.99	0.0837	P	0.7
5	☐	625.000	614.046	1346838.60	0.2042	P	2.1
6	☐	1250.000	1219.954	2458964.68	0.4056	P	1.2
7	☐	2500.000	2487.717	4875937.00	0.8271	A	0.5
8	☐	5000.000	5014.942	9433994.57	1.6672	A	0.4
9	☐			9481.34	0.0016	P	1.3

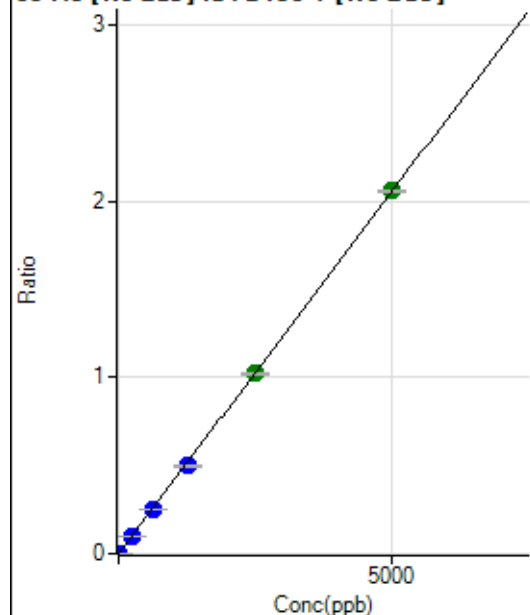
$$y = 3.3245\text{E-}004 * x + 3.5857\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.05811$$

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	97.23	0.0000	P	42.5
2	☐	0.500	0.464	1450.14	0.0002	P	10.2
3	☐	5.000	5.036	14858.28	0.0021	P	3.7
4	☐	250.000	248.585	713322.37	0.1019	P	0.9
5	☐	625.000	612.894	1657594.47	0.2513	P	1.6
6	☐	1250.000	1210.112	3007628.71	0.4961	P	0.1
7	☐	2500.000	2489.321	6016163.55	1.0205	A	0.5
8	☐	5000.000	5016.895	11637293.84	2.0566	A	0.6
9	☐			14418.89	0.0024	P	4.2

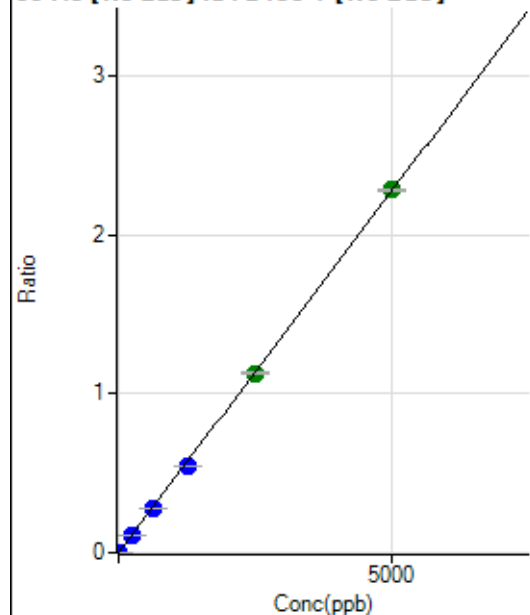
$$y = 4.0994\text{E-}004 * x + 1.3366\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.04154$$

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	161.12	0.0000	P	15.6
2	☐	0.500	0.453	1622.39	0.0002	P	3.9
3	☐	5.000	5.050	16571.38	0.0023	P	3.7
4	☐	250.000	249.737	794409.19	0.1135	P	1.0
5	☐	625.000	610.594	1830430.16	0.2775	P	1.9
6	☐	1250.000	1207.697	3327277.76	0.5488	P	0.2
7	☐	2500.000	2487.174	6663067.29	1.1302	A	0.4
8	☐	5000.000	5018.803	12904706.36	2.2806	A	0.3
9	☐			15531.21	0.0026	P	1.0

$$y = 4.5440\text{E-}004 * x + 2.2126\text{E-}005$$

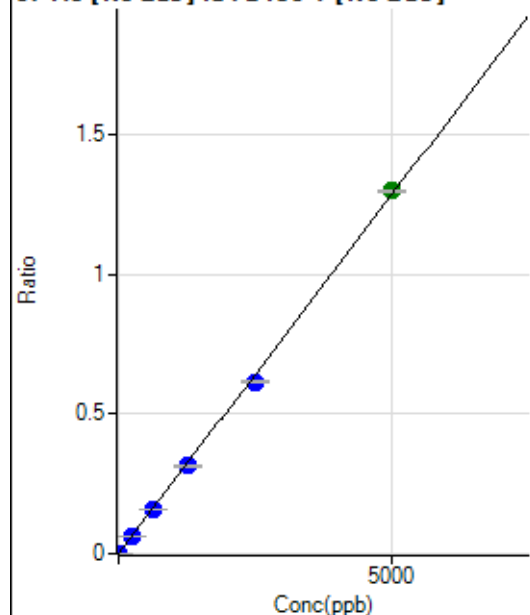
$$R = 1.0000$$

$$DL = 0.02282$$

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	83.34	0.0000	P	26.4
2	☐	0.500	0.474	947.30	0.0001	P	3.5
3	☐	5.000	5.131	9492.40	0.0013	P	2.1
4	☐	250.000	251.543	451579.00	0.0645	P	0.5
5	☐	625.000	617.652	1044829.22	0.1584	P	2.8
6	☐	1250.000	1221.097	1898656.86	0.3132	P	0.2
7	☐	2500.000	2399.130	3627269.61	0.6153	P	0.7
8	☐	5000.000	5058.502	7340603.72	1.2973	A	0.2
9	☐			8942.04	0.0015	P	3.1

$$y = 2.5645\text{E-}004 * x + 1.1446\text{E-}005$$

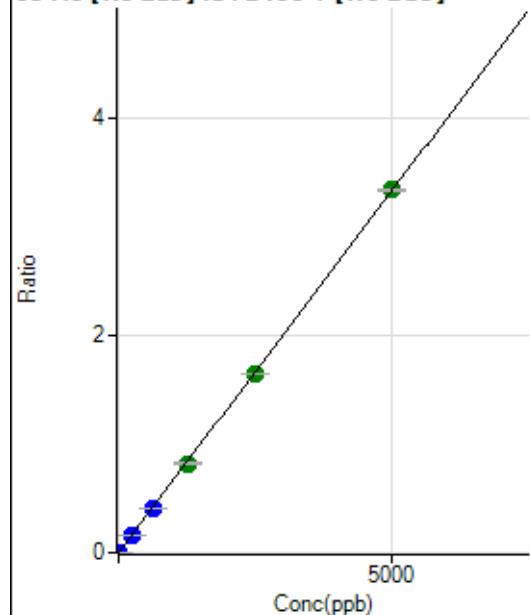
$$R = 0.9997$$

$$DL = 0.03541$$

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	202.79	0.0000	P	5.9
2	☐	0.500	0.469	2422.55	0.0003	P	5.4
3	☐	5.000	5.043	24215.72	0.0034	P	1.5
4	☐	250.000	251.054	1170237.29	0.1672	P	0.8
5	☐	625.000	612.299	2689685.56	0.4077	P	2.2
6	☐	1250.000	1233.210	4978930.93	0.8212	A	0.8
7	☐	2500.000	2475.317	9717460.63	1.6483	A	0.4
8	☐	5000.000	5018.074	18907845.56	3.3415	A	0.4
9	☐			22507.37	0.0037	P	3.9

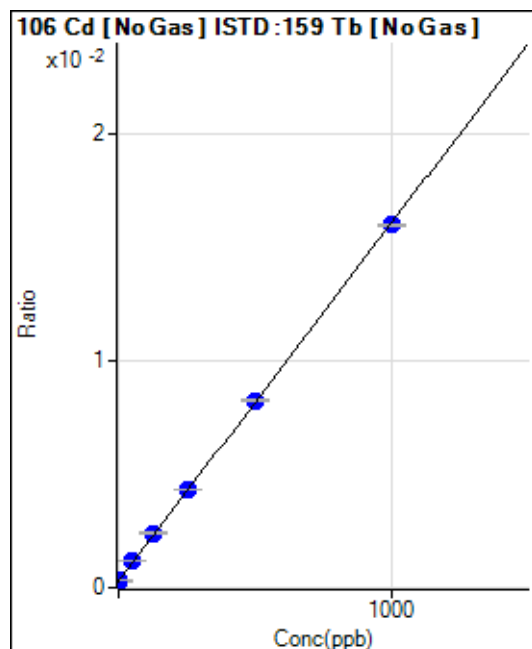
$$y = 6.6588\text{E-}004 * x + 2.7851\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.007422$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3531.16	0.0003	P	4.2
2	☐	0.100	1.627	3731.21	0.0003	P	9.6
3	☐	1.000	1.625	3736.78	0.0003	P	3.5
4	☐	50.000	55.880	14135.34	0.0012	P	2.9
5	☐	125.000	134.350	28326.37	0.0024	P	2.9
6	☐	250.000	257.499	48087.94	0.0043	P	0.4
7	☐	500.000	504.225	90278.66	0.0082	P	0.8
8	☐	1000.000	994.549	170129.40	0.0160	P	0.2
9	☐			3236.63	0.0003	P	5.5

