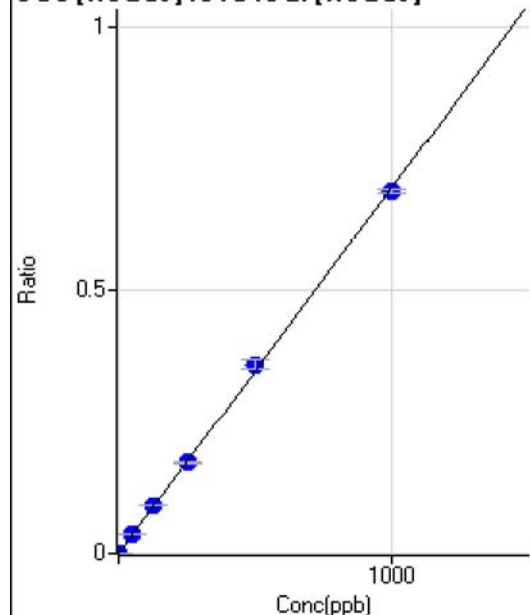


Batch Folder: D:\P8081518-MS .b\
Analysis File: P8081518-MS .batch.bin
DA Date-Time: 2018-08-15 23:16:28
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	005CALB P8081518-MS.D	S00	2018-08-15 13:18:11
2			
3	007CALS P8081518-MS.D	S02	2018-08-15 13:25:51
4	008CALS P8081518-MS.D	S03	2018-08-15 13:29:35
5	009CALS P8081518-MS.D	S04	2018-08-15 13:33:20
6	010CALS P8081518-MS.D	S05	2018-08-15 13:36:58
7	011CALS P8081518-MS.D	S06	2018-08-15 13:40:31
8	012CALS P8081518-MS.D	S07	2018-08-15 13:44:01
9	013CALS P8081518-MS.D	S08	2018-08-15 13:47:26

9 Be [NoGas] ISTD:6 Li [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	37.04	0.0000	P	8.3
2	☐	0.100					
3	☐	1.000	1.039	1081.56	0.0007	P	5.5
4	☐	50.000	51.543	53081.57	0.0358	P	2.3
5	☐	125.000	130.311	131986.26	0.0905	P	1.3
6	☐	250.000	250.071	256787.66	0.1736	P	1.7
7	☐	500.000	516.878	507900.49	0.3587	P	4.4
8	☐	1000.000	990.802	995303.15	0.6876	P	0.9
9	☐			592.62	0.0004	P	7.0

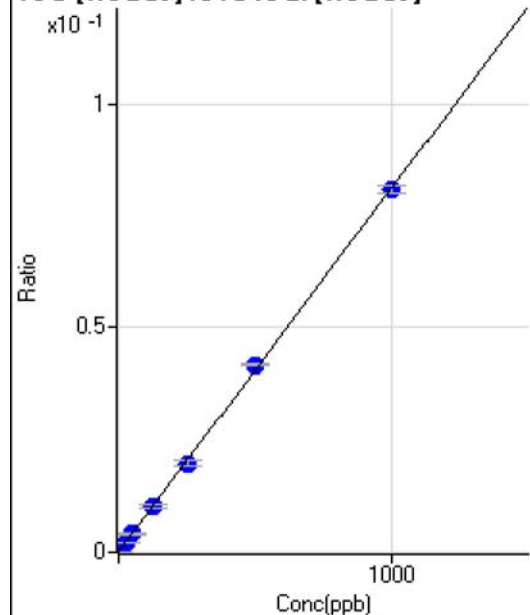
$$y = 6.9399\text{E-}004 * x + 2.5486\text{E-}005$$

$$R = 0.9998$$

$$DL = 0.009091$$

Weight: <None>

Min Conc: 0

10 B [NoGas] ISTD:6 Li [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	100.00	0.0001	P	30.5
2	☐	2.500					
3	☐	25.000	24.147	2939.31	0.0020	P	3.7
4	☐	50.000	50.709	6201.62	0.0042	P	7.1
5	☐	125.000	125.673	14977.81	0.0103	P	5.1
6	☐	250.000	242.468	29200.02	0.0197	P	6.7
7	☐	500.000	512.328	59036.37	0.0416	P	1.2
8	☐	1000.000	995.621	117066.90	0.0809	P	1.9
9	☐			6218.25	0.0044	P	8.6

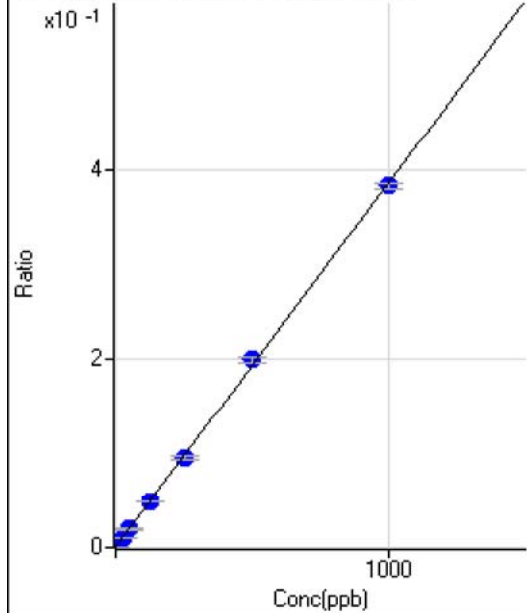
$$y = 8.1152\text{E-}005 * x + 6.8896\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.7777$$

Weight: <None>

Min Conc: 0

11 B [NoGas] ISTD:6 Li [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	466.70	0.0003	P	4.6
2	☐	2.500					
3	☐	25.000	23.764	13729.41	0.0095	P	4.2
4	☐	50.000	49.246	28621.06	0.0193	P	0.9
5	☐	125.000	126.482	71573.08	0.0491	P	2.1
6	☐	250.000	247.062	141289.94	0.0955	P	3.5
7	☐	500.000	514.088	281049.89	0.1984	P	2.6
8	☐	1000.000	993.574	554671.32	0.3832	P	1.4
9	☐			29355.96	0.0207	P	10.2

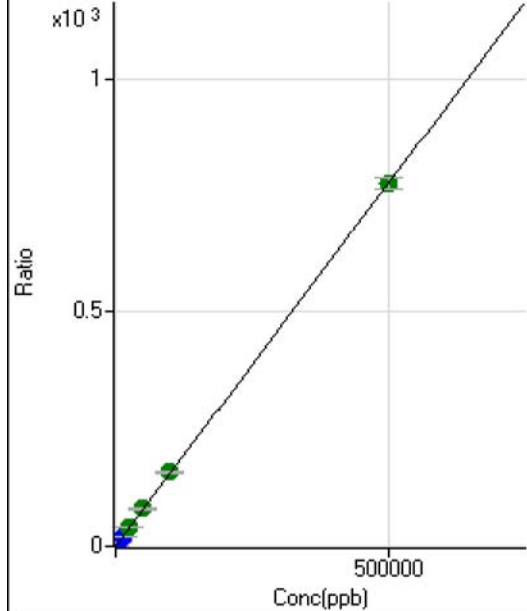
$$y = 3.8531\text{E-}004 * x + 3.2121\text{E-}004$$

$$R = 0.9998$$

$$DL = 0.1142$$

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	3550.60	0.1045	P	3.1
2	☐	50.000					
3	☐	500.000	479.528	29545.57	0.8490	P	1.7
4	☐	5000.000	5322.735	277367.42	8.3677	P	4.4
5	☐	12500.000	12920.964	674801.53	20.1634	P	0.7
6	☐	25000.000	26522.413	1327821.38	41.2786	A	3.9
7	☐	50000.000	51897.917	2555873.63	80.6722	A	3.3
8	☐	100000.00	101934.80	4927465.48	158.3508	A	2.0
9	☐	500000.00	499333.39	24907068.27	775.2830	A	3.3

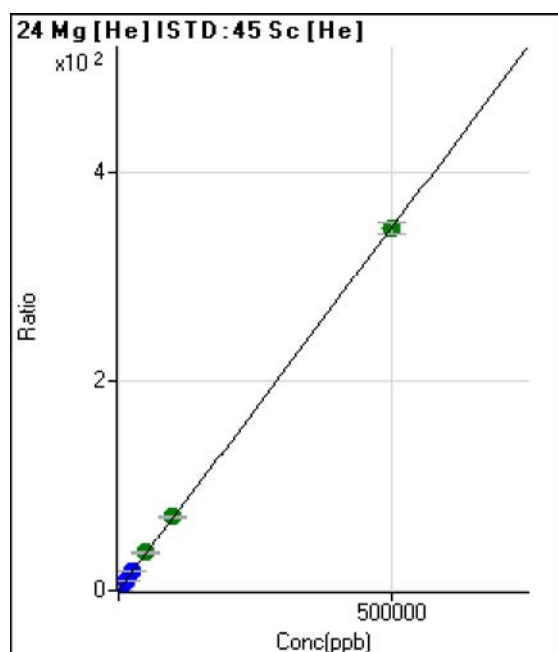
$$y = 0.0016 * x + 0.1045$$

$$R = 1.0000$$

$$DL = 6.196$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	241.68	0.0071	P	11.7
2	☐	50.000					
3	☐	500.000	472.188	11624.67	0.3340	P	2.8
4	☐	5000.000	5371.242	123492.87	3.7260	P	4.9
5	☐	12500.000	13020.167	301931.49	9.0220	P	1.3
6	☐	25000.000	26198.045	583592.01	18.1461	P	4.6
7	☐	50000.000	51976.912	1140605.70	35.9948	A	2.3
8	☐	100000.00	102829.79	2215647.34	71.2043	A	2.2
9	☐	500000.00	499159.75	11103322.38	345.6147	A	3.2

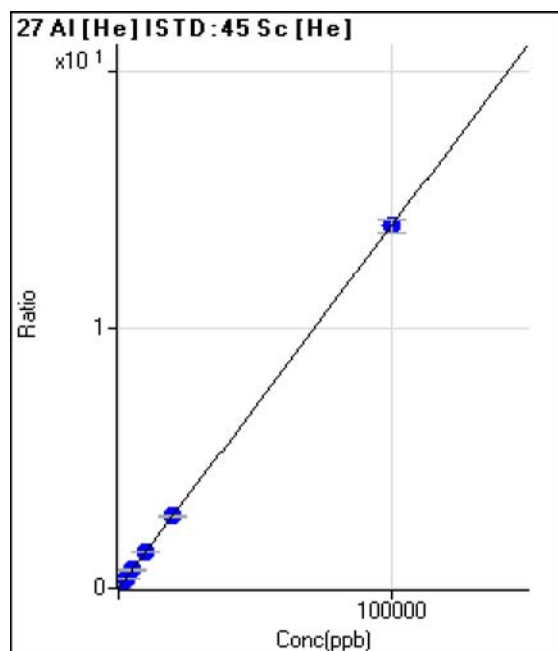
$$y = 6.9238\text{E-}004 * x + 0.0071$$

$$R = 1.0000$$

$$DL = 3.61$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	15.00	0.0004	P	49.5
2	☐	2.000					
3	☐	20.000	18.054	103.36	0.0030	P	15.7
4	☐	1000.000	1004.113	4677.00	0.1411	P	3.9
5	☐	2500.000	2471.053	11596.90	0.3465	P	0.7
6	☐	5000.000	5075.638	22875.01	0.7113	P	4.9
7	☐	10000.000	10069.821	44696.81	1.4107	P	3.2
8	☐	20000.000	19972.649	87051.76	2.7976	P	2.3
9	☐	100000.00	99995.389	449897.38	14.0049	P	3.6

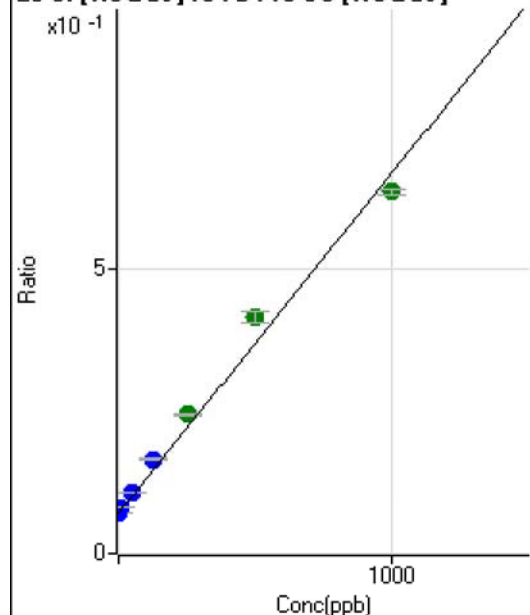
$$y = 1.4005\text{E-}004 * x + 4.4012\text{E-}004$$

$$R = 1.0000$$

$$DL = 4.667$$

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	342160.73	0.0711	P	1.4
2	☐	1.000					
3	☐	10.000	15.124	392064.19	0.0802	P	1.2
4	☐	50.000	62.523	531576.68	0.1085	P	1.5
5	☐	125.000	159.033	798137.19	0.1661	P	1.6
6	☐	250.000	291.142	1196093.01	0.2450	A	0.9
7	☐	500.000	576.036	1926749.43	0.4151	A	4.8
8	☐	1000.000	946.765	3050584.75	0.6364	A	1.2
9	☐			476326.13	0.1050	P	2.2

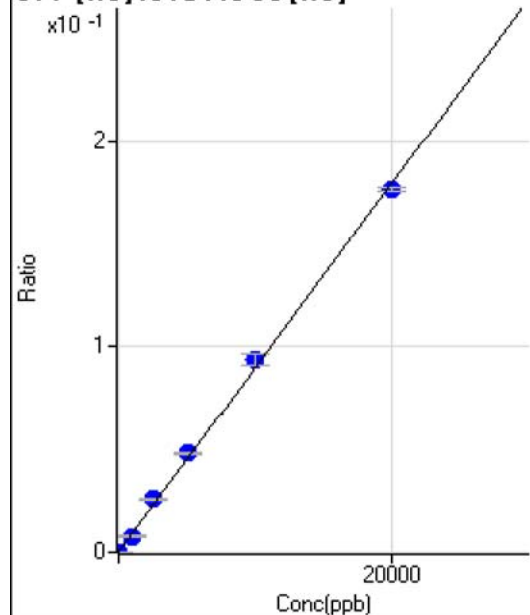
$$y = 5.9707\text{E-}004 * x + 0.0711$$

$$R = 0.9943$$

$$DL = 4.905$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.247	5.55	0.0002	P	86.7
2	☐	0.000					
3	☐	0.000	-0.247	5.55	0.0002	P	86.6
4	☐	1000.000	843.956	255.57	0.0077	P	8.9
5	☐	2500.000	2888.761	869.50	0.0260	P	3.6
6	☐	5000.000	5379.228	1552.93	0.0482	P	2.8
7	☐	10000.000	10389.565	2944.89	0.0930	P	6.4
8	☐	20000.000	19669.618	5476.30	0.1759	P	1.2
9	☐			11.11	0.0003	P	42.1

