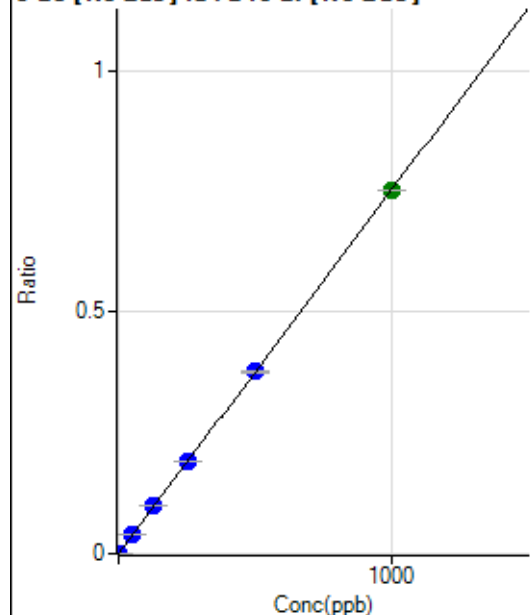


Calibration for 002CALB.d

Batch Folder: D:\ICP-MS Data\P7102718-MS.b\
 Analysis File: P7102718-MS.batch.bin
 DA Date-Time: 2018-10-27 17:16:32
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2018-10-27 14:25:29
2			
3	005CALS.d	S02	2018-10-27 14:33:50
4	006CALS.d	S03	2018-10-27 14:37:44
5	007CALS.d	S04	2018-10-27 14:41:46
6	008CALS.d	S05	2018-10-27 14:45:33
7	009CALS.d	S06	2018-10-27 14:49:17
8	010CALS.d	S07	2018-10-27 14:53:00
9	011CALS.d	S08	2018-10-27 14:56:45

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	74.08	0.0000	P	58.0
2	☐	0.100					
3	☐	1.000	1.066	5314.04	0.0008	P	3.3
4	☐	50.000	53.006	262634.79	0.0399	P	0.6
5	☐	125.000	131.286	637047.92	0.0988	P	0.5
6	☐	250.000	255.505	1224525.75	0.1922	P	0.6
7	☐	500.000	499.922	2350643.57	0.3760	P	0.7
8	☐	1000.000	997.727	4549785.40	0.7504	A	0.2
9	☐			646.33	0.0001	P	4.4

$$y = 7.5210\text{E-}004 * x + 1.1279\text{E-}005$$

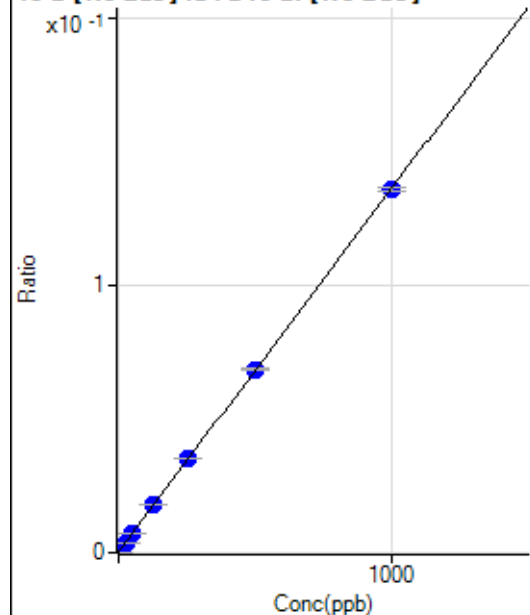
$$R = 1.0000$$

$$DL = 0.0261$$

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	1986.32	0.0003	P	13.0
2	☐	2.500					
3	☐	25.000	25.352	24487.30	0.0037	P	3.8
4	☐	50.000	51.129	47762.66	0.0073	P	2.3
5	☐	125.000	129.340	115340.94	0.0179	P	2.7
6	☐	250.000	255.496	223190.45	0.0350	P	0.7
7	☐	500.000	502.868	429144.69	0.0686	P	1.6
8	☐	1000.000	996.584	823025.85	0.1357	P	1.2
9	☐			15077.52	0.0027	P	6.6

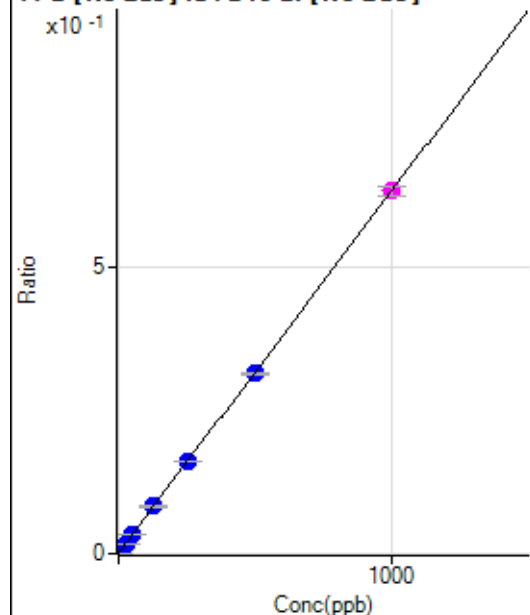
$$y = 1.3591\text{E-}004 * x + 3.0290\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.8718$$

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	9533.89	0.0015	P	4.4
2	☐	2.500					
3	☐	25.000	25.294	113883.26	0.0174	P	0.8
4	☐	50.000	51.827	225206.90	0.0342	P	2.0
5	☐	125.000	128.555	533281.00	0.0827	P	1.4
6	☐	250.000	251.912	1023324.80	0.1606	P	1.0
7	☐	500.000	497.001	1971971.07	0.3154	P	1.0
8	☐	1000.000	1000.479	3840859.07	0.6335	M	2.4
9	☐			69569.57	0.0124	P	8.5

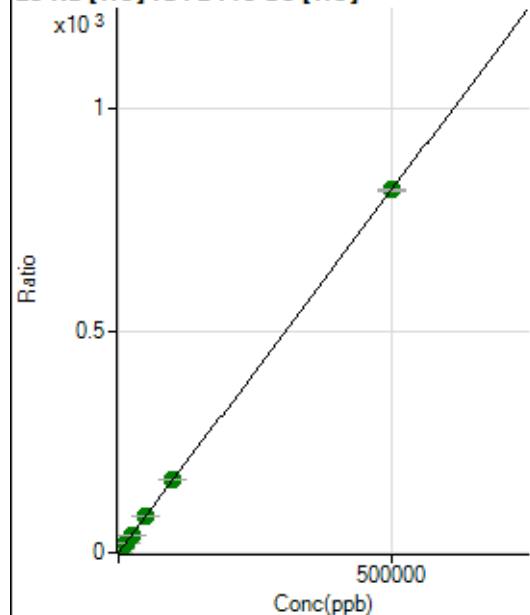
$$y = 6.3174\text{E-}004 * x + 0.0015$$

$$R = 1.0000$$

$$DL = 0.306$$

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	10584.70	0.0193	P	2.3
2	☐	50.000					
3	☐	500.000	491.419	459544.15	0.8234	P	0.6
4	☐	5000.000	4917.405	4443319.85	8.0653	A	0.3
5	☐	12500.000	12478.937	10804433.31	20.4377	A	0.9
6	☐	25000.000	24900.373	20878293.17	40.7620	A	0.4
7	☐	50000.000	49229.007	40977912.72	80.5692	A	0.4
8	☐	100000.00	99566.819	81480392.79	162.9333	A	0.3
9	☐	500000.00	500170.07	409992984.16	818.4113	A	0.4

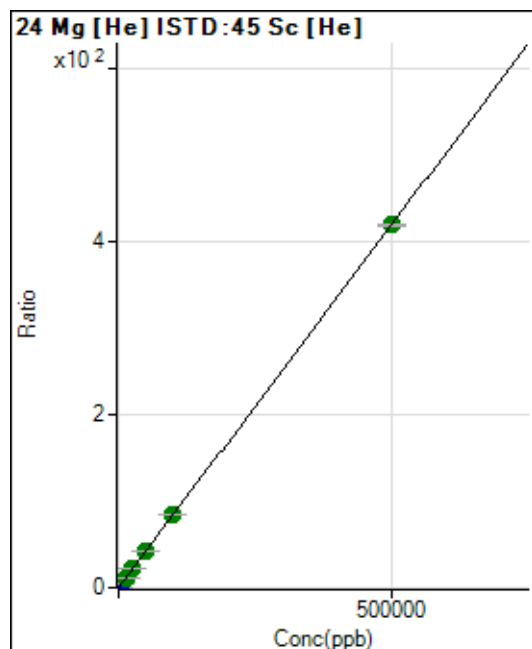
$$y = 0.0016 * x + 0.0193$$

$$R = 1.0000$$

$$DL = 0.8162$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	263.90	0.0005	P	8.2
2	☐	50.000					
3	☐	500.000	507.458	238056.61	0.4265	P	0.2
4	☐	5000.000	5054.994	2338292.48	4.2444	P	1.0
5	☐	12500.000	12753.884	5660826.60	10.7080	A	0.4
6	☐	25000.000	25366.410	10908299.81	21.2969	A	0.5
7	☐	50000.000	49975.471	21339601.00	41.9574	A	0.6
8	☐	100000.00	99783.188	41894224.55	83.7735	A	0.2
9	☐	500000.00	500020.59	210296075.54	419.7928	A	0.2

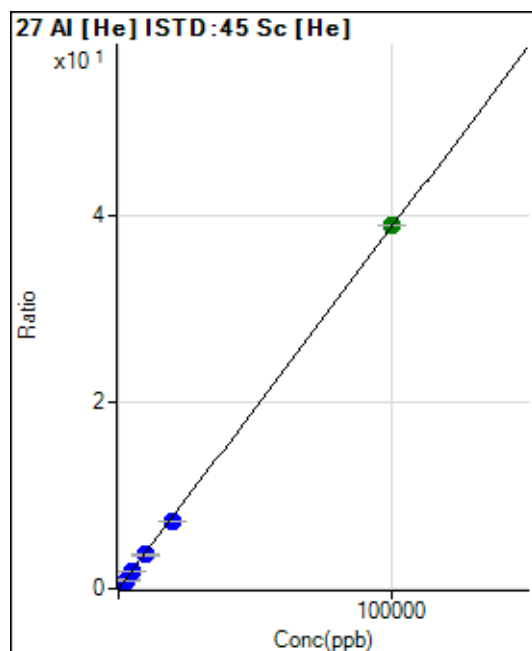
$$y = 8.3955\text{E-}004 * x + 4.8138\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.1412$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	50.00	0.0001	P	16.8
2	☐	2.000					
3	☐	20.000	19.349	4225.77	0.0076	P	2.9
4	☐	1000.000	954.027	203204.42	0.3689	P	0.9
5	☐	2500.000	2391.604	488756.24	0.9245	P	0.4
6	☐	5000.000	4748.188	940105.75	1.8354	P	0.8
7	☐	10000.000	9338.686	1835925.93	3.6098	P	1.0
8	☐	20000.000	18432.861	3563077.73	7.1249	P	0.3
9	☐	100000.00	100395.32	19439963.11	38.8059	A	0.1

$$y = 3.8653\text{E-}004 * x + 9.1203\text{E-}005$$

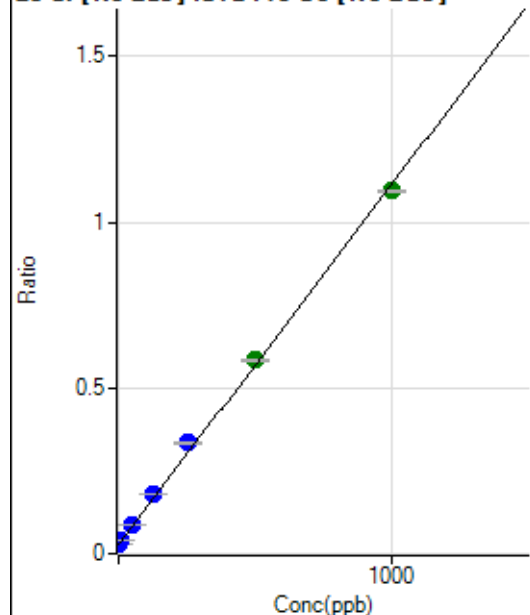
$$R = 0.9999$$

$$DL = 0.1188$$

Weight: <None>

Min Conc: 0

28 Si [No Gas] ISTD :45 Sc [No Gas]



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	323750.59	0.0265	P	0.9
2	☐	1.000					
3	☐	10.000	14.986	519681.21	0.0428	P	0.6
4	☐	50.000	56.469	1057107.55	0.0879	P	0.7
5	☐	125.000	142.031	2115522.12	0.1809	P	1.4
6	☐	250.000	284.125	3764827.30	0.3353	P	1.4
7	☐	500.000	513.013	6484487.00	0.5842	A	1.2
8	☐	1000.000	982.460	11881992.19	1.0945	A	0.9
9	☐			641557.27	0.0598	P	2.3

$$y = 0.0011 * x + 0.0265$$

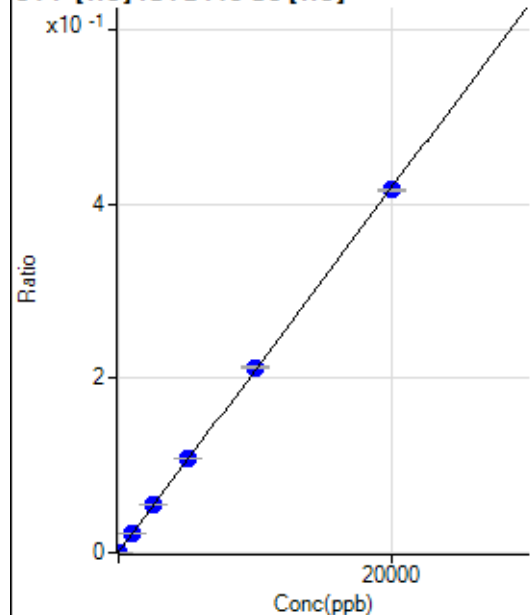
$$R = 0.9992$$

$$DL = 0.6899$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-5.447	188.90	0.0003	P	31.1
2	☐	0.000					
3	☐	0.000	5.447	319.46	0.0006	P	15.1
4	☐	1000.000	1025.999	12077.57	0.0219	P	0.9
5	☐	2500.000	2583.242	28812.03	0.0545	P	0.8
6	☐	5000.000	5132.391	55231.09	0.1078	P	0.8
7	☐	10000.000	10140.806	108134.56	0.2126	P	0.5
8	☐	20000.000	19884.794	208265.02	0.4165	P	0.8
9	☐			302.79	0.0006	P	4.6