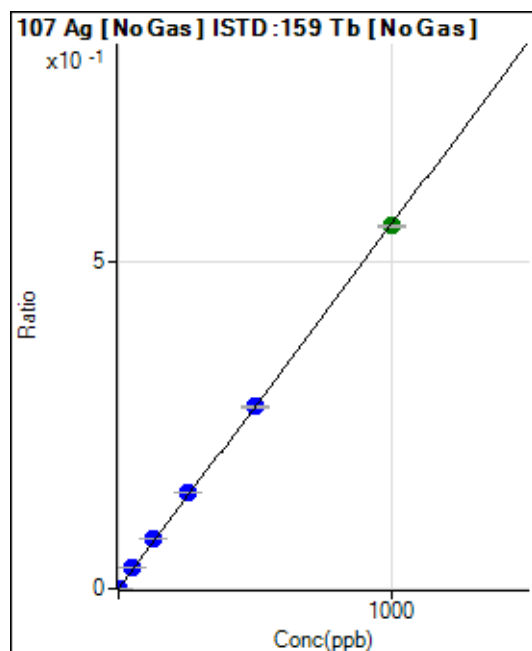
$$y = 1.5765\text{E-}005 * x + 2.8060\text{E-}004$$

$$R = 0.9999$$

$$DL = 2.249$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	150.01	0.0000	P	5.2
2	☐	0.100	0.123	980.63	0.0001	P	1.4
3	☐	1.000	1.252	8636.33	0.0007	P	0.4
4	☐	50.000	57.480	388965.83	0.0320	P	1.7
5	☐	125.000	136.473	895963.36	0.0759	P	2.3
6	☐	250.000	262.226	1615052.97	0.1458	P	0.5
7	☐	500.000	499.473	3045609.66	0.2776	P	0.5
8	☐	1000.000	995.398	5897912.46	0.5533	A	0.7
9	☐			1583.49	0.0001	P	5.3

$$y = 5.5583\text{E-}004 * x + 1.1918\text{E-}005$$

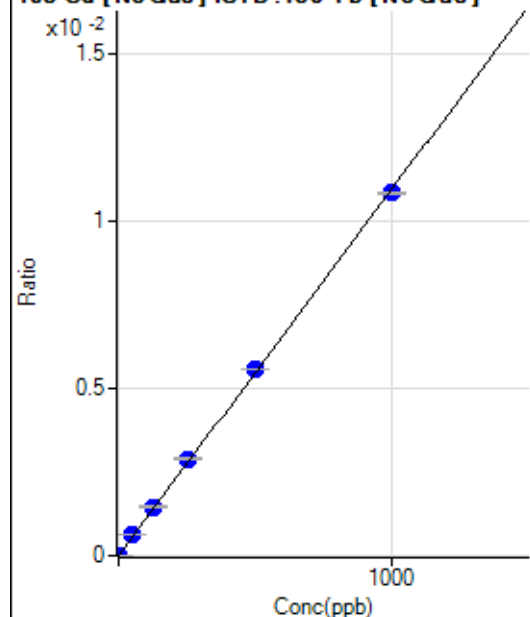
$$R = 0.9999$$

$$DL = 0.003373$$

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	9.72	0.0000	P	64.9
2	☐	0.100	0.107	23.61	0.0000	P	10.5
3	☐	1.000	1.024	145.84	0.0000	P	10.3
4	☐	50.000	56.046	7457.67	0.0006	P	1.2
5	☐	125.000	133.545	17230.17	0.0015	P	2.6
6	☐	250.000	264.304	31986.34	0.0029	P	0.7
7	☐	500.000	507.932	60852.35	0.0055	P	0.4
8	☐	1000.000	991.088	115371.51	0.0108	P	0.7
9	☐			48.61	0.0000	P	37.5

$$y = 1.0919\text{E-}005 * x + 7.7057\text{E-}007$$

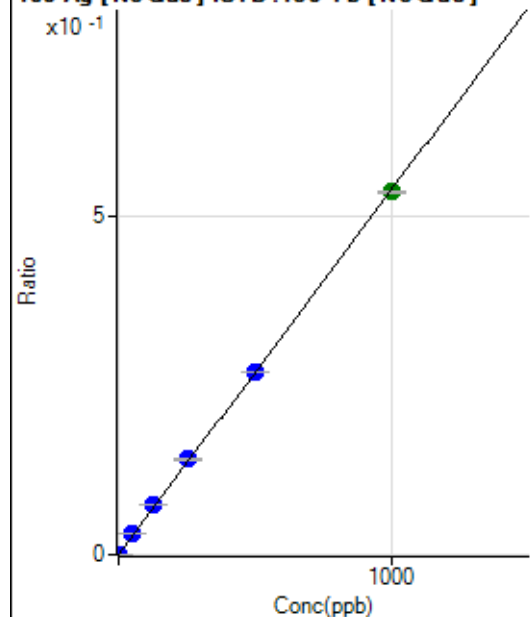
$$R = 0.9998$$

$$DL = 0.1375$$

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	77.78	0.0000	P	5.6
2	☐	0.100	0.128	911.18	0.0001	P	10.5
3	☐	1.000	1.231	8149.92	0.0007	P	3.7
4	☐	50.000	57.536	376592.12	0.0309	P	1.5
5	☐	125.000	136.636	867761.73	0.0735	P	2.1
6	☐	250.000	261.831	1560010.94	0.1408	P	1.0
7	☐	500.000	501.464	2958063.78	0.2697	P	0.2
8	☐	1000.000	994.479	5700367.27	0.5348	A	0.8
9	☐			1586.27	0.0001	P	5.4

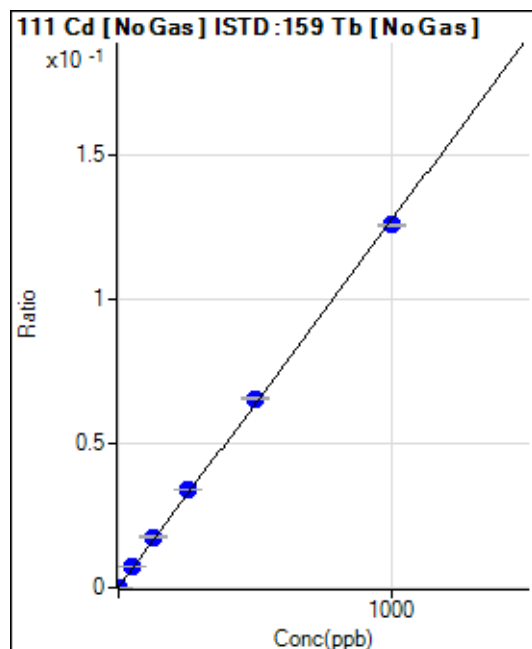
$$y = 5.3771\text{E-}004 * x + 6.1789\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.001944$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1778.91	0.0001	P	3.6
2	☒	0.100					
3	☐	1.000	1.164	3529.66	0.0003	P	2.4
4	☐	50.000	56.352	88855.78	0.0073	P	1.6
5	☐	125.000	136.348	206244.73	0.0175	P	2.3
6	☐	250.000	265.511	375321.75	0.0339	P	0.7
7	☐	500.000	514.350	718432.40	0.0655	P	0.5
8	☐	1000.000	987.211	1338542.29	0.1256	P	0.5
9	☐			2026.67	0.0002	P	5.3

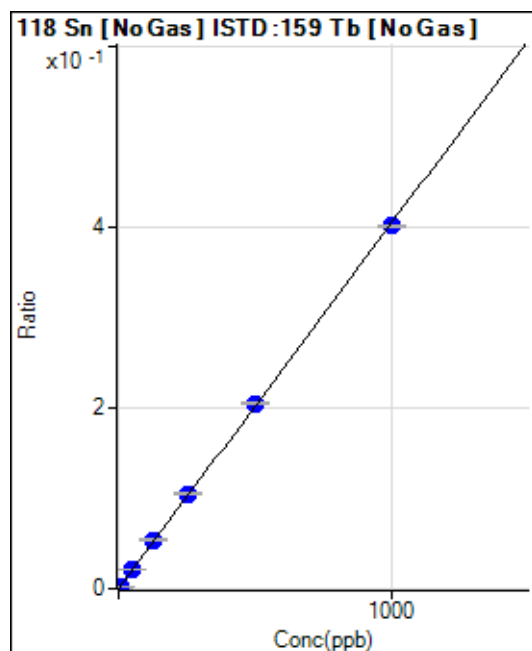
$$y = 1.2705\text{E-}004 * x + 1.4136\text{E-}004$$

$$R = 0.9997$$

$$DL = 0.1216$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	480.58	0.0000	P	4.1
2	☐	0.500	0.583	3339.44	0.0003	P	3.8
3	☐	5.000	5.704	28621.74	0.0023	P	2.5
4	☐	50.000	54.394	268234.28	0.0220	P	1.2
5	☐	125.000	132.588	633793.20	0.0537	P	2.3
6	☐	250.000	259.933	1165349.71	0.1052	P	0.9
7	☐	500.000	507.428	2252013.68	0.2053	P	0.7
8	☐	1000.000	992.631	4280385.25	0.4015	P	0.4
9	☐			3069.90	0.0003	P	7.7