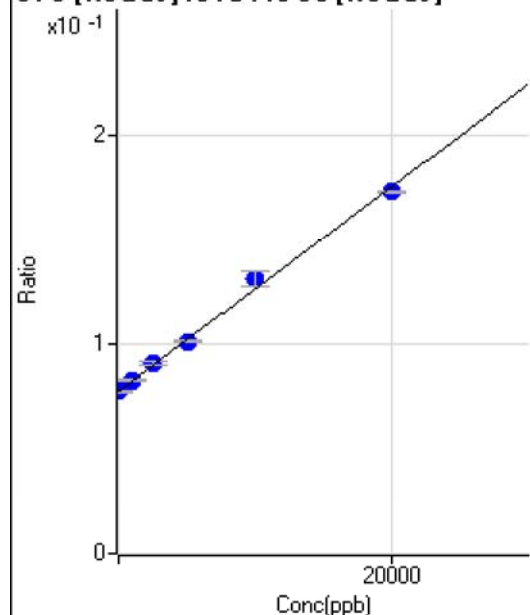
$$y = 8.9361\text{E-}006 * x + 1.6157\text{E-}004$$

$$R = 0.9992$$

$$DL = 46.99$$

Weight: <None>

Min Conc: 0

34 S [NoGas] ISTD:45 Sc [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	1.002	372280.17	0.0774	P	1.7
2	☐	0.000					
3	☐	0.000	-1.002	378509.16	0.0774	P	0.7
4	☐	1000.000	1083.400	405241.82	0.0827	P	1.3
5	☐	2500.000	2749.487	436442.51	0.0908	P	1.6
6	☐	5000.000	4823.303	492924.76	0.1009	P	0.6
7	☐	10000.000	10962.400	607600.34	0.1309	P	5.7
8	☐	20000.000	19527.618	828151.18	0.1728	P	0.6
9	☐			353568.43	0.0780	P	2.8

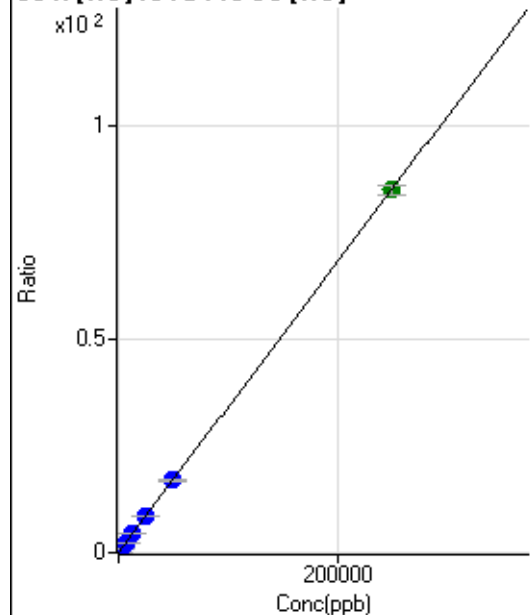
$$y = 4.8844\text{E-}006 * x + 0.0774$$

$$R = 0.9982$$

$$DL = 564.5$$

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	2019.69	0.0595	P	11.3
2	☐	50.000					
3	☐	500.000	473.143	7674.66	0.2205	P	2.8
4	☐	2500.000	2610.333	31399.84	0.9477	P	6.0
5	☐	6250.000	6314.266	73888.62	2.2080	P	2.3
6	☐	12500.000	12886.208	142913.33	4.4441	P	4.9
7	☐	25000.000	25172.418	273259.16	8.6245	P	3.0
8	☐	50000.000	49579.372	526751.42	16.9290	P	2.5
9	☐	250000.00	250044.91	2735434.18	85.1377	A	2.8

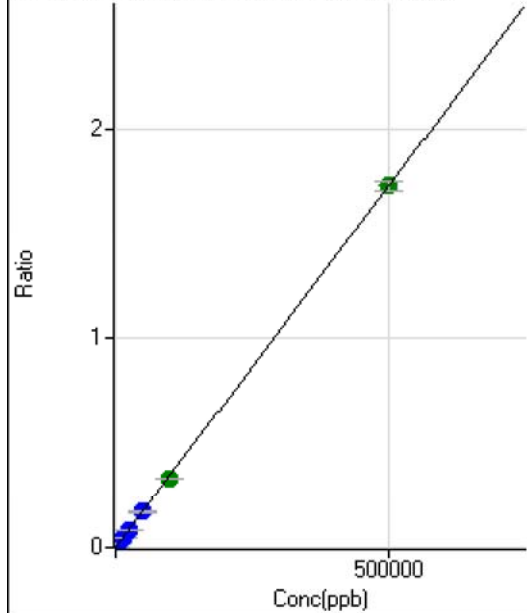
$$y = 3.4025\text{E-}004 * x + 0.0595$$

$$R = 1.0000$$

$$DL = 59.49$$

Weight: <None>

Min Conc: 0

43 Ca [NoGas] ISTD:45 Sc [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	616.71	0.0001	P	14.3
2	☐	50.000					
3	☐	500.000	437.542	8035.99	0.0016	P	4.3
4	☐	5000.000	4919.273	84051.58	0.0171	P	2.2
5	☐	12500.000	12359.923	206147.77	0.0429	P	0.9
6	☐	25000.000	23856.426	403674.00	0.0827	P	0.9
7	☐	50000.000	49904.156	801763.89	0.1728	P	6.1
8	☐	100000.00	95986.416	1592537.79	0.3322	A	1.0
9	☐	500000.00	500873.85	7859460.59	1.7331	A	2.4

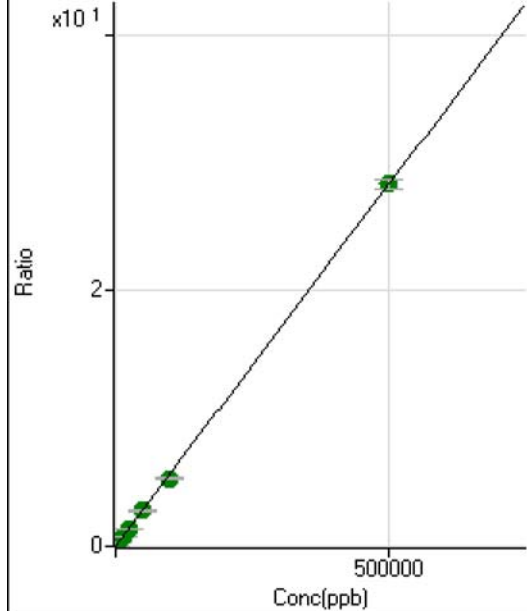
$$y = 3.4600\text{E-}006 * x + 1.2837\text{E-}004$$

$$R = 1.0000$$

$$DL = 15.93$$

Weight: <None>

Min Conc: 0

44 Ca [NoGas] ISTD:45 Sc [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	12959.38	0.0027	P	4.9
2	☐	50.000					
3	☐	500.000	454.453	139102.61	0.0284	P	1.2
4	☐	5000.000	4924.666	1380474.98	0.2817	A	1.6
5	☐	12500.000	12303.765	3362528.24	0.6997	A	1.1
6	☐	25000.000	23808.909	6598793.33	1.3514	A	0.7
7	☐	50000.000	49518.275	13030397.60	2.8077	A	5.5
8	☐	100000.00	94237.705	25600425.92	5.3409	A	1.1
9	☐	500000.00	501265.89	128773784.8	28.3974	A	2.9

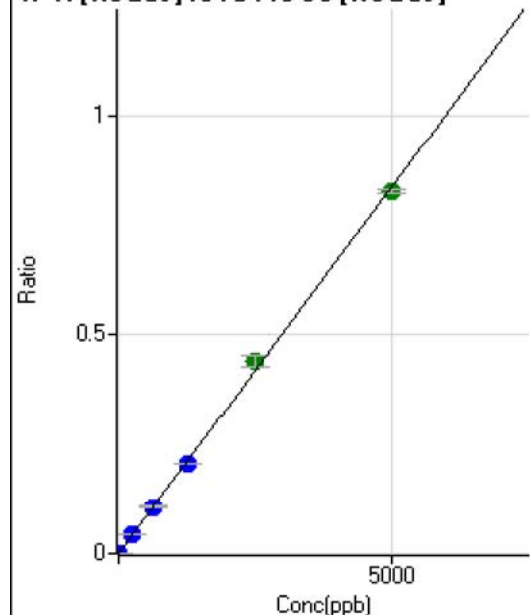
$$y = 5.6646\text{E-}005 * x + 0.0027$$

$$R = 0.9999$$

$$DL = 6.968$$

Weight: <None>

Min Conc: 0

47 Ti [NoGas] ISTD : 45 Sc [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	127.78	0.0000	P	11.2
2	☐	0.500					
3	☐	5.000	4.756	4023.00	0.0008	P	3.1
4	☐	250.000	253.376	207918.69	0.0424	P	1.6
5	☐	625.000	641.445	515892.55	0.1074	P	2.0
6	☐	1250.000	1233.550	1007948.52	0.2064	P	0.9
7	☐	2500.000	2617.308	2032562.37	0.4380	A	5.5
8	☐	5000.000	4943.234	3964715.32	0.8271	A	0.9
9	☐			2091.91	0.0005	P	10.9

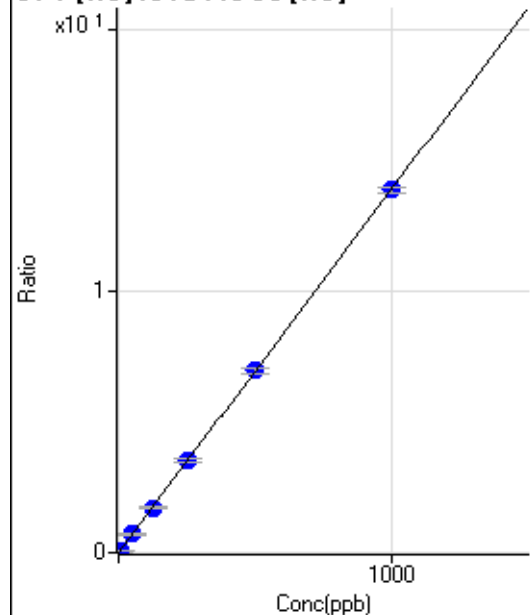
$$y = 1.6732E-004 * x + 2.6587E-005$$

$$R = 0.9996$$

$$DL = 0.05362$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4.44	0.0001	P	45.6
2	☐	0.500					
3	☐	5.000	4.355	2107.97	0.0606	P	4.1
4	☐	50.000	51.041	23487.72	0.7085	P	3.9
5	☐	125.000	124.223	57701.63	1.7241	P	0.4
6	☐	250.000	253.654	113229.52	3.5203	P	4.2
7	☐	500.000	501.429	220488.09	6.9589	P	2.9
8	☐	1000.000	998.421	431172.21	13.8561	P	1.9
9	☐			181.11	0.0056	P	2.6

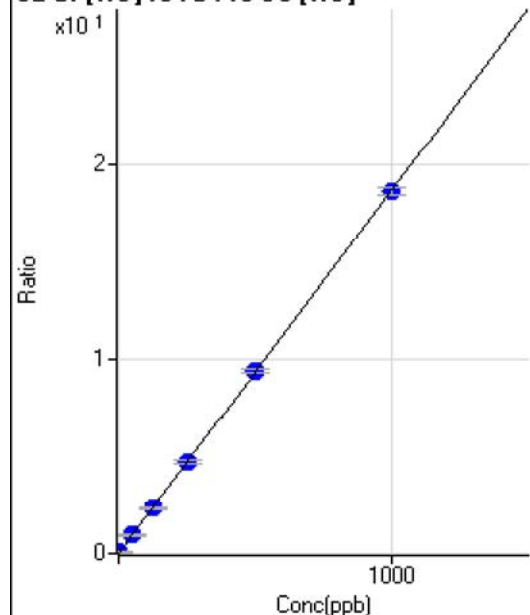
$$y = 0.0139 * x + 1.3161E-004$$

$$R = 1.0000$$

$$DL = 0.01296$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	385.57	0.0114	P	3.1
2	☐	0.200					
3	☐	2.000	2.043	1721.25	0.0495	P	3.2
4	☐	50.000	50.543	31622.53	0.9540	P	4.4
5	☐	125.000	124.168	77881.86	2.3271	P	0.9
6	☐	250.000	253.722	152563.98	4.7434	P	4.3
7	☐	500.000	502.923	297558.31	9.3911	P	2.8
8	☐	1000.000	997.685	579361.04	18.6186	P	2.0
9	☐			23555.60	0.7334	P	4.9

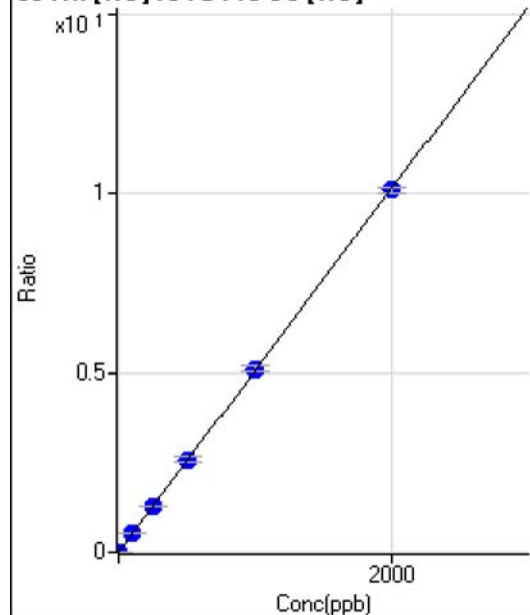
$$y = 0.0187 * x + 0.0114$$

$$R = 1.0000$$

$$DL = 0.05595$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	52.22	0.0015	P	36.6
2	☐	0.100					
3	☐	1.000	0.917	215.56	0.0062	P	11.2
4	☐	100.000	103.830	17500.05	0.5282	P	5.9
5	☐	250.000	251.968	42821.30	1.2795	P	1.2
6	☐	500.000	511.158	83422.92	2.5942	P	4.9
7	☐	1000.000	1006.088	161732.36	5.1045	P	2.9
8	☐	2000.000	1993.729	314723.56	10.1138	P	1.9
9	☐			1619.01	0.0504	P	4.4

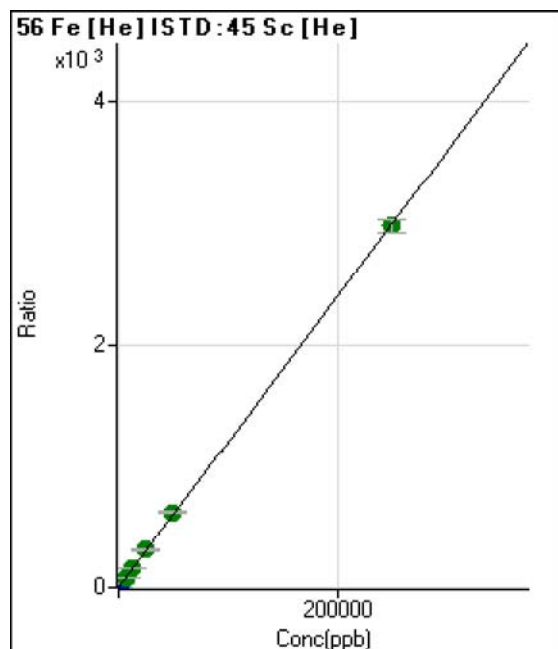
$$y = 0.0051 * x + 0.0015$$

$$R = 1.0000$$

$$DL = 0.3337$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	864.87	0.0255	P	8.9
2	☐	5.000					
3	☐	50.000	49.125	21366.83	0.6139	P	1.7
4	☐	2500.000	2670.543	1060937.52	32.0140	P	5.2
5	☐	6250.000	6579.427	2638355.62	78.8357	A	1.0
6	☐	12500.000	13267.613	5111215.33	158.9486	A	5.1
7	☐	25000.000	25920.164	9837804.04	310.5044	A	3.1
8	☐	50000.000	52108.498	19423367.56	624.1955	A	2.0
9	☐	250000.00	249437.96	95984628.07	2,987.862	A	3.5

