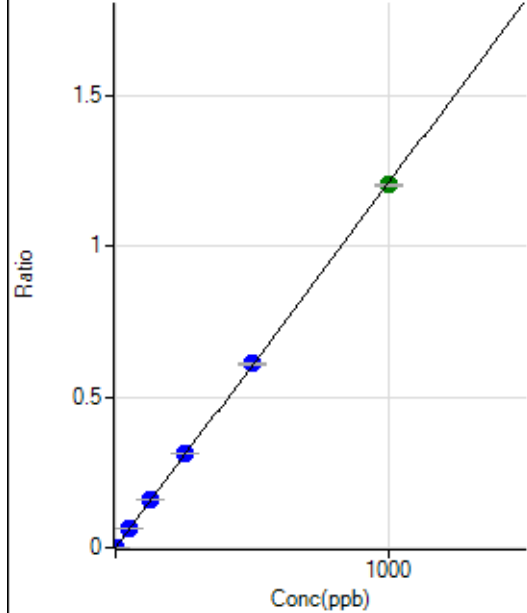


Batch Folder: D:\ICP-MS Data\P7020919 MS.b\
Analysis File: P7020919 MS.batch.bin
DA Date-Time: 2019-02-09 15:24:48
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2019-02-09 14:37:13
2			
3	005CALS.d	S02	2019-02-09 14:46:13
4	006CALS.d	S03	2019-02-09 14:50:09
5	007CALS.d	S04	2019-02-09 14:54:23
6	008CALS.d	S05	2019-02-09 14:58:09
7	009CALS.d	S06	2019-02-09 15:01:54
8	010CALS.d	S07	2019-02-09 15:05:41
9	011CALS.d	S08	2019-02-09 15:09:32

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	221.12	0.0000	P	4.3
2	☐	0.100					
3	☐	1.000	0.983	8851.59	0.0012	P	0.7
4	☐	50.000	53.399	457615.55	0.0647	P	0.1
5	☐	125.000	131.002	1096604.83	0.1587	P	0.4
6	☐	250.000	257.600	2112218.42	0.3121	P	0.4
7	☐	500.000	504.495	4022609.59	0.6112	P	0.4
8	☐	1000.000	994.932	7720028.08	1.2053	A	0.4
9	☐			1097.84	0.0002	P	11.7

$$y = 0.0012 * x + 3.0093E-005$$

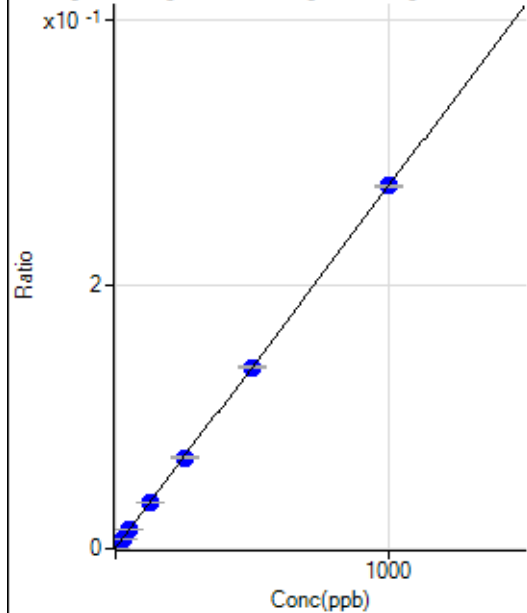
$$R = 0.9999$$

$$DL = 0.003229$$

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	3506.10	0.0005	P	4.3
2	☐	2.500					
3	☐	25.000	23.131	49412.49	0.0068	P	0.7
4	☐	50.000	51.943	104057.55	0.0147	P	1.6
5	☐	125.000	126.341	242579.12	0.0351	P	1.6
6	☐	250.000	249.731	466584.93	0.0689	P	1.3
7	☐	500.000	499.175	903853.15	0.1373	P	1.5
8	☐	1000.000	1000.262	1759456.79	0.2747	P	0.6
9	☐			41784.27	0.0072	P	9.5

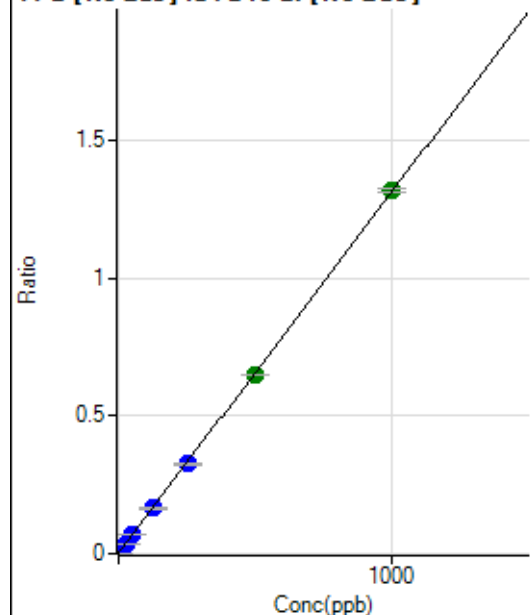
$$y = 2.7416E-004 * x + 4.7702E-004$$

$$R = 1.0000$$

$$DL = 0.2239$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	15945.11	0.0022	P	1.3
2	☐	2.500					
3	☐	25.000	22.850	232564.07	0.0321	P	1.0
4	☐	50.000	50.216	480237.43	0.0679	P	1.7
5	☐	125.000	124.089	1137450.00	0.1647	P	2.0
6	☐	250.000	246.576	2199792.00	0.3250	P	0.7
7	☐	500.000	494.275	4273939.07	0.6494	A	0.9
8	☐	1000.000	1003.875	8432986.47	1.3167	A	1.1
9	☐			196870.67	0.0340	P	9.6

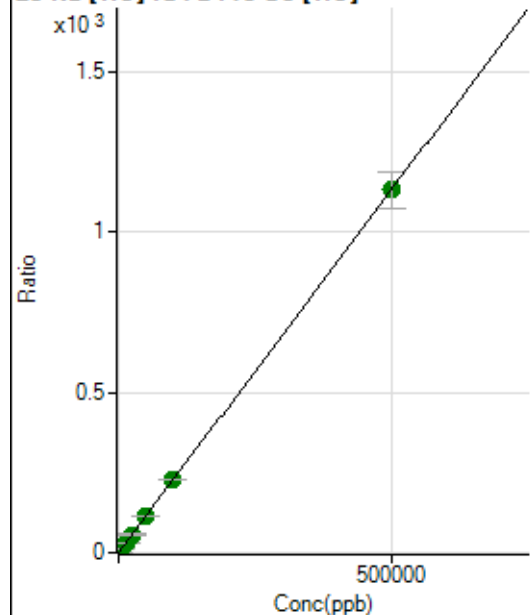
$$y = 0.0013 * x + 0.0022$$

$$R = 1.0000$$

$$DL = 0.06662$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44522.69	0.0576	P	2.3
2	☐	50.000					
3	☐	500.000	483.008	856440.50	1.1520	P	2.9
4	☐	5000.000	5621.188	8436741.25	12.7937	A	12.7
5	☐	12500.000	12923.780	20690257.23	29.3394	A	1.3
6	☐	25000.000	24913.461	40657015.15	56.5048	A	4.6
7	☐	50000.000	49807.537	79993540.68	112.9079	A	0.4
8	☐	100000.00	100961.82	163533605.04	228.8096	A	0.6
9	☐	500000.00	499814.41	758546300.29	1,132.500	A	9.8

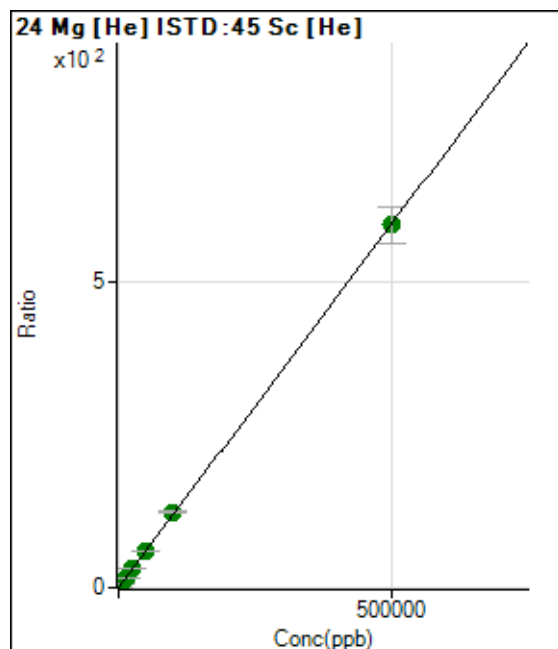
$$y = 0.0023 * x + 0.0576$$

$$R = 1.0000$$

$$DL = 1.755$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	313.90	0.0004	P	17.5
2	☐	50.000					
3	☐	500.000	514.833	455098.05	0.6122	P	2.9
4	☐	5000.000	5855.879	4589137.95	6.9587	A	12.6
5	☐	12500.000	13392.485	11222958.67	15.9141	A	0.7
6	☐	25000.000	25783.555	22044765.42	30.6378	A	4.6
7	☐	50000.000	51336.348	43218262.08	61.0011	A	0.5
8	☐	100000.00	103937.60	88270736.00	123.5047	A	1.1
9	☐	500000.00	499008.78	397145075.54	592.9498	A	9.9

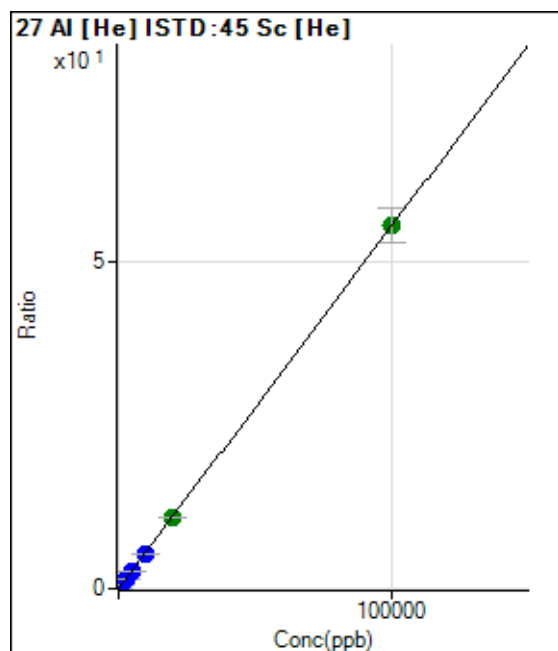
$$y = 0.0012 * x + 4.0605E-004$$

$$R = 1.0000$$

$$DL = 0.1789$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	97.22	0.0001	P	5.5
2	☐	2.000					
3	☐	20.000	19.398	8074.73	0.0109	P	5.7
4	☐	1000.000	1111.975	406281.26	0.6158	P	12.1
5	☐	2500.000	2520.662	984369.54	1.3958	P	0.4
6	☐	5000.000	4844.784	1930161.76	2.6827	P	4.8
7	☐	10000.000	9763.627	3830294.66	5.4062	P	0.1
8	☐	20000.000	19761.433	7820415.89	10.9420	A	1.1
9	☐	100000.00	100077.47	37123516.46	55.4130	A	9.4

$$y = 5.5370E-004 * x + 1.2589E-004$$

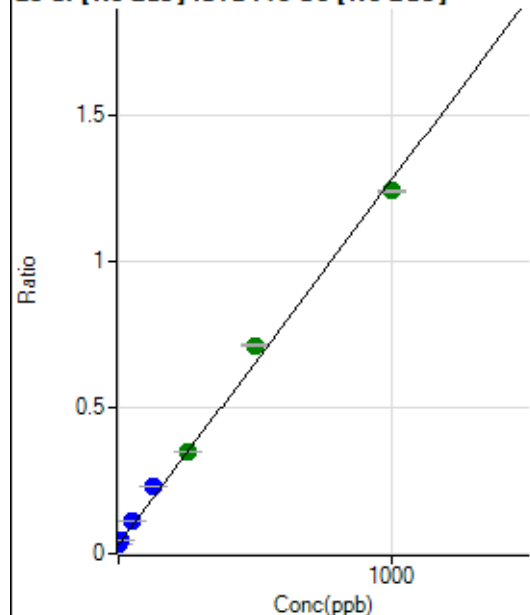
$$R = 1.0000$$

$$DL = 0.0373$$

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	583045.35	0.0315	P	1.3
2	☐	1.000					
3	☐	10.000	12.090	818455.41	0.0466	P	0.7
4	☐	50.000	66.121	1914804.69	0.1140	P	0.6
5	☐	125.000	157.670	3744489.58	0.2281	P	0.7
6	☐	250.000	254.517	5716209.20	0.3489	A	0.4
7	☐	500.000	545.859	11590705.21	0.7122	A	1.0
8	☐	1000.000	971.030	20103832.40	1.2424	A	0.5
9	☐			1592306.73	0.1047	P	2.2

$$y = 0.0012 * x + 0.0315$$

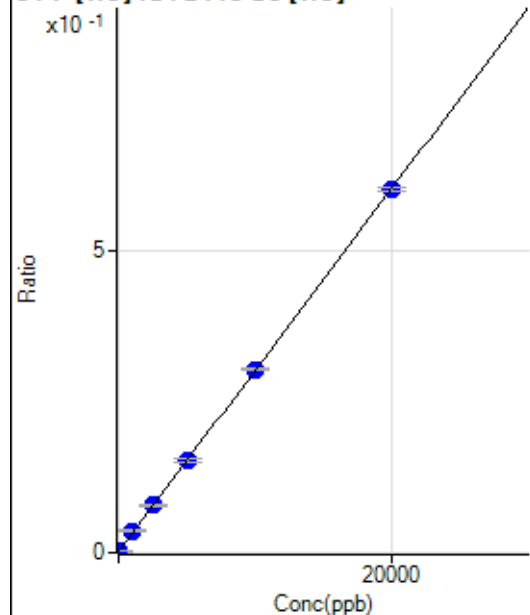
$$R = 0.9980$$

$$DL = 0.9623$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-26.258	683.38	0.0009	P	9.3
2	☐	0.000					
3	☐	0.000	26.258	1830.75	0.0025	P	4.9
4	☐	1000.000	1143.382	23814.27	0.0360	P	9.2
5	☐	2500.000	2574.849	55713.16	0.0790	P	2.7
6	☐	5000.000	5049.931	110337.33	0.1533	P	4.6
7	☐	10000.000	10052.656	215094.60	0.3036	P	1.2
8	☐	20000.000	19944.664	429325.67	0.6007	P	1.0
9	☐			755.61	0.0011	P	12.0