$$y = 4.0449\text{E-}004 * x + 3.8190\text{E-}005$$

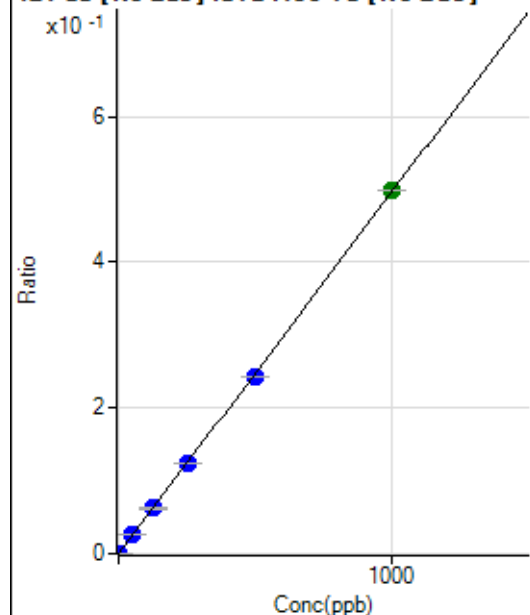
$$R = 0.9999$$

$$DL = 0.01153$$

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	50.00	0.0000	P	16.3
2	☐	0.200	0.205	1289.00	0.0001	P	10.0
3	☐	2.000	2.045	12411.54	0.0010	P	3.5
4	☐	50.000	52.318	315566.42	0.0259	P	1.1
5	☐	125.000	126.521	740437.75	0.0627	P	2.3
6	☐	250.000	251.689	1381899.53	0.1247	P	0.9
7	☐	500.000	489.334	2660034.63	0.2425	P	0.4
8	☐	1000.000	1004.605	5306642.57	0.4978	A	0.1
9	☐			8917.07	0.0008	P	4.2

$$y = 4.9553\text{E-}004 * x + 3.9718\text{E-}006$$

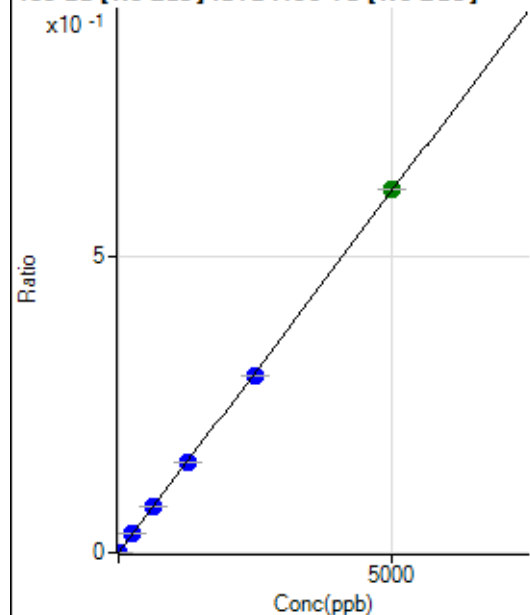
$$R = 0.9999$$

$$DL = 0.003922$$

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	111.12	0.0000	P	15.1
2	☐	1.000	0.993	1583.50	0.0001	P	13.0
3	☐	10.000	10.529	15784.50	0.0013	P	3.3
4	☐	250.000	261.877	389017.22	0.0320	P	0.8
5	☐	625.000	635.284	915543.84	0.0775	P	2.3
6	☐	1250.000	1258.182	1701081.44	0.1535	P	0.8
7	☐	2500.000	2447.031	3275580.65	0.2986	P	0.0
8	☐	5000.000	5022.559	6533036.69	0.6129	A	0.2
9	☐			1880.75	0.0002	P	8.0

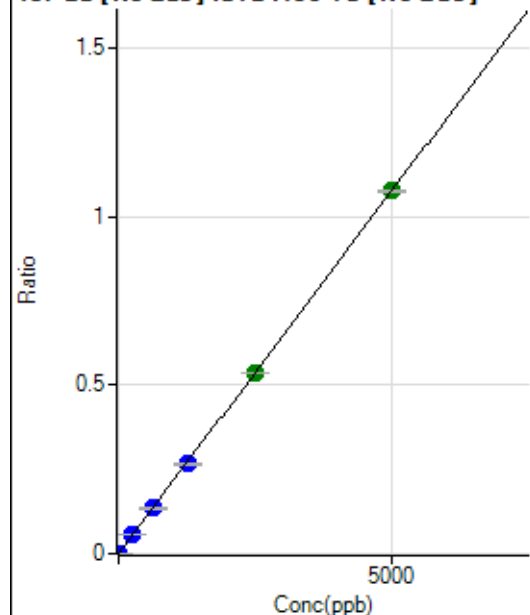
$$y = 1.2202\text{E-}004 * x + 8.8239\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.0327$$

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	91.67	0.0000	P	35.8
2	☐	1.000	1.025	2778.18	0.0002	P	4.8
3	☐	10.000	10.713	28254.57	0.0023	P	1.4
4	☐	250.000	259.162	679627.70	0.0558	P	0.3
5	☐	625.000	626.919	1595108.22	0.1351	P	2.3
6	☐	1250.000	1239.115	2957869.86	0.2670	P	1.0
7	☐	2500.000	2497.432	5902465.37	0.5380	A	0.6
8	☐	5000.000	5003.306	11490287.41	1.0779	A	0.5
9	☐			3281.08	0.0003	P	10.0

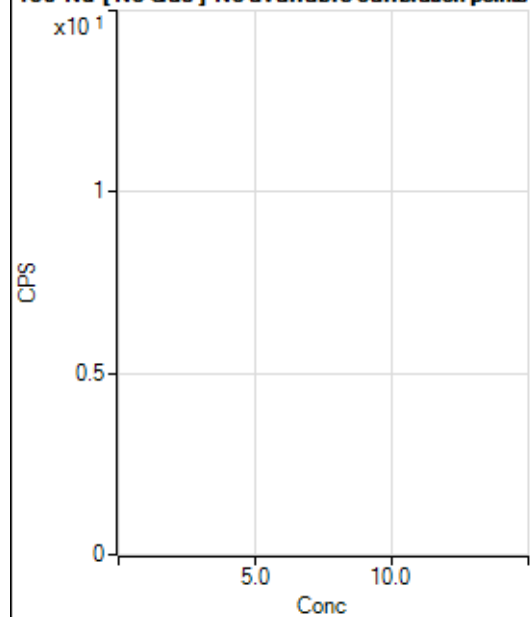
$$y = 2.1544\text{E-}004 * x + 7.2735\text{E-}006$$

$$R = 1.0000$$

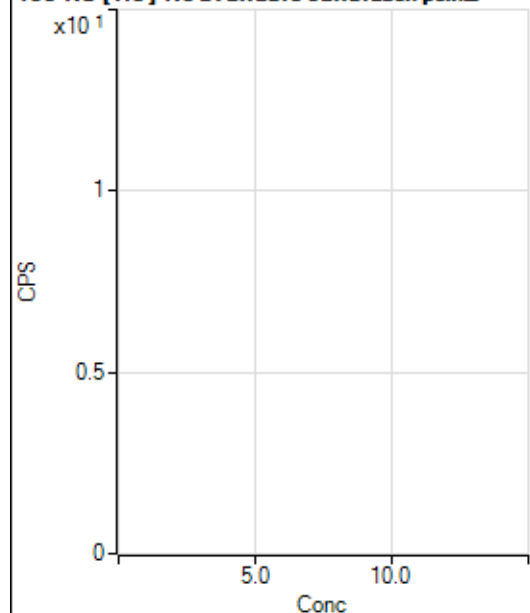
$$DL = 0.03626$$

Weight: <None>

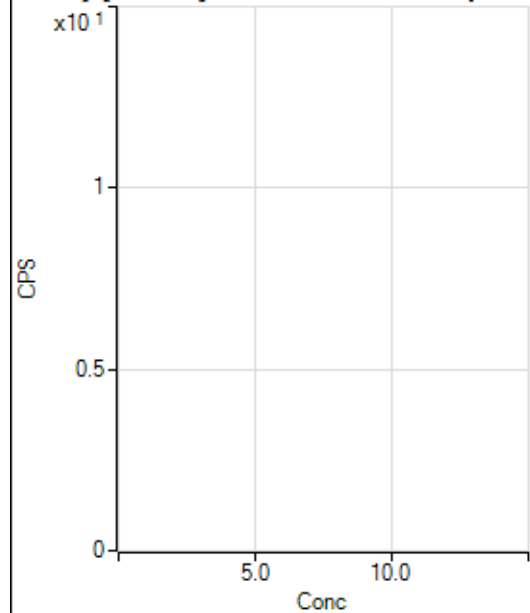
Min Conc: 0

150 Nd [No Gas] No available calibration points

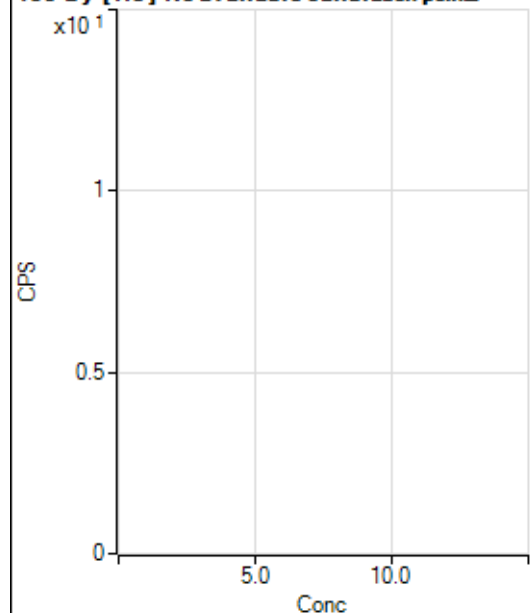
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.33		P	50.0
2	☐			8.89		P	114.5
3	☐			11.11		P	34.6
4	☐			46.67		P	24.7
5	☐			75.56		P	35.7
6	☐			186.67		P	12.4
7	☐			324.46		P	6.3
8	☐			577.81		P	6.4
9	☐			93.34		P	53.9