$$y = 2.0921E-005 * x + 4.5832E-004$$

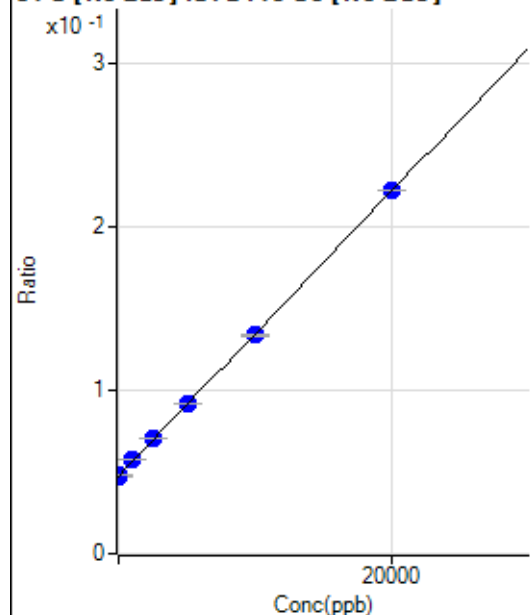
$$R = 0.9999$$

$$DL = 13.87$$

Weight: <None>

Min Conc: 0

34 S [No Gas] ISTD:45 Sc [No Gas]



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-68.088	572851.69	0.0469	P	0.6
2	☐	0.000					
3	☐	0.000	68.088	583757.81	0.0481	P	1.0
4	☐	1000.000	1136.607	690135.69	0.0574	P	0.4
5	☐	2500.000	2601.010	820257.54	0.0701	P	0.4
6	☐	5000.000	5078.798	1029867.20	0.0917	P	0.5
7	☐	10000.000	9922.997	1486996.79	0.1340	P	1.0
8	☐	20000.000	19999.346	2407821.32	0.2218	P	0.1
9	☐			488155.24	0.0455	P	1.4

$$y = 8.7167\text{E-}006 * x + 0.0475$$

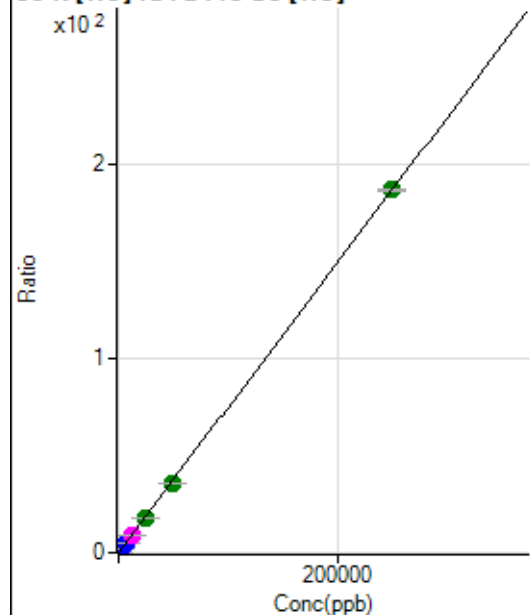
$$R = 0.9999$$

$$DL = 130.8$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	30921.88	0.0564	P	0.8
2	☐	50.000					
3	☐	500.000	496.369	238084.74	0.4266	P	0.6
4	☐	2500.000	2450.771	1037975.92	1.8841	P	1.1
5	☐	6250.000	6147.725	2453637.97	4.6412	P	0.2
6	☐	12500.000	12113.086	4655911.52	9.0900	M	0.7
7	☐	25000.000	23919.698	9101533.71	17.8951	A	0.4
8	☐	50000.000	47531.396	17754694.67	35.5041	A	0.8
9	☐	250000.00	250624.15	93661076.40	186.9655	A	0.2

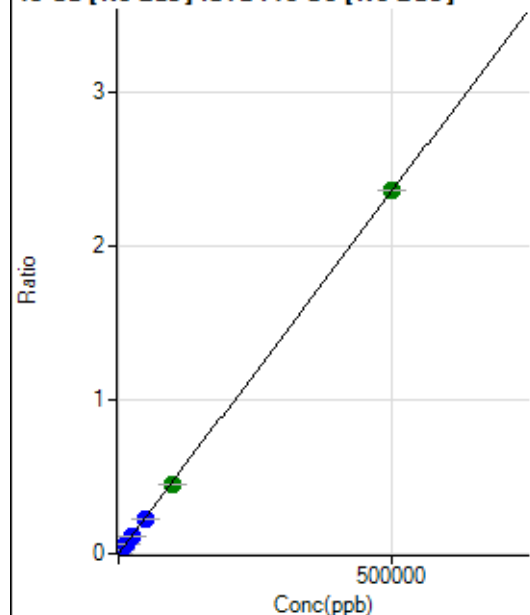
$$y = 7.4577\text{E-}004 * x + 0.0564$$

$$R = 0.9999$$

$$DL = 1.785$$

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	169.46	0.0000	P	3.2
2	☐	50.000					
3	☐	500.000	469.141	27025.34	0.0022	P	0.8
4	☐	5000.000	4839.939	274541.61	0.0228	P	0.3
5	☐	12500.000	12204.258	672801.72	0.0575	P	0.1
6	☐	25000.000	24143.963	1277499.66	0.1138	P	0.2
7	☐	50000.000	47173.012	2467805.72	0.2223	P	0.5
8	☐	100000.00	96784.932	4951525.28	0.4561	A	0.1
9	☐	500000.00	500977.53	25327341.89	2.3608	A	0.1

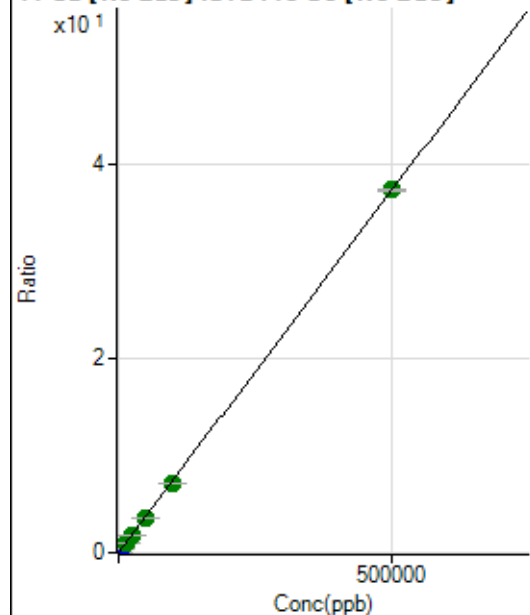
$$y = 4.7123\text{E-}006 * x + 1.3864\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.2817$$

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	10076.49	0.0008	P	1.2
2	☐	50.000					
3	☐	500.000	472.333	437738.71	0.0360	P	1.0
4	☐	5000.000	4855.563	4364020.19	0.3628	P	0.2
5	☐	12500.000	12020.555	10489297.54	0.8968	A	0.3
6	☐	25000.000	24055.801	20140911.74	1.7939	A	0.5
7	☐	50000.000	47471.584	39289728.66	3.5393	A	0.6
8	☐	100000.00	95771.504	77510032.29	7.1396	A	0.3
9	☐	500000.00	501159.20	400779595.07	37.3569	A	0.3

$$y = 7.4539\text{E-}005 * x + 8.2433\text{E-}004$$

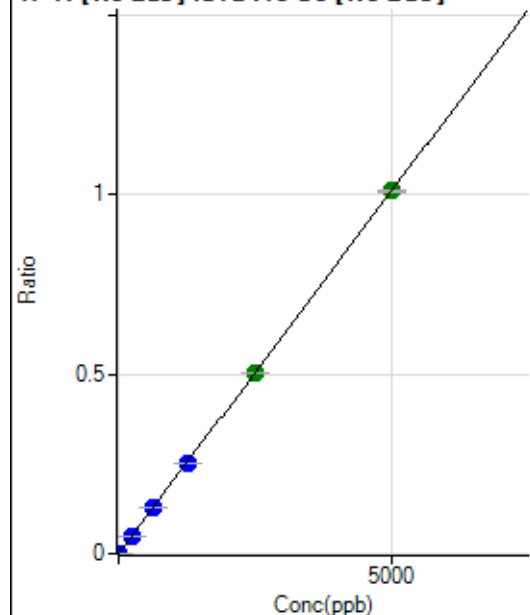
$$R = 1.0000$$

$$DL = 0.3945$$

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	102.78	0.0000	P	5.0
2	☐	0.500					
3	☐	5.000	5.139	12717.07	0.0010	P	0.8
4	☐	250.000	250.877	609936.40	0.0507	P	0.7
5	☐	625.000	629.143	1486959.35	0.1271	P	0.2
6	☐	1250.000	1241.941	2817494.55	0.2510	P	0.6
7	☐	2500.000	2498.640	5604657.50	0.5049	A	0.5
8	☐	5000.000	5002.133	10972975.94	1.0107	A	0.4
9	☐			4267.45	0.0004	P	8.0

$$y = 2.0206\text{E-}004 * x + 8.4095\text{E-}006$$

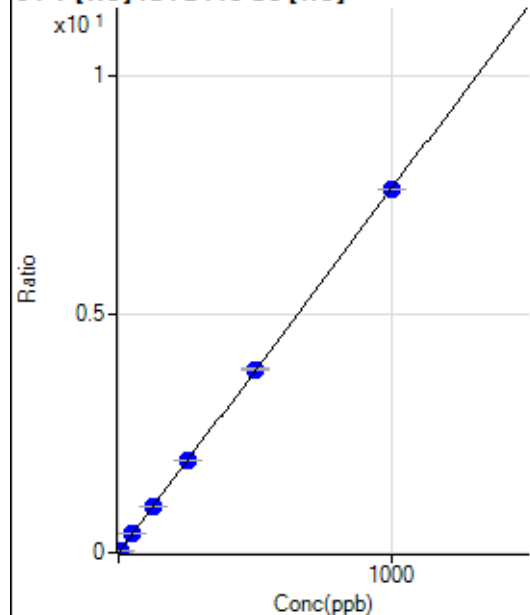
$$R = 1.0000$$

$$DL = 0.006287$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.33	0.0000	P	25.2
2	☐	0.500					
3	☐	5.000	5.085	21639.37	0.0388	P	1.5
4	☐	50.000	51.175	214825.33	0.3899	P	0.7
5	☐	125.000	127.973	515480.18	0.9751	P	0.7
6	☐	250.000	255.438	996892.89	1.9463	P	0.5
7	☐	500.000	503.041	1949401.38	3.8329	P	0.8
8	☐	1000.000	996.689	3797733.69	7.5941	P	0.2
9	☐			1693.46	0.0034	P	4.4

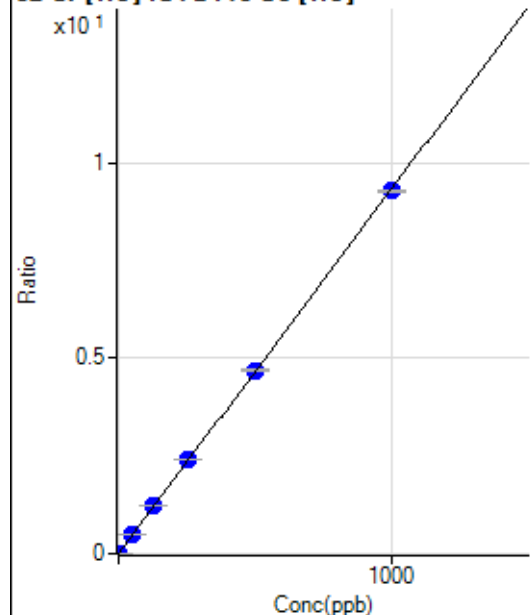
$$y = 0.0076 * x + 2.4327\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.002416$$

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	776.70	0.0014	P	3.7
2	☐	0.200					
3	☐	2.000	2.272	12628.89	0.0226	P	1.2
4	☐	50.000	52.008	268318.08	0.4870	P	1.0
5	☐	125.000	130.905	646926.09	1.2237	P	0.9
6	☐	250.000	258.819	1238582.68	2.4182	P	0.4
7	☐	500.000	503.565	2392194.39	4.7035	P	1.0
8	☐	1000.000	995.174	4647767.57	9.2939	P	0.3
9	☐			214895.17	0.4290	P	0.6

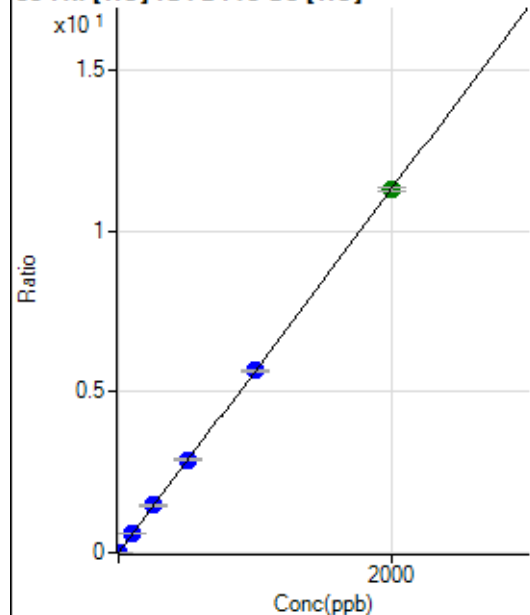
$$y = 0.0093 * x + 0.0014$$

$$R = 0.9999$$

$$DL = 0.01669$$

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	66.67	0.0001	P	25.9
2	☐	0.100					
3	☐	1.000	1.098	3533.82	0.0063	P	0.6
4	☐	100.000	103.615	322770.58	0.5859	P	0.4
5	☐	250.000	259.961	776970.90	1.4697	P	0.7
6	☐	500.000	512.526	1484112.44	2.8975	P	0.9
7	☐	1000.000	999.587	2874080.37	5.6510	P	1.1
8	☐	2000.000	1995.649	5641755.89	11.2819	A	1.1
9	☐			39663.58	0.0792	P	1.3