$$y = 3.0034E-005 * x + 0.0017$$

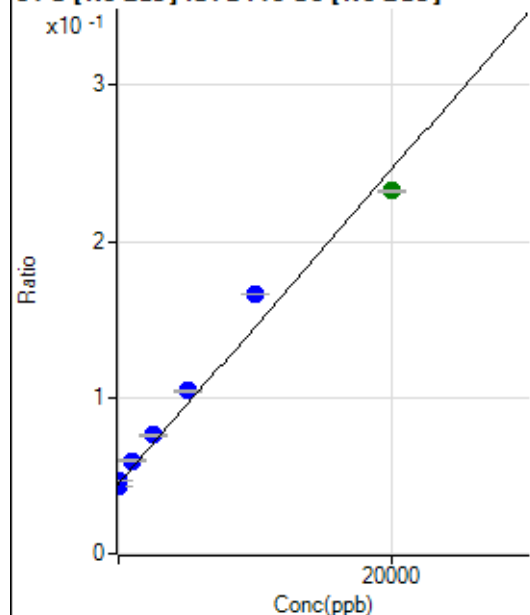
$$R = 1.0000$$

$$DL = 10.18$$

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	-182.196	797666.96	0.0431	P	0.3
2	☐	0.000					
3	☐	0.000	182.196	821603.34	0.0468	P	0.5
4	☐	1000.000	1457.289	1001098.33	0.0596	P	1.2
5	☐	2500.000	3074.265	1244818.77	0.0758	P	0.8
6	☐	5000.000	5920.048	1711316.40	0.1045	P	0.9
7	☐	10000.000	12084.099	2708698.56	0.1664	P	0.3
8	☐	20000.000	18633.291	3758825.30	0.2323	A	0.5
9	☐			686772.92	0.0452	P	1.8

$$y = 1.0056\text{E-}005 * x + 0.0449$$

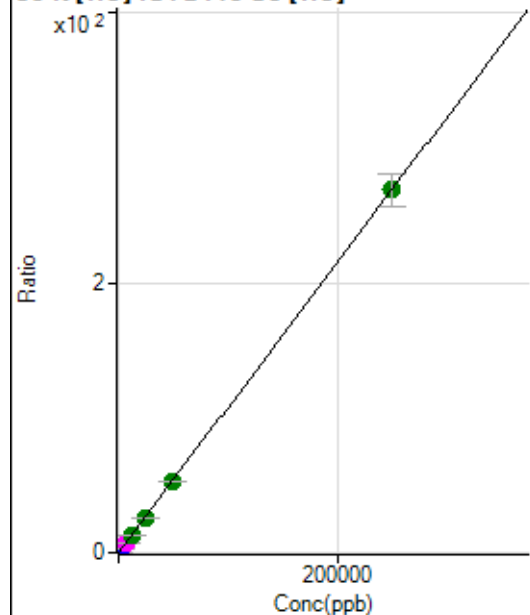
$$R = 0.9899$$

$$DL = 50.16$$

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	34972.93	0.0453	P	1.9
2	☐	50.000					
3	☐	500.000	470.226	409120.21	0.5503	P	2.9
4	☐	2500.000	2740.740	1971100.63	2.9889	P	12.6
5	☐	6250.000	6283.718	4791440.90	6.7941	M	0.8
6	☐	12500.000	11998.243	9305199.51	12.9317	A	4.4
7	☐	25000.000	24224.322	18465372.64	26.0628	A	0.4
8	☐	50000.000	48932.931	37594311.26	52.6004	A	0.8
9	☐	250000.00	250312.87	180175944.30	268.8874	A	9.1

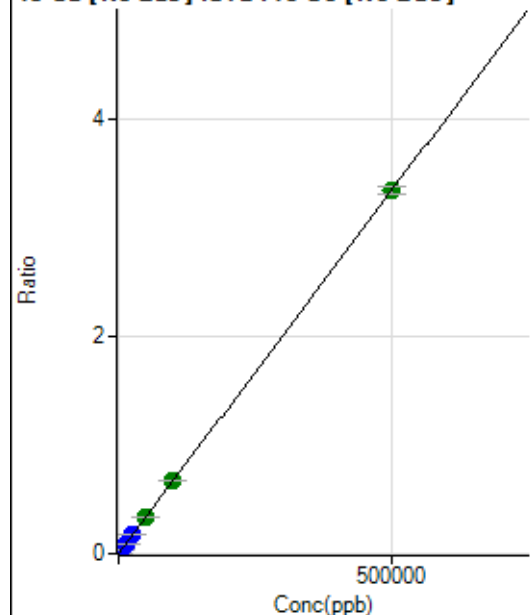
$$y = 0.0011 * x + 0.0453$$

$$R = 1.0000$$

$$DL = 2.401$$

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	263.90	0.0000	P	21.8
2	☐	50.000					
3	☐	500.000	467.269	55212.72	0.0031	P	1.1
4	☐	5000.000	5182.207	583071.65	0.0347	P	1.4
5	☐	12500.000	12841.981	1411123.98	0.0860	P	1.0
6	☐	25000.000	25329.790	2777996.24	0.1696	P	0.1
7	☐	50000.000	50012.639	5448090.96	0.3348	A	0.1
8	☐	100000.00	100959.02	10934619.52	0.6758	A	0.6
9	☐	500000.00	499780.10	50867560.51	3.3452	A	1.9

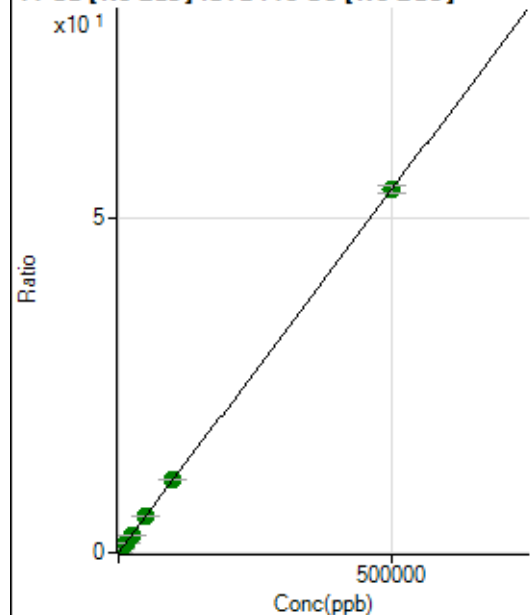
$$y = 6.6934\text{E-}006 * x + 1.4265\text{E-}005$$

$$R = 1.0000$$

$$DL = 1.396$$

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	23861.55	0.0013	P	0.6
2	☐	50.000					
3	☐	500.000	466.615	912085.18	0.0519	P	0.5
4	☐	5000.000	5096.762	9311537.80	0.5542	A	1.1
5	☐	12500.000	12656.272	22555777.59	1.3742	A	0.6
6	☐	25000.000	25043.281	44528447.17	2.7178	A	0.4
7	☐	50000.000	49593.095	87568949.88	5.3808	A	0.1
8	☐	100000.00	100245.74	175971409.49	10.8753	A	0.6
9	☐	500000.00	499984.53	824701957.32	54.2363	A	2.1

$$y = 1.0847\text{E-}004 * x + 0.0013$$

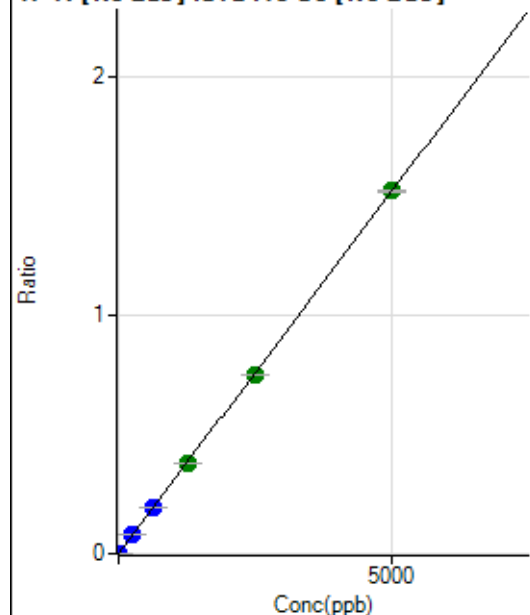
$$R = 1.0000$$

$$DL = 0.2186$$

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	280.57	0.0000	P	8.6
2	☐	0.500					
3	☐	5.000	4.824	26001.44	0.0015	P	0.5
4	☐	250.000	255.634	1304178.06	0.0776	P	0.8
5	☐	625.000	635.575	3167161.29	0.1929	P	0.4
6	☐	1250.000	1251.530	6224662.47	0.3799	A	0.2
7	☐	2500.000	2475.881	12231583.35	0.7516	A	0.2
8	☐	5000.000	5010.074	24608848.81	1.5209	A	0.4
9	☐			7927.43	0.0005	P	5.0

$$y = 3.0356E-004 * x + 1.5153E-005$$

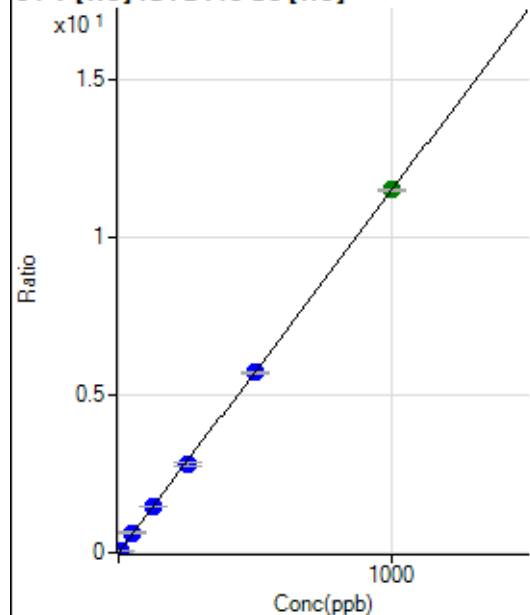
$$R = 1.0000$$

$$DL = 0.01295$$

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	11.11	0.0000	P	34.8
2	☐	0.500					
3	☐	5.000	5.035	42948.08	0.0578	P	2.8
4	☐	50.000	55.570	420417.95	0.6375	P	12.6
5	☐	125.000	126.786	1025696.65	1.4544	P	0.6
6	☐	250.000	245.860	2029232.37	2.8203	P	4.7
7	☐	500.000	497.593	4044043.58	5.7081	P	0.7
8	☐	1000.000	1001.736	8212941.54	11.4912	A	0.7
9	☐			1298.97	0.0019	P	8.3

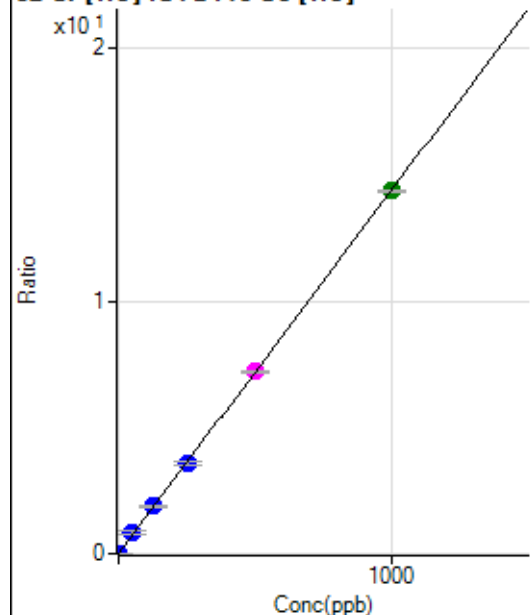
$$y = 0.0115 * x + 1.4392E-005$$

$$R = 1.0000$$

$$DL = 0.00131$$

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	4633.03	0.0060	P	4.0
2	☐	0.200					
3	☐	2.000	1.940	25191.69	0.0339	P	3.2
4	☐	50.000	57.020	544306.59	0.8256	P	12.9
5	☐	125.000	129.618	1318096.50	1.8691	P	0.8
6	☐	250.000	250.240	2592545.13	3.6028	P	4.3
7	☐	500.000	501.277	5108966.70	7.2111	M	0.6
8	☐	1000.000	998.374	10260531.79	14.3561	A	0.6
9	☐			63550.70	0.0949	P	9.5

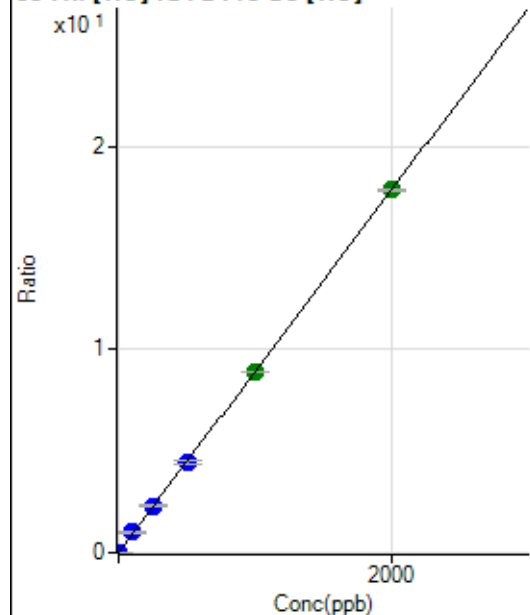
$$y = 0.0144 * x + 0.0060$$

$$R = 1.0000$$

$$DL = 0.05069$$

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	90.00	0.0001	P	9.4
2	☐	0.100					
3	☐	1.000	1.006	6763.88	0.0091	P	3.5
4	☐	100.000	113.994	670899.26	1.0171	P	12.4
5	☐	250.000	258.716	1627824.82	2.3083	P	1.0
6	☐	500.000	499.529	3206761.90	4.4567	P	4.5
7	☐	1000.000	996.104	6296188.86	8.8869	A	0.8
8	☐	2000.000	2000.276	12754630.64	17.8458	A	0.7
9	☐			44186.36	0.0660	P	9.9

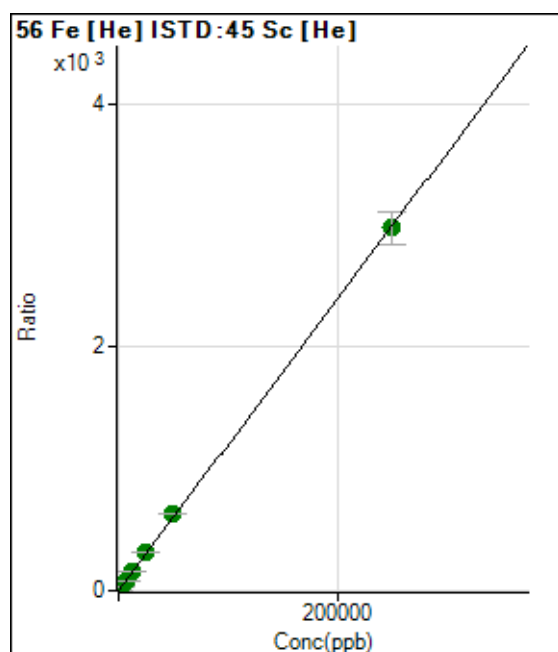
$$y = 0.0089 * x + 1.1649E-004$$

$$R = 1.0000$$

$$DL = 0.003684$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	11962.59	0.0155	P	0.2
2	☐	5.000					
3	☐	50.000	57.133	519439.00	0.6987	P	2.7
4	☐	2500.000	3035.072	23942432.95	36.3082	A	12.7
5	☐	6250.000	6896.104	58163467.50	82.4776	A	1.2
6	☐	12500.000	13251.477	114019710.88	158.4738	A	4.8
7	☐	25000.000	26530.570	224773740.21	317.2623	A	0.7
8	☐	50000.000	53059.870	453482110.13	634.4940	A	0.5
9	☐	250000.00	249175.89	1996745185.3	2,979.607	A	9.0