150 Nd [He] No available calibration points

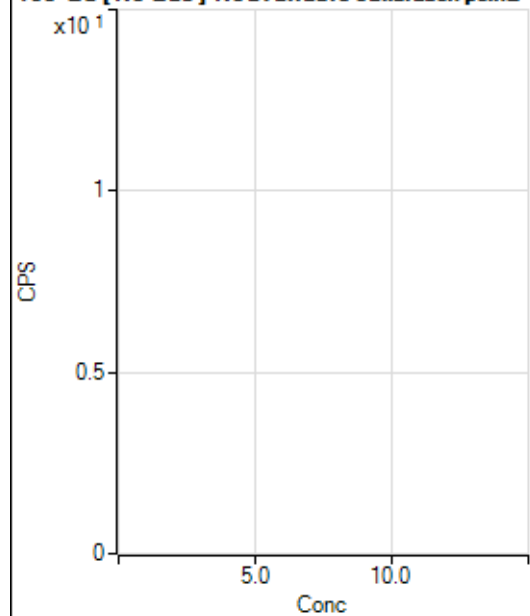
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			14.44		P	53.3
2	☐			11.11		P	34.6
3	☐			7.78		P	65.5
4	☐			10.00		P	0.0
5	☐			17.78		P	43.3
6	☐			13.33		P	66.1
7	☐			34.44		P	5.6
8	☐			36.67		P	39.6
9	☐			41.11		P	49.5

156 Dy [No Gas] No available calibration points

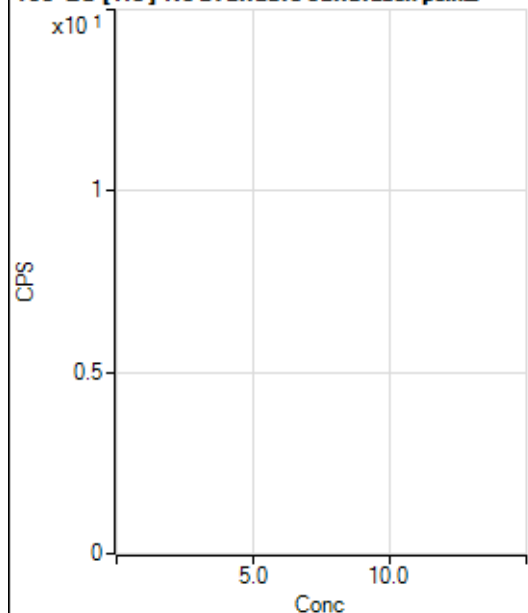
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			16.66		P	86.6
2	☐			30.55		P	68.6
3	☐			5.55		P	86.6
4	☐			44.45		P	65.8
5	☐			33.33		P	25.0
6	☐			75.00		P	33.3
7	☐			75.01		P	19.2
8	☐			111.12		P	42.6
9	☐			30.55		P	15.7

156 Dy [He] No available calibration points

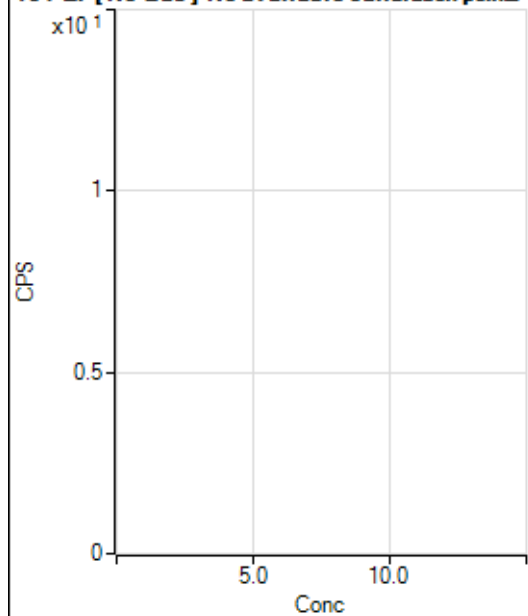
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			22.22		P	22.9
2	☐			23.33		P	14.3
3	☐			16.67		P	34.6
4	☐			12.22		P	41.7
5	☐			28.89		P	17.6
6	☐			43.33		P	46.2
7	☐			56.67		P	32.8
8	☐			84.45		P	18.7
9	☐			24.45		P	28.4

160 Gd [No Gas] Noavailable calibration poin_

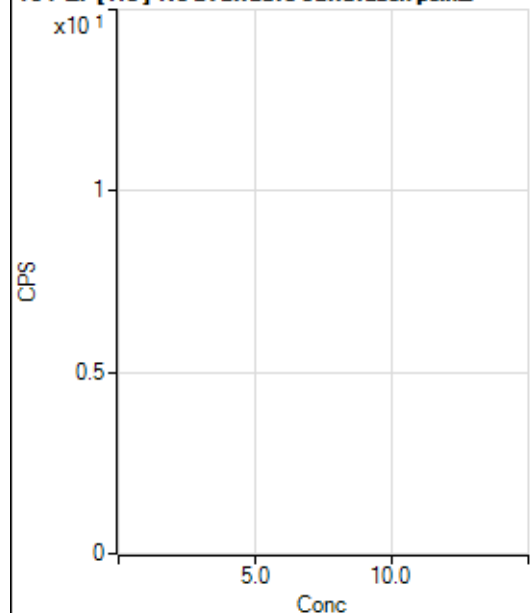
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			72.22		P	29.0
2	☐			63.89		P	37.7
3	☐			52.78		P	32.9
4	☐			58.34		P	0.0
5	☐			94.45		P	27.0
6	☐			80.56		P	11.9
7	☐			88.89		P	14.3
8	☐			72.23		P	26.7
9	☐			94.45		P	28.4

160 Gd [He] No available calibration points

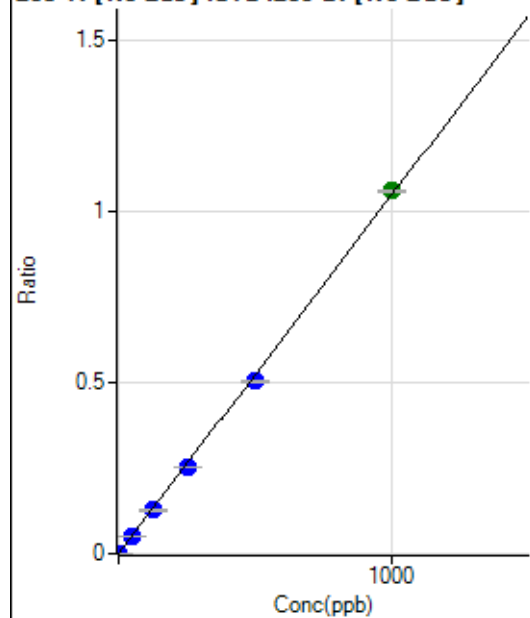
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			153.34		P	11.5
2	☐			108.89		P	4.7
3	☐			131.12		P	10.3
4	☐			96.67		P	15.0
5	☐			110.00		P	3.0
6	☐			88.89		P	22.9
7	☐			101.11		P	13.7
8	☐			110.00		P	12.1
9	☐			124.45		P	8.2

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			66.67		P	57.3
2	☐			63.89		P	39.8
3	☐			75.00		P	33.3
4	☐			86.11		P	14.8
5	☐			63.89		P	19.9
6	☐			55.56		P	17.3
7	☐			66.67		P	21.7
8	☐			66.67		P	21.6
9	☐			61.12		P	34.3