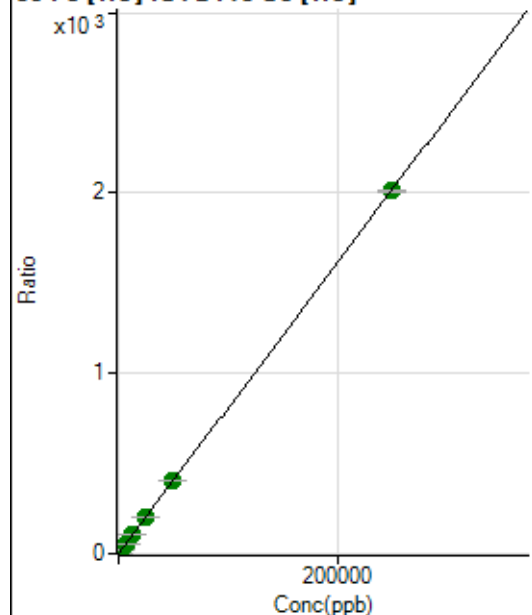
$$y = 0.0057 * x + 1.2157E-004$$

$$R = 1.0000$$

$$DL = 0.01671$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	7285.33	0.0133	P	3.8
2	☐	5.000					
3	☐	50.000	52.884	245131.49	0.4392	P	0.4
4	☐	2500.000	2588.113	11490659.86	20.8575	A	0.8
5	☐	6250.000	6481.967	27604655.48	52.2178	A	0.9
6	☐	12500.000	12868.765	53092549.33	103.6559	A	0.4
7	☐	25000.000	25329.234	103759835.65	204.0102	A	0.7
8	☐	50000.000	50579.791	203717463.81	407.3735	A	0.7
9	☐	250000.00	249825.99	1007953629.9	2,012.065	A	0.3

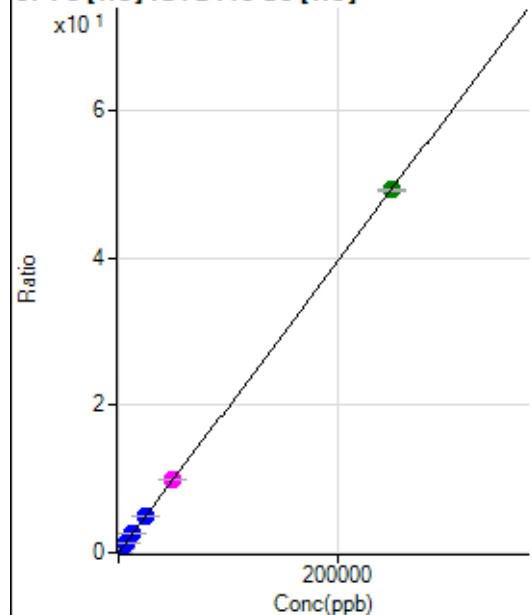
$$y = 0.0081 * x + 0.0133$$

$$R = 1.0000$$

$$DL = 0.1885$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	198.15	0.0004	P	15.2
2	☐	5.000					
3	☐	50.000	56.448	6418.27	0.0115	P	5.0
4	☐	2500.000	2599.226	282669.03	0.5131	P	0.6
5	☐	6250.000	6524.366	680551.96	1.2874	P	1.2
6	☐	12500.000	12899.598	1303524.81	2.5450	P	0.5
7	☐	25000.000	25127.638	2521181.25	4.9571	P	0.8
8	☐	50000.000	50484.483	4980388.94	9.9590	M	1.0
9	☐	250000.00	249862.50	24691585.50	49.2887	A	0.2

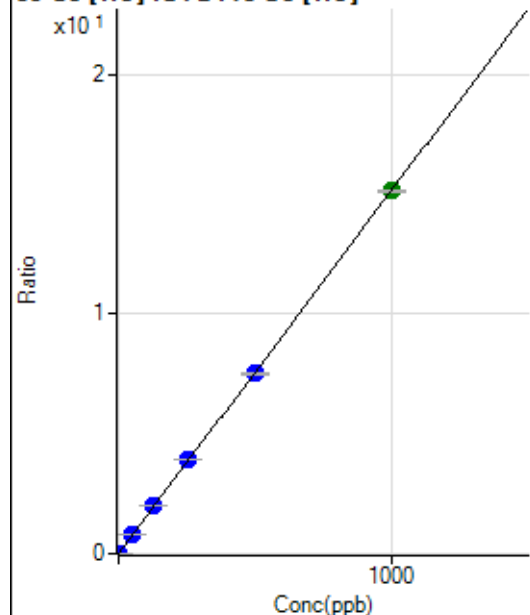
$$y = 1.9726E-004 * x + 3.6130E-004$$

$$R = 1.0000$$

$$DL = 0.8347$$

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	131.12	0.0002	P	37.1
2	☐	0.100					
3	☐	1.000	1.062	9104.06	0.0163	P	2.2
4	☐	50.000	52.632	439134.03	0.7971	P	0.5
5	☐	125.000	131.361	1051506.84	1.9890	P	0.7
6	☐	250.000	257.424	1996381.79	3.8977	P	0.3
7	☐	500.000	496.502	3823293.21	7.5173	P	1.0
8	☐	1000.000	998.966	7563533.29	15.1246	A	0.4
9	☐			88423.17	0.1765	P	0.3

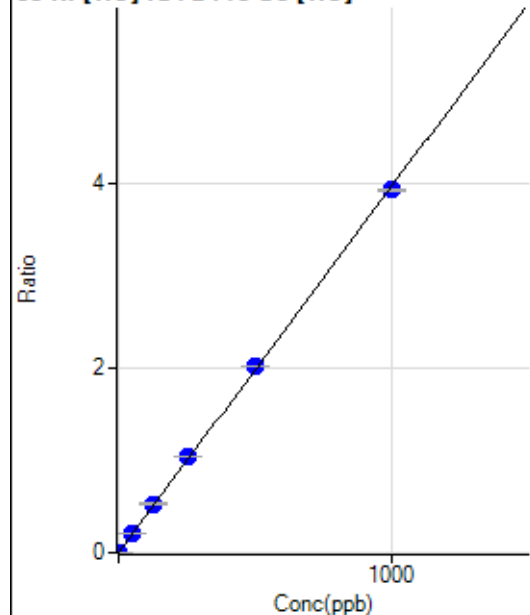
$$y = 0.0151 * x + 2.3893E-004$$

$$R = 0.9999$$

$$DL = 0.01757$$

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	124.45	0.0002	P	17.7
2	☐	0.100					
3	☐	1.000	1.184	2745.86	0.0049	P	2.5
4	☐	50.000	53.702	117449.12	0.2132	P	1.2
5	☐	125.000	133.813	280649.61	0.5309	P	0.5
6	☐	250.000	262.654	533618.60	1.0418	P	0.4
7	☐	500.000	508.996	1026727.38	2.0187	P	0.5
8	☐	1000.000	991.052	1965581.24	3.9304	P	0.7
9	☐			72175.42	0.1441	P	0.8

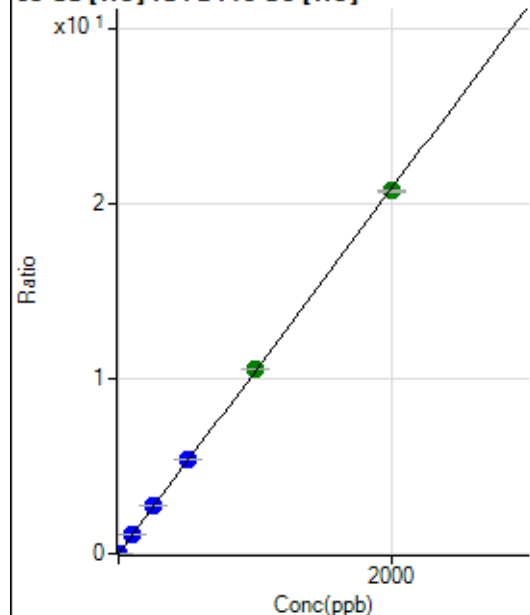
$$y = 0.0040 * x + 2.2693E-004$$

$$R = 0.9998$$

$$DL = 0.03044$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	558.91	0.0010	P	10.2
2	☐	0.200					
3	☐	2.000	2.226	13547.52	0.0243	P	0.8
4	☐	100.000	107.379	618685.84	1.1230	P	0.7
5	☐	250.000	266.445	1472338.93	2.7851	P	1.0
6	☐	500.000	518.579	2775907.77	5.4196	P	0.6
7	☐	1000.000	1010.616	5371282.56	10.5608	A	0.5
8	☐	2000.000	1987.623	10386463.53	20.7695	A	0.4
9	☐			24356.07	0.0486	P	0.4

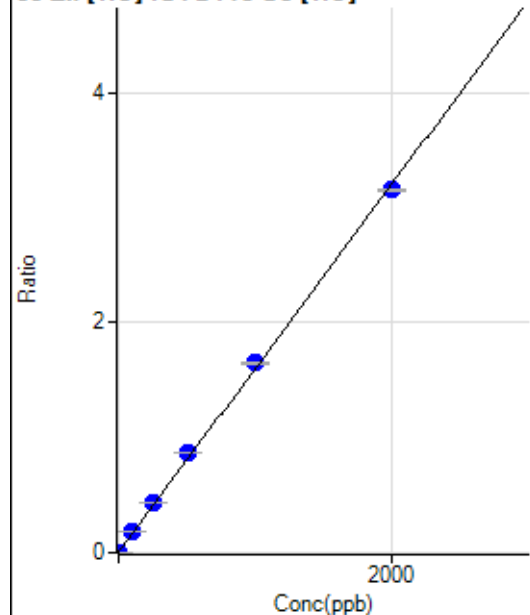
$$y = 0.0104 * x + 0.0010$$

$$R = 0.9999$$

$$DL = 0.02997$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1649.01	0.0030	P	3.2
2	☐	0.200					
3	☐	2.000	2.444	3856.12	0.0069	P	3.4
4	☐	100.000	110.546	98925.38	0.1796	P	0.3
5	☐	250.000	272.961	232060.08	0.4390	P	0.1
6	☐	500.000	540.870	443998.27	0.8668	P	0.3
7	☐	1000.000	1029.905	838124.60	1.6479	P	1.0
8	☐	2000.000	1971.432	1576123.41	3.1516	P	0.7
9	☐			13916.81	0.0278	P	1.8

$$y = 0.0016 * x + 0.0030$$

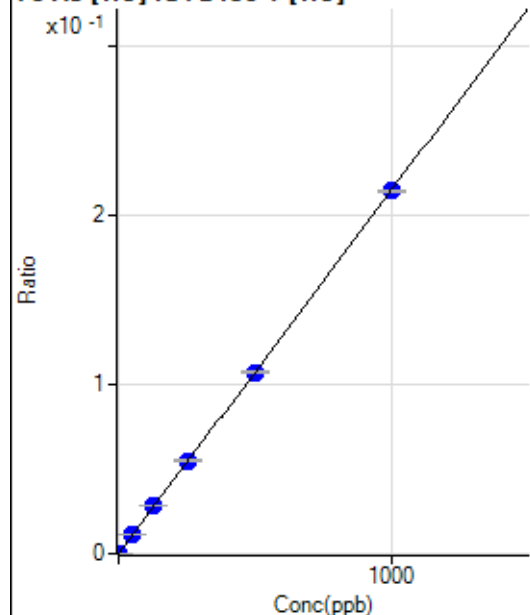
$$R = 0.9996$$

$$DL = 0.1795$$

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	16.67	0.0000	P	29.5
2	☐	0.100					
3	☐	1.000	1.084	633.35	0.0002	P	2.0
4	☐	50.000	51.856	29163.18	0.0111	P	0.9
5	☐	125.000	130.252	70605.88	0.0280	P	0.4
6	☐	250.000	256.419	134851.89	0.0551	P	0.3
7	☐	500.000	499.627	260540.87	0.1073	P	1.0
8	☐	1000.000	997.833	509990.56	0.2143	P	0.4
9	☐			719.78	0.0003	P	6.9

$$y = 2.1471\text{E-}004 * x + 6.4154\text{E-}006$$

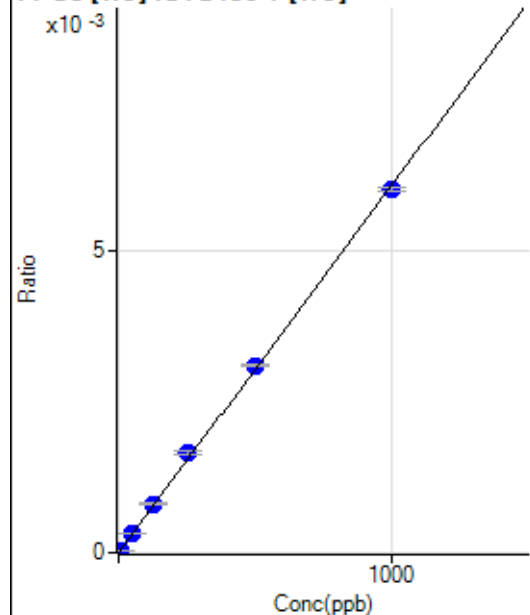
$$R = 1.0000$$

$$DL = 0.02642$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	0.500					
3	☐	5.000	6.621	106.67	0.0000	P	8.9
4	☐	50.000	52.401	834.48	0.0003	P	9.5
5	☐	125.000	132.976	2042.40	0.0008	P	3.2
6	☐	250.000	270.480	4030.63	0.0016	P	3.7
7	☐	500.000	510.235	7539.84	0.0031	P	1.7
8	☐	1000.000	988.637	14319.46	0.0060	P	1.1
9	☐			12.22	0.0000	P	15.2