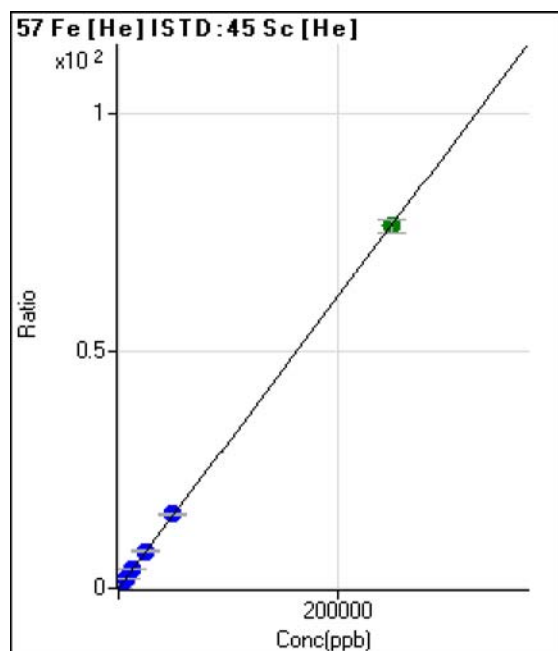
$$y = 0.0120 * x + 0.0255$$

$$R = 1.0000$$

$$DL = 0.5679$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	35.19	0.0010	P	19.8
2	☐	5.000					
3	☐	50.000	42.638	490.77	0.0141	P	14.1
4	☐	2500.000	2624.888	26696.55	0.8055	P	5.1
5	☐	6250.000	6367.069	65345.79	1.9525	P	0.4
6	☐	12500.000	12934.170	127508.87	3.9653	P	5.0
7	☐	25000.000	25656.403	249172.68	7.8645	P	3.1
8	☐	50000.000	51152.514	487900.63	15.6789	P	1.8
9	☐	250000.00	249677.97	2458380.87	76.5256	A	3.6

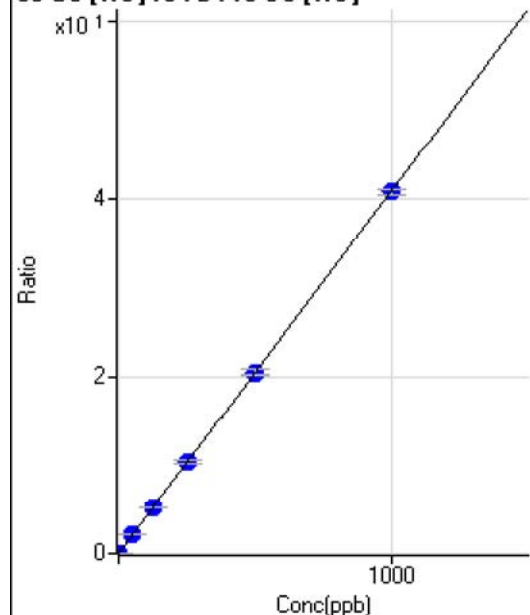
$$y = 3.0649E-004 * x + 0.0010$$

$$R = 1.0000$$

$$DL = 2.01$$

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	84.45	0.0025	P	17.8
2	☐	0.100					
3	☐	1.000	0.898	1364.54	0.0392	P	9.0
4	☐	50.000	51.835	70338.72	2.1218	P	4.2
5	☐	125.000	125.555	171885.64	5.1360	P	0.7
6	☐	250.000	254.890	335261.35	10.4241	P	4.4
7	☐	500.000	499.938	647738.82	20.4433	P	2.9
8	☐	1000.000	998.647	1270697.19	40.8339	P	1.7
9	☐			15564.42	0.4844	P	3.8

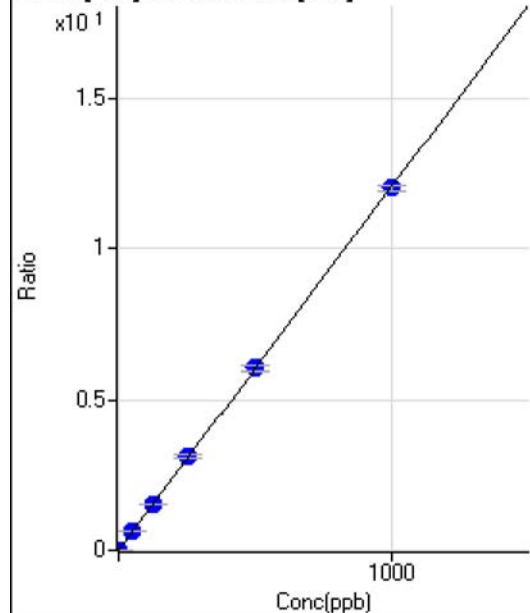
$$y = 0.0409 * x + 0.0025$$

$$R = 1.0000$$

$$DL = 0.03235$$

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	142.23	0.0042	P	15.0
2	☐	0.100					
3	☐	1.000	1.001	565.58	0.0163	P	4.0
4	☐	50.000	51.723	20795.78	0.6274	P	4.6
5	☐	125.000	127.288	51463.76	1.5378	P	1.6
6	☐	250.000	256.459	99522.11	3.0941	P	4.2
7	☐	500.000	501.472	191567.87	6.0462	P	3.0
8	☐	1000.000	997.277	374036.84	12.0199	P	1.8
9	☐			12476.88	0.3883	P	2.3

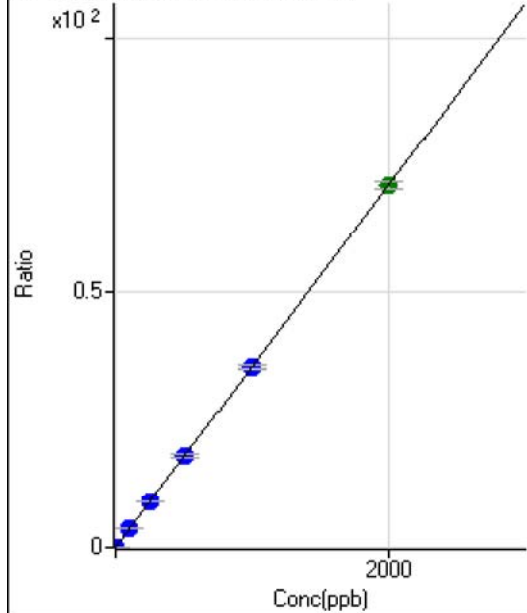
$$y = 0.0120 * x + 0.0042$$

$$R = 1.0000$$

$$DL = 0.157$$

Weight: <None>

Min Conc: 0

^{63}Cu [He] ISTD: ^{45}Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	517.80	0.0153	P	8.4
2	☐	0.200					
3	☐	2.000	1.860	2835.90	0.0815	P	3.1
4	☐	100.000	103.103	122172.14	3.6859	P	4.6
5	☐	250.000	249.928	298297.73	8.9132	P	0.5
6	☐	500.000	507.321	581443.41	18.0769	P	4.1
7	☐	1000.000	997.794	1126058.02	35.5387	P	2.7
8	☐	2000.000	1999.127	2215158.75	71.1880	A	2.1
9	☐			5637.90	0.1755	P	4.1

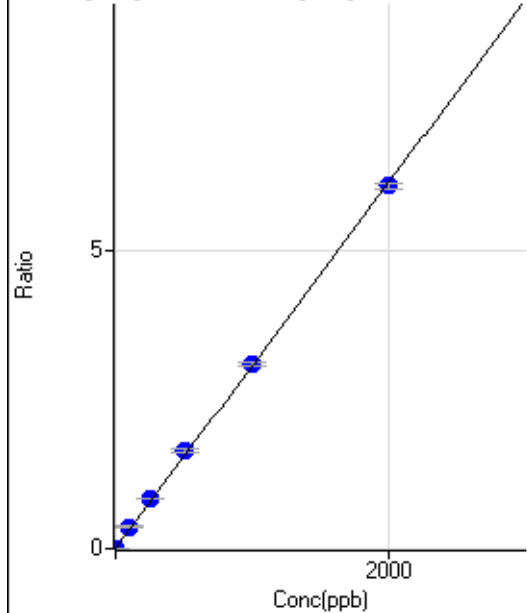
$$y = 0.0356 * x + 0.0153$$

$$R = 1.0000$$

$$DL = 0.1076$$

Weight: <None>

Min Conc: 0

 ^{66}Zn [He] ISTD: ^{45}Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	116.67	0.0034	P	9.5
2	☐	0.200					
3	☐	2.000	2.323	367.79	0.0106	P	4.8
4	☐	100.000	117.161	12027.58	0.3631	P	6.5
5	☐	250.000	273.773	28238.92	0.8438	P	1.5
6	☐	500.000	534.922	52922.74	1.6454	P	4.4
7	☐	1000.000	1007.504	98113.58	3.0959	P	1.8
8	☐	2000.000	1983.688	189590.59	6.0923	P	1.6
9	☐			1793.48	0.0558	P	1.4

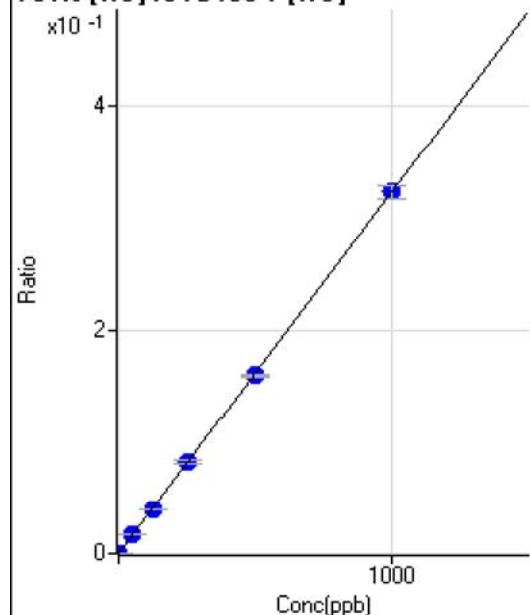
$$y = 0.0031 * x + 0.0034$$

$$R = 0.9998$$

$$DL = 0.3177$$

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	5.56	0.0000	P	36.2
2	☐	0.100					
3	☐	1.000	1.108	89.51	0.0004	P	1.4
4	☐	50.000	52.662	3777.10	0.0171	P	6.2
5	☐	125.000	123.330	9102.46	0.0399	P	0.6
6	☐	250.000	253.163	17986.47	0.0819	P	4.0
7	☐	500.000	492.595	34928.03	0.1594	P	1.3
8	☐	1000.000	1002.987	68360.60	0.3245	P	3.6
9	☐			125.93	0.0006	P	14.8

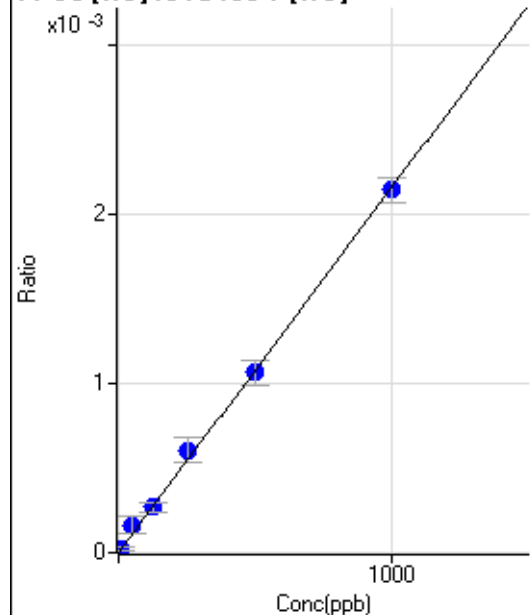
$$y = 3.2356\text{E-}004 * x + 2.4504\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.08222$$

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	11.072	5.55	0.0000	P	125.5
4	☐	50.000	75.543	35.55	0.0002	P	63.9
5	☐	125.000	124.072	61.11	0.0003	P	20.1
6	☐	250.000	281.640	133.34	0.0006	P	22.9
7	☐	500.000	493.281	233.34	0.0011	P	13.9
8	☐	1000.000	994.258	452.24	0.0021	P	6.9
9	☐			1.11	0.0000	P	173.2

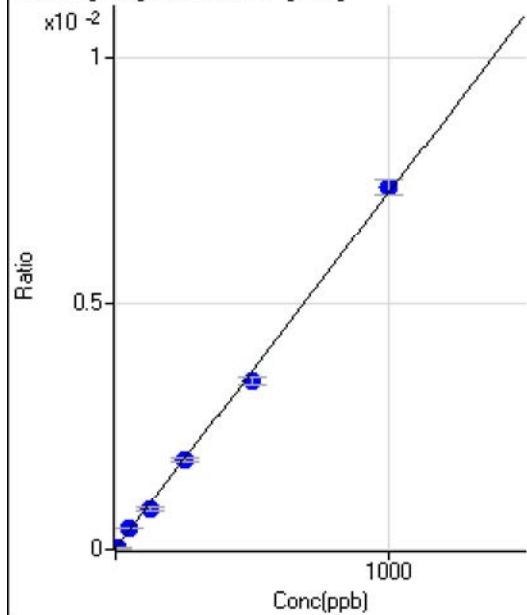
$$y = 2.1590\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9992$$

$$DL = 0$$

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	4.32	0.0000	P	110.0
2	☐	0.500					
3	☐	5.000	0.254	4.94	0.0000	P	78.1
4	☐	50.000	56.612	95.06	0.0004	P	4.2
5	☐	125.000	112.222	189.51	0.0008	P	10.8
6	☐	250.000	250.626	402.48	0.0018	P	4.5
7	☐	500.000	471.071	751.88	0.0034	P	5.1
8	☐	1000.000	1015.599	1552.58	0.0074	P	4.2
9	☐			0.62	0.0000	P	173.2

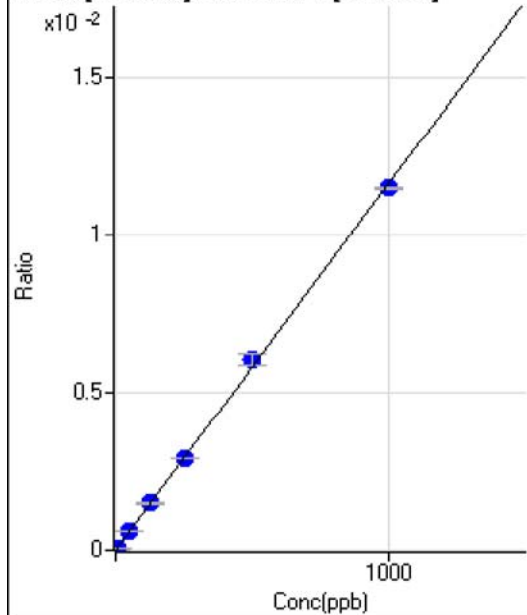
$$y = 7.2398\text{E-}006 * x + 1.9258\text{E-}005$$

$$R = 0.9993$$

$$DL = 8.775$$

Weight: <None>

Min Conc: 0

82 Se [NoGas] ISTD:89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	-18.97	0.0000	P	-352.
2	☐	0.500					
3	☐	5.000	4.978	458.12	0.0001	P	17.1
4	☐	50.000	50.993	4918.97	0.0006	P	3.5
5	☐	125.000	129.856	12410.77	0.0015	P	2.6
6	☐	250.000	251.727	24483.45	0.0029	P	0.5
7	☐	500.000	518.998	48217.69	0.0060	P	5.4
8	☐	1000.000	989.413	95100.62	0.0115	P	0.4
9	☐			117.41	0.0000	P	22.4