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			54.44		P	25.5
2	☐			64.44		P	7.9
3	☐			47.78		P	17.6
4	☐			50.00		P	6.7
5	☐			44.45		P	37.7
6	☐			47.78		P	8.1
7	☐			67.78		P	15.8
8	☐			66.67		P	27.8
9	☐			46.67		P	12.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	786.17	0.0001	P	8.2
2	☐	0.100	0.075	1427.91	0.0002	P	5.5
3	☐	1.000	0.940	9228.59	0.0011	P	4.6
4	☐	50.000	48.787	436470.61	0.0511	P	0.9
5	☐	125.000	120.869	1048585.24	0.1265	P	2.0
6	☐	250.000	242.038	1968884.33	0.2532	P	0.4
7	☐	500.000	480.917	3785651.08	0.5031	P	0.9
8	☐	1000.000	1012.109	7613262.76	1.0586	A	0.5
9	☐			3497.82	0.0005	P	1.1

$$y = 0.0010 * x + 8.7899E-005$$

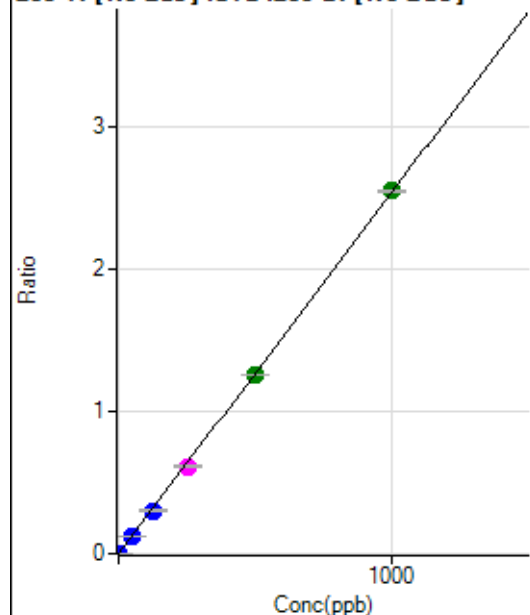
$$R = 0.9997$$

$$DL = 0.0206$$

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	1002.86	0.0001	P	6.4
2	☐	0.100	0.091	2956.01	0.0003	P	3.0
3	☐	1.000	0.943	21582.07	0.0025	P	1.2
4	☐	50.000	48.298	1047292.44	0.1226	P	1.0
5	☐	125.000	119.261	2508815.57	0.3027	P	2.3
6	☐	250.000	241.261	4759965.56	0.6122	M	2.5
7	☐	500.000	495.800	9466071.48	1.2580	A	0.9
8	☐	1000.000	1005.087	18339068.29	2.5501	A	0.2
9	☐			7986.05	0.0012	P	5.8

$$y = 0.0025 * x + 1.1212E-004$$

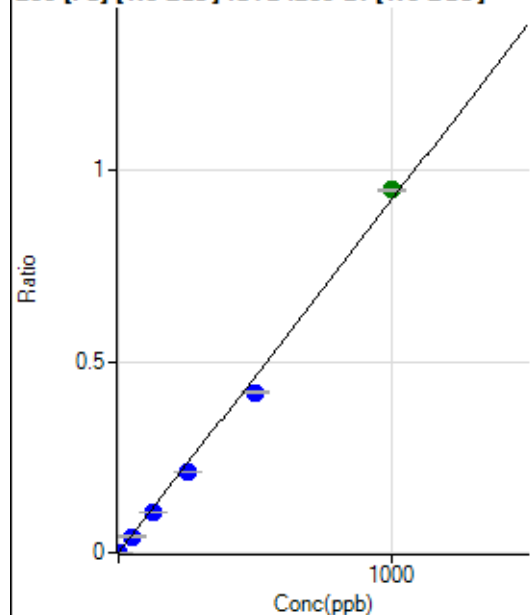
$$R = 0.9999$$

$$DL = 0.008543$$

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	825.98	0.0001	P	7.7
2	☐	0.100	0.073	1370.48	0.0002	P	6.3
3	☐	1.000	0.889	7869.22	0.0009	P	1.0
4	☐	50.000	46.079	364051.76	0.0426	P	1.3
5	☐	125.000	114.526	877215.36	0.1058	P	1.9
6	☐	250.000	228.764	1642854.32	0.2113	P	0.1
7	☐	500.000	455.405	3164529.09	0.4205	P	0.4
8	☐	1000.000	1029.112	6833473.19	0.9502	A	0.4
9	☐			8567.82	0.0013	P	0.7

$$y = 9.2325E-004 * x + 9.2362E-005$$

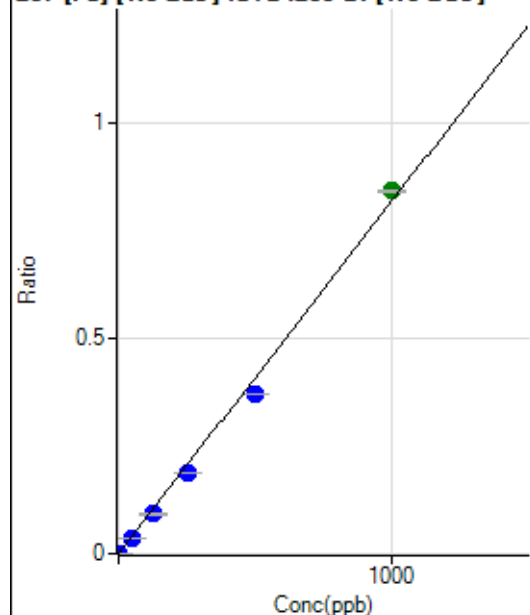
$$R = 0.9984$$

$$DL = 0.02298$$

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	803.75	0.0001	P	13.0
2	☐	0.100	0.081	1346.40	0.0002	P	5.0
3	☐	1.000	0.870	6911.26	0.0008	P	1.6
4	☐	50.000	45.778	320599.85	0.0375	P	0.7
5	☐	125.000	113.143	767983.35	0.0927	P	2.6
6	☐	250.000	227.509	1447953.68	0.1862	P	0.5
7	☐	500.000	454.088	2796265.11	0.3716	P	0.7
8	☐	1000.000	1030.272	6062633.06	0.8430	A	0.5
9	☐			7830.28	0.0012	P	0.5

$$y = 8.1818\text{E-}004 * x + 8.9898\text{E-}005$$

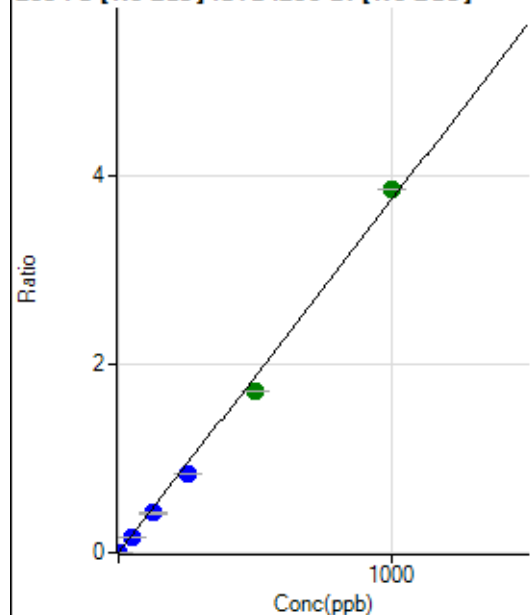
$$R = 0.9983$$

$$DL = 0.04276$$

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	2792.78	0.0003	P	7.0
2	☐	0.100	0.081	5296.84	0.0006	P	4.9
3	☐	1.000	0.878	31033.43	0.0036	P	0.9
4	☐	50.000	45.504	1458341.73	0.1708	P	0.8
5	☐	125.000	112.300	3489704.21	0.4210	P	2.2
6	☐	250.000	224.960	6554994.30	0.8431	P	0.1
7	☐	500.000	459.269	12949193.60	1.7209	A	0.5
8	☐	1000.000	1028.438	27709874.75	3.8532	A	0.2
9	☐			34306.85	0.0052	P	0.7

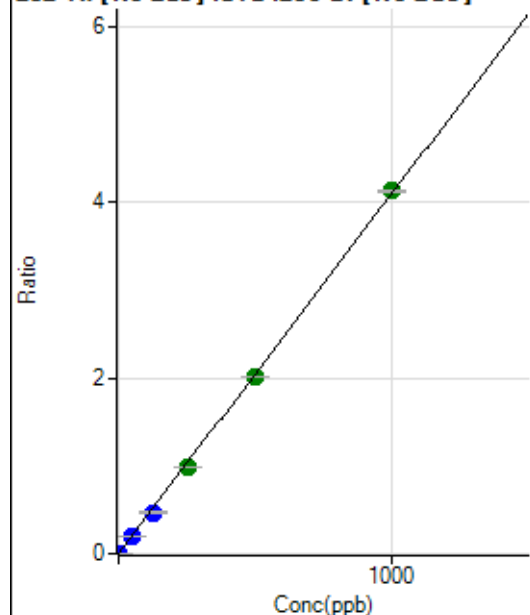
$$y = 0.0037 * x + 3.1230\text{E-}004$$

$$R = 0.9985$$

$$DL = 0.01756$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2270.64	0.0003	P	3.6
2	☐	0.100	0.072	4726.91	0.0005	P	3.1
3	☐	1.000	0.818	31022.61	0.0036	P	1.6
4	☐	50.000	45.762	1599821.48	0.1874	P	0.6
5	☐	125.000	113.561	3850419.61	0.4646	P	2.4
6	☐	250.000	239.662	7620234.14	0.9801	A	0.4
7	☐	500.000	491.028	15108874.88	2.0078	A	0.1
8	☐	1000.000	1008.712	29660487.47	4.1244	A	0.2
9	☐			11197.71	0.0017	P	5.4