$$y = 6.0846\text{E-}006 * x + 0.0000\text{E+}000$$

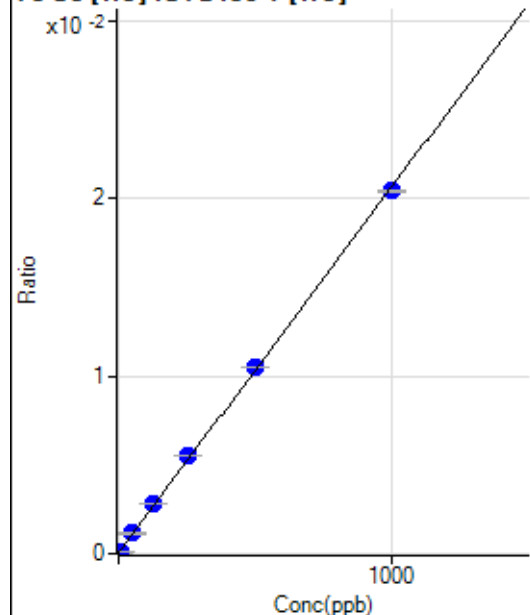
$$R = 0.9997$$

$$DL = 0$$

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	111.73	0.0000	P	33.9
2	☐	0.500					
3	☐	5.000	5.076	390.75	0.0001	P	5.6
4	☐	50.000	53.289	2985.52	0.0011	P	2.9
5	☐	125.000	132.976	7020.88	0.0028	P	0.9
6	☐	250.000	266.159	13529.22	0.0055	P	0.5
7	☐	500.000	509.453	25584.31	0.0105	P	0.2
8	☐	1000.000	990.072	48636.06	0.0204	P	0.7
9	☐			108.03	0.0000	P	15.9

$$y = 2.0594E-005 * x + 4.3007E-005$$

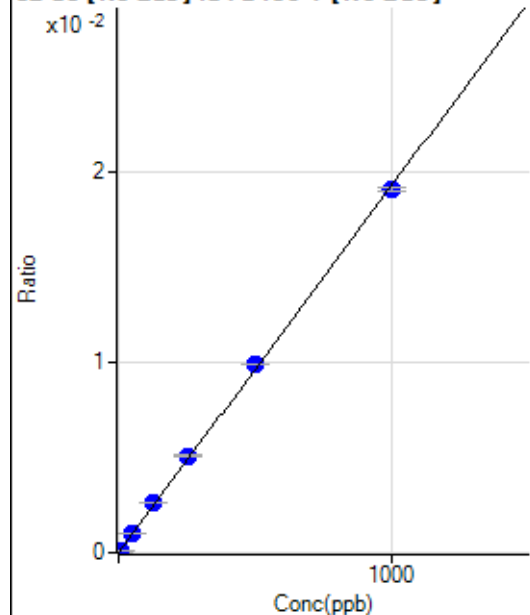
$$R = 0.9998$$

$$DL = 2.125$$

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	16.91	0.0000	P	367.
2	☐	0.500					
3	☐	5.000	5.550	1932.14	0.0001	P	4.6
4	☐	50.000	54.134	18508.49	0.0010	P	0.9
5	☐	125.000	135.358	44972.55	0.0026	P	0.7
6	☐	250.000	264.399	85487.19	0.0051	P	0.5
7	☐	500.000	512.185	164160.79	0.0099	P	0.4
8	☐	1000.000	988.804	308983.47	0.0191	P	1.0
9	☐			294.66	0.0000	P	6.6

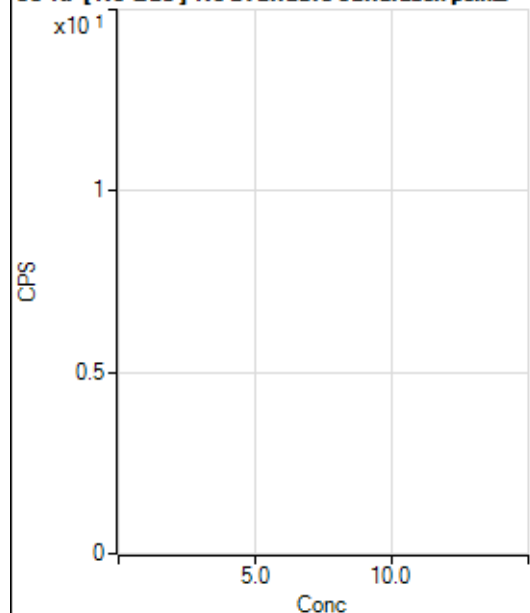
$$y = 1.9321E-005 * x + 9.4412E-007$$

$$R = 0.9998$$

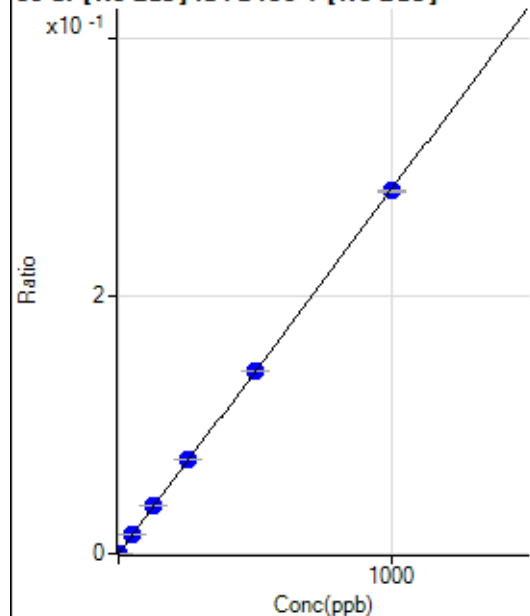
$$DL = 0.5381$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			563.35		P	12.0
2	☐						
3	☐			524.46		P	2.6
4	☐			512.24		P	8.6
5	☐			564.47		P	4.1
6	☐			531.13		P	10.1
7	☐			525.57		P	10.3
8	☐			557.80		P	12.9
9	☐			555.58		P	4.0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	927.85	0.0001	P	5.8
2	☐	0.100					
3	☐	1.000	1.084	6387.81	0.0004	P	2.6
4	☐	50.000	51.791	259366.28	0.0147	P	0.5
5	☐	125.000	130.876	635917.61	0.0370	P	0.5
6	☐	250.000	258.195	1220234.34	0.0729	P	0.6
7	☐	500.000	502.068	2351526.46	0.1418	P	0.5
8	☐	1000.000	996.093	4547920.02	0.2812	P	0.6
9	☐			22930.18	0.0014	P	3.6

$$y = 2.8226E-004 * x + 5.1597E-005$$

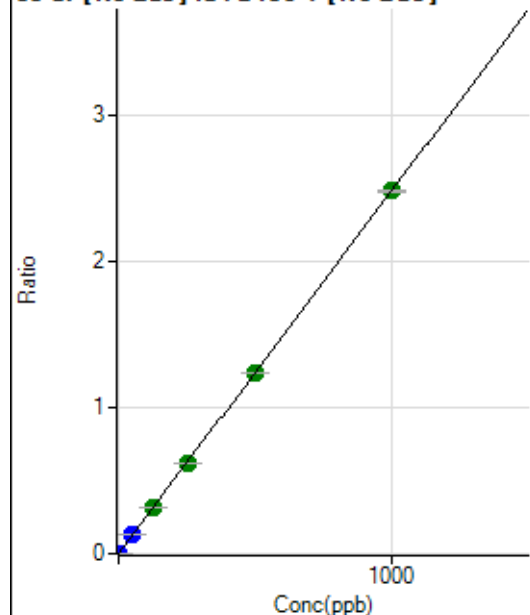
$$R = 1.0000$$

$$DL = 0.03191$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	172.23	0.0000	P	28.2
2	☐	0.100					
3	☐	1.000	1.051	46721.28	0.0026	P	0.4
4	☐	50.000	50.699	2221974.70	0.1257	P	0.7
5	☐	125.000	125.958	5367117.31	0.3122	A	0.4
6	☐	250.000	251.169	10416700.06	0.6226	A	0.3
7	☐	500.000	498.307	20487610.87	1.2351	A	0.1
8	☐	1000.000	1000.400	40102127.63	2.4797	A	0.2
9	☐			193639.27	0.0122	P	0.6

$$y = 0.0025 * x + 9.5742E-006$$

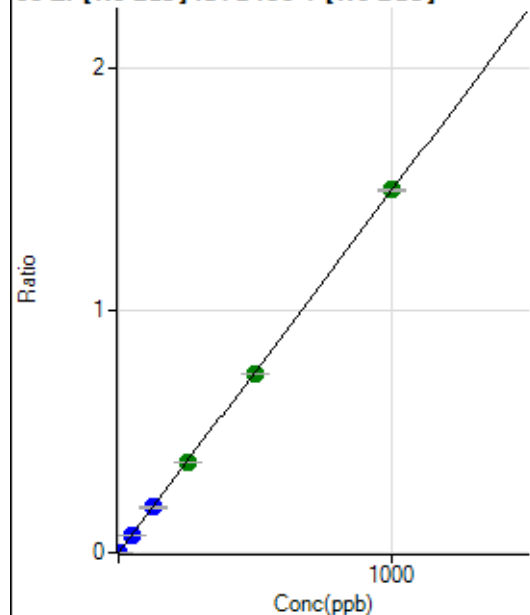
$$R = 1.0000$$

$$DL = 0.003272$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1389.01	0.0001	P	7.8
2	☐	0.100					
3	☐	1.000	1.036	29063.64	0.0016	P	2.7
4	☐	50.000	49.994	1323291.01	0.0748	P	0.1
5	☐	125.000	124.863	3211463.03	0.1868	P	0.1
6	☐	250.000	248.784	6226703.18	0.3721	A	0.3
7	☐	500.000	495.455	12292239.25	0.7411	A	0.4
8	☐	1000.000	1002.594	24251101.41	1.4995	A	0.3
9	☐			12931.35	0.0008	P	1.3

$$y = 0.0015 * x + 7.7245E-005$$

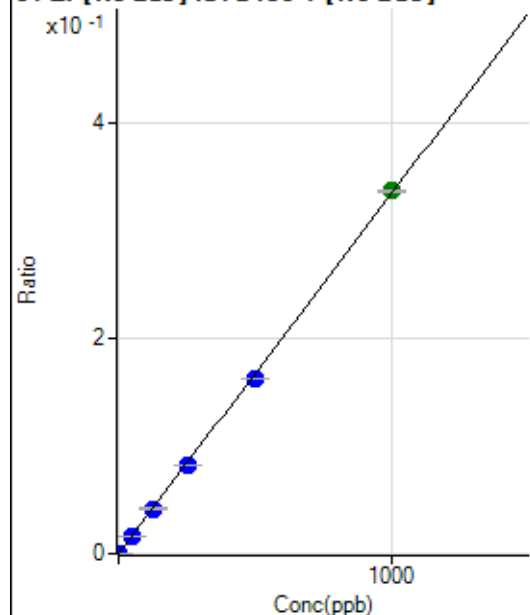
$$R = 1.0000$$

$$DL = 0.01216$$

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	263.90	0.0000	P	6.3
2	☐	0.100					
3	☐	1.000	1.078	6696.29	0.0004	P	3.5
4	☐	50.000	50.137	296380.43	0.0168	P	0.1
5	☐	125.000	125.273	719650.87	0.0419	P	0.8
6	☐	250.000	246.931	1380447.40	0.0825	P	0.5
7	☐	500.000	486.786	2697647.15	0.1626	P	0.4
8	☐	1000.000	1007.333	5442528.64	0.3365	A	0.3
9	☐			2730.93	0.0002	P	3.8

$$y = 3.3407\text{E-}004 * x + 1.4672\text{E-}005$$

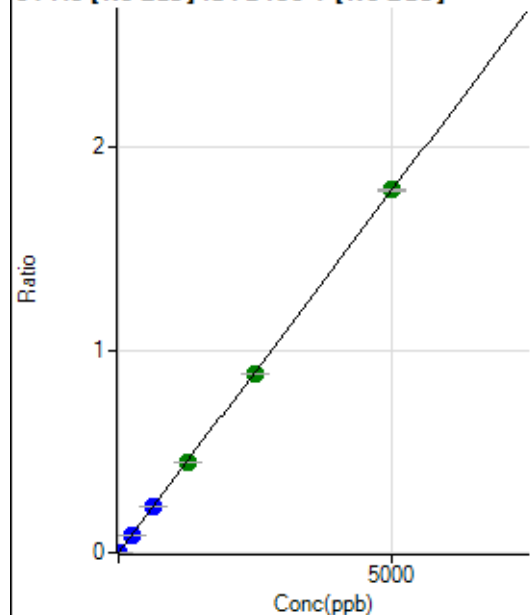
$$R = 0.9999$$

$$DL = 0.008265$$

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	463.91	0.0000	P	19.9
2	☐	0.500					
3	☐	5.000	5.053	32688.27	0.0018	P	3.4
4	☐	250.000	250.310	1580551.72	0.0894	P	0.4
5	☐	625.000	625.711	3840829.56	0.2234	P	0.3
6	☐	1250.000	1242.381	7422420.91	0.4436	A	0.3
7	☐	2500.000	2477.396	14672503.80	0.8846	A	0.3
8	☐	5000.000	5013.102	28947034.68	1.7899	A	0.7
9	☐			36143.94	0.0023	P	1.6

$$y = 3.5704\text{E-}004 * x + 2.5790\text{E-}005$$

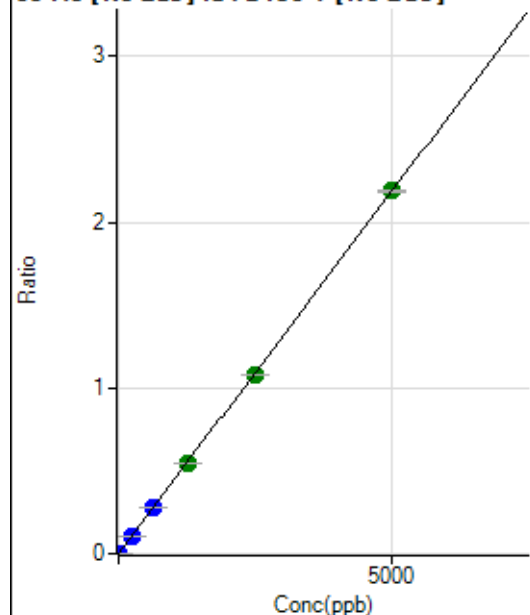
$$R = 1.0000$$

$$DL = 0.04314$$

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	88.89	0.0000	P	21.9
2	☐	0.500					
3	☐	5.000	5.041	39419.29	0.0022	P	1.5
4	☐	250.000	250.680	1935884.44	0.1095	P	0.4
5	☐	625.000	625.284	4694855.66	0.2731	P	0.4
6	☐	1250.000	1249.299	9130010.45	0.5457	A	0.3
7	☐	2500.000	2479.099	17960796.93	1.0828	A	0.2
8	☐	5000.000	5010.556	35393027.18	2.1885	A	0.3
9	☐			54095.07	0.0034	P	1.3