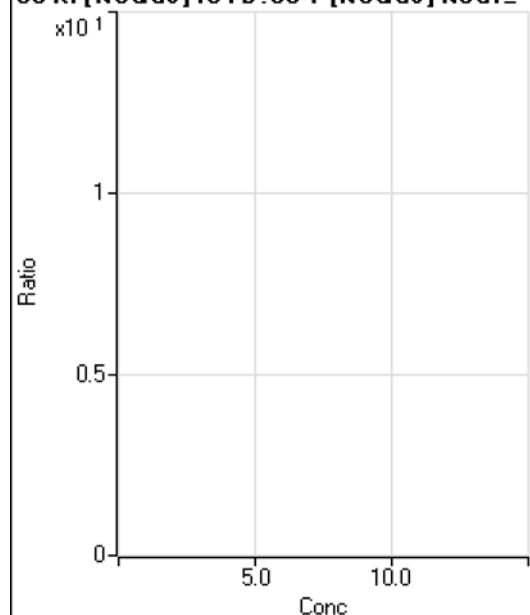
$$y = 1.1610\text{E-}005 * x - 2.4113\text{E-}006$$

$$R = 0.9997$$

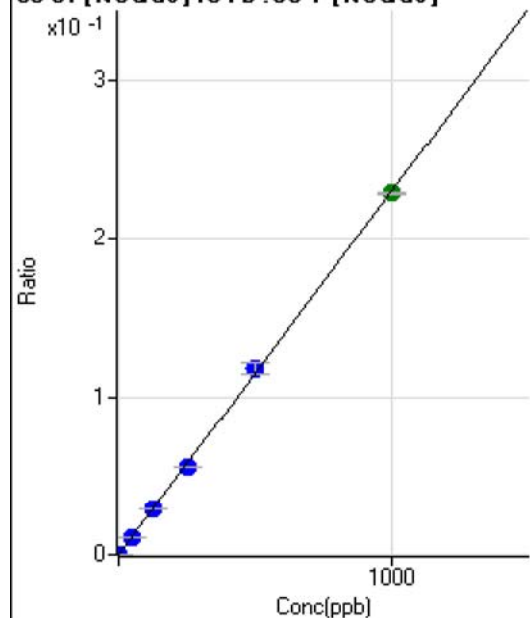
$$DL = 2.197$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			347.79	0.0000	P	18.5
2	☐						
3	☐			315.57	0.0000	P	2.7
4	☐			324.45	0.0000	P	15.0
5	☐			376.68	0.0000	P	6.2
6	☐			338.90	0.0000	P	11.8
7	☐			384.46	0.0000	P	2.2
8	☐			374.46	0.0000	P	22.8
9	☐			301.12	0.0000	P	7.3

86 Sr [NoGas] ISTD:89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	475.04	0.0001	P	16.3
2	☐	0.100					
3	☐	1.000	0.997	2378.10	0.0003	P	11.7
4	☐	50.000	49.592	95625.59	0.0115	P	1.3
5	☐	125.000	125.196	237804.81	0.0288	P	1.8
6	☐	250.000	244.199	471185.59	0.0562	P	0.2
7	☐	500.000	510.938	940491.49	0.1175	P	6.2
8	☐	1000.000	995.977	1896505.12	0.2290	A	0.3
9	☐			9837.34	0.0013	P	5.3

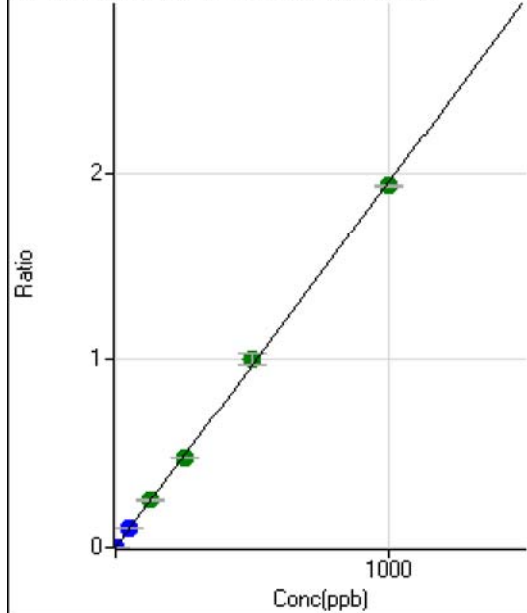
$$y = 2.2988\text{E-}004 * x + 5.7851\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.1229$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	122.23	0.0000	P	22.6
2	☐	0.100					
3	☐	1.000	0.968	15756.90	0.0019	P	3.0
4	☐	50.000	50.686	825144.63	0.0989	P	1.8
5	☐	125.000	129.812	2088079.21	0.2532	A	2.2
6	☐	250.000	248.083	4057648.57	0.4839	A	0.8
7	☐	500.000	515.930	8054784.64	1.0064	A	6.2
8	☐	1000.000	991.879	16021998.45	1.9348	A	0.8
9	☐			78380.56	0.0100	P	2.2

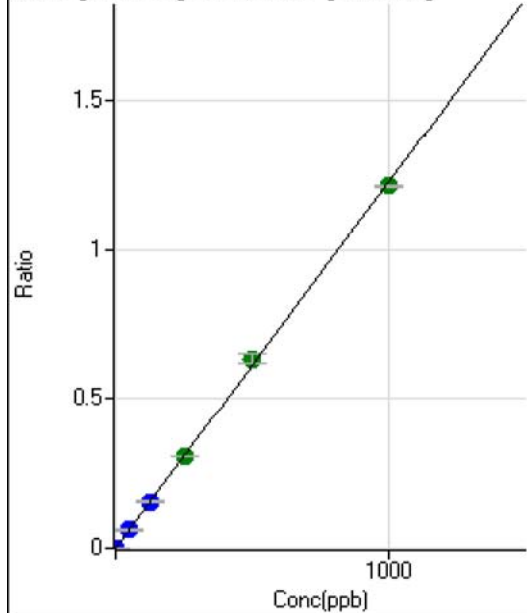
$$y = 0.0020 * x + 1.4833E-005$$

$$R = 0.9998$$

$$DL = 0.005158$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	783.40	0.0001	P	7.5
2	☐	0.100					
3	☐	1.000	0.974	10701.87	0.0013	P	0.3
4	☐	50.000	49.818	511335.54	0.0613	P	1.4
5	☐	125.000	128.176	1298789.73	0.1575	P	1.8
6	☐	250.000	251.335	2588731.22	0.3087	A	0.6
7	☐	500.000	516.998	5083359.44	0.6350	A	5.5
8	☐	1000.000	990.779	10076347.88	1.2168	A	0.5
9	☐			3142.17	0.0004	P	7.7

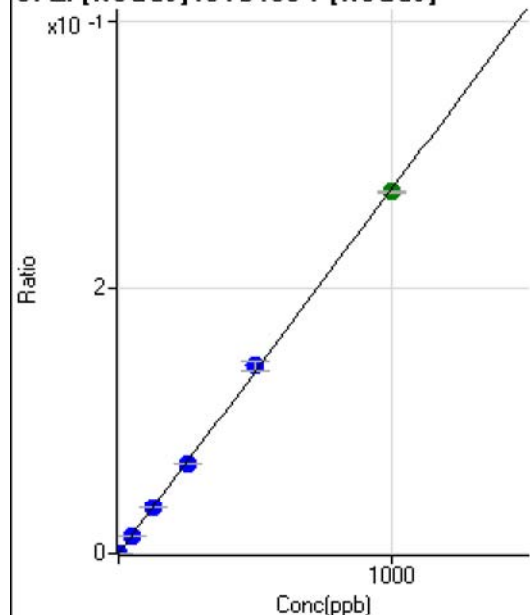
$$y = 0.0012 * x + 9.5381E-005$$

$$R = 0.9998$$

$$DL = 0.01758$$

Weight: <None>

Min Conc: 0

91 Zr [NoGas] ISTD:89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	188.90	0.0000	P	26.1
2	☐	0.100					
3	☐	1.000	0.966	2386.44	0.0003	P	5.4
4	☐	50.000	49.336	113232.18	0.0136	P	1.1
5	☐	125.000	126.410	286402.28	0.0347	P	1.3
6	☐	250.000	245.282	564831.71	0.0674	P	0.3
7	☐	500.000	514.581	1131200.68	0.1413	P	5.4
8	☐	1000.000	993.746	2259490.94	0.2729	A	0.7
9	☐			747.28	0.0001	P	16.6

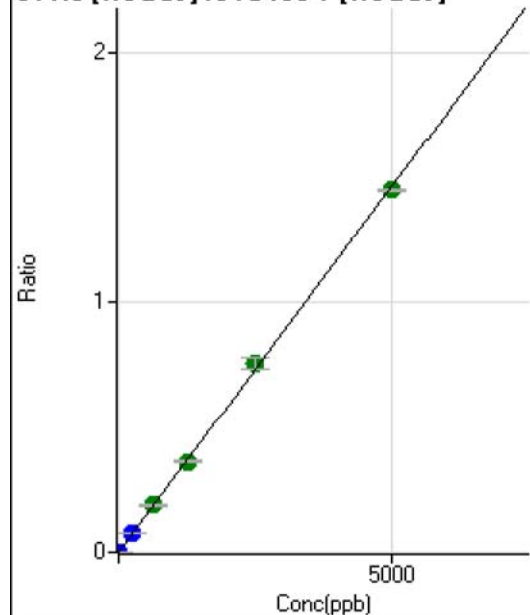
$$y = 2.7455\text{E-}004 * x + 2.3049\text{E-}005$$

$$R = 0.9998$$

$$DL = 0.06569$$

Weight: <None>

Min Conc: 0

94 Mo [NoGas] ISTD:89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	294.47	0.0000	P	34.0
2	☐	0.500					
3	☐	5.000	4.885	12142.03	0.0015	P	2.0
4	☐	250.000	252.668	617447.50	0.0740	P	2.1
5	☐	625.000	645.599	1558501.85	0.1890	A	2.5
6	☐	1250.000	1246.500	3059620.82	0.3649	A	0.9
7	☐	2500.000	2575.650	6035191.93	0.7540	A	5.8
8	☐	5000.000	4960.342	12023928.83	1.4520	A	0.8
9	☐			16093.56	0.0021	P	1.6

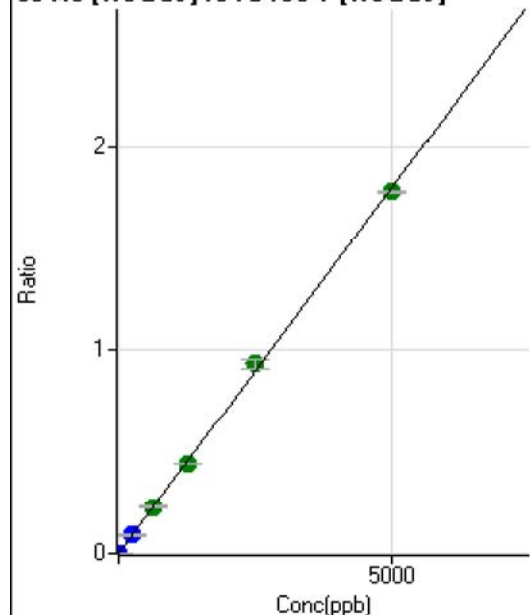
$$y = 2.9272\text{E-}004 * x + 3.5858\text{E-}005$$

$$R = 0.9998$$

$$DL = 0.125$$

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	50.00	0.0000	P	1.9
2	☐	0.500					
3	☐	5.000	4.784	14291.48	0.0017	P	1.8
4	☐	250.000	251.381	753792.25	0.0903	P	2.1
5	☐	625.000	642.059	1902367.36	0.2307	A	2.6
6	☐	1250.000	1239.218	3733757.33	0.4453	A	0.4
7	☐	2500.000	2589.232	7447724.64	0.9304	A	5.7
8	☐	5000.000	4955.878	14747155.01	1.7808	A	0.3
9	☐			25828.40	0.0033	P	3.9

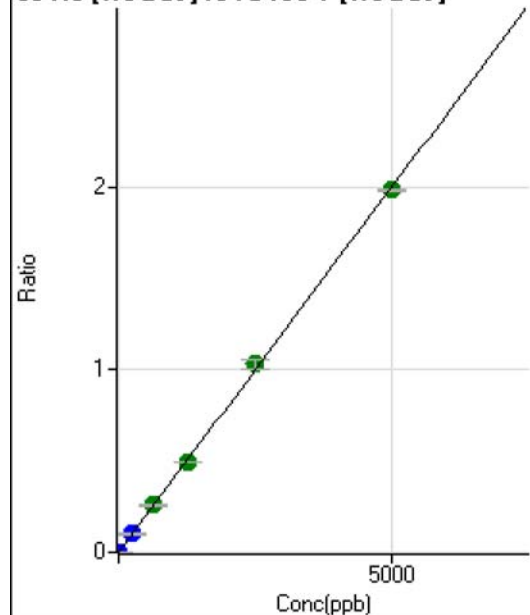
$$y = 3.5934\text{E-}004 * x + 6.0834\text{E-}006$$

$$R = 0.9998$$

$$DL = 0.0009853$$

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	130.56	0.0000	P	27.1
2	☐	0.500					
3	☐	5.000	4.738	15865.47	0.0019	P	5.5
4	☐	250.000	251.216	840448.23	0.1007	P	1.7
5	☐	625.000	645.204	2132795.77	0.2586	A	2.0
6	☐	1250.000	1235.340	4152192.63	0.4952	A	0.7
7	☐	2500.000	2568.775	8242175.10	1.0297	A	5.9
8	☐	5000.000	4966.691	16486981.27	1.9909	A	0.7
9	☐			29396.64	0.0038	P	1.1

$$y = 4.0085\text{E-}004 * x + 1.5908\text{E-}005$$

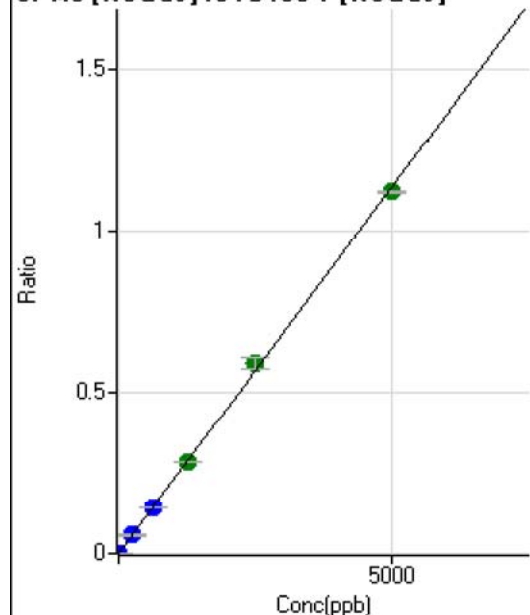
$$R = 0.9998$$

$$DL = 0.03231$$

Weight: <None>

Min Conc: 0

97 Mo [NoGas] ISTD:89 Y [NoGas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	47.22	0.0000	P	8.4
2	☐	0.500					
3	☐	5.000	4.785	9053.42	0.0011	P	2.3
4	☐	250.000	249.512	473040.96	0.0567	P	1.9
5	☐	625.000	628.228	1176924.47	0.1427	P	1.8
6	☐	1250.000	1254.781	2390196.97	0.2851	A	0.2
7	☐	2500.000	2599.726	4728194.98	0.5906	A	5.5
8	☐	5000.000	4948.563	9309632.59	1.1242	A	0.5
9	☐			16235.41	0.0021	P	4.3

$$y = 2.2718\text{E-}004 * x + 5.7381\text{E-}006$$

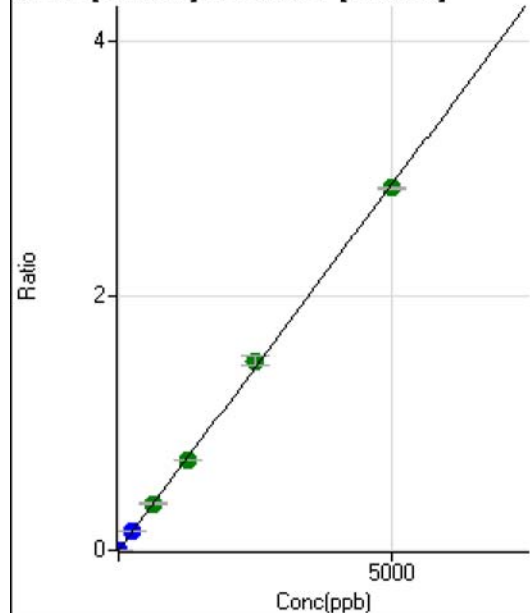
$$R = 0.9997$$

$$DL = 0.006361$$

Weight: <None>

Min Conc: 0

98 Mo [NoGas] ISTD:89 Y [NoGas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	100.00	0.0000	P	6.6
2	☐	0.500					
3	☐	5.000	4.796	22920.27	0.0028	P	2.4
4	☐	250.000	253.356	1214497.66	0.1455	P	1.6
5	☐	625.000	641.315	3037671.40	0.3684	A	2.0
6	☐	1250.000	1229.227	5920348.70	0.7061	A	0.8
7	☐	2500.000	2583.924	11882726.74	1.4842	A	5.3
8	☐	5000.000	4961.024	23597703.48	2.8497	A	0.9
9	☐			42060.75	0.0054	P	4.0