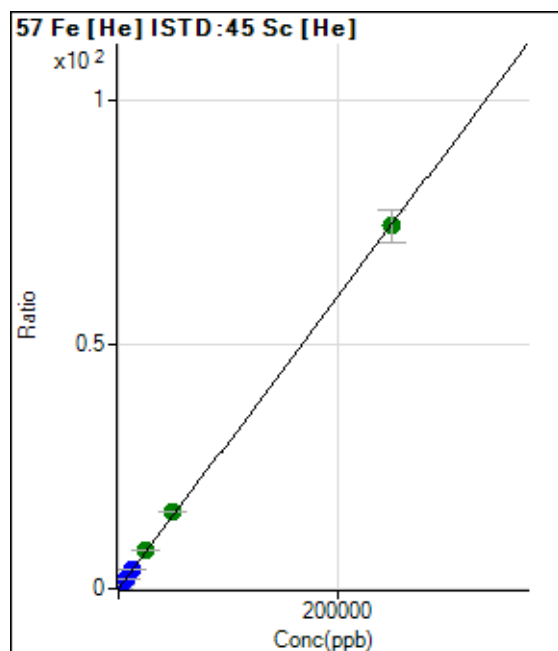
$$y = 0.0120 * x + 0.0155$$

$$R = 0.9999$$

$$DL = 0.008217$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	211.12	0.0003	P	16.5
2	☐	5.000					
3	☐	50.000	58.563	13198.89	0.0178	P	3.2
4	☐	2500.000	3013.598	593142.98	0.8999	P	13.2
5	☐	6250.000	6901.960	1453135.45	2.0606	P	1.0
6	☐	12500.000	13263.218	2849021.94	3.9595	P	4.5
7	☐	25000.000	26499.563	5604429.35	7.9106	A	1.1
8	☐	50000.000	52734.866	11251111.01	15.7421	A	0.7
9	☐	250000.00	249243.47	49854108.52	74.4017	A	9.1

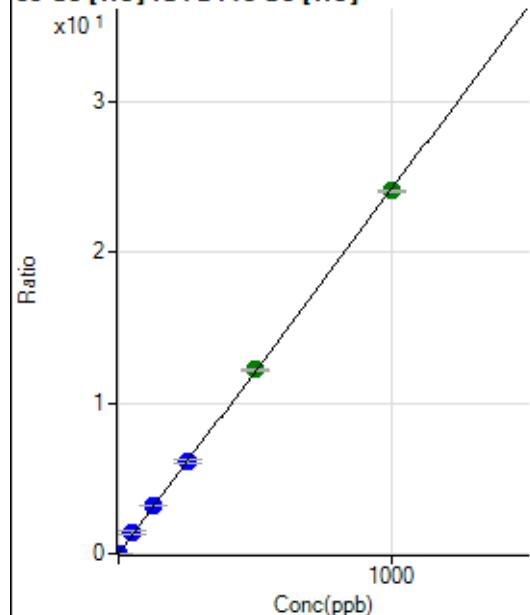
$$y = 2.9851E-004 * x + 2.7349E-004$$

$$R = 0.9999$$

$$DL = 0.4541$$

Weight: <None>

Min Conc: 0

59 Co [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	138.89	0.0002	P	2.6
2	☐	0.100					
3	☐	1.000	1.007	18230.41	0.0245	P	4.0
4	☐	50.000	58.419	930795.13	1.4122	P	13.4
5	☐	125.000	132.866	2264983.47	3.2117	P	0.7
6	☐	250.000	254.937	4434379.90	6.1624	P	4.3
7	☐	500.000	504.101	8632689.11	12.1850	A	1.0
8	☐	1000.000	995.311	17194726.55	24.0582	A	0.5
9	☐			174048.49	0.2598	P	9.7

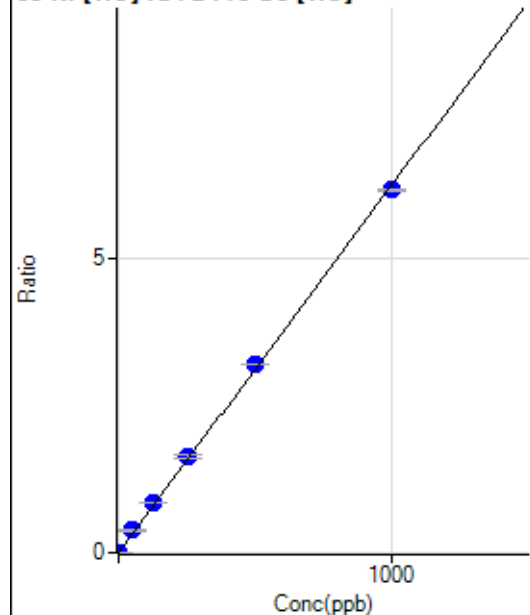
$$y = 0.0242 * x + 1.7981E-004$$

$$R = 0.9999$$

$$DL = 0.0005824$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	204.45	0.0003	P	12.9
2	☐	0.100					
3	☐	1.000	1.102	5311.05	0.0071	P	4.2
4	☐	50.000	61.079	251687.22	0.3818	P	13.0
5	☐	125.000	137.834	607292.44	0.8611	P	1.0
6	☐	250.000	261.536	1175555.39	1.6338	P	4.5
7	☐	500.000	513.879	2274112.76	3.2098	P	0.7
8	☐	1000.000	988.018	4410658.02	6.1712	P	0.8
9	☐			46654.11	0.0696	P	9.4

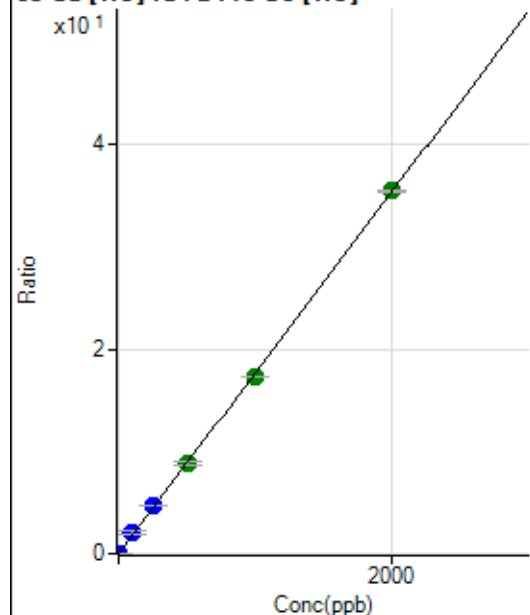
$$y = 0.0062 * x + 2.6452E-004$$

$$R = 0.9997$$

$$DL = 0.01644$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2530.26	0.0033	P	5.4
2	☐	0.200					
3	☐	2.000	2.019	28963.30	0.0390	P	2.9
4	☐	100.000	116.676	1361266.25	2.0649	P	13.1
5	☐	250.000	263.934	3291149.78	4.6669	P	0.8
6	☐	500.000	499.489	6351618.86	8.8290	A	5.1
7	☐	1000.000	979.237	12260935.51	17.3059	A	0.6
8	☐	2000.000	2007.934	25359838.23	35.4825	A	0.6
9	☐			23915.27	0.0357	P	9.5

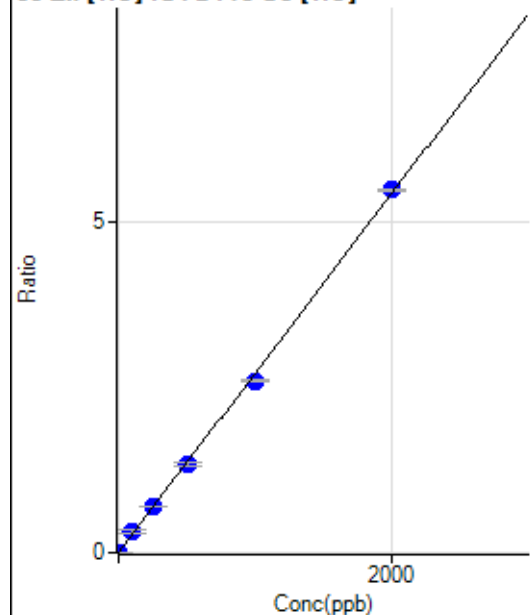
$$y = 0.0177 * x + 0.0033$$

$$R = 0.9999$$

$$DL = 0.03003$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	948.93	0.0012	P	4.3
2	☐	0.200					
3	☐	2.000	1.935	4827.54	0.0065	P	3.0
4	☐	100.000	115.879	208478.37	0.3161	P	12.6
5	☐	250.000	260.008	499142.09	0.7078	P	0.9
6	☐	500.000	493.915	966730.92	1.3434	P	4.2
7	☐	1000.000	956.079	1841589.10	2.5993	P	0.6
8	☐	2000.000	2021.437	3926918.76	5.4944	P	0.6
9	☐			14102.55	0.0211	P	9.6

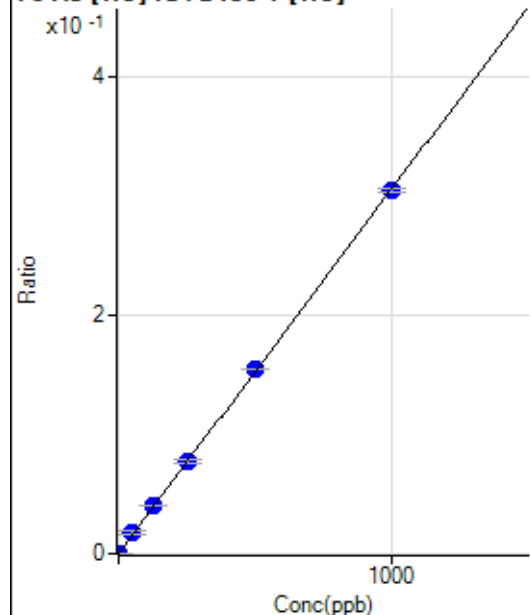
$$y = 0.0027 * x + 0.0012$$

$$R = 0.9996$$

$$DL = 0.05892$$

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	22.84	0.0000	P	31.9
2	☐	0.100					
3	☐	1.000	1.010	1140.80	0.0003	P	4.2
4	☐	50.000	57.911	57192.77	0.0177	P	11.9
5	☐	125.000	130.840	138945.63	0.0400	P	1.0
6	☐	250.000	251.918	271593.98	0.0771	P	4.0
7	☐	500.000	505.735	531102.52	0.1548	P	0.3
8	☐	1000.000	995.528	1042525.15	0.3047	P	0.9
9	☐			1213.02	0.0004	P	14.6

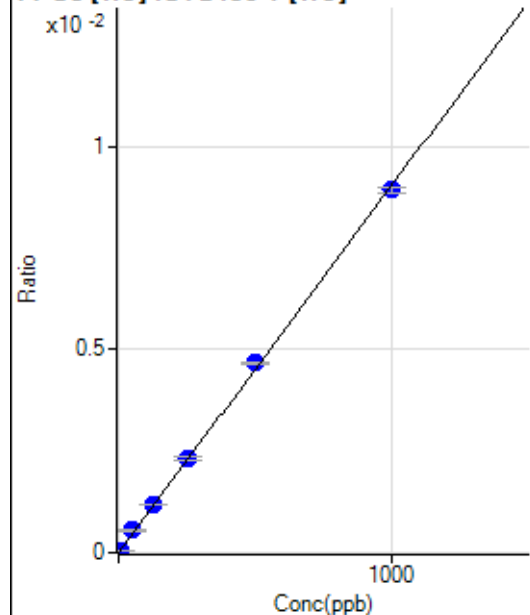
$$y = 3.0604\text{E-}004 * x + 6.0467\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.01892$$

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	5.640	184.45	0.0001	P	12.4
4	☐	50.000	61.641	1797.92	0.0006	P	11.9
5	☐	125.000	130.667	4098.42	0.0012	P	2.9
6	☐	250.000	257.011	8184.66	0.0023	P	4.7
7	☐	500.000	516.793	16031.30	0.0047	P	0.6
8	☐	1000.000	988.557	30580.20	0.0089	P	1.8
9	☐			6.67	0.0000	P	42.7

$$y = 9.0407\text{E-}006 * x + 0.0000\text{E+}000$$

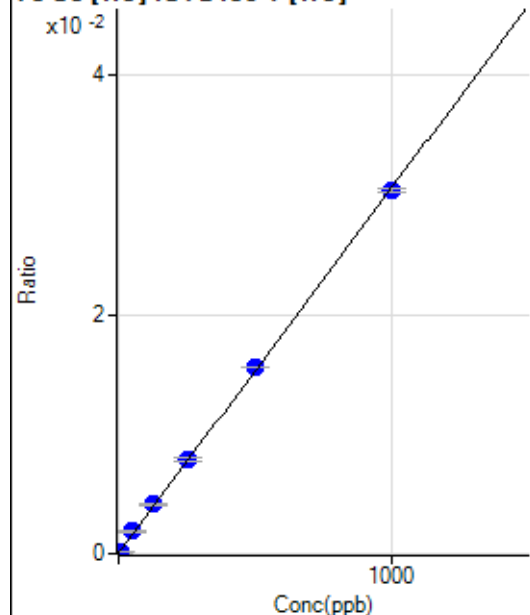
$$R = 0.9997$$

$$DL = 0$$

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	134.57	0.0000	P	2.9
2	☐	0.500					
3	☐	5.000	5.339	719.16	0.0002	P	6.6
4	☐	50.000	60.450	6072.93	0.0019	P	10.9
5	☐	125.000	133.909	14306.52	0.0041	P	1.2
6	☐	250.000	258.848	27958.43	0.0079	P	4.2
7	☐	500.000	507.708	53304.24	0.0155	P	0.1
8	☐	1000.000	992.296	103773.56	0.0303	P	1.2
9	☐			116.67	0.0000	P	9.3