$$y = 4.3677\text{E-}004 * x + 4.9450\text{E-}006$$

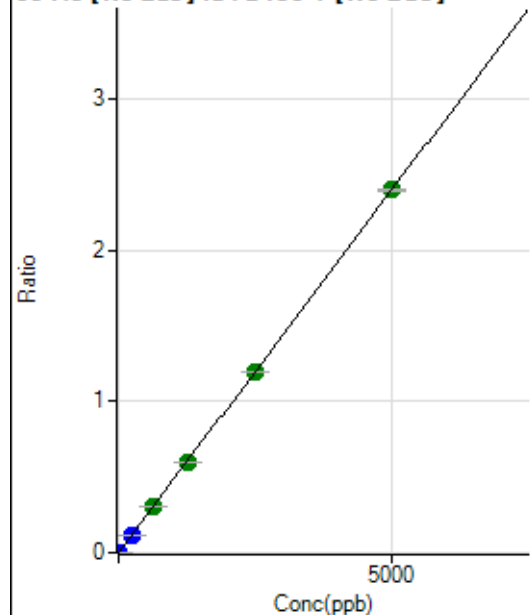
$$R = 1.0000$$

$$DL = 0.007449$$

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	230.57	0.0000	P	38.6
2	☐	0.500					
3	☐	5.000	5.078	43673.30	0.0024	P	1.0
4	☐	250.000	250.639	2122787.68	0.1201	P	0.6
5	☐	625.000	626.559	5159298.29	0.3001	A	0.1
6	☐	1250.000	1254.699	10055848.14	0.6010	A	0.5
7	☐	2500.000	2484.994	19743842.63	1.1903	A	0.2
8	☐	5000.000	5006.102	38779489.06	2.3979	A	0.4
9	☐			70876.23	0.0045	P	1.1

$$y = 4.7899\text{E-}004 * x + 1.2809\text{E-}005$$

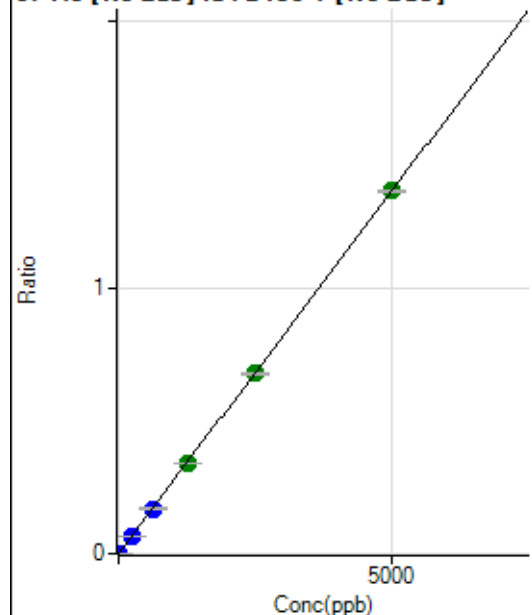
$$R = 1.0000$$

$$DL = 0.03097$$

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	77.78	0.0000	P	27.1
2	☐	0.500					
3	☐	5.000	4.968	24249.20	0.0014	P	0.3
4	☐	250.000	250.824	1208015.55	0.0683	P	0.2
5	☐	625.000	621.854	2911852.30	0.1694	P	0.8
6	☐	1250.000	1249.455	5694587.80	0.3403	A	0.3
7	☐	2500.000	2484.286	11224655.89	0.6767	A	0.3
8	☐	5000.000	5008.345	22062777.23	1.3642	A	0.7
9	☐			34022.16	0.0021	P	1.6

$$y = 2.7239\text{E-}004 * x + 4.3264\text{E-}006$$

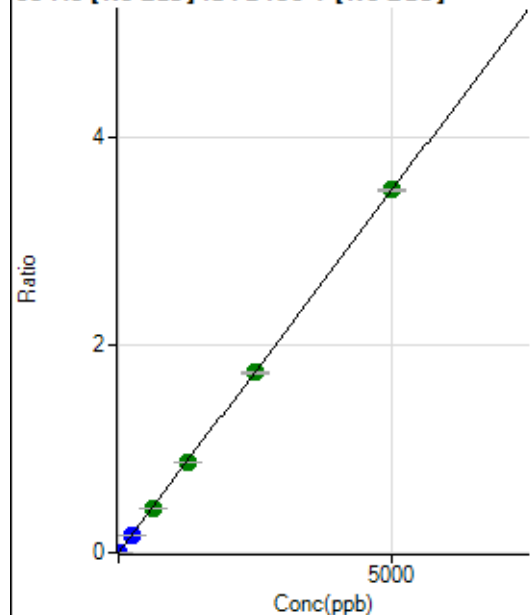
$$R = 1.0000$$

$$DL = 0.01292$$

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	175.01	0.0000	P	30.9
2	☐	0.500					
3	☐	5.000	5.061	63288.62	0.0035	P	1.3
4	☐	250.000	251.311	3101859.46	0.1754	P	0.6
5	☐	625.000	622.068	7464980.46	0.4343	A	0.5
6	☐	1250.000	1250.306	14603646.50	0.8728	A	0.4
7	☐	2500.000	2482.832	28748998.21	1.7332	A	0.2
8	☐	5000.000	5008.808	56546845.01	3.4965	A	0.3
9	☐			86772.41	0.0055	P	0.8

$$y = 6.9807\text{E-}004 * x + 9.7255\text{E-}006$$

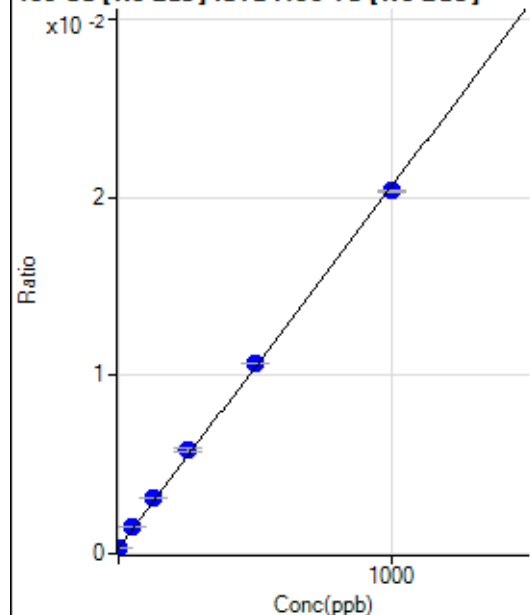
$$R = 1.0000$$

$$DL = 0.01293$$

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	7382.82	0.0003	P	3.0
2	☐	0.100					
3	☐	1.000	1.644	8030.37	0.0004	P	2.3
4	☐	50.000	56.273	32510.58	0.0015	P	0.7
5	☐	125.000	137.170	67260.04	0.0031	P	1.2
6	☐	250.000	269.737	123881.83	0.0058	P	3.0
7	☐	500.000	510.811	229205.12	0.0107	P	0.9
8	☐	1000.000	987.825	429015.08	0.0203	P	0.4
9	☐			6949.21	0.0003	P	3.0

$$y = 2.0261\text{E-}005 * x + 3.2840\text{E-}004$$

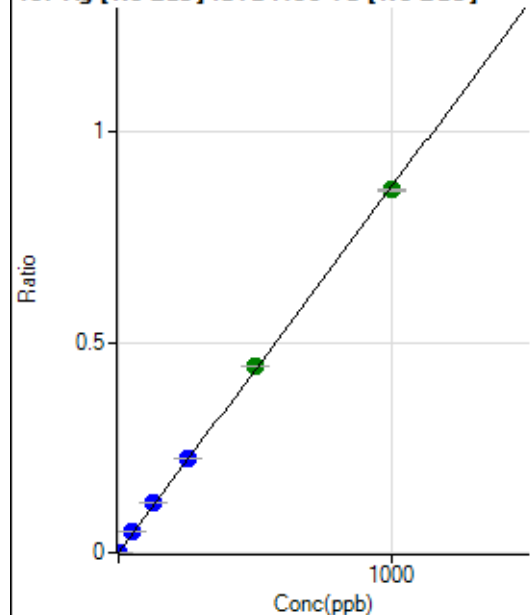
$$R = 0.9997$$

$$DL = 1.441$$

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	169.45	0.0000	P	28.8
2	☐	0.100					
3	☐	1.000	1.115	21692.27	0.0010	P	1.9
4	☐	50.000	55.398	1066758.41	0.0482	P	0.3
5	☐	125.000	135.646	2553522.87	0.1180	P	0.7
6	☐	250.000	257.609	4791180.97	0.2240	P	1.6
7	☐	500.000	509.432	9510643.44	0.4431	A	0.5
8	☐	1000.000	991.781	18190573.32	0.8626	A	0.3
9	☐			2328.07	0.0001	P	7.1

$$y = 8.6970\text{E-}004 * x + 7.5371\text{E-}006$$

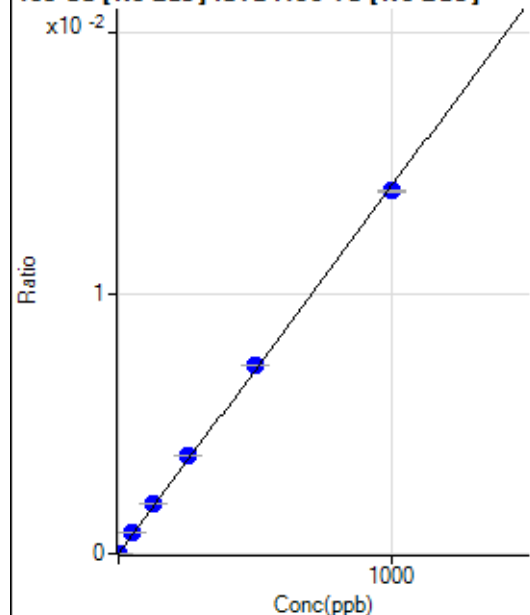
$$R = 0.9999$$

$$DL = 0.007485$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	20.83	0.0000	P	20.1
2	☐	0.100					
3	☐	1.000	1.184	391.68	0.0000	P	9.1
4	☐	50.000	55.593	17394.27	0.0008	P	0.3
5	☐	125.000	136.214	41640.51	0.0019	P	0.9
6	☐	250.000	266.274	80408.56	0.0038	P	0.7
7	☐	500.000	513.452	155612.54	0.0072	P	0.1
8	☐	1000.000	987.524	294019.98	0.0139	P	0.4
9	☐			109.72	0.0000	P	21.9

$$y = 1.4117\text{E-}005 * x + 9.2678\text{E-}007$$

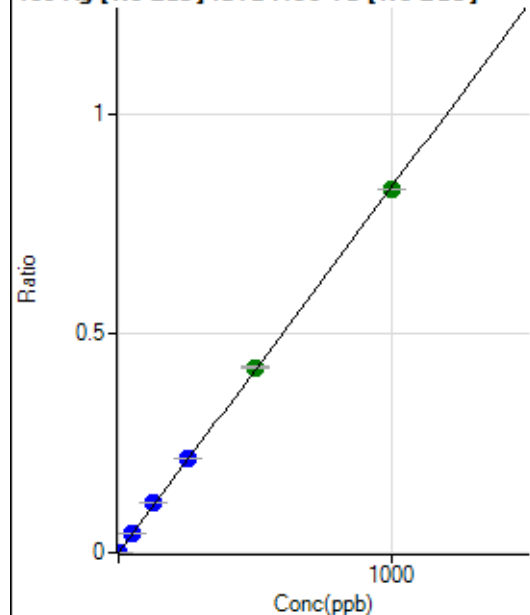
$$R = 0.9997$$

$$DL = 0.03951$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	80.56	0.0000	P	15.8
2	☐	0.100					
3	☐	1.000	1.112	20677.02	0.0009	P	2.9
4	☐	50.000	55.154	1018735.03	0.0460	P	0.2
5	☐	125.000	136.512	2465083.91	0.1139	P	0.5
6	☐	250.000	257.720	4598330.49	0.2150	P	0.4
7	☐	500.000	507.146	9082192.13	0.4231	A	0.3
8	☐	1000.000	992.800	17467449.52	0.8283	A	0.0
9	☐			2261.39	0.0001	P	8.4

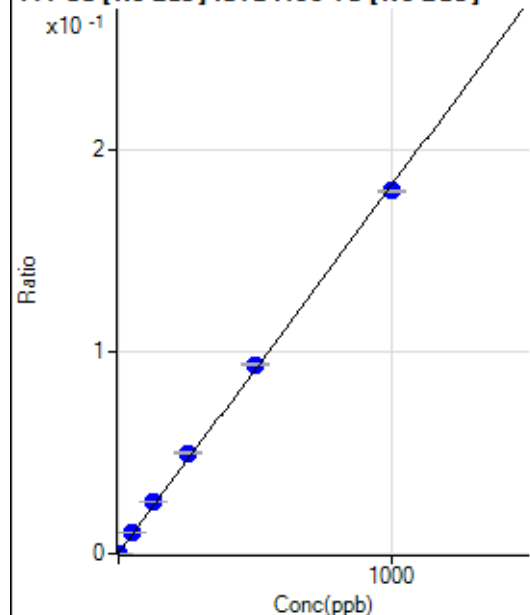
$$y = 8.3427\text{E-}004 * x + 3.5836\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.002042$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5181.17	0.0002	P	3.0
2	☐	0.100					
3	☐	1.000	1.150	9765.92	0.0004	P	3.1
4	☐	50.000	56.763	233862.59	0.0106	P	0.4
5	☐	125.000	141.107	560961.34	0.0259	P	1.3
6	☐	250.000	272.325	1065106.71	0.0498	P	1.0
7	☐	500.000	512.943	2009312.40	0.0936	P	1.5
8	☐	1000.000	985.596	3788715.49	0.1797	P	0.6
9	☐			5565.45	0.0003	P	3.2