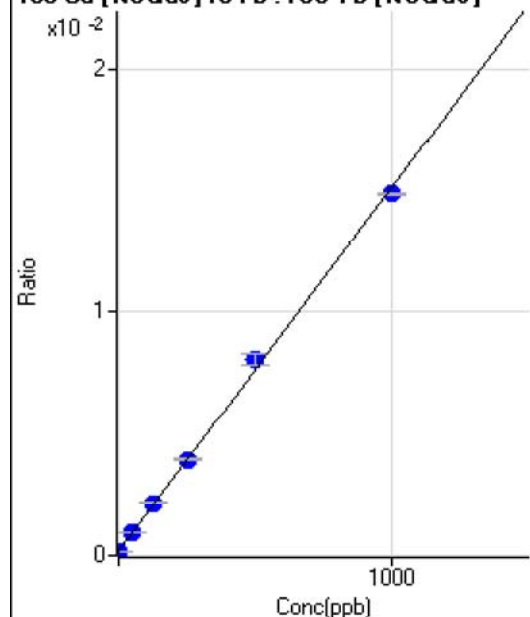
$$y = 5.7441\text{E-}004 * x + 1.2155\text{E-}005$$

$$R = 0.9998$$

$$DL = 0.00419$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1802.97	0.0002	P	2.4
2	☐	0.100					
3	☐	1.000	1.076	1972.47	0.0002	P	6.0
4	☐	50.000	52.401	10137.53	0.0010	P	1.1
5	☐	125.000	132.778	22650.47	0.0022	P	1.1
6	☐	250.000	253.748	42724.24	0.0040	P	2.4
7	☐	500.000	527.069	83664.77	0.0081	P	6.7
8	☐	1000.000	984.436	163372.05	0.0149	P	0.5
9	☐			1800.20	0.0002	P	4.3

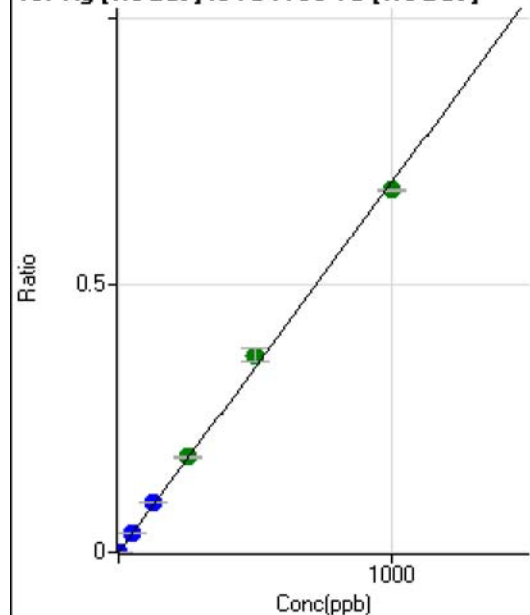
$$y = 1.4961\text{E-}005 * x + 1.7420\text{E-}004$$

$$R = 0.9994$$

$$DL = 0.8252$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	80.56	0.0000	P	17.0
2	☐	0.100					
3	☐	1.000	1.055	7641.42	0.0007	P	2.2
4	☐	50.000	53.443	390805.65	0.0369	P	1.8
5	☐	125.000	133.429	966780.24	0.0922	P	0.8
6	☐	250.000	257.338	1914181.92	0.1779	A	0.6
7	☐	500.000	532.202	3819016.88	0.3678	A	6.3
8	☐	1000.000	980.839	7431766.05	0.6779	A	0.5
9	☐			786.17	0.0001	P	8.6

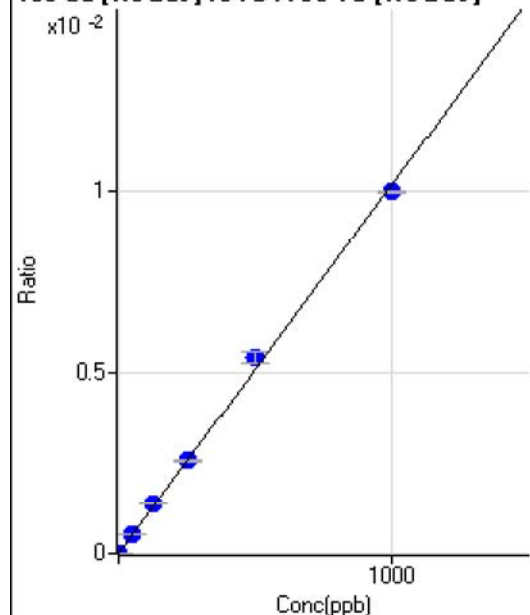
$$y = 6.9116\text{E-}004 * x + 7.7968\text{E-}006$$

$$R = 0.9992$$

$$DL = 0.005767$$

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	25.8
2	☐	0.100					
3	☐	1.000	1.238	140.28	0.0000	P	19.7
4	☐	50.000	53.789	5798.59	0.0005	P	2.2
5	☐	125.000	135.597	14467.73	0.0014	P	1.7
6	☐	250.000	254.424	27859.68	0.0026	P	1.5
7	☐	500.000	528.869	55868.21	0.0054	P	5.9
8	☐	1000.000	982.945	109615.07	0.0100	P	0.8
9	☐			81.95	0.0000	P	21.7

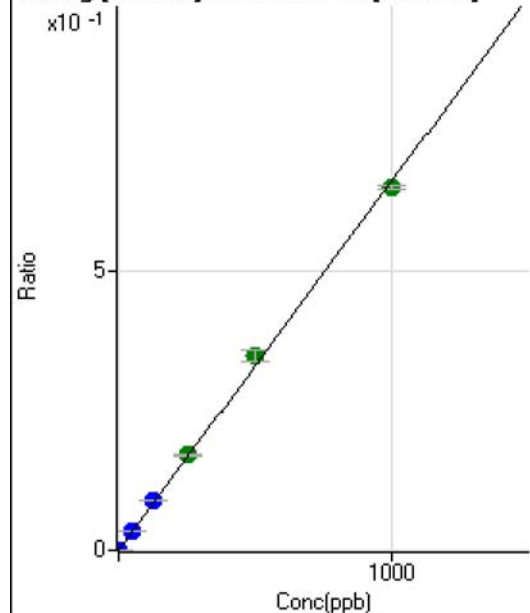
$$y = 1.0171\text{E-}005 * x + 9.4086\text{E-}007$$

$$R = 0.9993$$

$$DL = 0.07172$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	25.00	0.0000	P	31.9
2	☐	0.100					
3	☐	1.000	1.045	7185.60	0.0007	P	2.3
4	☐	50.000	53.268	372508.93	0.0352	P	1.4
5	☐	125.000	134.606	932805.30	0.0890	P	0.5
6	☐	250.000	257.845	1834180.40	0.1705	A	1.3
7	☐	500.000	528.005	3624427.56	0.3490	A	5.8
8	☐	1000.000	982.672	7121094.35	0.6496	A	0.9
9	☐			794.51	0.0001	P	17.9

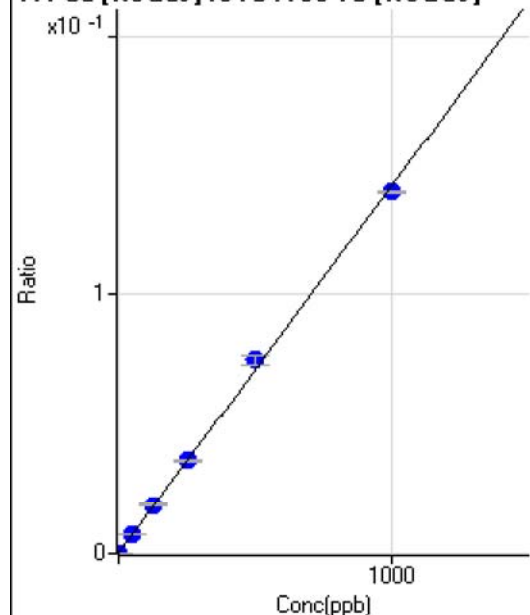
$$y = 6.6105\text{E-}004 * x + 2.4083\text{E-}006$$

$$R = 0.9994$$

$$DL = 0.003485$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1262.22	0.0001	P	2.5
2	☐	0.100					
3	☐	1.000	1.052	2813.21	0.0003	P	1.0
4	☐	50.000	52.405	80014.29	0.0076	P	0.7
5	☐	125.000	132.341	198283.38	0.0189	P	0.6
6	☐	250.000	254.275	389870.66	0.0362	P	1.5
7	☐	500.000	524.958	775453.72	0.0747	P	5.6
8	☐	1000.000	985.414	1535401.07	0.1401	P	0.6
9	☐			1668.08	0.0002	P	4.4

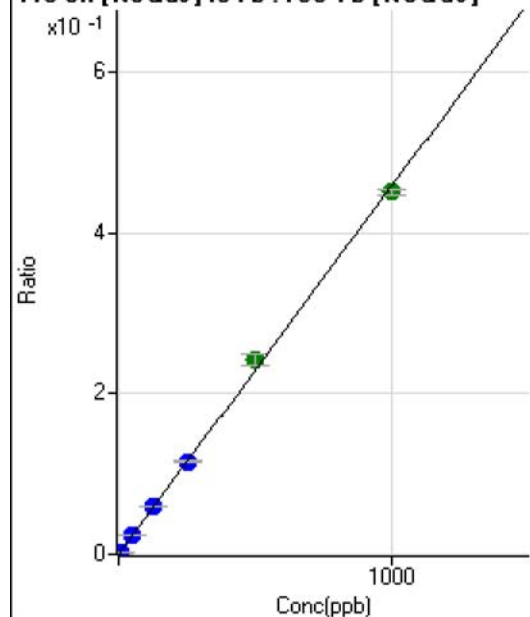
$$y = 1.4201\text{E-}004 * x + 1.2195\text{E-}004$$

$$R = 0.9995$$

$$DL = 0.064$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	566.71	0.0001	P	15.4
2	☐	0.500					
3	☐	5.000	4.964	24133.75	0.0023	P	2.5
4	☐	50.000	51.603	250520.42	0.0237	P	0.8
5	☐	125.000	131.215	630344.18	0.0601	P	1.1
6	☐	250.000	252.916	1246685.48	0.1159	P	1.6
7	☐	500.000	526.604	2503774.21	0.2412	A	6.4
8	☐	1000.000	985.112	4945278.28	0.4511	A	1.3
9	☐			24779.34	0.0024	P	4.9

$$y = 4.5787\text{E-}004 * x + 5.4845\text{E-}005$$

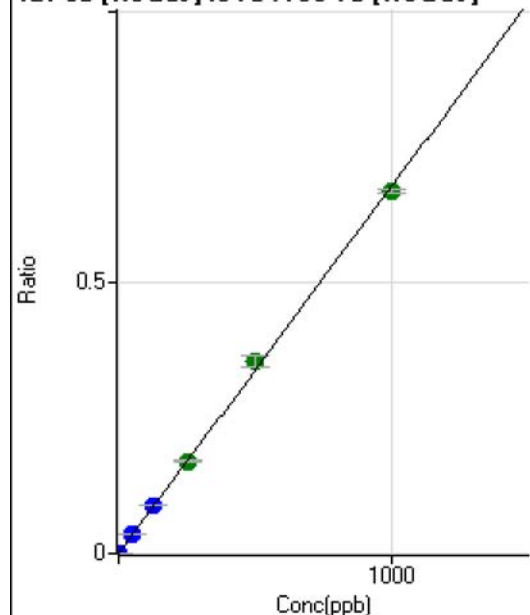
$$R = 0.9995$$

$$DL = 0.05544$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	86.11	0.0000	P	31.6
2	☐	0.200					
3	☐	2.000	1.973	13977.42	0.0013	P	4.2
4	☐	50.000	50.566	363387.31	0.0344	P	2.0
5	☐	125.000	130.036	925941.61	0.0883	P	1.0
6	☐	250.000	253.424	1852365.78	0.1721	A	1.5
7	☐	500.000	524.665	3700213.63	0.3564	A	6.1
8	☐	1000.000	986.154	7342981.15	0.6698	A	1.0
9	☐			20572.24	0.0020	P	7.5

$$y = 6.7924\text{E-}004 * x + 8.3281\text{E-}006$$

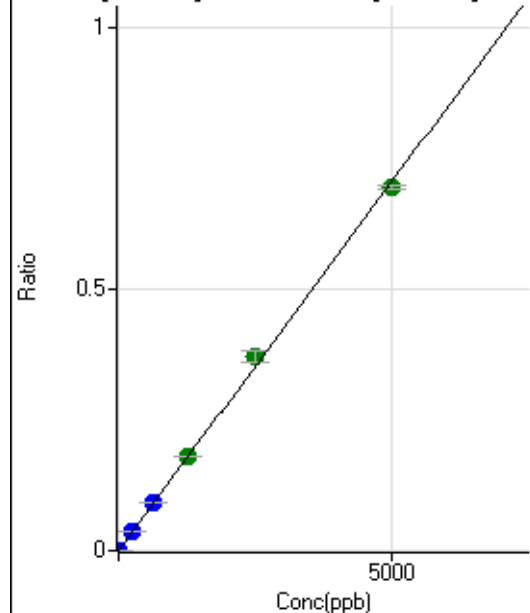
$$R = 0.9995$$

$$DL = 0.01164$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	27.78	0.0000	P	120.1
2	☐	1.000					
3	☐	10.000	10.051	14689.36	0.0014	P	2.3
4	☐	250.000	258.569	384873.90	0.0364	P	1.5
5	☐	625.000	657.847	970284.67	0.0926	P	1.5
6	☐	1250.000	1276.597	1932892.47	0.1796	A	1.8
7	☐	2500.000	2635.589	3849768.40	0.3708	A	6.6
8	☐	5000.000	4921.022	7590553.21	0.6924	A	0.9
9	☐			1455.70	0.0001	P	11.7

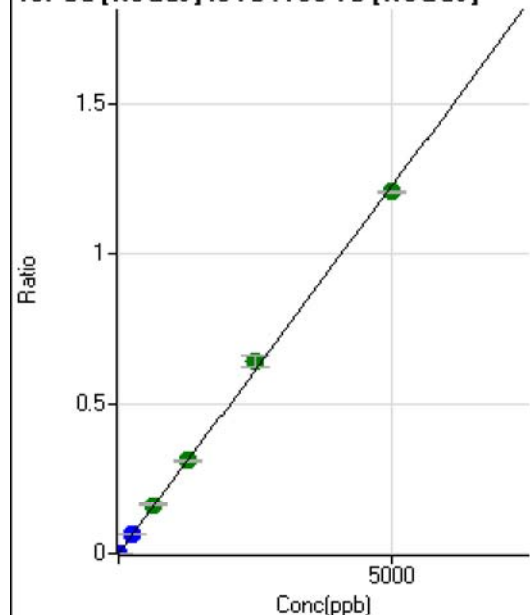
$$y = 1.4071\text{E-}004 * x + 2.6512\text{E-}006$$

$$R = 0.9994$$

$$DL = 0.06791$$

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	44.44	0.0000	P	20.9
2	☐	1.000					
3	☐	10.000	10.005	25436.42	0.0025	P	0.8
4	☐	250.000	260.960	675712.37	0.0639	P	1.6
5	☐	625.000	664.773	1705647.50	0.1627	A	1.8
6	☐	1250.000	1275.821	3360415.70	0.3123	A	1.7
7	☐	2500.000	2611.200	6635964.56	0.6392	A	6.2
8	☐	5000.000	4932.425	13235343.27	1.2073	A	0.5
9	☐			2375.33	0.0002	P	14.7