$$y = 3.0528\text{E-}005 * x + 3.5679\text{E-}005$$

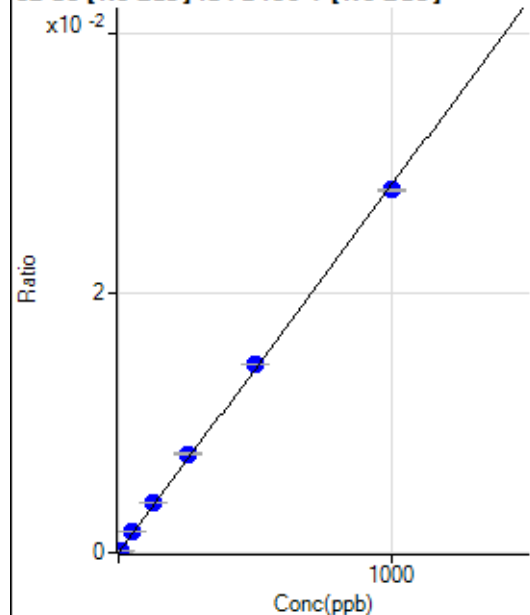
$$R = 0.9999$$

$$DL = 0.1015$$

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	44.48	0.0000	P	406.
2	☐	0.500					
3	☐	5.000	5.626	4392.93	0.0002	P	1.9
4	☐	50.000	56.718	41970.32	0.0016	P	1.2
5	☐	125.000	137.828	101263.72	0.0039	P	0.7
6	☐	250.000	269.032	195893.07	0.0076	P	0.5
7	☐	500.000	512.565	373137.05	0.0145	P	0.4
8	☐	1000.000	987.017	713700.44	0.0280	P	0.8
9	☐			346.61	0.0000	P	32.0

$$y = 2.8369\text{E-}005 * x + 1.5569\text{E-}006$$

$$R = 0.9997$$

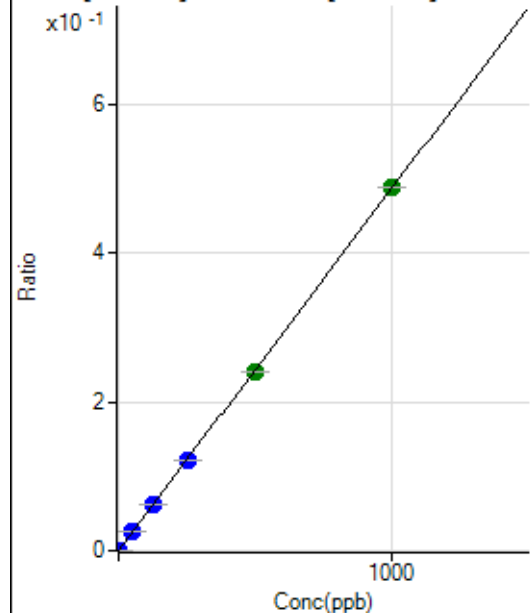
$$DL = 0.6687$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1163.40		P	11.8
2	☐						
3	☐			1031.16		P	8.2
4	☐			1078.95		P	5.1
5	☐			1034.50		P	5.8
6	☐			1043.39		P	7.8
7	☐			1034.50		P	1.6
8	☐			1175.62		P	9.8
9	☐			1171.18		P	8.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1791.87	0.0001	P	12.7
2	☐	0.100					
3	☐	1.000	0.806	12416.95	0.0005	P	3.0
4	☐	50.000	51.474	654021.21	0.0251	P	0.2
5	☐	125.000	126.410	1593136.46	0.0615	P	0.5
6	☐	250.000	250.656	3129775.72	0.1220	P	0.7
7	☐	500.000	494.326	6169814.50	0.2405	A	0.7
8	☐	1000.000	1002.423	12427019.64	0.4876	A	0.2
9	☐			43753.61	0.0019	P	2.6

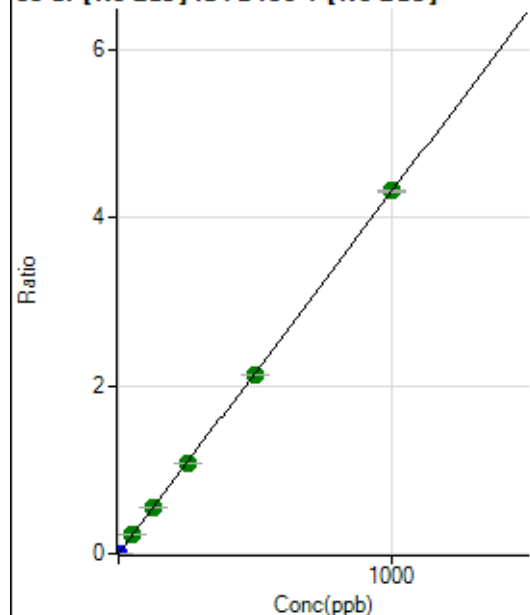
$$y = 4.8633\text{E-}004 * x + 6.3312\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.04941$$

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	336.13	0.0000	P	3.5
2	☐	0.100					
3	☐	1.000	0.790	93045.41	0.0034	P	0.3
4	☐	50.000	50.733	5695369.40	0.2186	A	0.6
5	☐	125.000	125.779	14026423.41	0.5418	A	0.6
6	☐	250.000	249.329	27560762.07	1.0740	A	0.6
7	☐	500.000	494.406	54643338.03	2.1297	A	0.5
8	☐	1000.000	1002.831	110101355.24	4.3198	A	0.3
9	☐			365097.90	0.0156	P	1.5

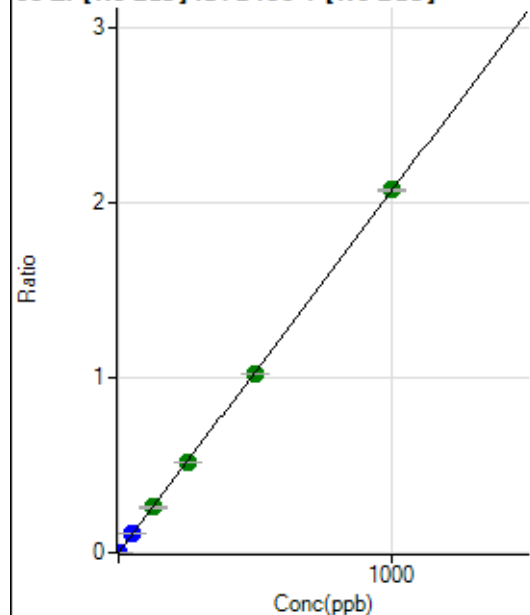
$$y = 0.0043 * x + 1.1873E-005$$

$$R = 1.0000$$

$$DL = 0.0002898$$

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	1675.18	0.0001	P	4.7
2	☐	0.100					
3	☐	1.000	0.961	55686.90	0.0020	P	0.9
4	☐	50.000	51.088	2750223.11	0.1055	P	1.3
5	☐	125.000	124.994	6682421.94	0.2581	A	1.2
6	☐	250.000	249.045	13196658.11	0.5143	A	0.4
7	☐	500.000	493.514	26145537.74	1.0190	A	0.2
8	☐	1000.000	1003.428	52804970.28	2.0718	A	0.5
9	☐			14991.78	0.0006	P	3.1

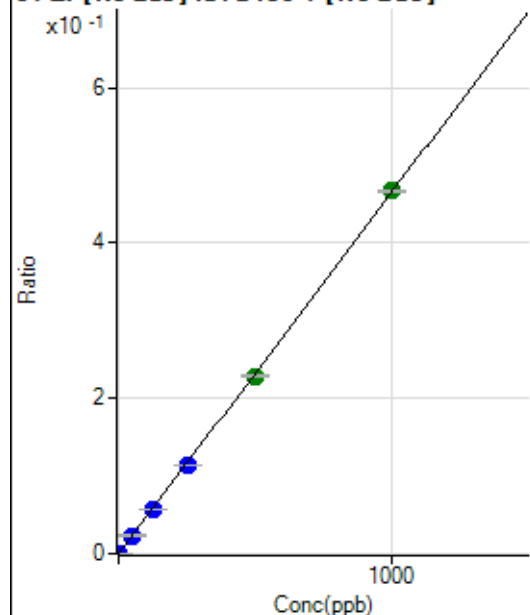
$$y = 0.0021 * x + 5.9168E-005$$

$$R = 1.0000$$

$$DL = 0.004002$$

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	358.35	0.0000	P	20.0
2	☐	0.100					
3	☐	1.000	0.937	12225.14	0.0004	P	2.4
4	☐	50.000	50.447	611522.83	0.0235	P	1.2
5	☐	125.000	123.994	1492713.66	0.0577	P	1.0
6	☐	250.000	246.381	2939847.11	0.1146	P	0.7
7	☐	500.000	491.981	5869216.89	0.2287	A	0.3
8	☐	1000.000	1005.018	11909446.53	0.4673	A	0.8
9	☐			3242.17	0.0001	P	6.4

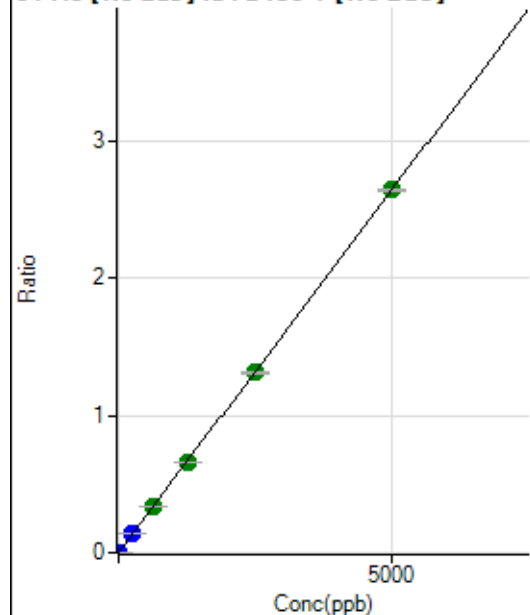
$$y = 4.6493\text{E-}004 * x + 1.2656\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.0163$$

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	786.17	0.0000	P	11.1
2	☐	0.500					
3	☐	5.000	4.652	67811.46	0.0025	P	1.2
4	☐	250.000	259.154	3571359.76	0.1370	P	1.1
5	☐	625.000	627.210	8585732.83	0.3317	A	0.7
6	☐	1250.000	1246.412	16911653.33	0.6590	A	0.8
7	☐	2500.000	2485.487	33718764.99	1.3142	A	0.4
8	☐	5000.000	5007.420	67479439.70	2.6476	A	0.7
9	☐			32683.11	0.0014	P	6.1

$$y = 5.2873\text{E-}004 * x + 2.7765\text{E-}005$$

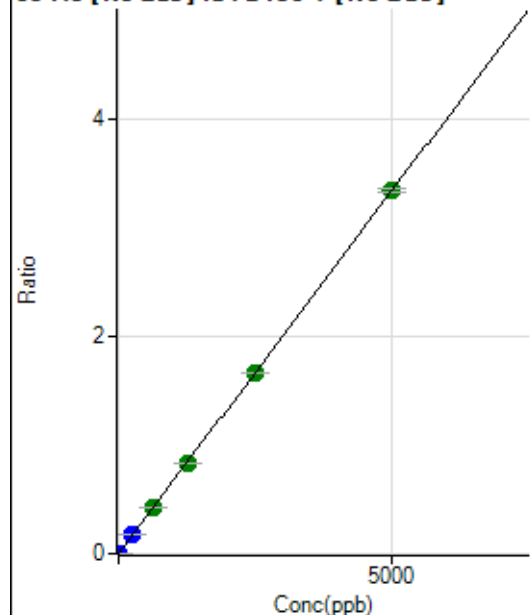
$$R = 1.0000$$

$$DL = 0.01741$$

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	297.24	0.0000	P	11.3
2	☐	0.500					
3	☐	5.000	4.584	83499.71	0.0031	P	0.7
4	☐	250.000	259.319	4500637.77	0.1727	P	0.7
5	☐	625.000	630.390	10868357.45	0.4198	A	0.8
6	☐	1250.000	1253.472	21421382.08	0.8348	A	0.7
7	☐	2500.000	2486.613	42489249.21	1.6560	A	0.4
8	☐	5000.000	5004.686	84946122.04	3.3329	A	0.9
9	☐			49921.63	0.0021	P	4.8

$$y = 6.6596E-004 * x + 1.0497E-005$$

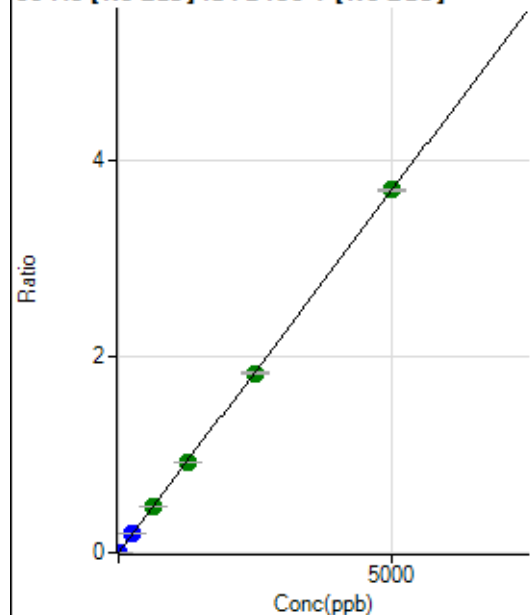
$$R = 1.0000$$

$$DL = 0.00536$$

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	572.26	0.0000	P	18.6
2	☐	0.500					
3	☐	5.000	4.539	92071.81	0.0034	P	0.2
4	☐	250.000	258.330	4980860.09	0.1911	P	0.3
5	☐	625.000	628.085	12028943.24	0.4647	A	0.6
6	☐	1250.000	1249.055	23711773.10	0.9240	A	0.6
7	☐	2500.000	2479.672	47066624.66	1.8344	A	0.3
8	☐	5000.000	5009.599	94453531.28	3.7060	A	0.8
9	☐			77983.70	0.0033	P	4.5

$$y = 7.3977E-004 * x + 2.0224E-005$$

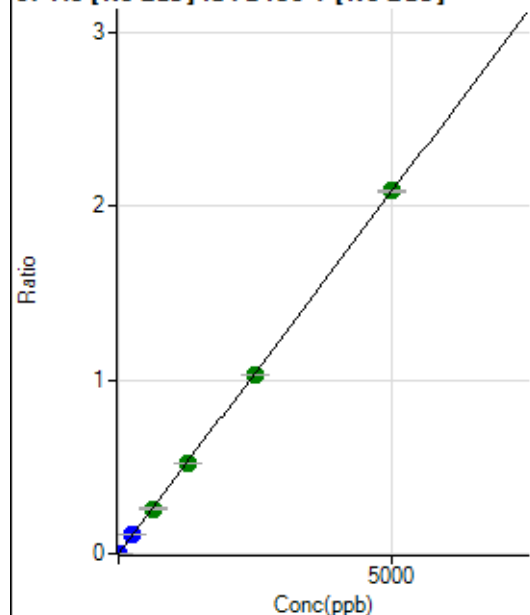
$$R = 1.0000$$

$$DL = 0.01526$$

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	213.90	0.0000	P	29.4
2	☐	0.500					
3	☐	5.000	4.582	52179.72	0.0019	P	0.8
4	☐	250.000	256.332	2779904.57	0.1067	P	0.8
5	☐	625.000	622.988	6711506.92	0.2593	A	0.5
6	☐	1250.000	1250.154	13349991.62	0.5202	A	0.6
7	☐	2500.000	2477.175	26449106.49	1.0308	A	0.3
8	☐	5000.000	5011.310	53150576.53	2.0854	A	0.5
9	☐			28059.23	0.0012	P	5.4