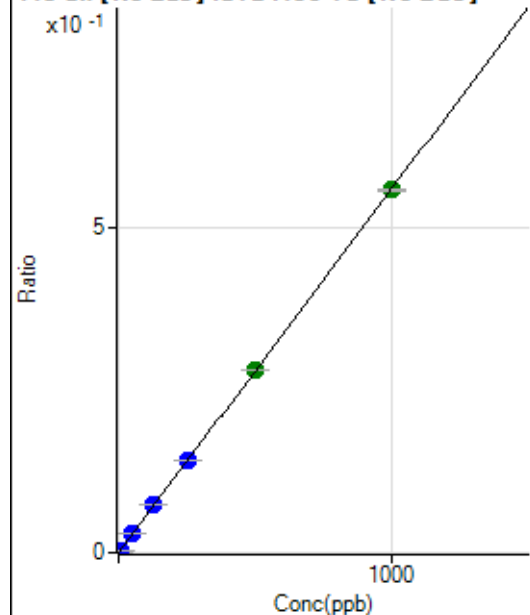
$$y = 1.8204\text{E-}004 * x + 2.3047\text{E-}004$$

$$R = 0.9995$$

$$DL = 0.113$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	605.59	0.0000	P	17.0
2	☐	0.500					
3	☐	5.000	5.273	66013.25	0.0030	P	0.9
4	☐	50.000	52.066	644724.57	0.0291	P	0.3
5	☐	125.000	129.884	1571593.12	0.0726	P	0.5
6	☐	250.000	252.427	3017401.46	0.1411	P	0.6
7	☐	500.000	501.717	6019001.26	0.2804	A	0.6
8	☐	1000.000	997.819	11759911.02	0.5576	A	0.6
9	☐			14321.71	0.0007	P	1.7

$$y = 5.5883\text{E-}004 * x + 2.6937\text{E-}005$$

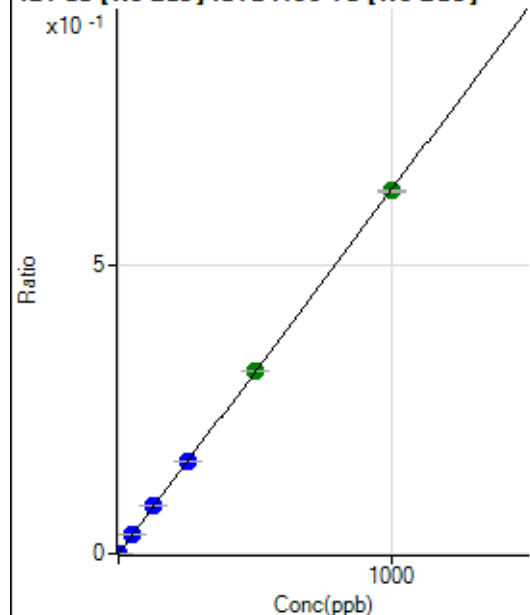
$$R = 1.0000$$

$$DL = 0.02454$$

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	186.12	0.0000	P	39.0
2	☐	0.200					
3	☐	2.000	2.110	29673.97	0.0013	P	3.0
4	☐	50.000	52.510	732212.10	0.0331	P	0.6
5	☐	125.000	130.416	1777710.06	0.0821	P	0.3
6	☐	250.000	254.084	3421989.01	0.1600	P	0.6
7	☐	500.000	502.347	6790520.64	0.3163	A	0.4
8	☐	1000.000	997.003	13240252.73	0.6278	A	0.6
9	☐			20073.27	0.0010	P	1.4

$$y = 6.2971\text{E-}004 * x + 8.2771\text{E-}006$$

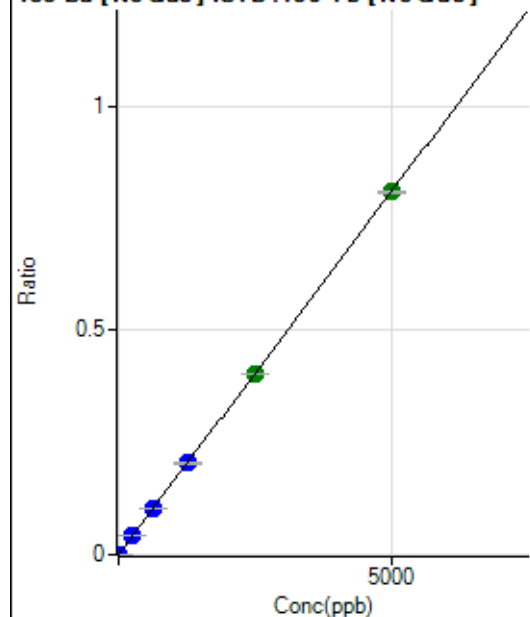
$$R = 1.0000$$

$$DL = 0.01539$$

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	36.11	0.0000	P	48.1
2	☐	1.000					
3	☐	10.000	10.228	36799.74	0.0017	P	1.2
4	☐	250.000	261.252	936465.54	0.0423	P	0.7
5	☐	625.000	646.199	2264571.77	0.1046	P	0.5
6	☐	1250.000	1259.120	4359815.59	0.2039	P	1.1
7	☐	2500.000	2497.847	8681391.34	0.4044	A	0.2
8	☐	5000.000	4995.583	17057277.12	0.8088	A	0.8
9	☐			4364.77	0.0002	P	2.9

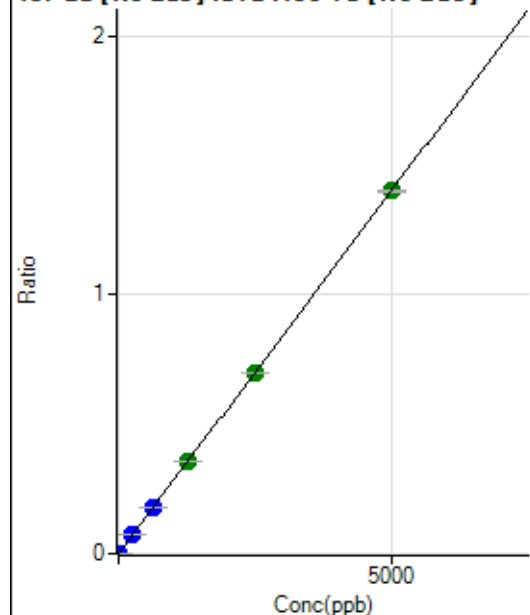
$$y = 1.6191\text{E-}004 * x + 1.6068\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.01432$$

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	69.45	0.0000	P	48.6
2	☐	1.000					
3	☐	10.000	10.143	63152.79	0.0028	P	1.3
4	☐	250.000	259.805	1611356.30	0.0728	P	0.5
5	☐	625.000	642.781	3897559.51	0.1801	P	0.8
6	☐	1250.000	1267.312	7592908.33	0.3550	A	0.5
7	☐	2500.000	2489.320	14969697.04	0.6974	A	0.4
8	☐	5000.000	4998.299	29530382.95	1.4003	A	0.2
9	☐			7624.62	0.0004	P	1.8

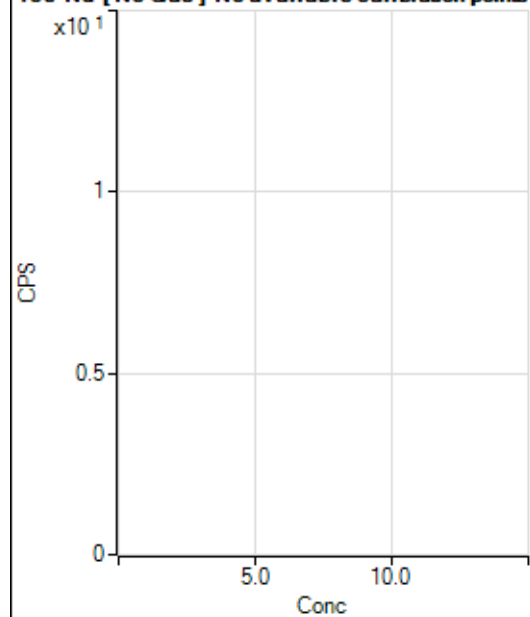
$$y = 2.8015E-004 * x + 3.0900E-006$$

$$R = 1.0000$$

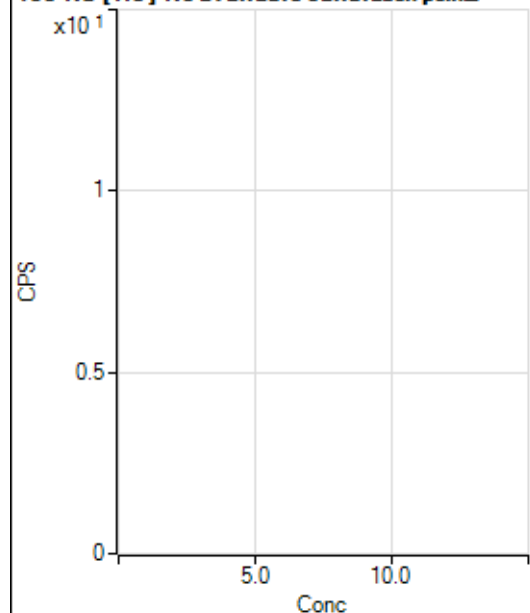
$$DL = 0.01608$$

Weight: <None>

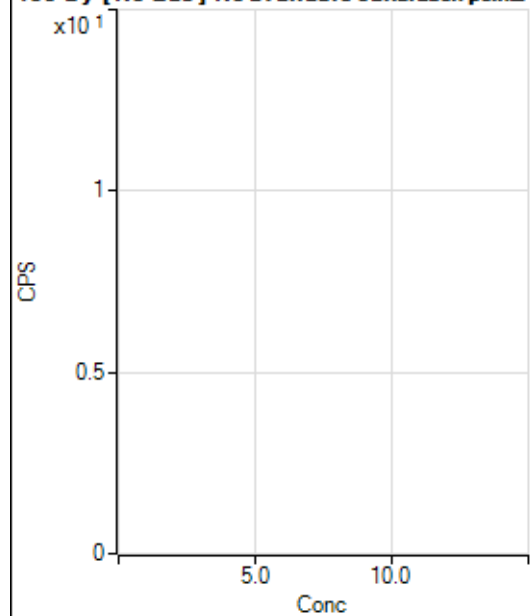
Min Conc: 0

150 Nd [No Gas] No available calibration points

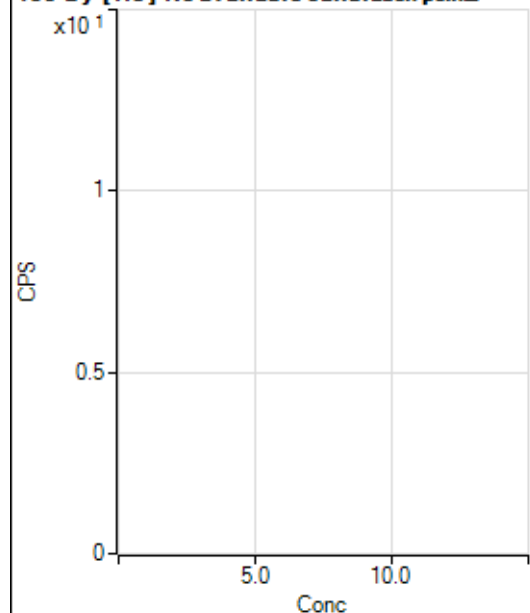
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			2.22		P	173.
2	☐						
3	☐			13.33		P	100.
4	☐			73.34		P	32.8
5	☐			182.23		P	11.2
6	☐			340.02		P	11.9
7	☐			666.71		P	17.1
8	☐			1284.55		P	10.8
9	☐			273.35		P	21.7

150 Nd [He] No available calibration points

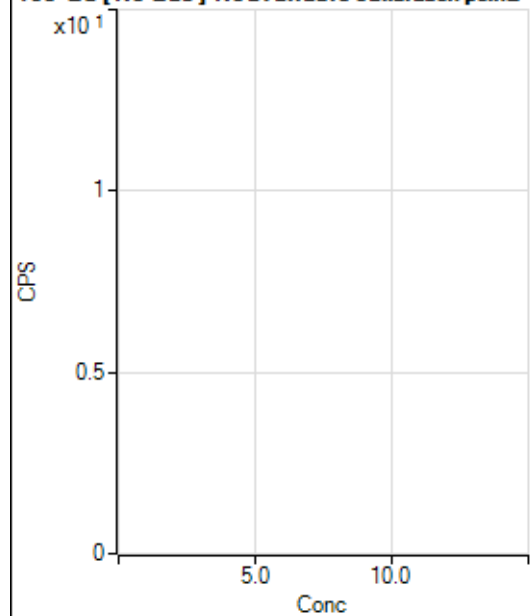
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	114.
2	☐						
3	☐			4.44		P	114.
4	☐			13.33		P	50.0
5	☐			22.22		P	22.9
6	☐			32.22		P	26.0
7	☐			63.33		P	36.8
8	☐			104.45		P	7.4
9	☐			100.00		P	29.1

156 Dy [No Gas] No available calibration points

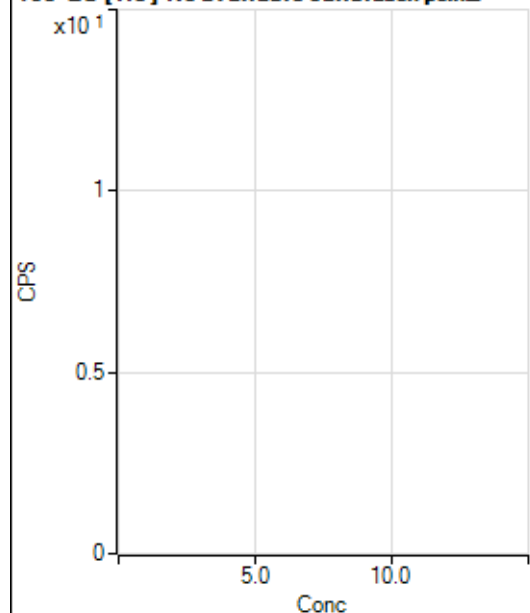
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.55		P	86.6
2	☐						
3	☐			13.89		P	124.
4	☐			33.33		P	50.0
5	☐			36.11		P	48.0
6	☐			86.11		P	11.2
7	☐			141.67		P	23.5
8	☐			288.91		P	21.7
9	☐			169.45		P	36.9