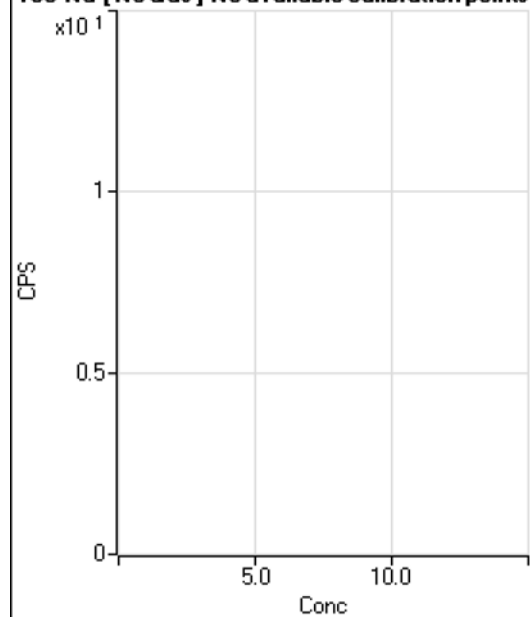
$$y = 2.4477E-004 * x + 4.2892E-006$$

$$R = 0.9996$$

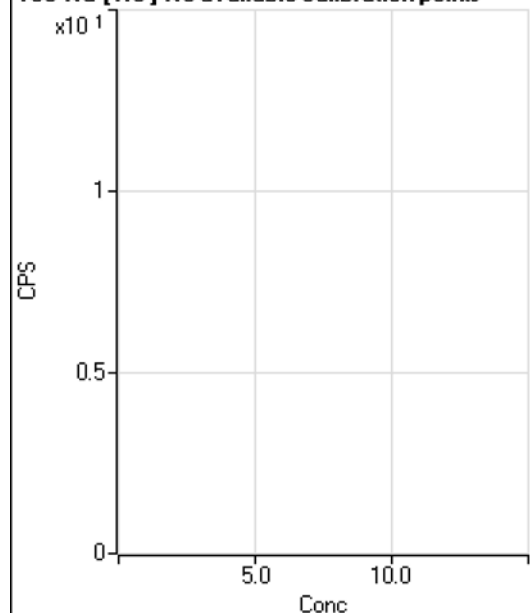
$$DL = 0.01098$$

Weight: <None>

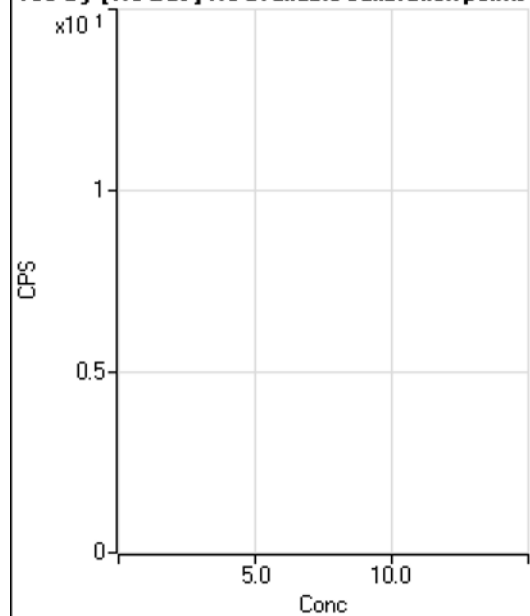
Min Conc: 0

150 Nd [No Gas] No available calibration points

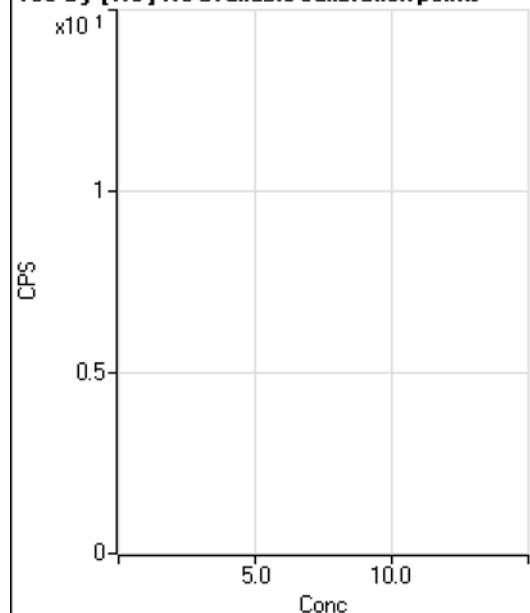
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	86.6
2	☐						
3	☐			6.67		P	100.0
4	☐			28.89		P	58.1
5	☐			57.78		P	37.1
6	☐			80.00		P	52.0
7	☐			142.23		P	21.1
8	☐			297.79		P	25.0
9	☐			86.67		P	20.4

150 Nd [He] No available calibration points

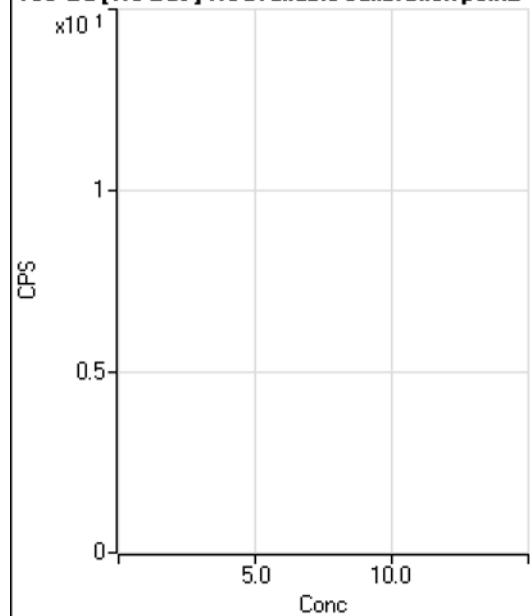
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			2.22		P	86.6
4	☐			0.00		P	
5	☐			0.00		P	
6	☐			3.33		P	0.0
7	☐			5.55		P	69.3
8	☐			8.89		P	43.3
9	☐			10.00		P	66.7

156 Dy [No Gas] No available calibration points

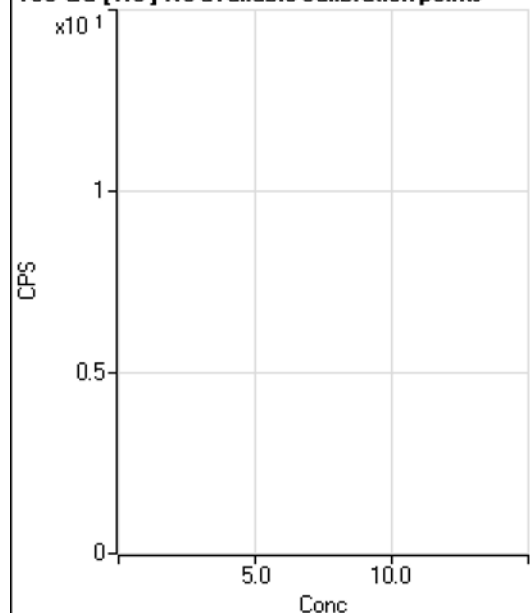
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.89		P	69.3
2	☐						
3	☐			5.55		P	86.6
4	☐			19.44		P	49.5
5	☐			19.44		P	99.0
6	☐			30.56		P	15.7
7	☐			44.44		P	60.3
8	☐			102.78		P	26.1
9	☐			91.67		P	63.0

156 Dy [He] No available calibration points

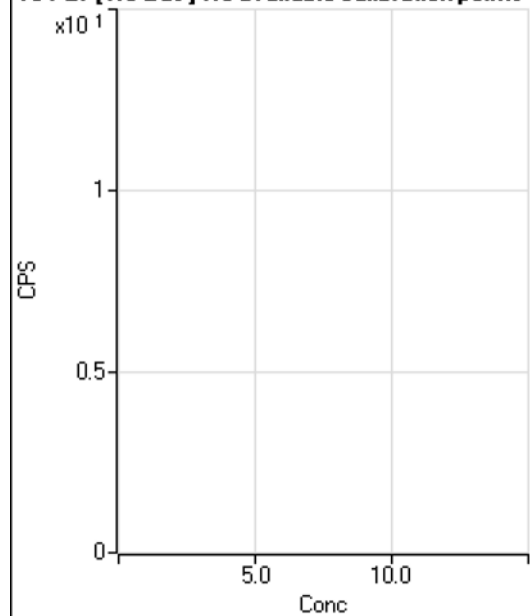
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	86.6
2	☐						
3	☐			0.00		P	
4	☐			1.11		P	173.2
5	☐			1.11		P	173.2
6	☐			1.11		P	173.2
7	☐			7.78		P	89.2
8	☐			7.78		P	49.5
9	☐			10.00		P	0.0

160 Gd [No Gas] No available calibration poin_

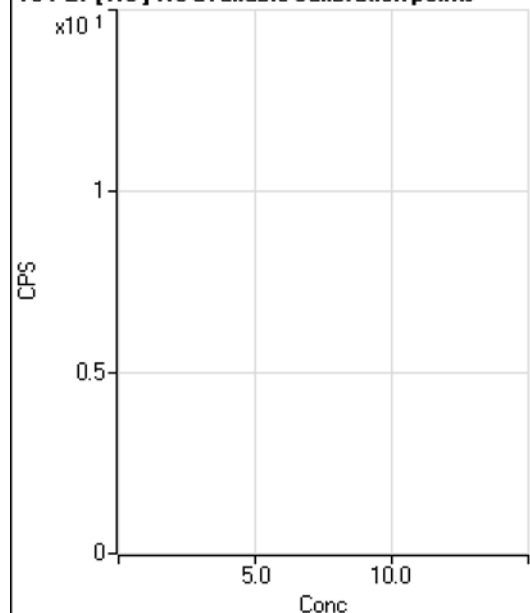
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			61.11		P	43.8
2	☐						
3	☐			83.34		P	40.0
4	☐			66.67		P	12.5
5	☐			75.00		P	29.4
6	☐			63.89		P	39.8
7	☐			66.67		P	21.6
8	☐			83.34		P	30.0
9	☐			86.12		P	27.9

160 Gd [He] No available calibration points

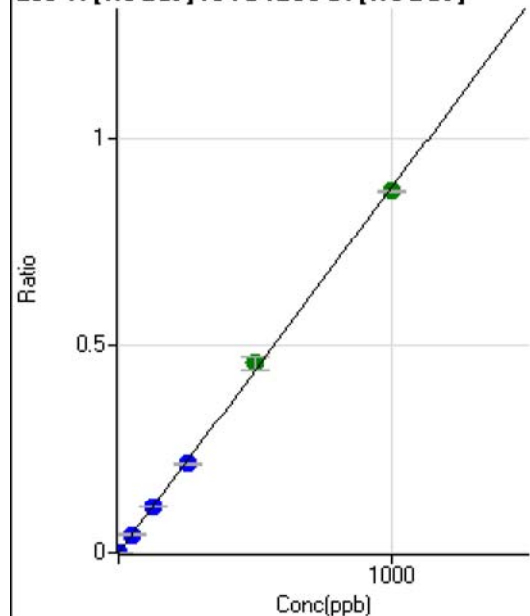
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	50.0
2	☐						
3	☐			11.11		P	45.8
4	☐			8.89		P	57.3
5	☐			11.11		P	69.3
6	☐			8.89		P	78.1
7	☐			14.44		P	13.4
8	☐			15.56		P	32.7
9	☐			15.55		P	24.8

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			36.11		P	13.3
2	☐						
3	☐			47.22		P	73.5
4	☐			44.45		P	47.2
5	☐			33.34		P	43.3
6	☐			44.45		P	39.0
7	☐			52.78		P	9.1
8	☐			27.78		P	17.3
9	☐			47.22		P	36.7

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	21.6
2	☐						
3	☐			6.67		P	132.3
4	☐			5.55		P	69.3
5	☐			5.55		P	69.3
6	☐			7.78		P	24.7
7	☐			6.67		P	50.0
8	☐			5.55		P	124.9
9	☐			10.00		P	57.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	130.56	0.0000	P	19.7
2	☐	0.100					
3	☐	1.000	0.959	5723.77	0.0009	P	7.2
4	☐	50.000	49.704	293510.62	0.0438	P	2.9
5	☐	125.000	126.522	743098.31	0.1115	P	1.2
6	☐	250.000	245.567	1477936.61	0.2164	P	1.7
7	☐	500.000	518.588	3015545.29	0.4569	A	6.8
8	☐	1000.000	991.639	6039924.18	0.8737	A	0.8
9	☐			4011.94	0.0007	P	5.1

$$y = 8.8102E-004 * x + 1.9957E-005$$

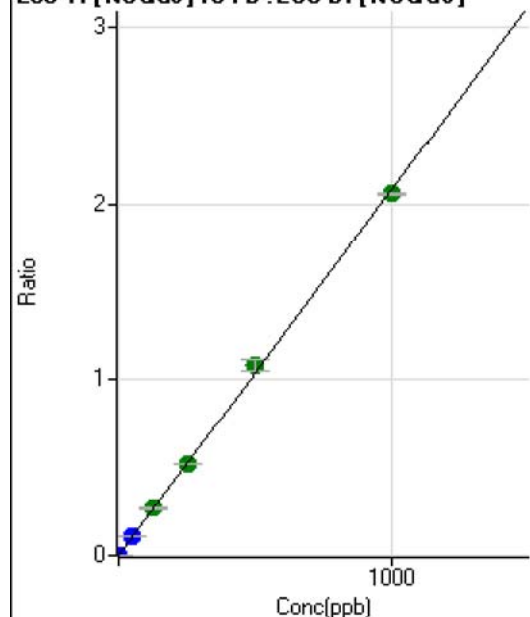
$$R = 0.9997$$

$$DL = 0.01339$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	316.69	0.0000	P	25.9
2	☐	0.100					
3	☐	1.000	0.984	13883.20	0.0021	P	2.4
4	☐	50.000	50.610	706150.10	0.1054	P	2.6
5	☐	125.000	129.360	1795067.03	0.2693	A	1.5
6	☐	250.000	251.231	3572630.94	0.5230	A	1.1
7	☐	500.000	518.104	7120817.69	1.0785	A	5.7
8	☐	1000.000	990.065	14247994.59	2.0610	A	0.3
9	☐			9456.75	0.0015	P	6.1

$$y = 0.0021 * x + 4.8443E-005$$

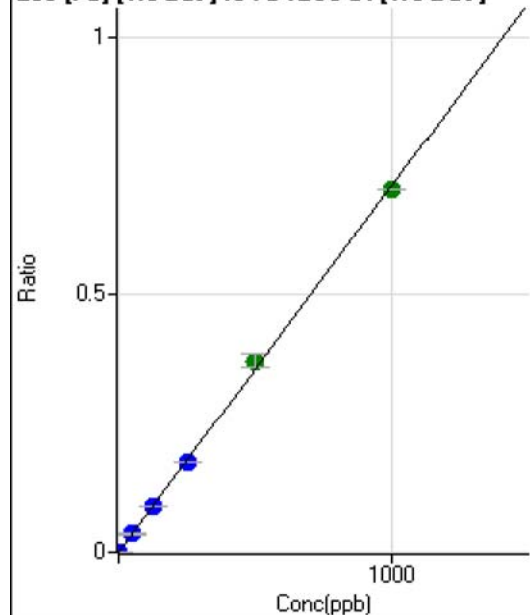
$$R = 0.9997$$

$$DL = 0.01808$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	166.67	0.0000	P	15.3
2	☐	0.100					
3	☐	1.000	0.953	4658.40	0.0007	P	3.9
4	☐	50.000	50.249	239803.89	0.0358	P	3.1
5	☐	125.000	126.657	601105.77	0.0902	P	1.6
6	☐	250.000	245.518	1194051.17	0.1748	P	1.1
7	☐	500.000	521.961	2452451.93	0.3716	A	6.7
8	☐	1000.000	989.920	4871940.62	0.7047	A	0.2
9	☐			30451.75	0.0050	P	2.3