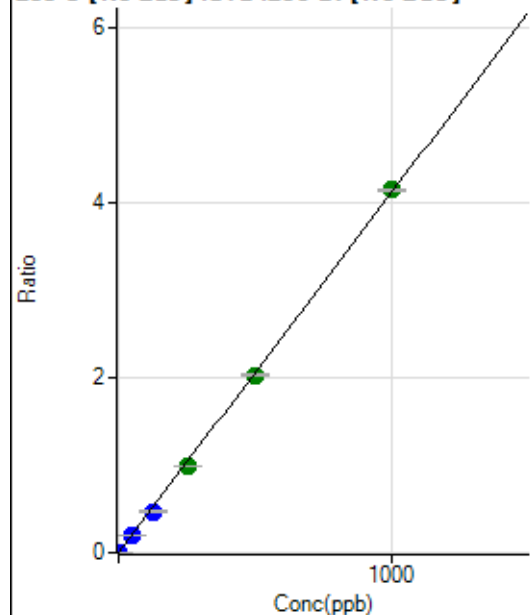
$$y = 0.0041 * x + 2.5385E-004$$

$$R = 0.9998$$

$$DL = 0.006747$$

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	2833.79	0.0003	P	3.8
2	☐	0.100	0.082	5623.69	0.0007	P	3.9
3	☐	1.000	0.902	34747.55	0.0040	P	1.1
4	☐	50.000	46.445	1635743.91	0.1916	P	1.0
5	☐	125.000	114.042	3894324.18	0.4699	P	3.0
6	☐	250.000	240.693	7708002.43	0.9914	A	0.5
7	☐	500.000	493.168	15282628.29	2.0310	A	0.6
8	☐	1000.000	1007.290	29829661.78	4.1480	A	0.7
9	☐			8989.63	0.0014	P	4.0

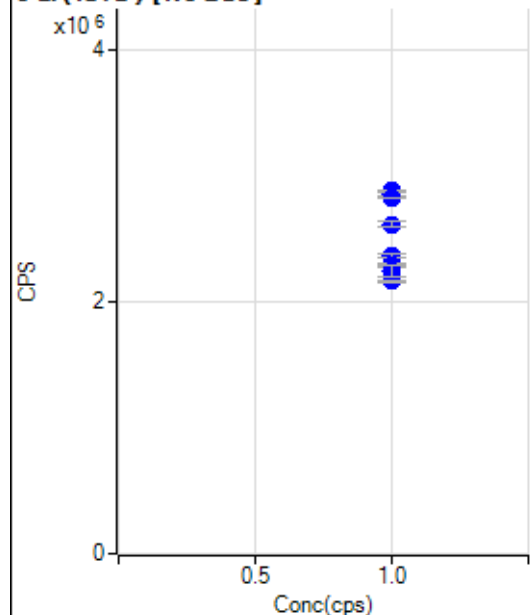
$$y = 0.0041 * x + 3.1680E-004$$

$$R = 0.9999$$

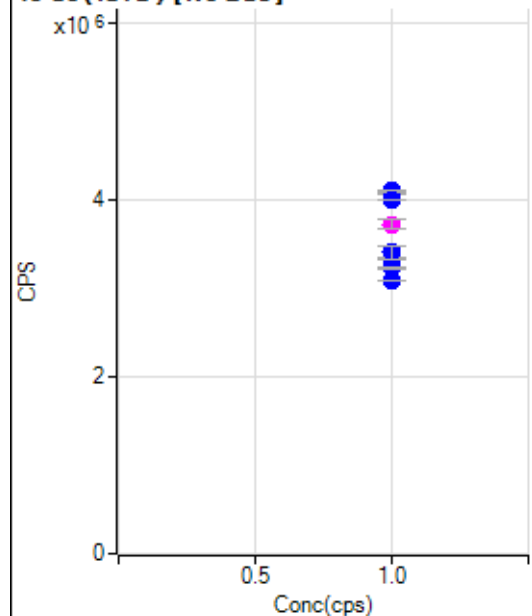
$$DL = 0.008742$$

Weight: <None>

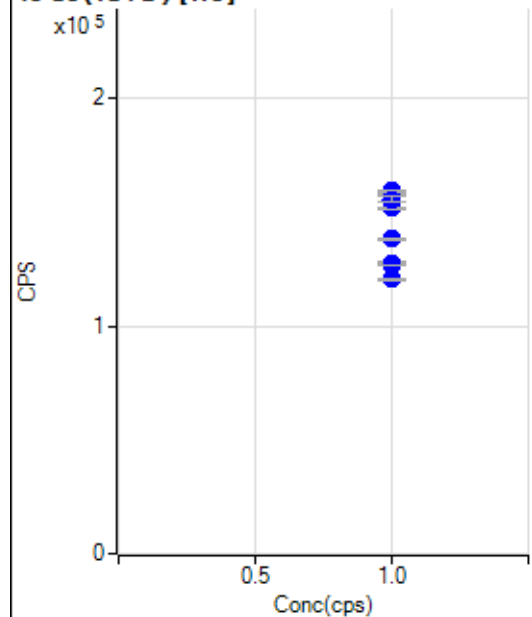
Min Conc: 0

6 Li (ISTD) [No Gas]

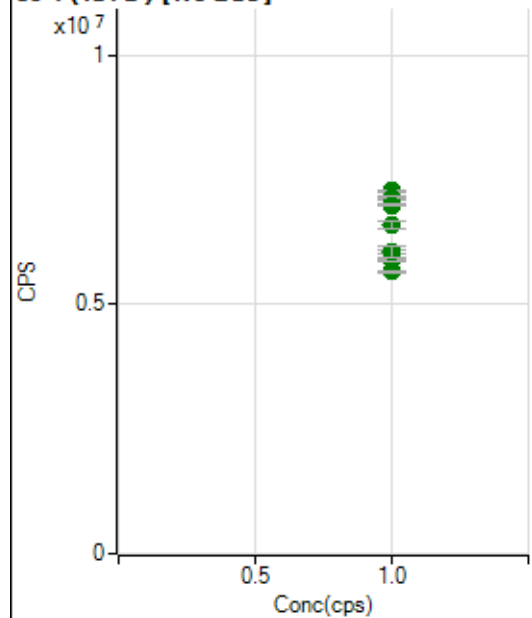
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2872365.51		P	0.1
2	☐	1.000		2859451.38		P	0.8
3	☐	1.000		2883266.42		P	0.4
4	☐	1.000		2825185.90		P	0.2
5	☐	1.000		2614918.12		P	1.8
6	☐	1.000		2371347.51		P	1.3
7	☐	1.000		2293989.90		P	0.8
8	☐	1.000		2165775.75		P	0.5
9	☐	1.000		2250226.60		P	4.2

45 Sc (ISTD) [No Gas]

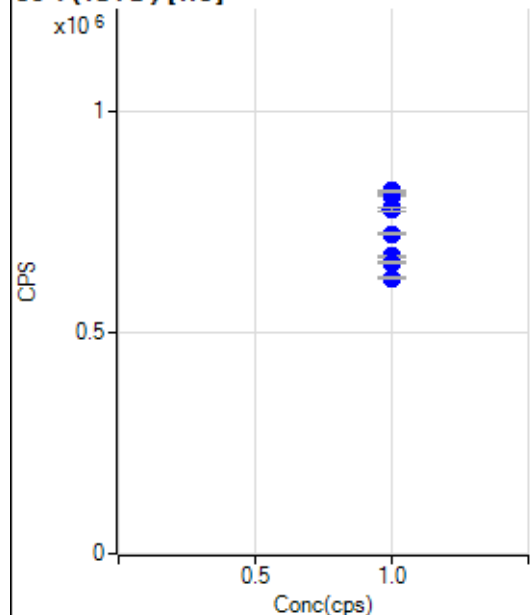
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4065702.78		P	0.4
2	☐	1.000		4079994.01		P	0.4
3	☐	1.000		4102768.32		P	0.7
4	☐	1.000		4001863.28		P	0.3
5	☐	1.000		3728997.26		M	2.5
6	☐	1.000		3348275.42		P	0.7
7	☐	1.000		3237332.56		P	0.6
8	☐	1.000		3085695.12		P	0.2
9	☐	1.000		3403773.67		P	4.6

45 Sc (ISTD) [He]

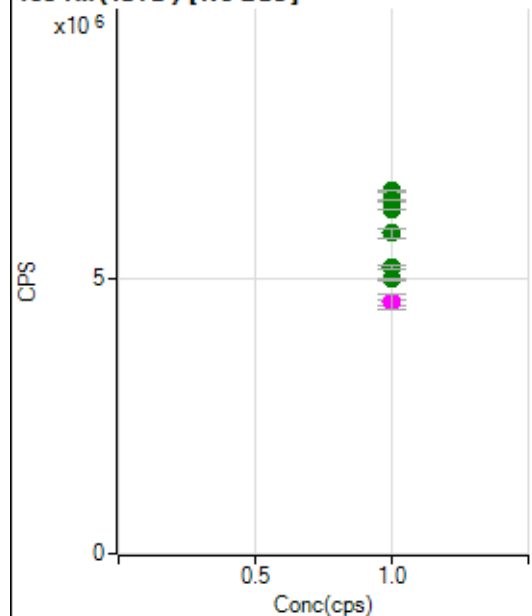
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		157945.37		P	0.6
2	☐	1.000		159089.89		P	0.4
3	☐	1.000		159522.01		P	0.3
4	☐	1.000		151922.79		P	0.3
5	☐	1.000		138316.06		P	0.6
6	☐	1.000		127909.53		P	0.8
7	☐	1.000		126673.35		P	0.2
8	☐	1.000		120700.92		P	0.8
9	☐	1.000		155748.03		P	1.4