156 Dy [He] No available calibration points

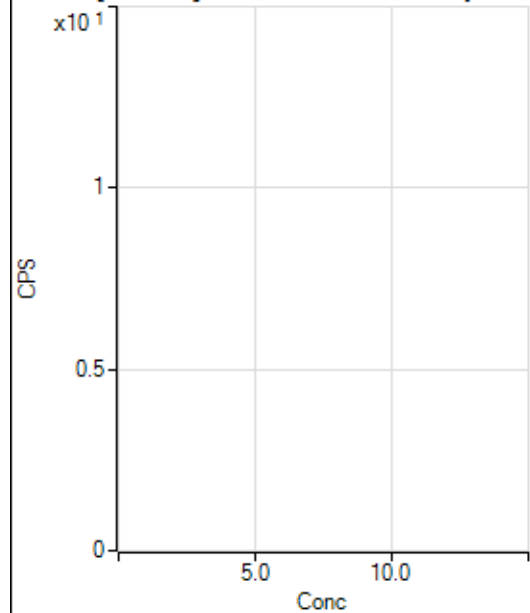
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.
2	☐						
3	☐			6.67		P	50.0
4	☐			17.78		P	28.6
5	☐			33.33		P	30.0
6	☐			58.89		P	11.8
7	☐			107.78		P	25.0
8	☐			207.78		P	8.8
9	☐			62.22		P	32.3

160 Gd [No Gas] Noavailable calibration poin_

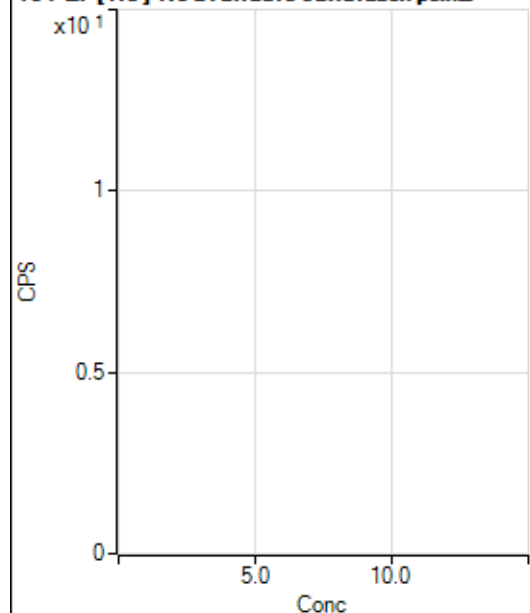
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			130.56		P	13.3
2	☐						
3	☐			133.34		P	16.5
4	☐			155.57		P	17.2
5	☐			150.01		P	29.4
6	☐			136.12		P	35.9
7	☐			175.01		P	42.3
8	☐			194.46		P	19.3
9	☐			216.68		P	10.2

160 Gd [He] No available calibration points

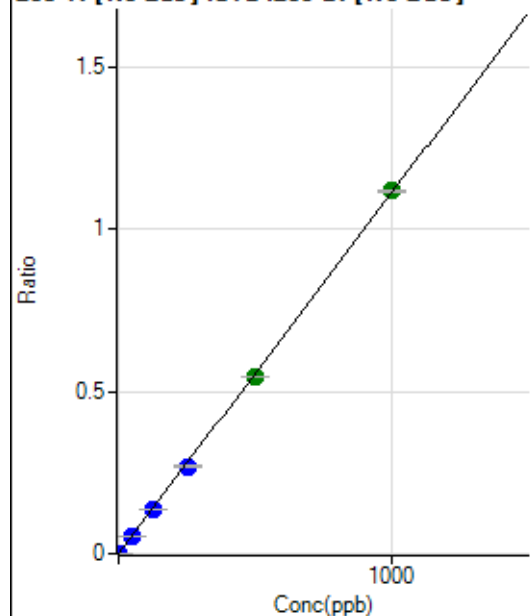
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			246.67		P	8.1
2	☐						
3	☐			268.90		P	15.7
4	☐			265.56		P	2.6
5	☐			260.01		P	7.7
6	☐			264.45		P	9.5
7	☐			243.34		P	1.4
8	☐			214.45		P	20.5
9	☐			255.56		P	10.9

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			72.23		P	37.1
2	☐						
3	☐			136.12		P	9.4
4	☐			61.12		P	7.9
5	☐			58.34		P	42.9
6	☐			63.89		P	30.1
7	☐			72.23		P	24.0
8	☐			72.23		P	17.6
9	☐			119.45		P	26.4

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			35.56		P	21.6
2	☐						
3	☐			42.22		P	29.9
4	☐			46.67		P	63.5
5	☐			25.56		P	19.9
6	☐			36.66		P	31.5
7	☐			35.55		P	30.1
8	☐			44.45		P	15.6
9	☐			55.56		P	30.8

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	316.68	0.0000	P	13.9
2	☐	0.100					
3	☐	1.000	0.981	16438.57	0.0011	P	2.0
4	☐	50.000	48.637	794544.00	0.0541	P	0.6
5	☐	125.000	122.948	1955355.97	0.1366	P	0.8
6	☐	250.000	242.423	3793322.70	0.2694	P	0.9
7	☐	500.000	492.406	7614039.58	0.5471	A	0.3
8	☐	1000.000	1006.016	14988753.63	1.1178	A	0.4
9	☐			5092.87	0.0004	P	1.6

$$y = 0.0011 * x + 2.1113E-005$$

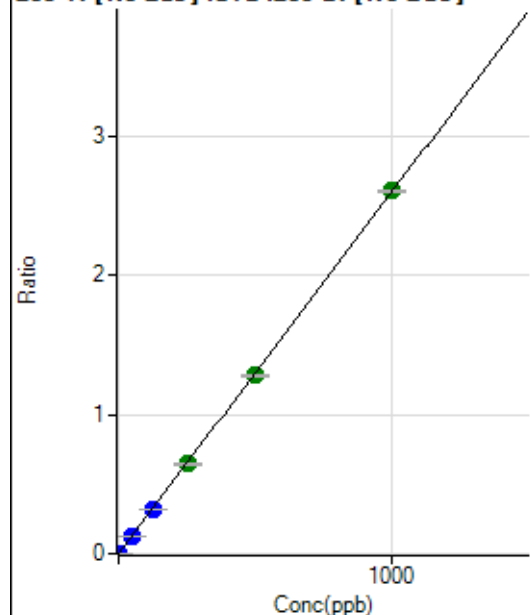
$$R = 0.9999$$

$$DL = 0.007908$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	683.39	0.0000	P	15.6
2	☐	0.100					
3	☐	1.000	0.981	38423.22	0.0026	P	0.6
4	☐	50.000	49.768	1901724.61	0.1294	P	0.2
5	☐	125.000	124.029	4614162.52	0.3224	P	0.5
6	☐	250.000	247.545	9060736.92	0.6434	A	0.6
7	☐	500.000	494.009	17868297.97	1.2840	A	0.8
8	☐	1000.000	1003.742	34982942.80	2.6089	A	0.4
9	☐			12461.91	0.0011	P	2.3

$$y = 0.0026 * x + 4.5575E-005$$

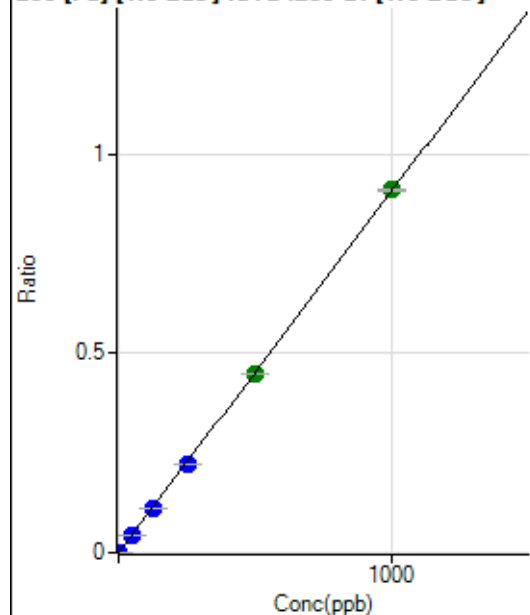
$$R = 1.0000$$

$$DL = 0.008181$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	444.47	0.0000	P	1.9
2	☐	0.100					
3	☐	1.000	0.975	13535.05	0.0009	P	1.9
4	☐	50.000	49.441	659494.78	0.0449	P	0.3
5	☐	125.000	124.355	1614676.90	0.1128	P	0.4
6	☐	250.000	244.123	3118500.79	0.2215	P	0.6
7	☐	500.000	494.739	6245158.36	0.4488	A	0.7
8	☐	1000.000	1004.209	12214446.57	0.9109	A	0.8
9	☐			15184.95	0.0013	P	3.8

$$y = 9.0704E-004 * x + 2.9632E-005$$

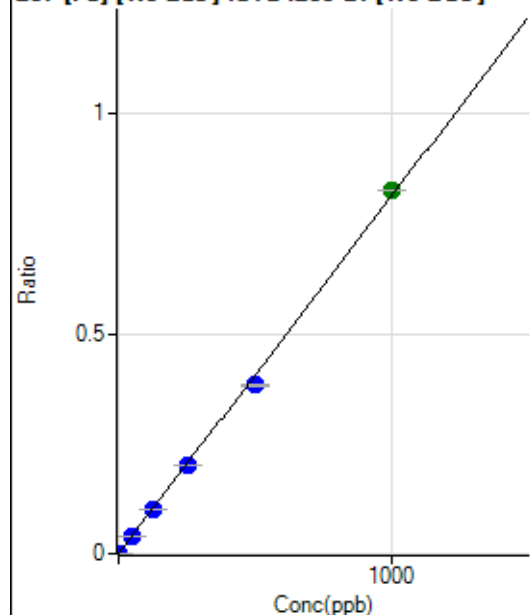
$$R = 1.0000$$

$$DL = 0.001896$$

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	338.91	0.0000	P	15.9
2	☐	0.100					
3	☐	1.000	1.008	12452.42	0.0008	P	1.8
4	☐	50.000	49.788	594634.90	0.0405	P	0.1
5	☐	125.000	125.719	1461663.54	0.1021	P	0.5
6	☐	250.000	247.133	2826834.64	0.2007	P	0.6
7	☐	500.000	472.050	5335611.34	0.3834	P	1.1
8	☐	1000.000	1014.612	11050446.08	0.8241	A	0.1
9	☐			12841.72	0.0011	P	3.1

$$y = 8.1221\text{E-}004 * x + 2.2601\text{E-}005$$

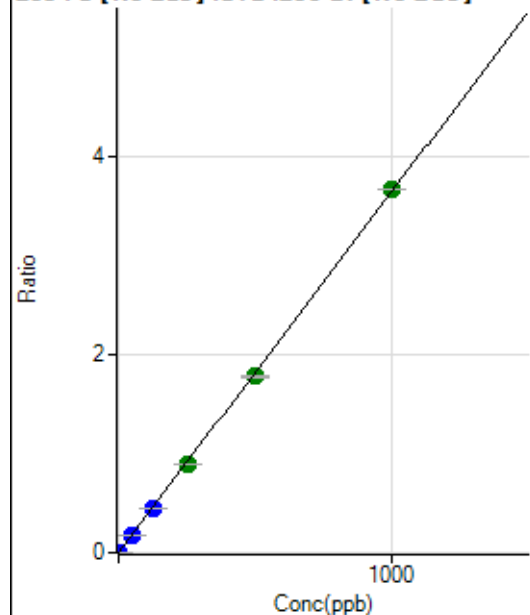
$$R = 0.9994$$

$$DL = 0.01326$$

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	1759.37	0.0001	P	4.2
2	☐	0.100					
3	☐	1.000	0.991	55255.36	0.0037	P	2.2
4	☐	50.000	49.635	2661931.56	0.1811	P	0.3
5	☐	125.000	124.420	6495203.43	0.4538	P	0.5
6	☐	250.000	246.752	12672989.58	0.9000	A	0.2
7	☐	500.000	488.853	24809873.93	1.7829	A	0.8
8	☐	1000.000	1006.477	49218355.73	3.6705	A	0.1
9	☐			59972.87	0.0051	P	1.7

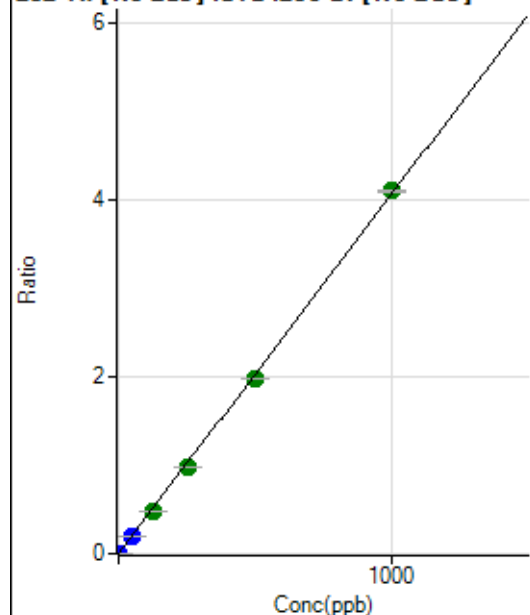
$$y = 0.0036 * x + 1.1731\text{E-}004$$

$$R = 0.9999$$

$$DL = 0.004096$$

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	362.98	0.0000	P	3.7
2	☐	0.100					
3	☐	1.000	0.936	56676.57	0.0038	P	0.3
4	☐	50.000	47.017	2809697.08	0.1912	P	0.3
5	☐	125.000	118.272	6882010.57	0.4809	A	0.5
6	☐	250.000	242.325	13873656.79	0.9852	A	0.1
7	☐	500.000	487.299	27570650.85	1.9812	A	0.3
8	☐	1000.000	1009.259	55022137.80	4.1033	A	0.4
9	☐			9470.35	0.0008	P	6.0