$$y = 7.1186E-004 * x + 2.5471E-005$$

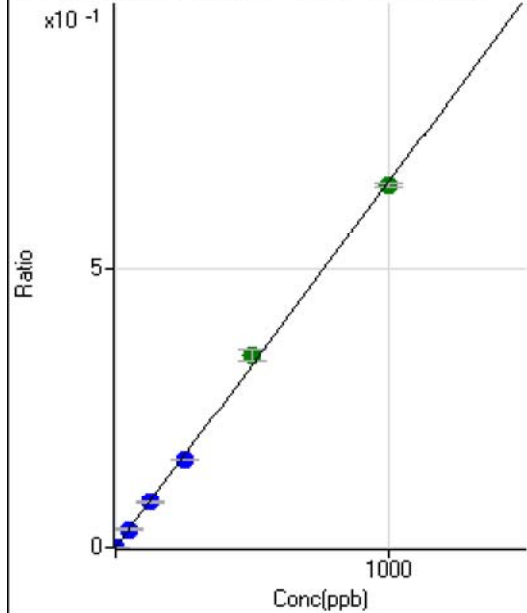
$$R = 0.9996$$

$$DL = 0.0164$$

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	129.63	0.0000	P	23.8
2	☐	0.100					
3	☐	1.000	0.984	4400.90	0.0007	P	1.6
4	☐	50.000	49.367	216774.74	0.0324	P	2.2
5	☐	125.000	124.405	543202.66	0.0815	P	1.9
6	☐	250.000	241.687	1081420.23	0.1583	P	1.6
7	☐	500.000	523.394	2263340.56	0.3428	A	5.9
8	☐	1000.000	990.487	4484988.90	0.6488	A	0.9
9	☐			25344.26	0.0041	P	2.8

$$y = 6.5497\text{E-}004 * x + 1.9794\text{E-}005$$

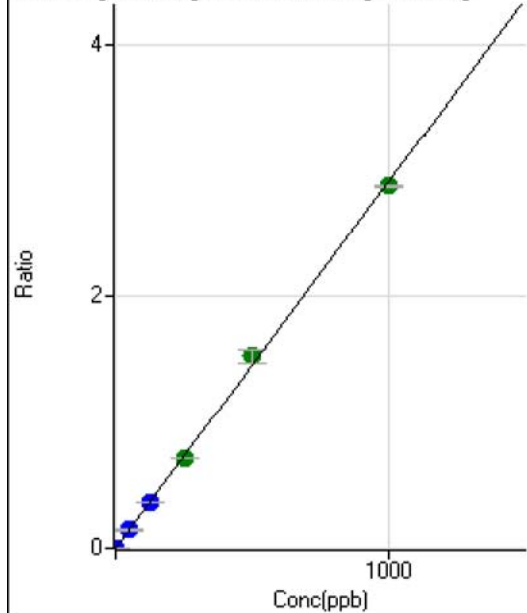
$$R = 0.9996$$

$$DL = 0.02158$$

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	633.36	0.0001	P	12.6
2	☐	0.100					
3	☐	1.000	0.975	19393.43	0.0029	P	3.1
4	☐	50.000	49.842	971176.99	0.1450	P	2.2
5	☐	125.000	126.297	2447052.06	0.3671	P	1.7
6	☐	250.000	247.086	4906000.65	0.7182	A	0.9
7	☐	500.000	521.966	10013561.30	1.5171	A	6.4
8	☐	1000.000	989.591	19883292.48	2.8761	A	0.6
9	☐			119152.30	0.0194	P	2.5

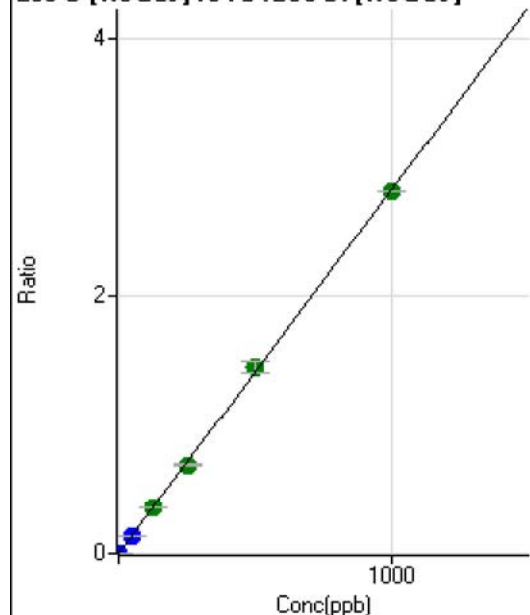
$$y = 0.0029 * x + 9.6814\text{E-}005$$

$$R = 0.9996$$

$$DL = 0.01263$$

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	33.33	0.0000	P	42.3
2	☐	0.100					
3	☐	1.000	0.948	17763.32	0.0027	P	3.6
4	☐	50.000	49.343	934205.81	0.1394	P	2.4
5	☐	125.000	127.248	2396685.30	0.3596	A	1.0
6	☐	250.000	244.773	4724861.56	0.6917	A	0.7
7	☐	500.000	510.623	9524104.12	1.4429	A	6.4
8	☐	1000.000	995.747	19452115.71	2.8137	A	0.1
9	☐			1925.25	0.0003	P	22.9

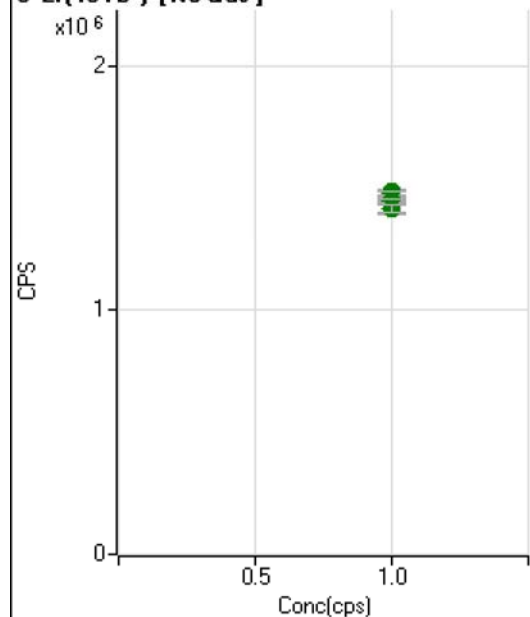
$$y = 0.0028 * x + 5.0814E-006$$

$$R = 0.9999$$

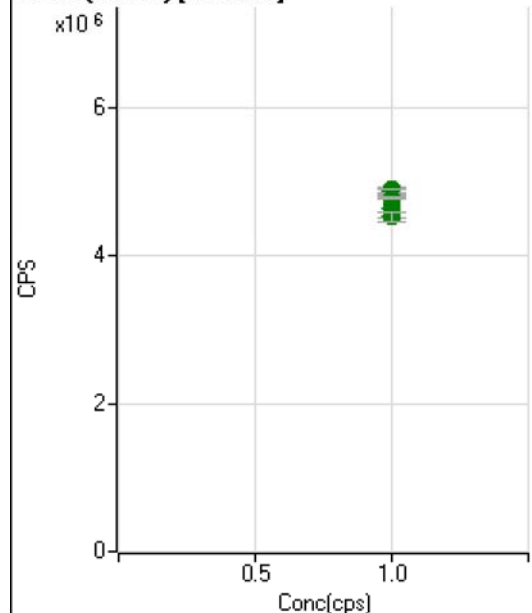
$$DL = 0.002282$$

Weight: <None>

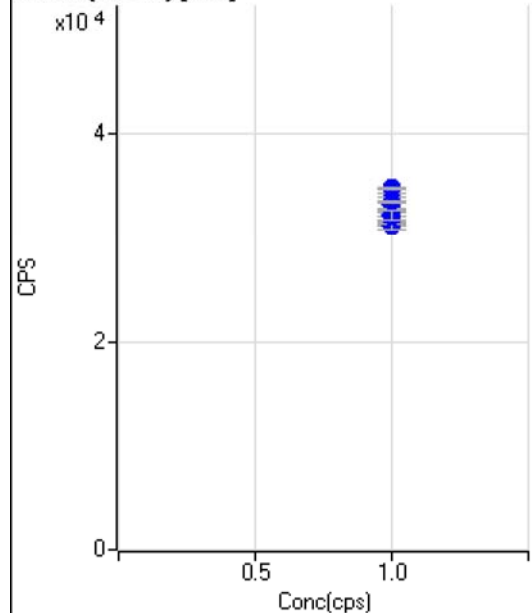
Min Conc: 0

6 Li(ISTD) [No Gas]

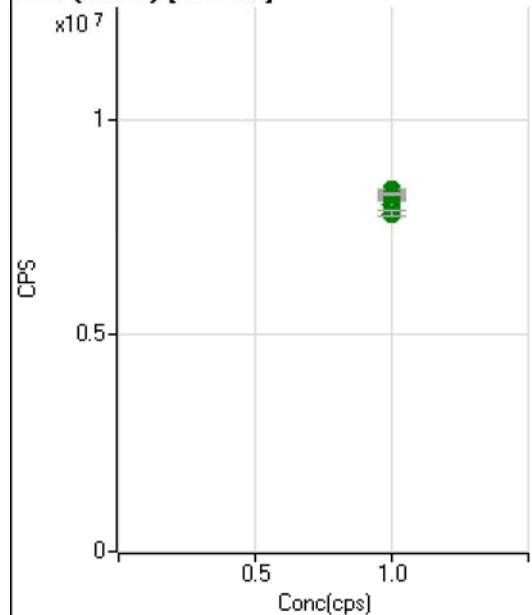
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1452892.13		A	0.5
2	☐	1.000					
3	☐	1.000		1449265.31		A	1.8
4	☐	1.000		1483150.79		A	1.3
5	☐	1.000		1459170.78		A	0.9
6	☐	1.000		1479622.62		A	1.2
7	☐	1.000		1417557.25		A	4.2
8	☐	1.000		1447516.82		A	0.8
9	☐	1.000		1416644.09		A	2.1

45 Sc(ISTD) [NoGas]

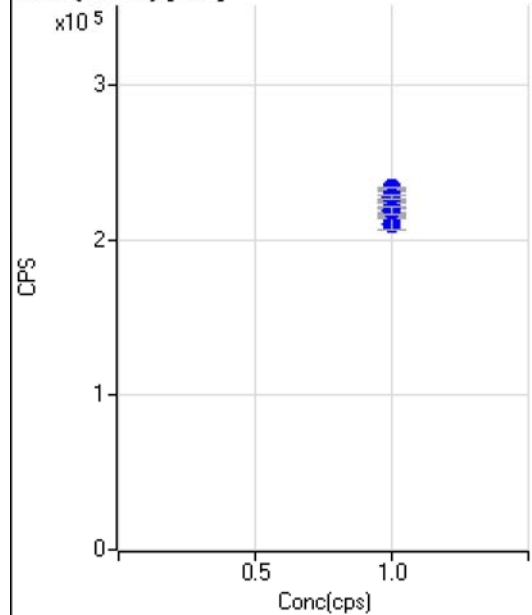
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4811217.60		A	1.7
2	☐	1.000					
3	☐	1.000		4891684.27		A	1.2
4	☐	1.000		4902051.80		A	1.6
5	☐	1.000		4806454.28		A	1.4
6	☐	1.000		4883132.40		A	0.9
7	☐	1.000		4649760.00		A	5.2
8	☐	1.000		4793558.23		A	0.8
9	☐	1.000		4536534.39		A	2.5

45 Sc(ISTD) [He]

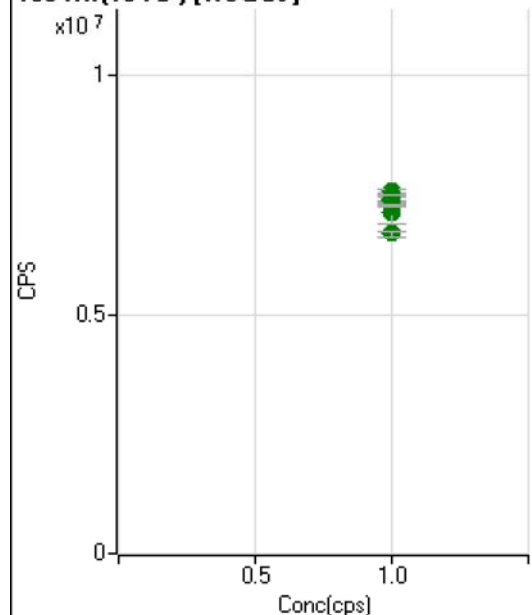
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		33959.09		P	2.1
2	☐	1.000					
3	☐	1.000		34804.27		P	0.6
4	☐	1.000		33189.52		P	4.3
5	☐	1.000		33467.82		P	0.7
6	☐	1.000		32203.85		P	4.4
7	☐	1.000		31701.46		P	2.8
8	☐	1.000		31125.76		P	2.0
9	☐	1.000		32145.82		P	2.8

89 Y (ISTD) [No Gas]

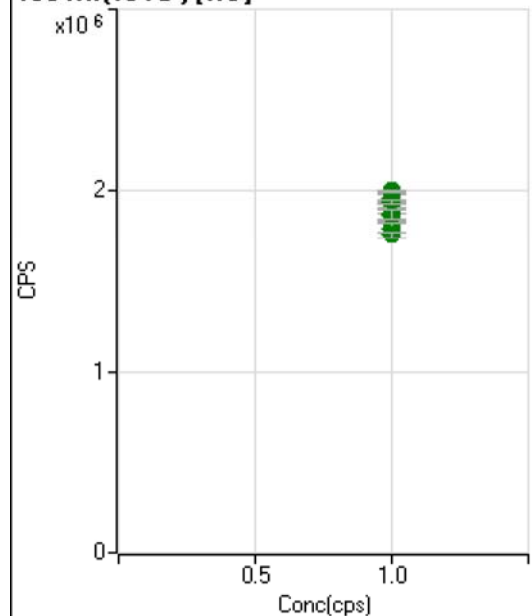
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8221082.03		A	1.9
2	☐	1.000					
3	☐	1.000		8284469.60		A	1.8
4	☐	1.000		8346303.97		A	1.8
5	☐	1.000		8247849.32		A	1.8
6	☐	1.000		8384777.72		A	0.3
7	☐	1.000		8022090.51		A	5.7
8	☐	1.000		8281137.44		A	0.6
9	☐	1.000		7836809.46		A	1.7

89 Y (ISTD) [He]

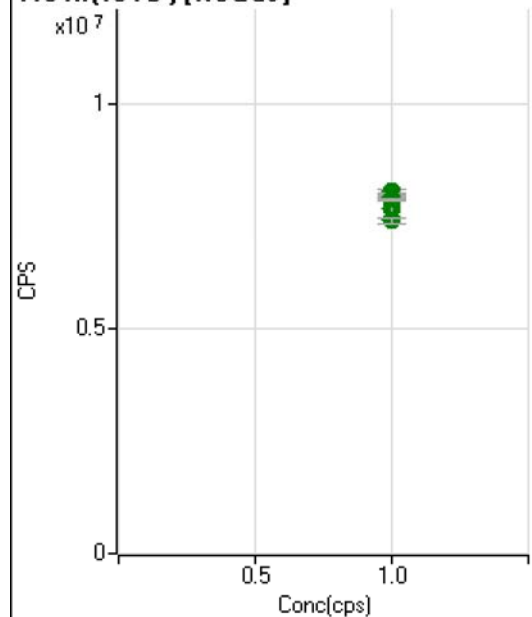
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		228331.26		P	2.9
2	☐	1.000					
3	☐	1.000		233655.57		P	0.8
4	☐	1.000		221718.74		P	4.0
5	☐	1.000		227961.70		P	0.6
6	☐	1.000		219724.33		P	3.7
7	☐	1.000		219140.02		P	1.4
8	☐	1.000		210811.31		P	3.5
9	☐	1.000		219554.97		P	2.1