$$y = 4.1613\text{E-}004 * x + 7.5583\text{E-}006$$

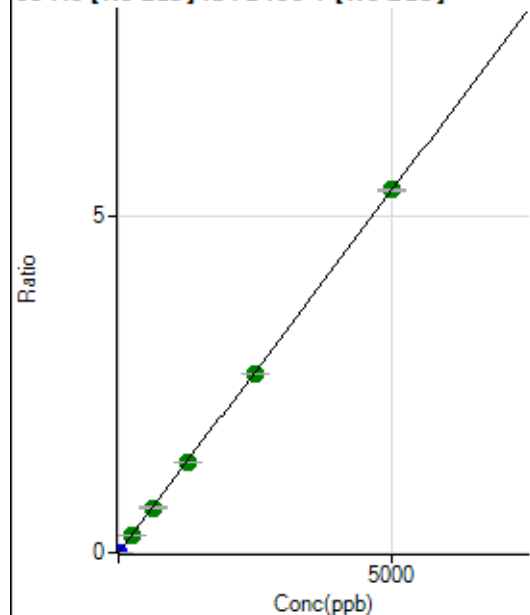
$$R = 1.0000$$

$$DL = 0.01601$$

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	416.69	0.0000	P	0.4
2	☐	0.500					
3	☐	5.000	4.609	135455.40	0.0050	P	0.5
4	☐	250.000	251.156	7035772.12	0.2700	A	0.7
5	☐	625.000	622.870	17333297.26	0.6696	A	0.9
6	☐	1250.000	1254.733	34611261.54	1.3488	A	0.6
7	☐	2500.000	2476.784	68311760.56	2.6624	A	0.3
8	☐	5000.000	5010.633	137276135.01	5.3861	A	0.7
9	☐			67580.62	0.0029	P	7.1

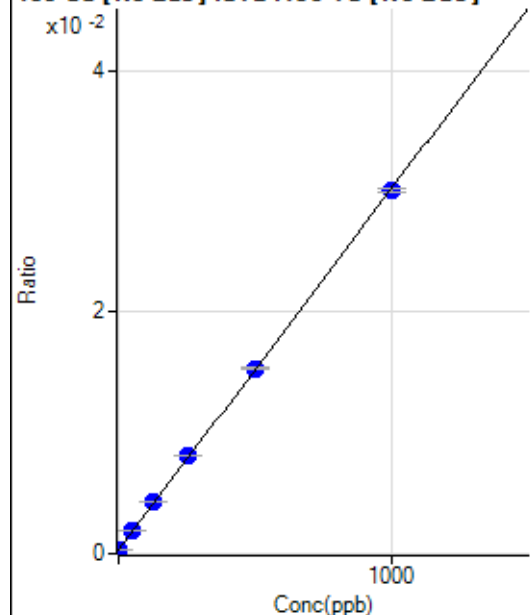
$$y = 0.0011 * x + 1.4719\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.0001521$$

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	11321.63	0.0003	P	0.8
2	☐	0.100					
3	☐	1.000	1.677	12620.00	0.0004	P	1.9
4	☐	50.000	55.686	68583.66	0.0020	P	0.7
5	☐	125.000	134.826	149876.42	0.0043	P	0.5
6	☐	250.000	260.593	279410.54	0.0081	P	0.6
7	☐	500.000	503.188	528627.06	0.0153	P	1.0
8	☐	1000.000	994.245	1017669.12	0.0300	P	0.9
9	☐			10393.07	0.0003	P	1.6

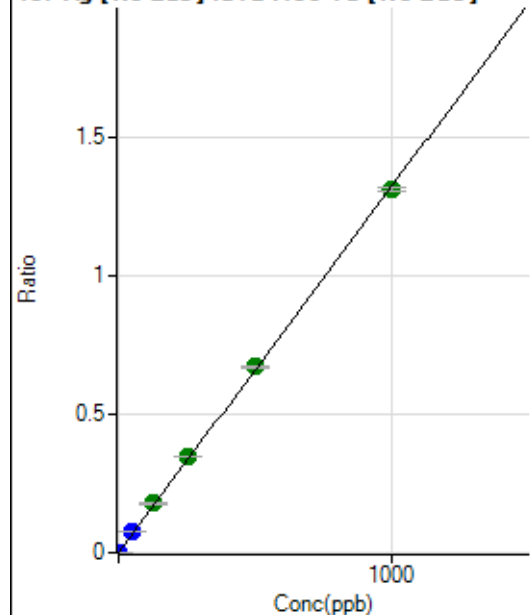
$$y = 2.9879\text{E-}005 * x + 3.0799\text{E-}004$$

$$R = 0.9999$$

$$DL = 0.2334$$

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	358.35	0.0000	P	9.2
2	☐	0.100					
3	☐	1.000	1.191	55699.61	0.0016	P	0.5
4	☐	50.000	55.914	2565767.66	0.0738	P	0.3
5	☐	125.000	134.402	6127650.74	0.1773	A	1.3
6	☐	250.000	262.464	11951741.15	0.3462	A	0.4
7	☐	500.000	508.256	23100599.65	0.6705	A	0.6
8	☐	1000.000	991.285	44335755.16	1.3076	A	0.9
9	☐			4600.98	0.0002	P	9.9

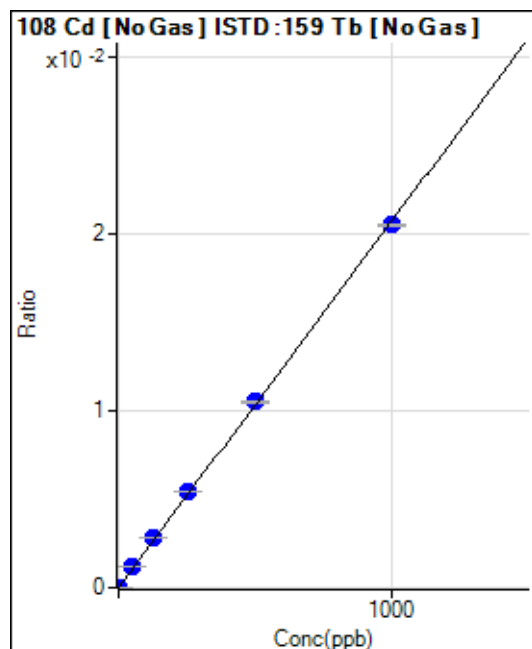
$$y = 0.0013 * x + 9.7535\text{E-}006$$

$$R = 0.9998$$

$$DL = 0.002047$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	31.94	0.0000	P	39.2
2	☐	0.100					
3	☐	1.000	1.043	791.71	0.0000	P	11.1
4	☐	50.000	55.755	40186.35	0.0012	P	1.6
5	☐	125.000	135.324	96875.40	0.0028	P	1.2
6	☐	250.000	264.039	188774.62	0.0055	P	0.7
7	☐	500.000	508.369	362729.52	0.0105	P	0.8
8	☐	1000.000	990.728	695620.65	0.0205	P	0.5
9	☐			173.62	0.0000	P	4.0

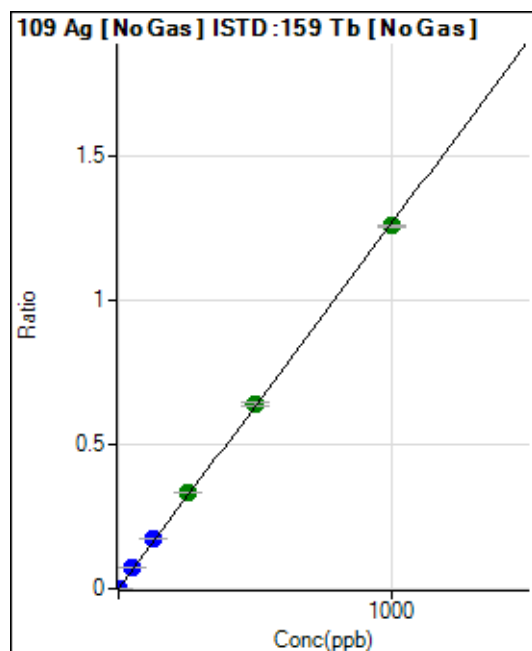
$$y = 2.0707\text{E-}005 * x + 8.6735\text{E-}007$$

$$R = 0.9998$$

$$DL = 0.04926$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	263.90	0.0000	P	16.9
2	☐	0.100					
3	☐	1.000	1.186	53293.25	0.0015	P	0.4
4	☐	50.000	55.986	2471236.88	0.0710	P	0.3
5	☐	125.000	135.650	5949342.28	0.1721	P	0.8
6	☐	250.000	261.778	11466760.24	0.3322	A	0.6
7	☐	500.000	504.319	22049060.39	0.6400	A	1.5
8	☐	1000.000	993.265	42734840.19	1.2604	A	0.5
9	☐			4462.02	0.0001	P	10.3

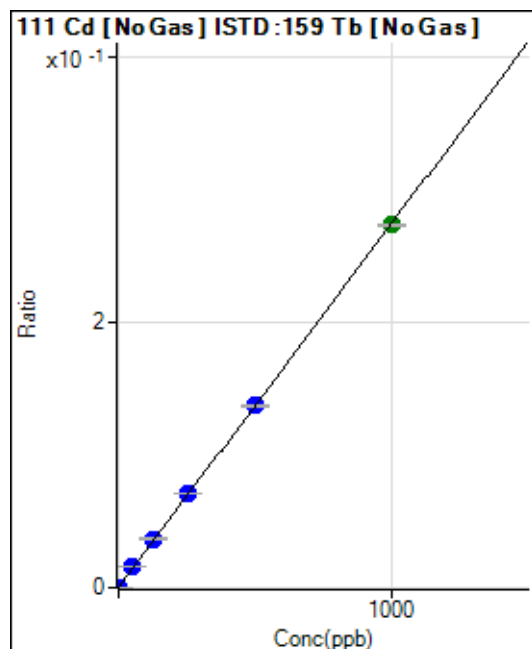
$$y = 0.0013 * x + 7.1851\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.002872$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	7977.78	0.0002	P	0.8
2	☐	0.100					
3	☐	1.000	1.076	18065.31	0.0005	P	1.9
4	☐	50.000	55.074	533543.99	0.0153	P	0.8
5	☐	125.000	133.944	1278693.73	0.0370	P	0.6
6	☐	250.000	259.189	2464293.46	0.0714	P	0.2
7	☐	500.000	499.779	4735780.38	0.1375	P	1.3
8	☐	1000.000	996.441	9284477.45	0.2738	A	0.3
9	☐			8345.37	0.0003	P	2.3

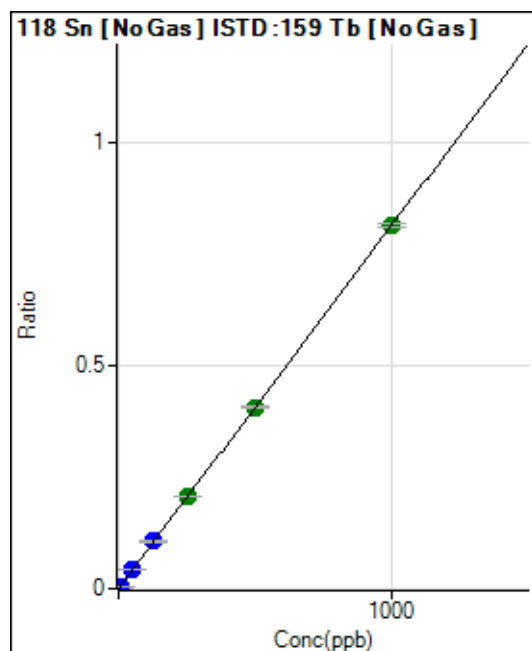
$$y = 2.7459\text{E-}004 * x + 2.1702\text{E-}004$$

$$R = 0.9999$$

$$DL = 0.01873$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1491.81	0.0000	P	5.2
2	☐	0.500					
3	☐	5.000	5.060	146287.63	0.0042	P	0.9
4	☐	50.000	52.649	1488628.18	0.0428	P	0.2
5	☐	125.000	129.803	3644753.99	0.1055	P	1.0
6	☐	250.000	252.532	7080938.79	0.2051	A	0.6
7	☐	500.000	498.837	13959753.61	0.4052	A	0.7
8	☐	1000.000	999.215	27515201.66	0.8115	A	1.1
9	☐			15631.60	0.0005	P	4.7

$$y = 8.1213\text{E-}004 * x + 4.0589\text{E-}005$$

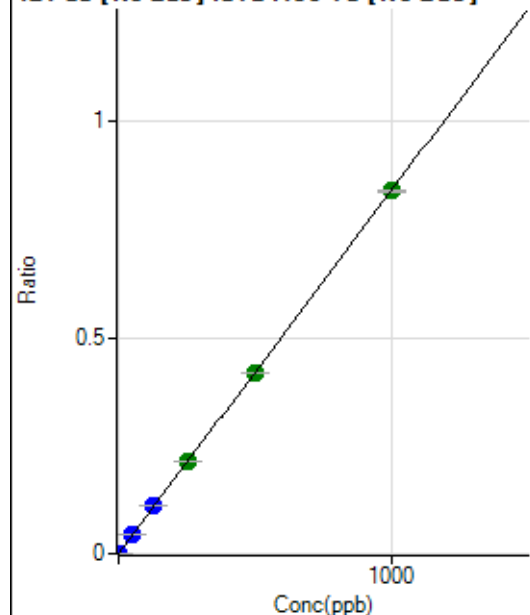
$$R = 1.0000$$

$$DL = 0.007752$$

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	205.57	0.0000	P	6.5
2	☐	0.200					
3	☐	2.000	1.922	57108.56	0.0016	P	1.9
4	☐	50.000	53.355	1559379.94	0.0448	P	0.5
5	☐	125.000	130.849	3799674.22	0.1099	P	1.1
6	☐	250.000	255.112	7398883.50	0.2143	A	0.6
7	☐	500.000	498.576	14432955.88	0.4189	A	0.1
8	☐	1000.000	998.535	28445085.01	0.8389	A	0.6
9	☐			27886.87	0.0009	P	1.6

$$y = 8.4016\text{E-}004 * x + 5.5931\text{E-}006$$

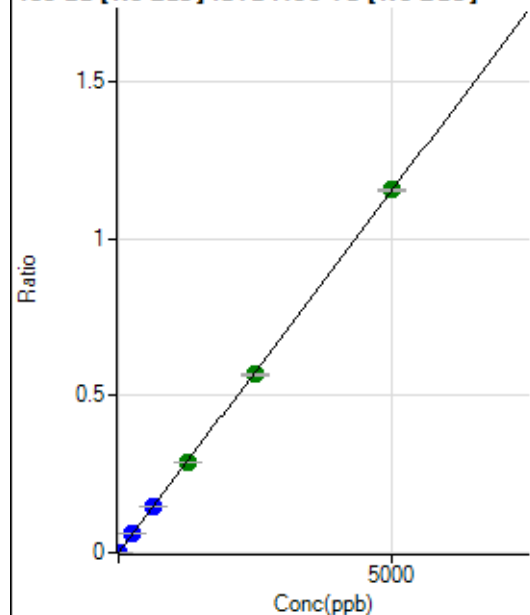
$$R = 1.0000$$

$$DL = 0.001296$$

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	75.00	0.0000	P	11.9
2	☐	1.000					
3	☐	10.000	9.783	79591.42	0.0023	P	1.7
4	☐	250.000	258.108	2070618.95	0.0595	P	0.4
5	☐	625.000	639.744	5099551.59	0.1475	P	1.0
6	☐	1250.000	1252.354	9970171.93	0.2888	A	1.2
7	☐	2500.000	2460.793	19554944.36	0.5675	A	0.4
8	☐	5000.000	5016.767	39230481.43	1.1570	A	0.7
9	☐			6082.22	0.0002	P	15.1