89 Y (ISTD) [No Gas]

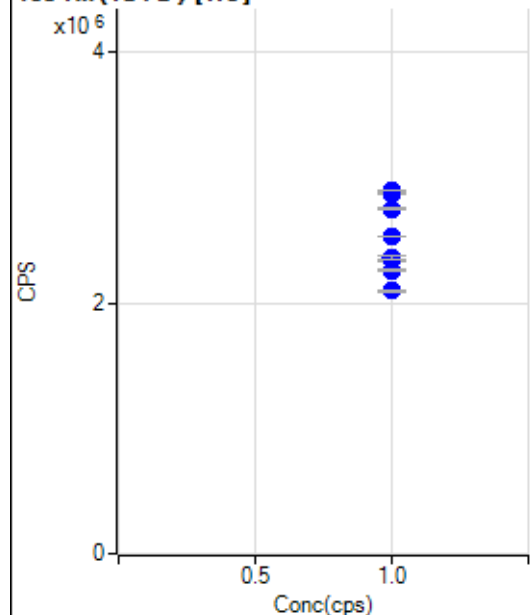
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7280343.43		A	0.4
2	☐	1.000		7120423.92		A	0.4
3	☐	1.000		7152299.96		A	0.6
4	☐	1.000		6999168.78		A	0.4
5	☐	1.000		6598860.66		A	2.6
6	☐	1.000		6062792.83		A	0.9
7	☐	1.000		5895558.94		A	0.7
8	☐	1.000		5658536.72		A	0.5
9	☐	1.000		6050343.38		A	4.2

89 Y (ISTD) [He]

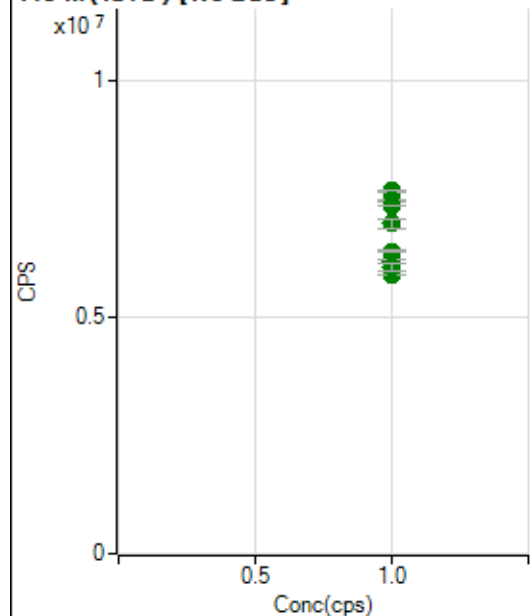
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		809033.85		P	0.6
2	☐	1.000		814015.10		P	0.8
3	☐	1.000		819294.38		P	0.4
4	☐	1.000		781394.34		P	0.1
5	☐	1.000		721792.86		P	0.5
6	☐	1.000		672344.16		P	0.5
7	☐	1.000		656990.36		P	0.8
8	☐	1.000		622756.04		P	0.2
9	☐	1.000		775557.24		P	1.2

103 Rh (ISTD) [No Gas]

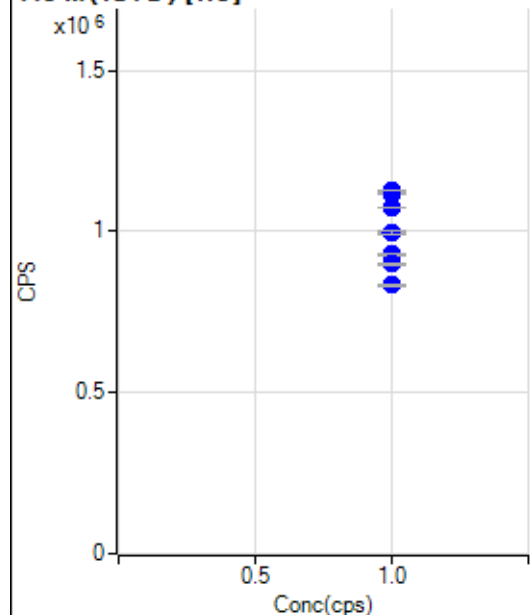
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6581657.83		A	0.2
2	☐	1.000		6393681.70		A	0.4
3	☐	1.000		6421083.87		A	0.2
4	☐	1.000		6252071.58		A	0.2
5	☐	1.000		5814085.46		A	2.8
6	☐	1.000		5209776.25		A	1.1
7	☐	1.000		4972112.57		A	0.6
8	☐	1.000		4561010.13		M	2.5
9	☐	1.000		4578732.48		M	6.2

103 Rh (ISTD) [He]

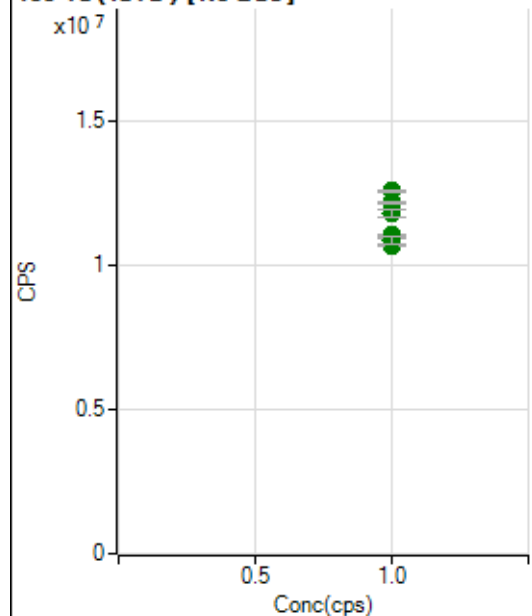
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2885316.97		P	0.7
2	☐	1.000		2876598.81		P	0.6
3	☐	1.000		2896249.71		P	0.2
4	☐	1.000		2752193.40		P	0.7
5	☐	1.000		2532716.23		P	0.2
6	☐	1.000		2344612.43		P	0.4
7	☐	1.000		2257568.30		P	0.6
8	☐	1.000		2099728.94		P	0.6
9	☐	1.000		2364012.83		P	1.1

115 In (ISTD) [No Gas]

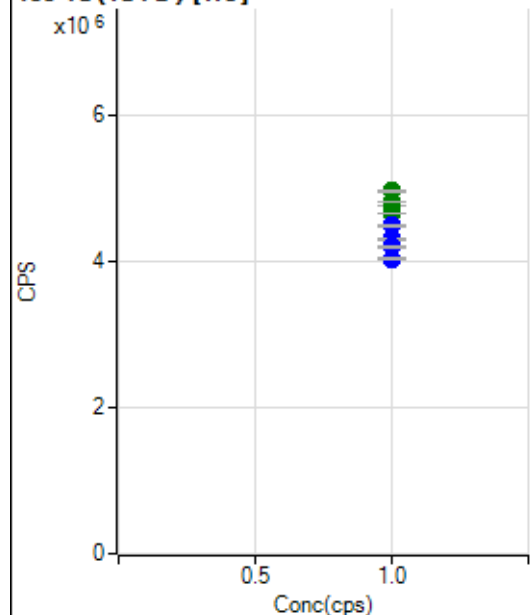
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7666029.73		A	0.4
2	☐	1.000		7452177.95		A	0.2
3	☐	1.000		7486643.90		A	0.3
4	☐	1.000		7354488.81		A	0.2
5	☐	1.000		6969292.46		A	2.8
6	☐	1.000		6394272.39		A	0.6
7	☐	1.000		6185198.11		A	1.0
8	☐	1.000		5880912.44		A	0.2
9	☐	1.000		6060339.28		A	3.0

115 In (ISTD) [He]

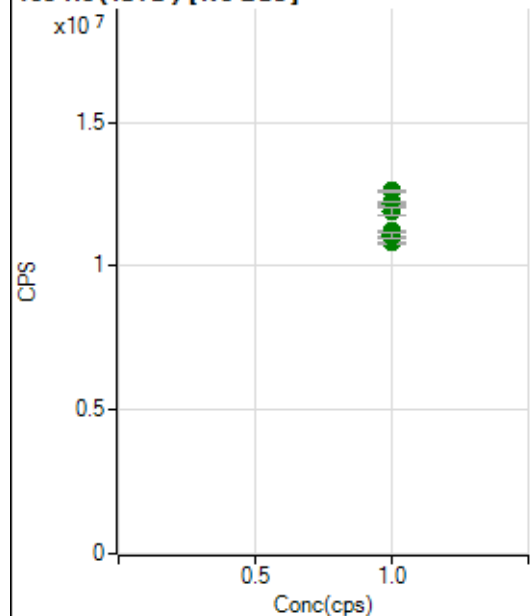
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1118401.11		P	0.7
2	☐	1.000		1120322.98		P	0.4
3	☐	1.000		1125794.32		P	0.1
4	☐	1.000		1074101.59		P	0.5
5	☐	1.000		996257.53		P	0.6
6	☐	1.000		929725.21		P	0.6
7	☐	1.000		898221.84		P	0.4
8	☐	1.000		832519.63		P	0.3
9	☐	1.000		995349.97		P	1.0