103 Rh(ISTD) [NoGas]

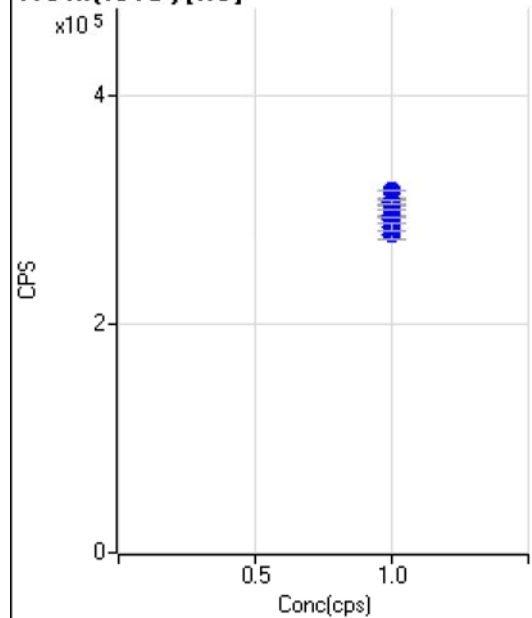
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7445959.28		A	1.2
2	☐	1.000					
3	☐	1.000		7570411.80		A	1.6
4	☐	1.000		7583690.79		A	1.2
5	☐	1.000		7413561.02		A	1.3
6	☐	1.000		7520014.23		A	0.2
7	☐	1.000		7143569.34		A	6.4
8	☐	1.000		7289103.03		A	0.7
9	☐	1.000		6707057.96		A	2.0

103 Rh(ISTD) [He]

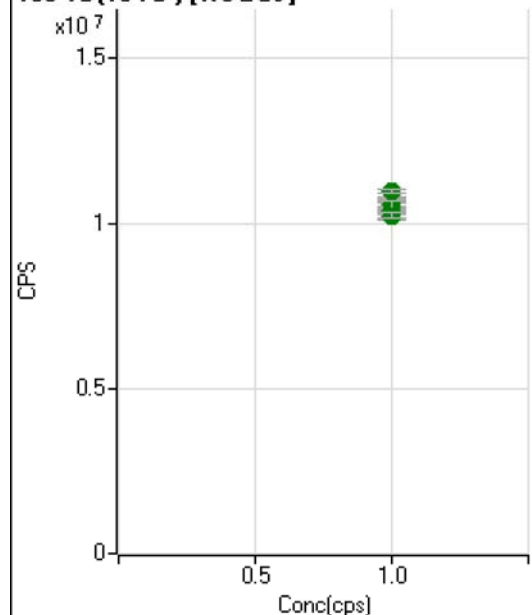
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1961549.36		A	2.1
2	☐	1.000					
3	☐	1.000		2001693.10		A	0.6
4	☐	1.000		1911712.14		A	3.4
5	☐	1.000		1941352.70		A	1.0
6	☐	1.000		1875343.86		A	3.9
7	☐	1.000		1870330.20		A	3.0
8	☐	1.000		1798274.19		A	3.2
9	☐	1.000		1759352.23		A	1.9

115 In(ISTD) [NoGas]

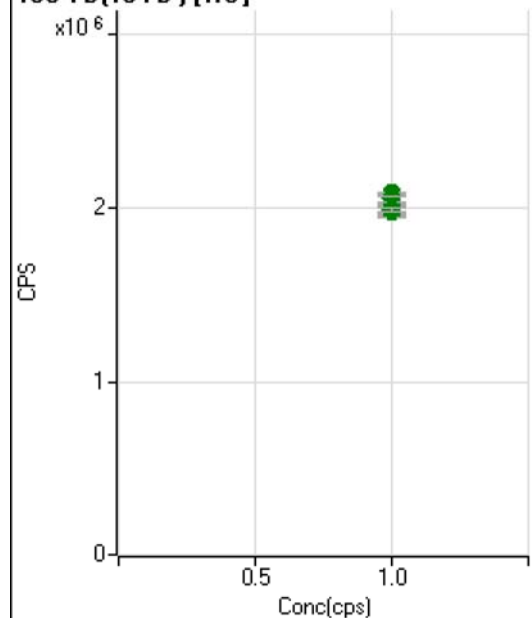
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7889305.48		A	1.1
2	☐	1.000					
3	☐	1.000		7954765.45		A	1.6
4	☐	1.000		8052199.41		A	1.3
5	☐	1.000		7947110.68		A	1.4
6	☐	1.000		8003989.93		A	0.2
7	☐	1.000		7663055.31		A	5.4
8	☐	1.000		7886914.86		A	0.7
9	☐	1.000		7405855.45		A	2.1

115 In(ISTD) [He]

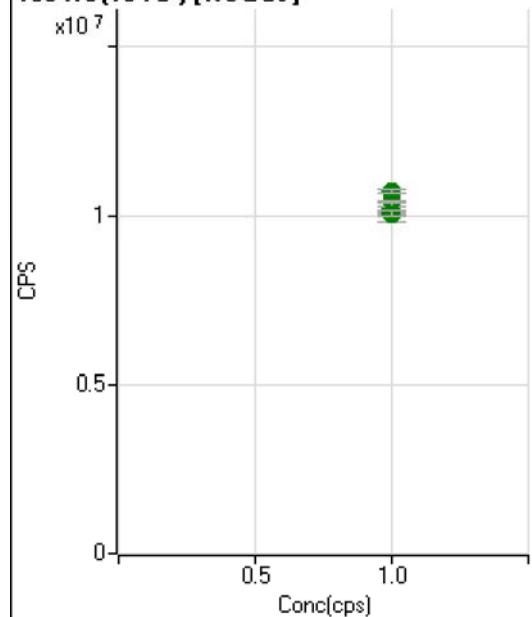
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		308815.51		P	2.3
2	☐	1.000					
3	☐	1.000		317629.64		P	0.1
4	☐	1.000		301223.83		P	3.8
5	☐	1.000		308040.92		P	1.5
6	☐	1.000		295730.74		P	4.0
7	☐	1.000		292269.63		P	1.9
8	☐	1.000		278944.74		P	3.2
9	☐	1.000		286174.55		P	1.9

159 Tb(ISTD) [No Gas]

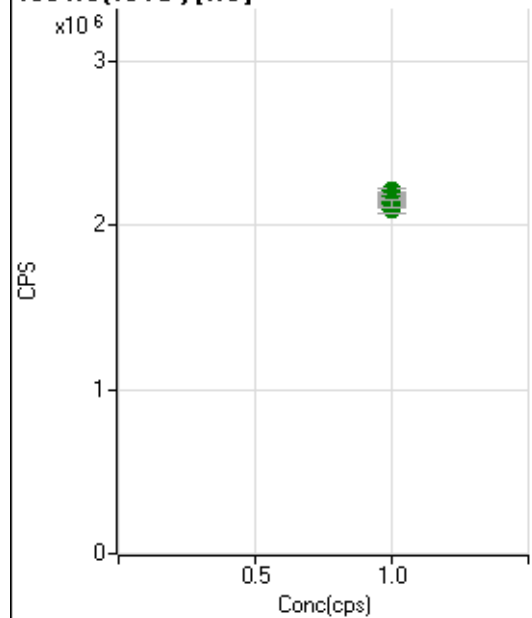
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10349065.12		A	1.6
2	☐	1.000					
3	☐	1.000		10368247.55		A	1.4
4	☐	1.000		10579013.87		A	1.1
5	☐	1.000		10482859.71		A	0.8
6	☐	1.000		10761822.06		A	1.1
7	☐	1.000		10408593.32		A	6.1
8	☐	1.000		10962877.06		A	0.9
9	☐	1.000		10252598.53		A	1.9

159 Tb(ISTD) [He]

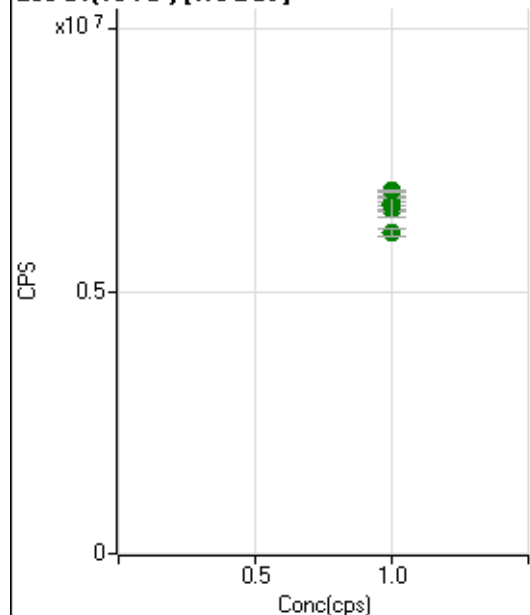
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2042259.78		A	2.5
2	☐	1.000					
3	☐	1.000		2088714.19		A	0.8
4	☐	1.000		1996983.49		A	3.2
5	☐	1.000		2054106.03		A	1.4
6	☐	1.000		1995681.10		A	4.2
7	☐	1.000		2019655.84		A	1.7
8	☐	1.000		1982051.45		A	3.3
9	☐	1.000		1992256.97		A	1.6

165 Ho(ISTD) [NoGas]

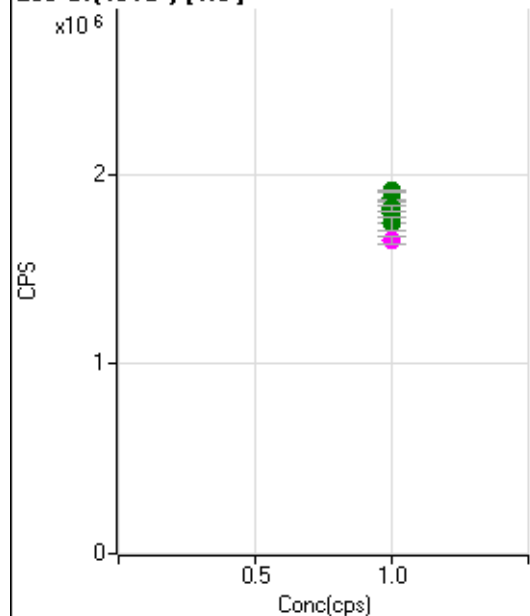
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10066569.58		A	0.8
2	☐	1.000					
3	☐	1.000		10043277.39		A	1.7
4	☐	1.000		10235200.84		A	1.1
5	☐	1.000		10195971.50		A	1.4
6	☐	1.000		10436413.17		A	0.1
7	☐	1.000		10082042.85		A	5.6
8	☐	1.000		10702840.78		A	1.1
9	☐	1.000		10050523.40		A	1.7

165 Ho(ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2153714.43		A	1.9
2	☐	1.000					
3	☐	1.000		2209431.81		A	1.1
4	☐	1.000		2103976.43		A	3.3
5	☐	1.000		2173746.17		A	1.4
6	☐	1.000		2117449.26		A	4.1
7	☐	1.000		2144046.50		A	2.2
8	☐	1.000		2094343.49		A	2.5
9	☐	1.000		2128000.58		A	2.3

209 Bi(ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6543331.01		A	0.9
2	☐	1.000					
3	☐	1.000		6623374.14		A	2.1
4	☐	1.000		6702199.76		A	2.1
5	☐	1.000		6665668.09		A	0.8
6	☐	1.000		6831527.54		A	1.2
7	☐	1.000		6616771.01		A	5.7
8	☐	1.000		6913343.79		A	0.4
9	☐	1.000		6131642.89		A	2.4

209 Bi(ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1877467.07		A	2.7
2	☐	1.000					
3	☐	1.000		1911310.86		A	0.6
4	☐	1.000		1811874.92		A	4.7
5	☐	1.000		1858842.19		A	0.8
6	☐	1.000		1790879.84		A	5.1
7	☐	1.000		1819130.22		A	1.4
8	☐	1.000		1739280.36		A	4.1
9	☐	1.000		1651984.47		M	2.7

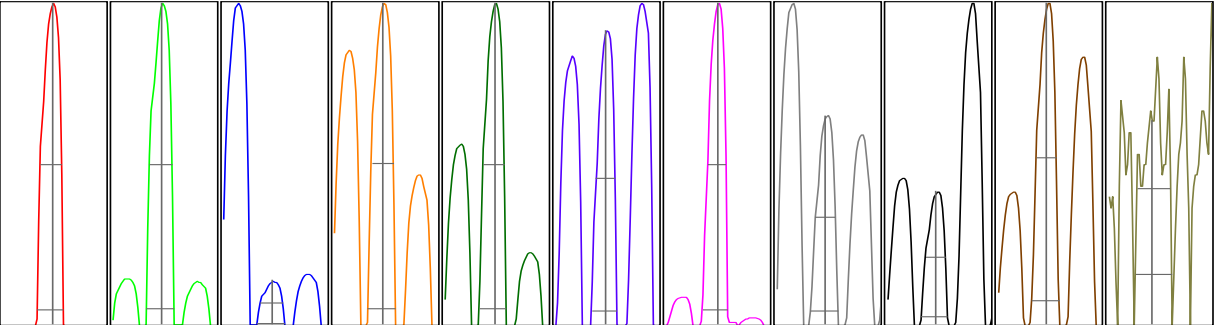
US EPA Tune Check Sample Report

Batch Folder D:\P8081518-MS.b
Report Comment
Instrument Name G8403A JP17141814

[No Gas]				
Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	6081	2.26	5.00	
24	306598	1.62	5.00	
25	41977	1.62	5.00	
26	48903	1.48	5.00	
59	62896	1.11	5.00	
113	8557	1.57	5.00	
115	105818	1.54	5.00	
206	25791	0.97	5.00	
207	23464	1.19	5.00	
208	55834	1.15	5.00	
220	1	23.21		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	6004	6203	6096	6213	5889
24	307299	311402	302769	311171	300350
25	41886	42345	41622	42901	41129
26	49043	49266	48443	49816	47947
59	63250	62689	62590	63887	62062
113	8629	8353	8595	8703	8507
115	106223	103264	106631	107591	105382
206	25867	25567	26187	25725	25609
207	23565	23360	23898	23329	23171
208	56200	55574	56668	55763	54966
220	1	1	1	1	1

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	10613	9.00	8.9 - 9.1		0.740	0.900	
24	513701	23.95	23.9 - 24.1		0.785	0.900	
25	70421	24.95	24.9 - 25.1		0.785	0.900	
26	82547	25.95	25.9 - 26.1		0.784	0.900	
59	110462	59.00	58.9 - 59.1		0.776	0.900	
113	16220	113.00	112.9 - 113.1		0.728	0.900	
115	198374	115.05	114.9 - 115.1		0.726	0.900	
206	46658	205.95	205.9 - 206.1		0.785	0.900	
207	42480	206.95	206.9 - 207.1		0.742	0.900	
208	102354	207.95	207.9 - 208.1		0.777	0.900	
220	1	219.80	-		1.053		

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

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.9	V	Deflect	13.6	V
Extract 2	-215.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-95	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination	5.0	V
He Flow	0.0	mL/min	OctP RF	200	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	7372	1.00	
89	5514	0.81	
205	12278	0.84	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	7358	7422	7255	7380	7444
89	5488	5558	5464	5494	5565
205	12335	12371	12113	12246	12327

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.9	V	Deflect	2.4	V
Extract 2	-215.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-95	V	Cell Exit	-60	V			

Cell Parameters

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