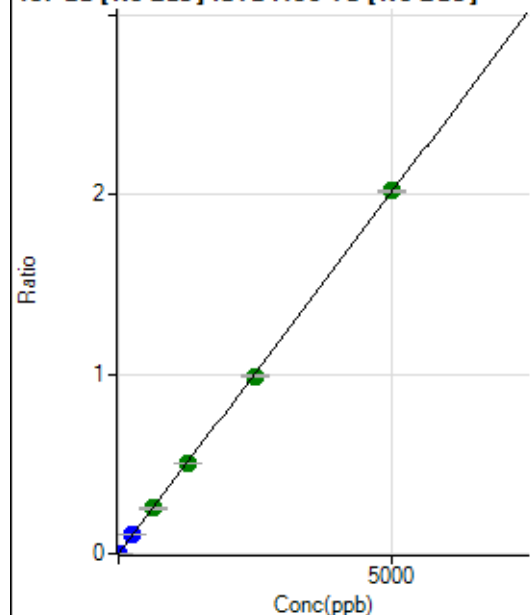
$$y = 2.3064\text{E-}004 * x + 2.0417\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.003171$$

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	15.0
2	☐	1.000					
3	☐	10.000	9.716	137998.79	0.0039	P	1.4
4	☐	250.000	258.374	3619386.06	0.1041	P	0.3
5	☐	625.000	627.771	8737963.56	0.2528	A	1.0
6	☐	1250.000	1250.879	17389391.36	0.5038	A	1.1
7	☐	2500.000	2460.381	34140845.21	0.9909	A	0.2
8	☐	5000.000	5018.825	68532120.98	2.0213	A	0.9
9	☐			10443.28	0.0003	P	8.9

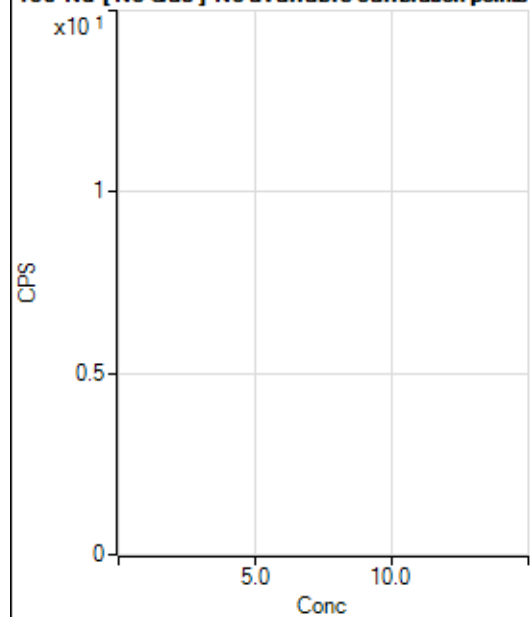
$$y = 4.0273E-004 * x + 2.4916E-006$$

$$R = 1.0000$$

$$DL = 0.002779$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			6.67		P	0.0
2	☐						
3	☐			6.67		P	0.0
4	☐			175.56		P	7.9
5	☐			357.80		P	7.8
6	☐			846.73		P	17.8
7	☐			1677.94		P	2.4
8	☐			2918.19		P	2.1
9	☐			628.93		P	9.3

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐						
3	☐			4.44		P	114.
4	☐			20.00		P	33.4
5	☐			34.44		P	5.6
6	☐			45.56		P	36.1
7	☐			128.89		P	23.5
8	☐			235.56		P	12.8
9	☐			226.67		P	20.8

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			41.67		P	20.0
2	☐						
3	☐			19.45		P	24.7
4	☐			30.55		P	15.7
5	☐			77.78		P	22.3
6	☐			111.12		P	33.8
7	☐			319.46		P	17.4
8	☐			572.26		P	16.2
9	☐			275.01		P	8.0

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.
2	☐						
3	☐			10.00		P	57.8
4	☐			35.56		P	23.6
5	☐			80.00		P	11.0
6	☐			122.23		P	15.0
7	☐			264.45		P	9.5
8	☐			447.79		P	6.4
9	☐			128.89		P	6.5

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			208.34		P	28.0
2	☐						
3	☐			197.23		P	10.6
4	☐			213.90		P	39.0
5	☐			238.90		P	15.7
6	☐			252.79		P	16.3
7	☐			288.91		P	28.5
8	☐			338.91		P	14.4
9	☐			363.91		P	5.8

160 Gd [He] No available calibration points

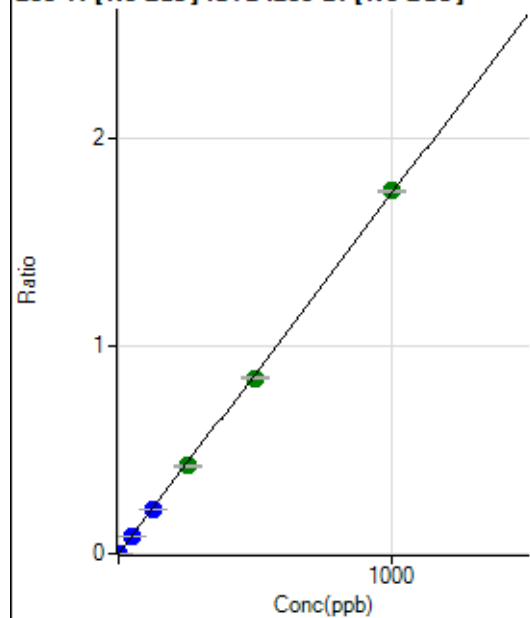
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			450.02		P	2.6
2	☐						
3	☐			434.46		P	26.5
4	☐			375.57		P	14.2
5	☐			433.35		P	5.0
6	☐			430.01		P	10.8
7	☐			422.24		P	6.7
8	☐			448.91		P	11.8
9	☐			500.02		P	8.7

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			130.56		P	22.4
2	☐						
3	☐			138.89		P	3.5
4	☐			136.12		P	46.4
5	☐			127.78		P	21.0
6	☐			91.67		P	27.3
7	☐			169.45		P	23.2
8	☐			144.45		P	24.0
9	☐			177.79		P	17.7

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			40.00		P	38.2
2	☐						
3	☐			53.33		P	22.5
4	☐			37.78		P	5.1
5	☐			43.33		P	33.5
6	☐			61.11		P	8.3
7	☐			56.67		P	50.9
8	☐			67.78		P	20.5
9	☐			81.11		P	10.3

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1619.62	0.0001	P	5.2
2	☐	0.100					
3	☐	1.000	0.861	35568.12	0.0016	P	1.1
4	☐	50.000	49.582	1910930.62	0.0858	P	1.0
5	☐	125.000	122.797	4687410.13	0.2125	P	1.8
6	☐	250.000	243.446	9117846.21	0.4212	A	0.3
7	☐	500.000	487.002	17626904.91	0.8424	A	1.1
8	☐	1000.000	1008.434	34361880.63	1.7444	A	0.7
9	☐			6084.98	0.0004	P	8.8

$$y = 0.0017 * x + 6.8183E-005$$

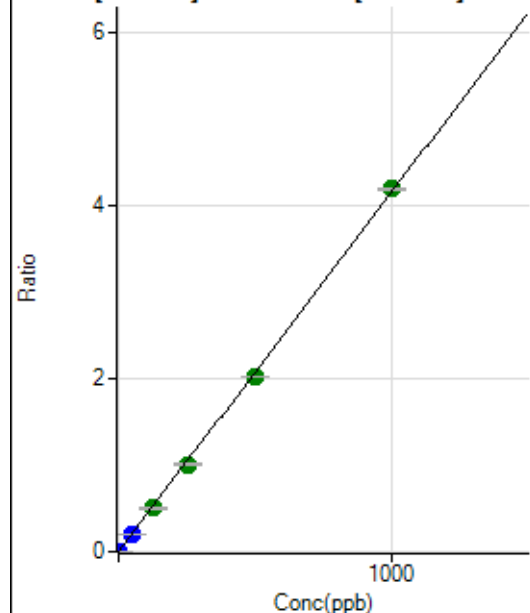
$$R = 0.9999$$

$$DL = 0.00617$$

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	3678.47	0.0002	P	2.6
2	☐	0.100					
3	☐	1.000	0.859	84929.28	0.0037	P	1.9
4	☐	50.000	49.653	4590008.31	0.2062	P	0.8
5	☐	125.000	120.663	11048144.26	0.5008	A	0.6
6	☐	250.000	242.577	21791899.45	1.0066	A	0.8
7	☐	500.000	486.462	42233470.04	2.0184	A	0.8
8	☐	1000.000	1009.185	82482555.32	4.1872	A	0.5
9	☐			14102.54	0.0009	P	10.6

$$y = 0.0041 * x + 1.5487E-004$$

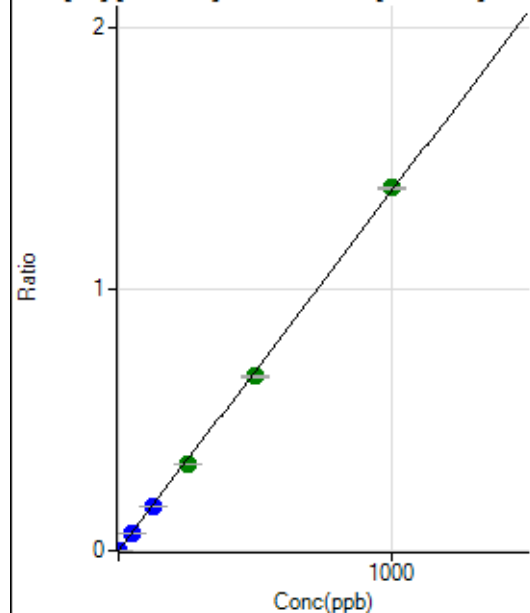
$$R = 0.9998$$

$$DL = 0.002957$$

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	1977.99	0.0001	P	3.5
2	☐	0.100					
3	☐	1.000	0.879	29440.67	0.0013	P	1.0
4	☐	50.000	49.835	1524314.44	0.0685	P	0.5
5	☐	125.000	122.851	3720818.31	0.1687	P	1.0
6	☐	250.000	242.357	7201488.59	0.3326	A	0.5
7	☐	500.000	484.945	13925080.75	0.6655	A	0.7
8	☐	1000.000	1009.715	27294410.56	1.3856	A	0.7
9	☐			21968.60	0.0015	P	1.9

$$y = 0.0014 * x + 8.3274E-005$$

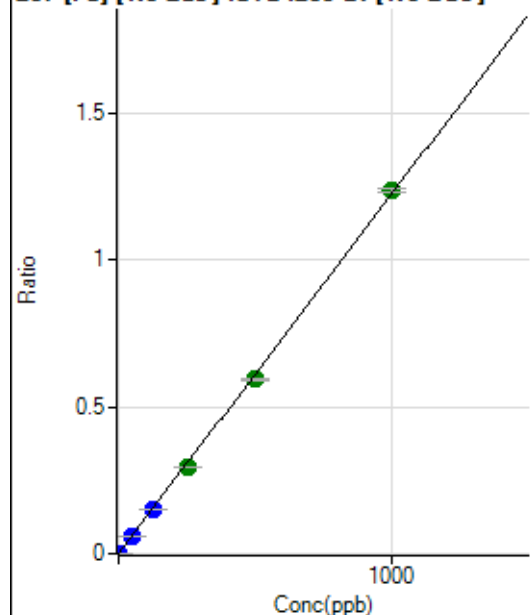
$$R = 0.9998$$

$$DL = 0.006425$$

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	1707.57	0.0001	P	3.0
2	☐	0.100					
3	☐	1.000	0.845	25258.18	0.0011	P	2.1
4	☐	50.000	49.687	1354303.86	0.0608	P	0.3
5	☐	125.000	122.356	3302222.99	0.1497	P	1.5
6	☐	250.000	242.002	6408020.80	0.2960	A	0.1
7	☐	500.000	485.622	12426362.31	0.5939	A	0.9
8	☐	1000.000	1009.535	24318585.27	1.2345	A	1.0
9	☐			18261.18	0.0012	P	4.4

$$y = 0.0012 * x + 7.1892E-005$$

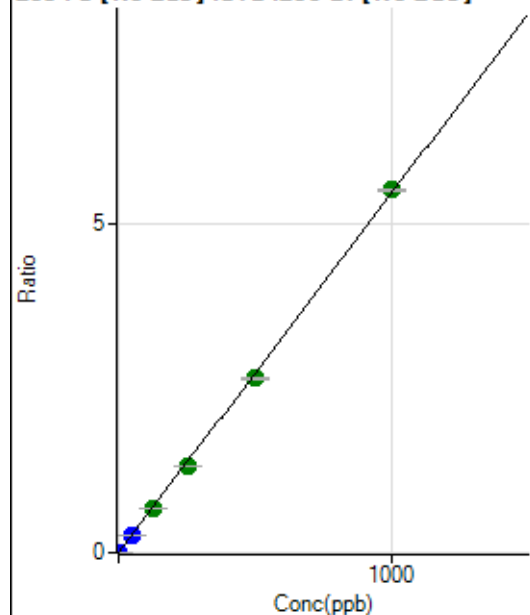
$$R = 0.9998$$

$$DL = 0.005228$$

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	7758.53	0.0003	P	2.8
2	☐	0.100					
3	☐	1.000	0.868	115971.06	0.0051	P	1.5
4	☐	50.000	49.843	6082099.57	0.2732	P	0.2
5	☐	125.000	122.326	14780483.95	0.6700	A	0.8
6	☐	250.000	242.997	28805726.86	1.3306	A	0.2
7	☐	500.000	485.733	55644108.77	2.6594	A	0.8
8	☐	1000.000	1009.227	108837827.66	5.5251	A	0.9
9	☐			84117.86	0.0056	P	3.3