159 Tb (ISTD) [No Gas]

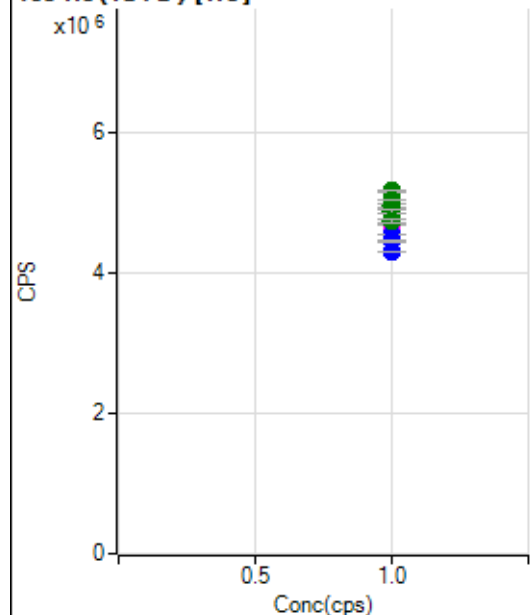
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12585445.23		A	0.6
2	☐	1.000		12185167.59		A	0.4
3	☐	1.000		12203095.51		A	0.2
4	☐	1.000		12171089.26		A	0.8
5	☐	1.000		11814183.30		A	2.6
6	☐	1.000		11079861.08		A	0.4
7	☐	1.000		10969950.81		A	0.5
8	☐	1.000		10659923.59		A	0.3
9	☐	1.000		10880045.11		A	2.3

159 Tb (ISTD) [He]

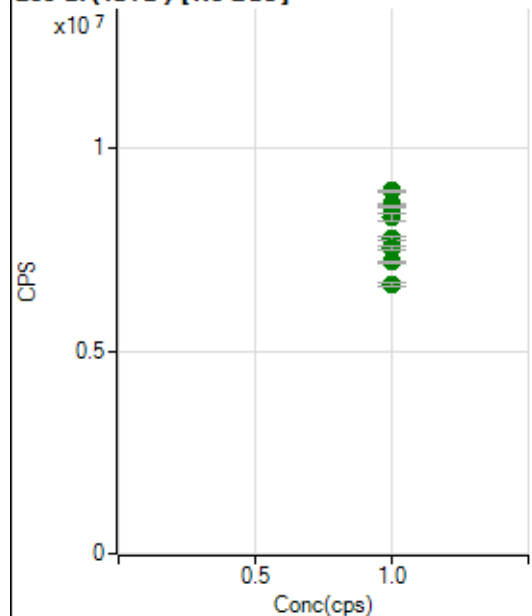
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4964211.31		A	0.4
2	☐	1.000		4763923.57		A	0.5
3	☐	1.000		4812122.05		A	0.1
4	☐	1.000		4660381.01		A	0.4
5	☐	1.000		4497519.52		P	0.4
6	☐	1.000		4313354.00		P	0.5
7	☐	1.000		4207937.19		P	0.6
8	☐	1.000		4033427.79		P	0.5
9	☐	1.000		4497130.94		P	0.6

165 Ho (ISTD) [No Gas]

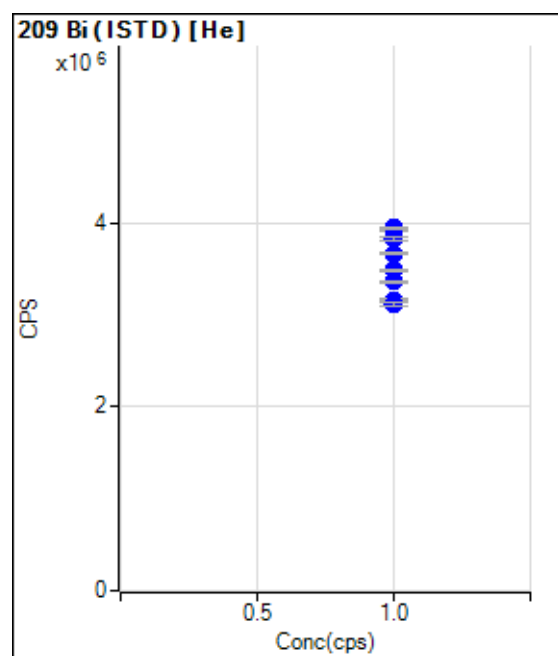
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12617964.00		A	0.4
2	☐	1.000		12179485.86		A	0.1
3	☐	1.000		12231847.58		A	0.2
4	☐	1.000		12180293.07		A	0.9
5	☐	1.000		11923398.79		A	2.5
6	☐	1.000		11218137.58		A	0.5
7	☐	1.000		11084943.74		A	1.0
8	☐	1.000		10822023.50		A	0.6
9	☐	1.000		11052167.87		A	1.6

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5171174.23		A	0.4
2	☐	1.000		4953065.38		A	1.2
3	☐	1.000		5044244.30		A	0.3
4	☐	1.000		4880710.31		A	1.1
5	☐	1.000		4696918.65		M	0.9
6	☐	1.000		4540396.08		P	0.2
7	☐	1.000		4461752.82		P	0.8
8	☐	1.000		4302785.18		P	0.2
9	☐	1.000		4732799.55		A	1.1

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8944869.24		A	0.5
2	☐	1.000		8603923.21		A	0.5
3	☐	1.000		8620471.19		A	0.5
4	☐	1.000		8539279.32		A	0.5
5	☐	1.000		8291689.18		A	2.5
6	☐	1.000		7775010.09		A	0.9
7	☐	1.000		7525002.32		A	1.0
8	☐	1.000		7191480.87		A	0.3
9	☐	1.000		6625736.22		A	1.7



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3943386.33		P	0.8
2	☐	1.000		3933323.97		P	1.0
3	☐	1.000		3949292.06		P	0.5
4	☐	1.000		3831419.73		P	0.8
5	☐	1.000		3667353.56		P	0.8
6	☐	1.000		3487805.02		P	0.8
7	☐	1.000		3365212.97		P	0.8
8	☐	1.000		3165790.13		P	0.8
9	☐	1.000		3119806.00		P	0.8

US EPA Tune Check Sample Report

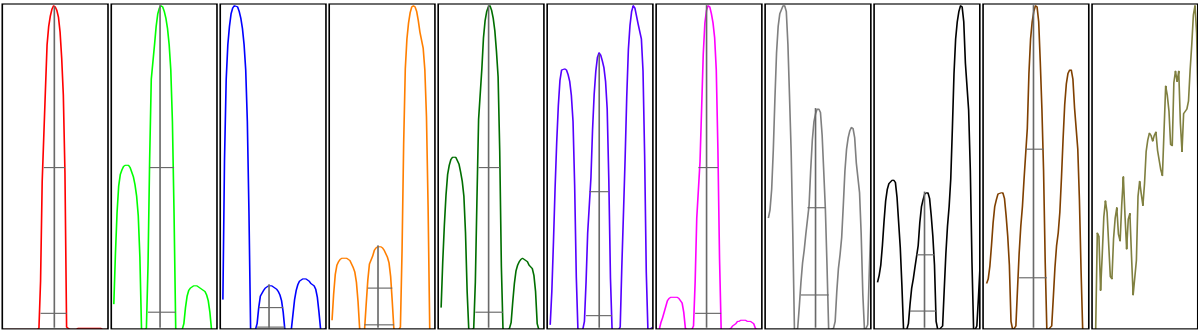
Batch Folder D:\ICP-MS Data\P7101619 MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	6599	2.92	5.00	
24	70786	2.79	5.00	
25	9528	2.94	5.00	
26	11195	2.99	5.00	
59	44926	2.95	5.00	
113	7535	2.23	5.00	
115	87256	2.44	5.00	
206	29761	1.64	5.00	
207	28569	1.80	5.00	
208	64714	2.10	5.00	
220	97	2.69		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	6773	6678	6647	6628	6268
24	72574	71452	71607	70865	67433
25	9797	9633	9579	9575	9054
26	11493	11344	11272	11245	10621
59	46062	45510	45271	45142	42643
113	7645	7580	7576	7632	7240
115	88667	87974	87762	88384	83495
206	29807	29900	30103	30077	28917
207	28616	28698	28925	28922	27682
208	65151	64951	65223	65886	62360
220	100	99	97	94	95

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	10784	9.00	8.9 - 9.1		0.780	0.900	
24	109372	23.90	23.9 - 24.1		0.830	0.900	
25	14676	24.90	24.9 - 25.1		0.823	0.900	
26	17017	25.90	25.9 - 26.1		0.834	0.900	
59	74128	58.95	58.9 - 59.1		0.820	0.900	
113	13665	113.00	112.9 - 113.1		0.779	0.900	
115	159760	114.95	114.9 - 115.1		0.773	0.900	
206	54682	205.95	205.9 - 206.1		0.799	0.900	
207	50149	206.95	206.9 - 207.1		0.757	0.900	
208	118440	207.95	207.9 - 208.1		0.796	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
RF Power	1600	W	Carrier Gas	0.80	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	5.5	V	Deflect	11.8	V
Extract 2	-90.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-45	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	140	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	10943	0.82	
89	9651	1.03	
205	23160	0.66	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	11067	10937	10973	10916	10821
89	9811	9650	9659	9578	9558
205	23394	22986	23203	23119	23099

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.80	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	5.9	V	Deflect	1.0	V
Extract 2	-110.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-60	V	Cell Exit	-60	V			

Cell Parameters

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