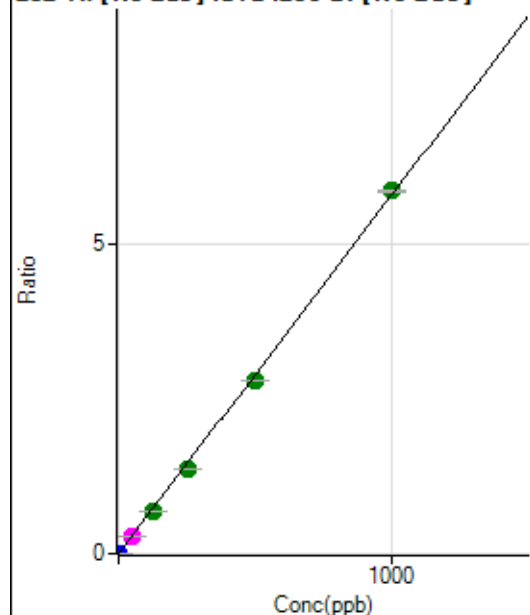
$$y = 0.0055 * x + 3.2665E-004$$

$$R = 0.9998$$

$$DL = 0.005003$$

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	566.70	0.0000	P	3.1
2	☐	0.100					
3	☐	1.000	0.790	105260.93	0.0046	P	0.8
4	☐	50.000	46.499	6011315.24	0.2700	M	0.8
5	☐	125.000	118.506	15179873.83	0.6881	A	1.1
6	☐	250.000	236.870	29774496.50	1.3753	A	0.3
7	☐	500.000	484.058	58808480.48	2.8105	A	0.3
8	☐	1000.000	1012.241	115773281.29	5.8772	A	0.2
9	☐			22138.16	0.0015	P	1.3

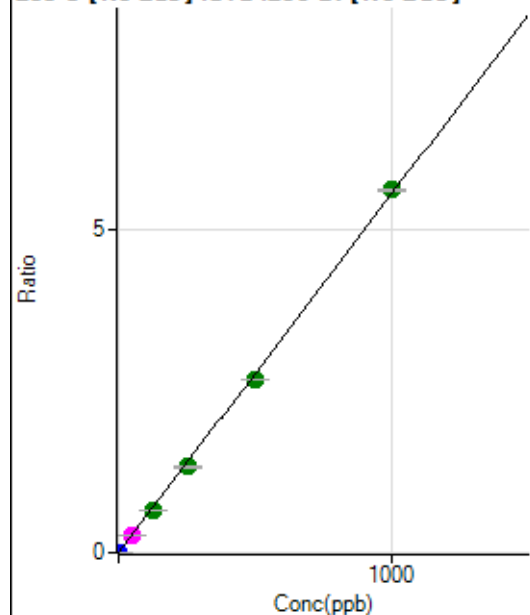
$$y = 0.0058 * x + 2.3859E-005$$

$$R = 0.9997$$

$$DL = 0.0003788$$

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	200.01	0.0000	P	8.8
2	☐	0.100					
3	☐	1.000	0.821	104066.92	0.0046	P	0.9
4	☐	50.000	47.259	5827337.15	0.2617	M	0.7
5	☐	125.000	118.428	14469884.09	0.6559	A	1.0
6	☐	250.000	238.775	28629343.35	1.3224	A	0.5
7	☐	500.000	483.857	56072320.70	2.6797	A	0.4
8	☐	1000.000	1011.837	110389838.58	5.6039	A	0.5
9	☐			9398.38	0.0006	P	20.9

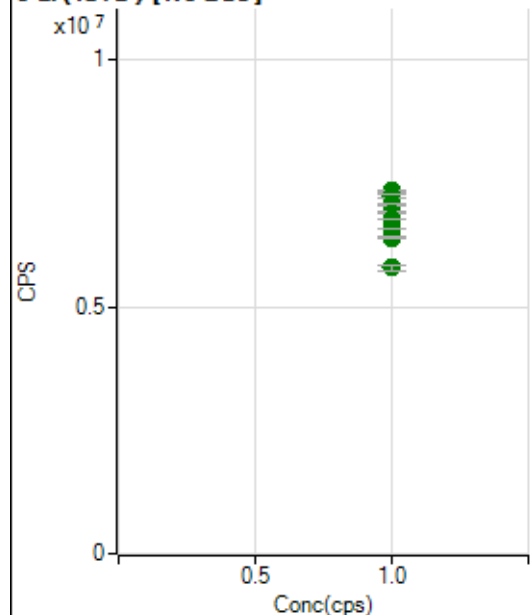
$$y = 0.0055 * x + 8.4237E-006$$

$$R = 0.9997$$

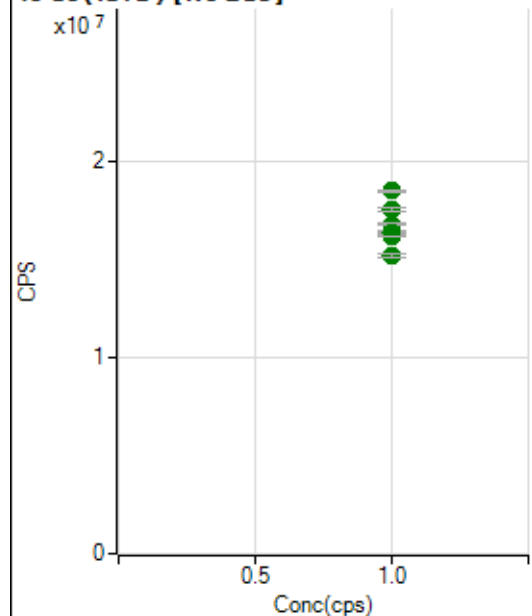
$$DL = 0.0004019$$

Weight: <None>

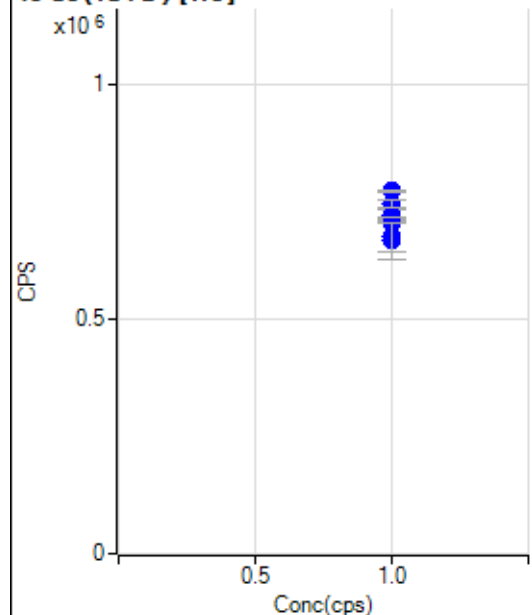
Min Conc: 0

6 Li (ISTD) [No Gas]

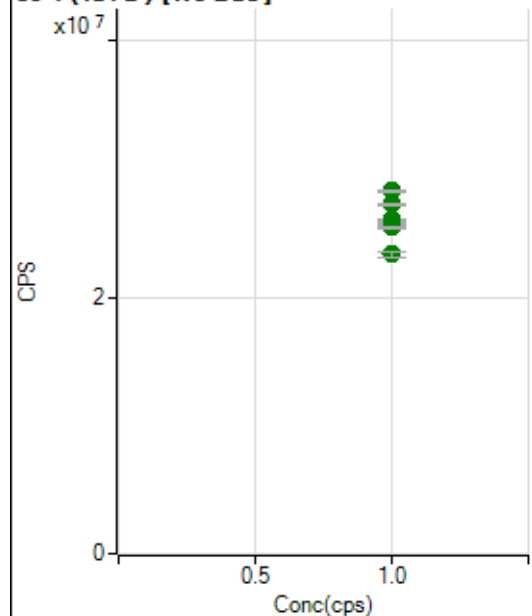
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		7348902.33		A	0.5
2	☐	1.000					
3	☐	1.000		7247019.46		A	0.7
4	☐	1.000		7070690.10		A	0.6
5	☐	1.000		6908584.40		A	0.5
6	☐	1.000		6767788.16		A	0.2
7	☐	1.000		6581450.92		A	0.2
8	☐	1.000		6404847.69		A	0.1
9	☐	1.000		5789678.27		A	1.8

45 Sc (ISTD) [No Gas]

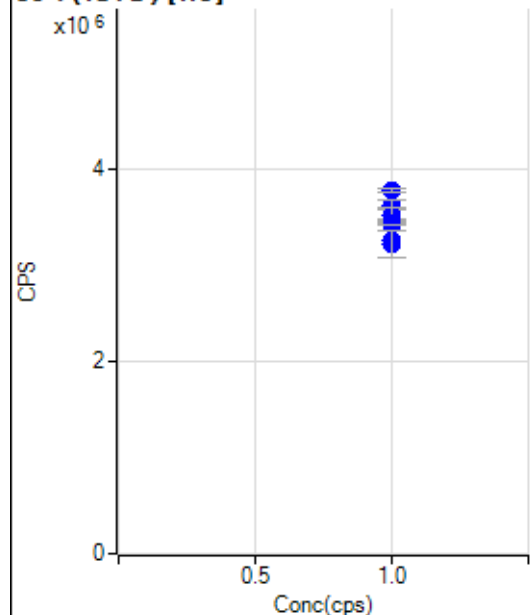
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		18511095.55		A	0.4
2	☐	1.000					
3	☐	1.000		17572931.30		A	0.9
4	☐	1.000		16803348.81		A	0.4
5	☐	1.000		16414690.82		A	0.7
6	☐	1.000		16383830.58		A	0.6
7	☐	1.000		16274264.77		A	0.3
8	☐	1.000		16180769.11		A	0.3
9	☐	1.000		15209667.01		A	1.9

45 Sc (ISTD) [He]

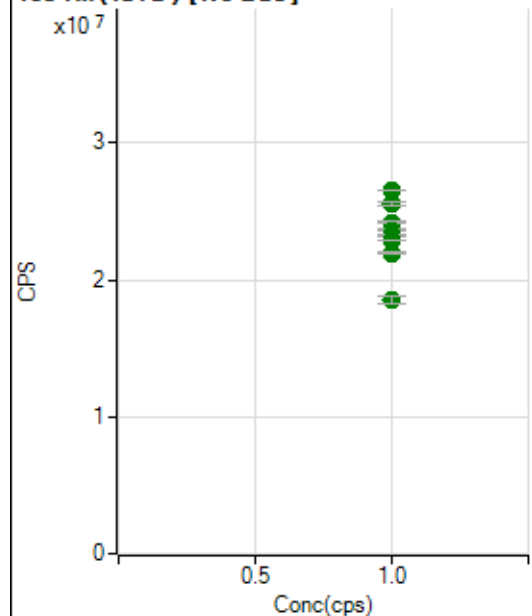
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		772432.80		P	0.8
2	☐	1.000					
3	☐	1.000		743848.90		P	3.0
4	☐	1.000		665978.64		P	11.6
5	☐	1.000		705243.26		P	0.7
6	☐	1.000		720553.49		P	4.7
7	☐	1.000		708495.17		P	0.5
8	☐	1.000		714714.16		P	0.0
9	☐	1.000		673725.72		P	8.9

89 Y (ISTD) [No Gas]

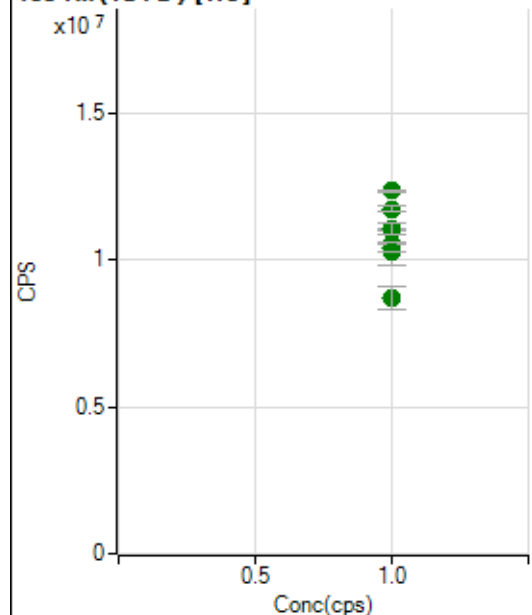
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		28309385.69		A	0.4
2	☐	1.000					
3	☐	1.000		27258927.93		A	0.3
4	☐	1.000		26060518.50		A	0.9
5	☐	1.000		25888057.67		A	0.2
6	☐	1.000		25662069.62		A	0.8
7	☐	1.000		25658014.06		A	0.4
8	☐	1.000		25487870.45		A	0.7
9	☐	1.000		23354641.60		A	1.9

89 Y(ISTD) [He]

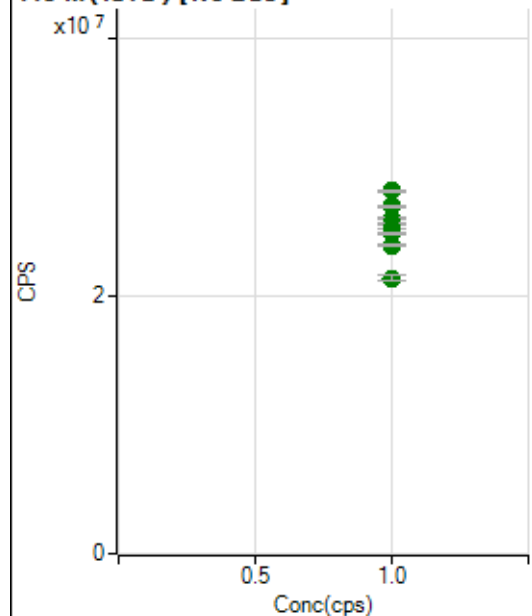
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3771329.21		P	0.9
2	☐	1.000					
3	☐	1.000		3621073.45		P	2.8
4	☐	1.000		3255154.54		P	11.4
5	☐	1.000		3469496.93		P	0.4
6	☐	1.000		3526561.89		P	4.3
7	☐	1.000		3431291.86		P	0.4
8	☐	1.000		3421719.05		P	0.3
9	☐	1.000		3214157.80		P	8.6

103 Rh(ISTD) [No Gas]

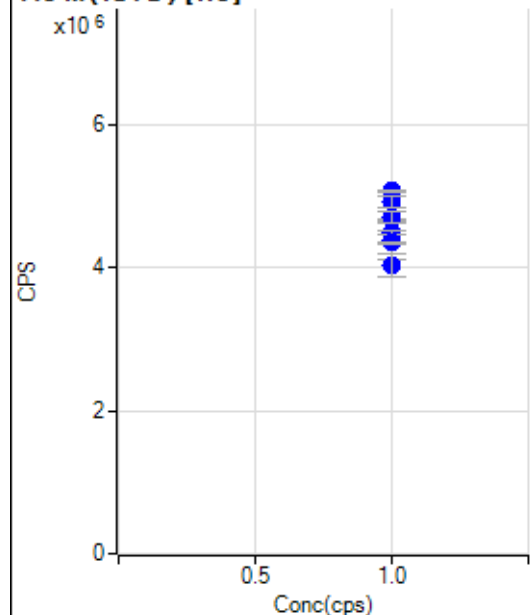
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		26508218.65		A	0.2
2	☐	1.000					
3	☐	1.000		25593102.83		A	1.2
4	☐	1.000		24234958.18		A	0.5
5	☐	1.000		23673302.79		A	0.9
6	☐	1.000		23319945.83		A	0.6
7	☐	1.000		22873151.38		A	0.3
8	☐	1.000		21979026.36		A	0.5
9	☐	1.000		18544691.04		A	2.3

103 Rh (ISTD) [He]

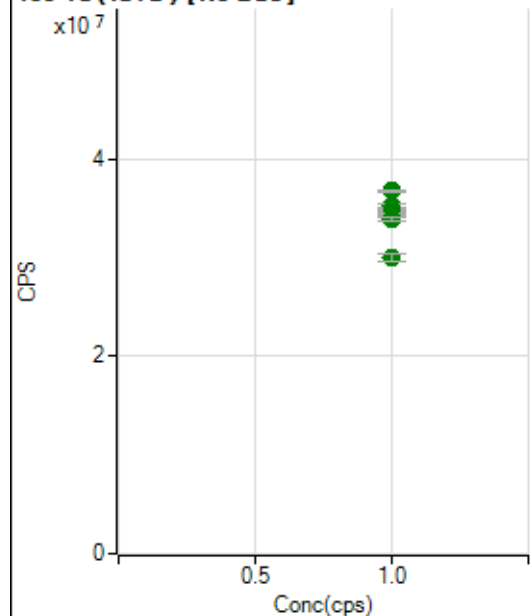
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		12339897.73		A	0.5
2	☐	1.000					
3	☐	1.000		11732109.27		A	2.0
4	☐	1.000		10396077.83		A	11.4
5	☐	1.000		11014815.95		A	0.4
6	☐	1.000		11073155.39		A	3.7
7	☐	1.000		10554308.87		A	0.4
8	☐	1.000		10281217.97		A	0.3
9	☐	1.000		8695368.62		A	8.6

115 In (ISTD) [No Gas]

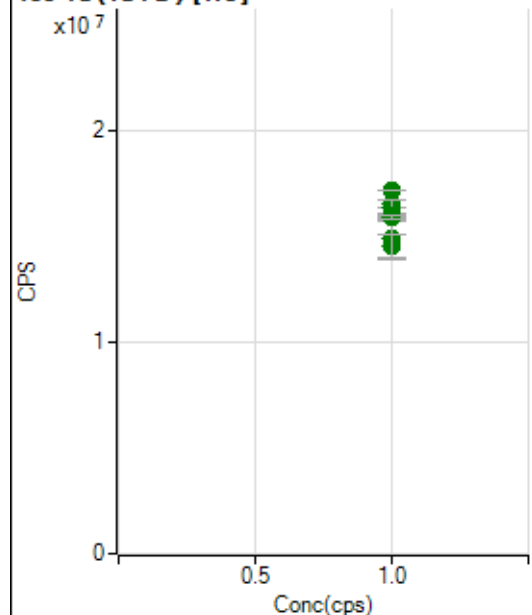
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		28177413.86		A	0.4
2	☐	1.000					
3	☐	1.000		26968269.71		A	0.8
4	☐	1.000		26046992.64		A	0.5
5	☐	1.000		25618998.54		A	0.9
6	☐	1.000		25208951.59		A	0.2
7	☐	1.000		24892794.11		A	0.3
8	☐	1.000		23932819.44		A	0.8
9	☐	1.000		21396654.59		A	2.1

115 In (ISTD) [He]

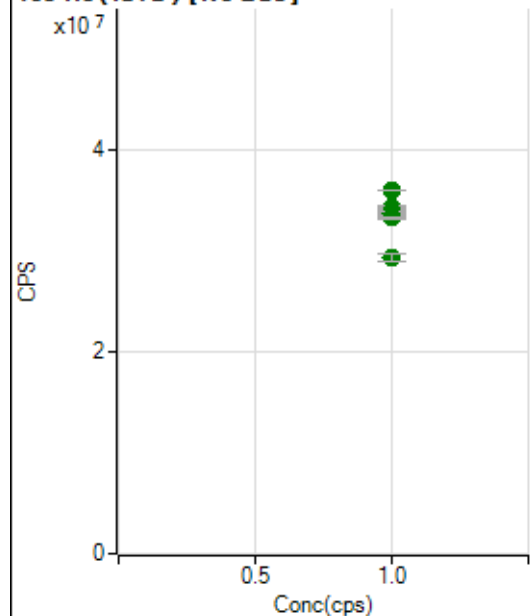
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		5076096.35		P	0.5
2	☐	1.000					
3	☐	1.000		4929147.40		P	3.1
4	☐	1.000		4384410.53		P	11.9
5	☐	1.000		4669999.09		P	0.2
6	☐	1.000		4712277.08		P	3.8
7	☐	1.000		4493239.38		P	0.6
8	☐	1.000		4348769.18		P	0.4
9	☐	1.000		4040800.51		P	8.4

159 Tb (ISTD) [No Gas]

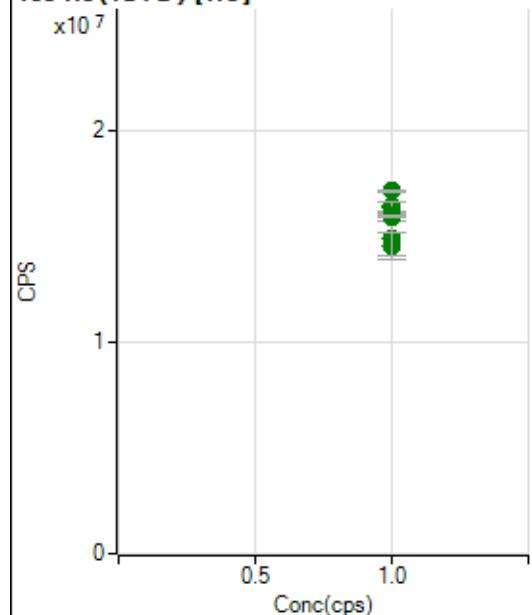
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		36759325.84		A	0.9
2	☐	1.000					
3	☐	1.000		35248488.09		A	1.2
4	☐	1.000		34782384.76		A	0.2
5	☐	1.000		34563150.32		A	0.9
6	☐	1.000		34520496.15		A	0.9
7	☐	1.000		34455199.21		A	0.2
8	☐	1.000		33906669.50		A	0.7
9	☐	1.000		30025384.83		A	2.1

159 Tb (ISTD) [He]

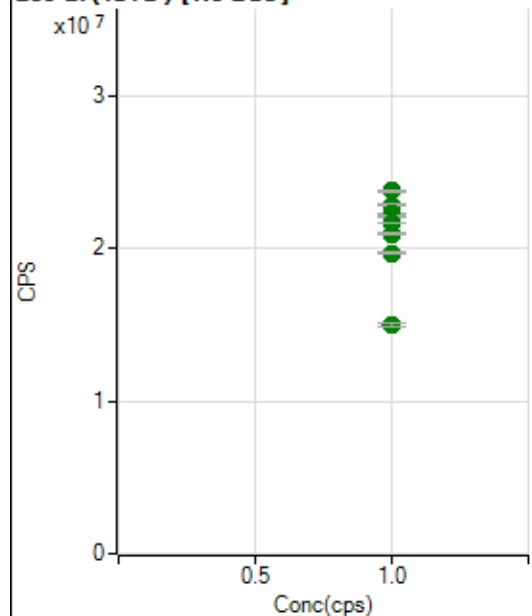
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		17145835.99		A	0.1
2	☐	1.000					
3	☐	1.000		16537619.47		A	2.4
4	☐	1.000		14891471.45		A	11.7
5	☐	1.000		16078948.79		A	0.1
6	☐	1.000		16365429.62		A	4.1
7	☐	1.000		15989961.01		A	0.6
8	☐	1.000		15890500.59		A	1.0
9	☐	1.000		14506058.26		A	8.5

165 Ho (ISTD) [No Gas]

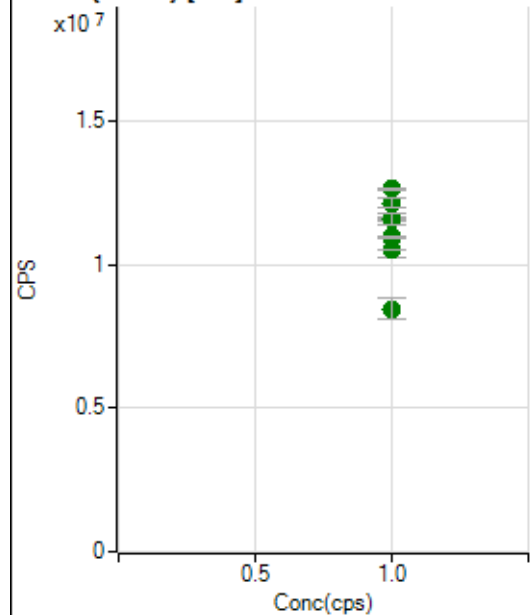
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		35974599.41		A	0.2
2	☐	1.000					
3	☐	1.000		34396313.27		A	0.9
4	☐	1.000		33880903.54		A	0.8
5	☐	1.000		33683419.16		A	0.9
6	☐	1.000		34015524.02		A	0.7
7	☐	1.000		33778393.81		A	1.4
8	☐	1.000		33338515.33		A	0.5
9	☐	1.000		29413173.92		A	2.5

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		17165314.33		A	0.5
2	☐	1.000					
3	☐	1.000		16432075.03		A	2.4
4	☐	1.000		14907742.69		A	11.3
5	☐	1.000		16123444.48		A	0.2
6	☐	1.000		16407320.31		A	3.5
7	☐	1.000		15994205.18		A	0.9
8	☐	1.000		15937037.12		A	0.5
9	☐	1.000		14542517.01		A	8.7

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		23750269.09		A	0.5
2	☐	1.000					
3	☐	1.000		22842970.08		A	1.0
4	☐	1.000		22264136.19		A	0.5
5	☐	1.000		22062256.06		A	0.7
6	☐	1.000		21649489.54		A	0.5
7	☐	1.000		20924511.08		A	0.7
8	☐	1.000		19698836.51		A	0.2
9	☐	1.000		14984099.08		A	2.0

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12660668.28		A	0.4
2	☐	1.000					
3	☐	1.000		12173472.88		A	2.6
4	☐	1.000		10909010.05		A	11.9
5	☐	1.000		11620773.65		A	0.4
6	☐	1.000		11616372.05		A	3.7
7	☐	1.000		10975792.69		A	0.2
8	☐	1.000		10544992.48		A	0.3
9	☐	1.000		8487600.57		A	8.2

US EPA Tune Check Sample Report

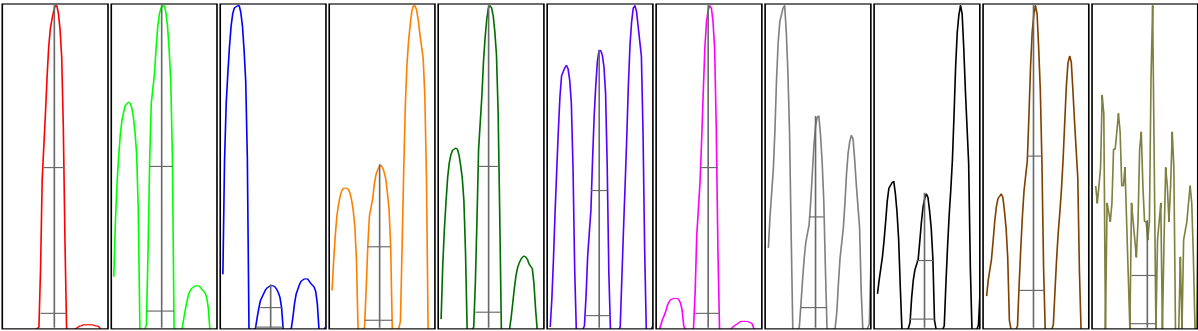
Batch Folder D:\ICP-MS Data\P7020919 MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	38143	0.41	5.00	
24	433273	0.43	5.00	
25	58111	0.51	5.00	
26	67617	0.30	5.00	
59	331817	0.45	5.00	
113	38664	0.43	5.00	
115	464765	0.65	5.00	
206	108343	0.36	5.00	
207	102275	0.46	5.00	
208	237793	0.36	5.00	
220	0	26.73		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	38253	38200	38271	37894	38096
24	434791	432187	431052	435577	432760
25	58394	58180	57828	58380	57774
26	67530	67784	67853	67563	67357
59	333906	332600	331416	331228	329935
113	38714	38833	38757	38618	38400
115	468029	467089	465157	462899	460652
206	108431	108701	108447	108459	107679
207	102370	102993	102291	101808	101912
208	236828	239019	237267	238179	237672
220	0	0	0	0	0

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	66012	9.00	8.9 - 9.1		0.779	0.900	
24	704017	23.95	23.9 - 24.1		0.785	0.900	
25	95231	24.95	24.9 - 25.1		0.786	0.900	
26	110292	25.95	25.9 - 26.1		0.785	0.900	
59	586961	58.95	58.9 - 59.1		0.775	0.900	
113	80178	113.00	112.9 - 113.1		0.720	0.900	
115	957254	115.00	114.9 - 115.1		0.718	0.900	
206	230779	205.95	205.9 - 206.1		0.740	0.900	
207	211470	206.95	206.9 - 207.1		0.693	0.900	
208	507286	207.95	207.9 - 208.1		0.726	0.900	
220	0	220.10	-		0.746		

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	5.7	V	Deflect	14.0	V
Extract 2	-115.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-65	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	81073	0.64	
89	64277	0.55	
205	90127	0.44	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	80424	81041	81706	80739	81453
89	63814	64365	64481	64022	64701
205	89783	89738	90070	90396	90650

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	6.3	V	Deflect	2.0	V
Extract 2	-145.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-75	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			