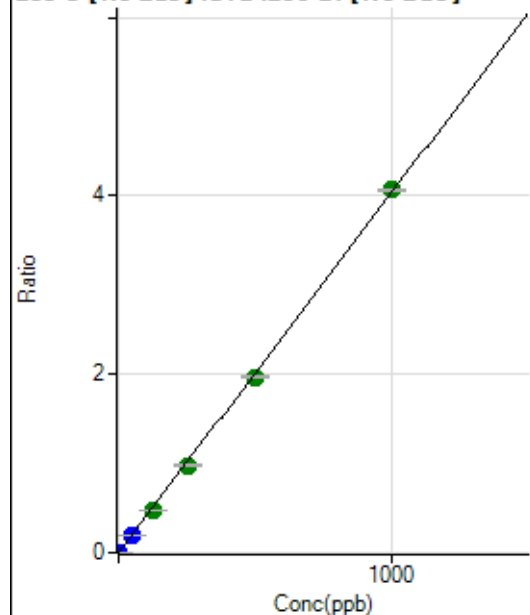
$$y = 0.0041 * x + 2.4199E-005$$

$$R = 0.9998$$

$$DL = 0.0006595$$

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	205.57	0.0000	P	14.4
2	☐	0.100					
3	☐	1.000	0.945	56618.40	0.0038	P	2.0
4	☐	50.000	47.202	2798121.94	0.1904	P	0.7
5	☐	125.000	118.796	6857448.16	0.4792	A	0.5
6	☐	250.000	243.057	13804908.99	0.9804	A	0.4
7	☐	500.000	488.631	27426424.92	1.9708	A	0.2
8	☐	1000.000	1008.336	54534451.91	4.0670	A	0.3
9	☐			9514.98	0.0008	P	2.9

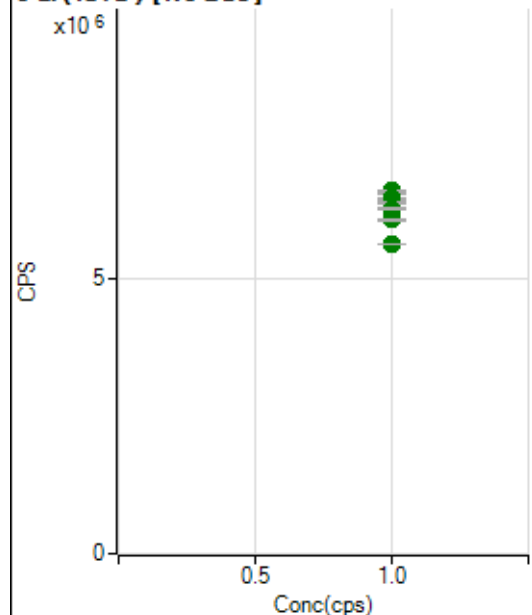
$$y = 0.0040 * x + 1.3707E-005$$

$$R = 0.9999$$

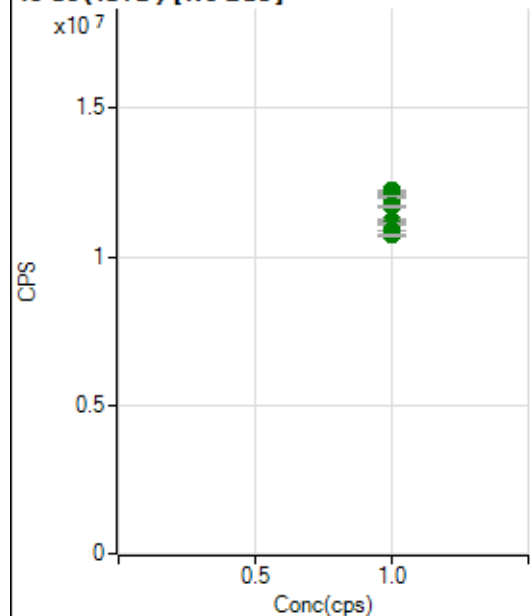
$$DL = 0.001466$$

Weight: <None>

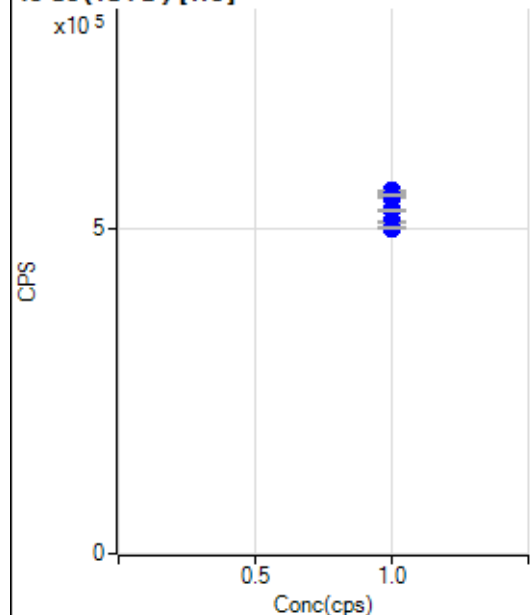
Min Conc: 0

6 Li (ISTD) [No Gas]

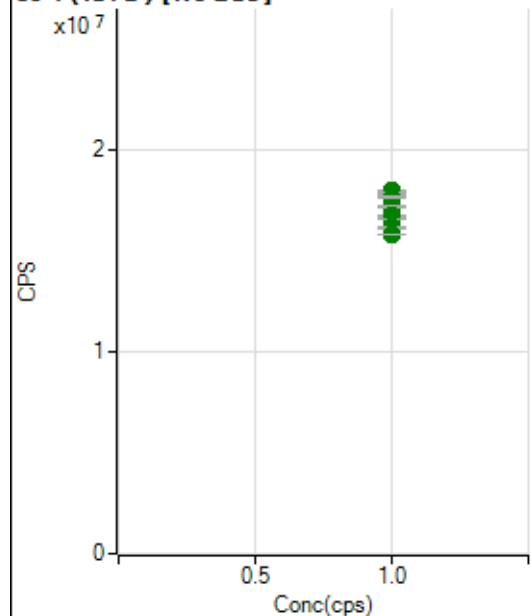
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		6559775.94		A	0.4
2	☐	1.000					
3	☐	1.000		6532701.15		A	0.7
4	☐	1.000		6586025.04		A	0.5
5	☐	1.000		6451208.38		A	0.7
6	☐	1.000		6371997.61		A	0.4
7	☐	1.000		6251843.38		A	0.6
8	☐	1.000		6063134.84		A	0.2
9	☐	1.000		5612710.40		A	0.3

45 Sc (ISTD) [No Gas]

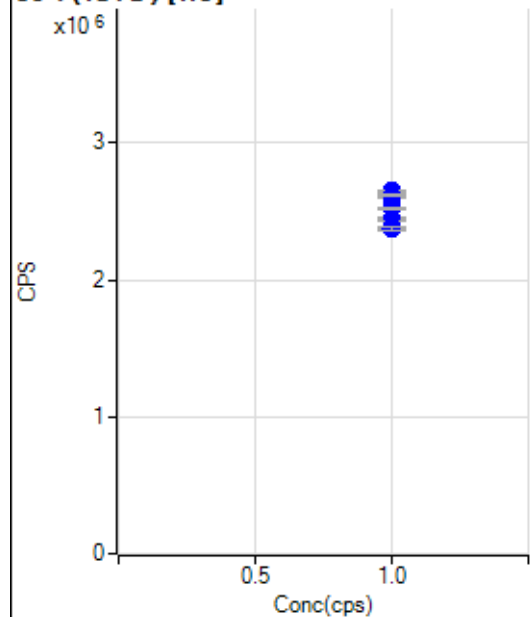
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		12223398.28		A	0.5
2	☐	1.000					
3	☐	1.000		12148733.43		A	0.7
4	☐	1.000		12030252.18		A	0.3
5	☐	1.000		11696054.34		A	0.4
6	☐	1.000		11227111.88		A	0.4
7	☐	1.000		11101117.09		A	0.6
8	☐	1.000		10856393.38		A	0.1
9	☐	1.000		10728454.75		A	0.5

45 Sc (ISTD) [He]

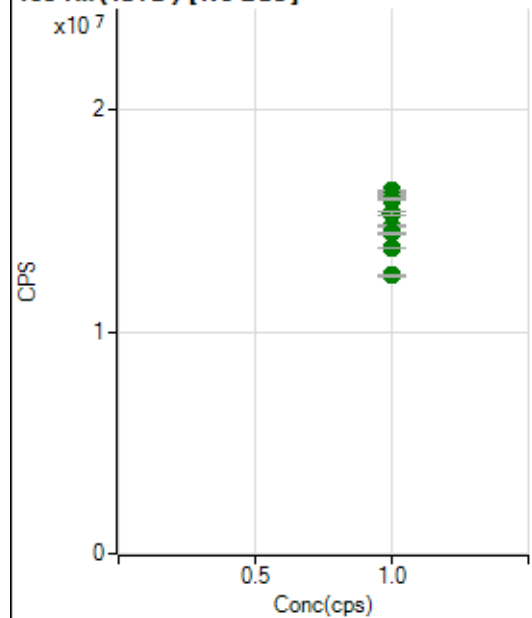
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		548312.12		P	0.3
2	☐	1.000					
3	☐	1.000		558140.69		P	0.8
4	☐	1.000		550921.79		P	0.3
5	☐	1.000		528660.30		P	0.5
6	☐	1.000		512201.16		P	0.2
7	☐	1.000		508610.12		P	0.4
8	☐	1.000		500087.13		P	0.6
9	☐	1.000		500954.50		P	0.7

89 Y (ISTD) [No Gas]

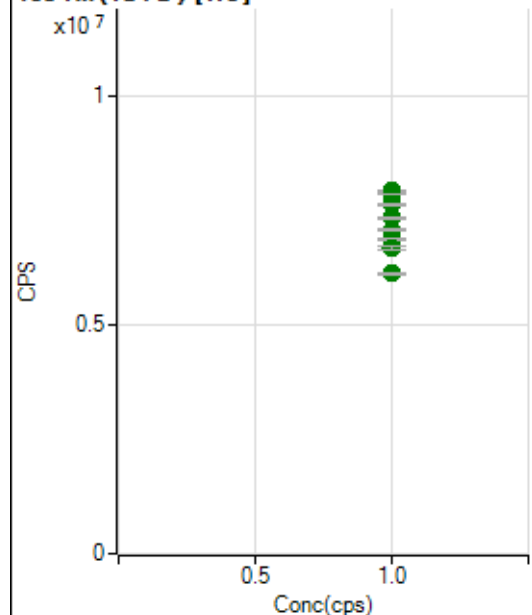
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		17985092.37		A	0.4
2	☐	1.000					
3	☐	1.000		17862982.51		A	0.3
4	☐	1.000		17679997.65		A	0.2
5	☐	1.000		17190278.91		A	0.3
6	☐	1.000		16731885.72		A	0.7
7	☐	1.000		16587228.64		A	0.2
8	☐	1.000		16172464.62		A	0.4
9	☐	1.000		15845929.07		A	0.2

89 Y(ISTD) [He]

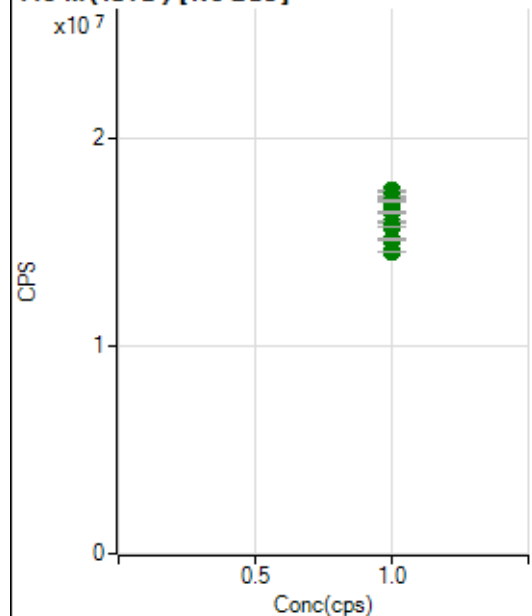
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2598616.42		P	0.3
2	☐	1.000					
3	☐	1.000		2648734.46		P	0.6
4	☐	1.000		2617784.54		P	0.4
5	☐	1.000		2524098.38		P	0.5
6	☐	1.000		2449064.86		P	0.2
7	☐	1.000		2428619.68		P	0.4
8	☐	1.000		2380384.29		P	1.0
9	☐	1.000		2367080.11		P	1.2

103 Rh(ISTD) [No Gas]

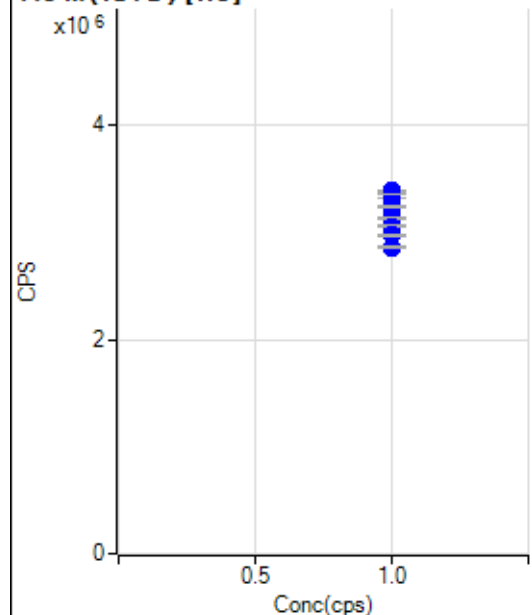
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		16369139.77		A	0.4
2	☐	1.000					
3	☐	1.000		16166949.32		A	0.3
4	☐	1.000		15991423.10		A	0.4
5	☐	1.000		15344929.86		A	0.9
6	☐	1.000		14782174.11		A	0.7
7	☐	1.000		14470464.04		A	0.5
8	☐	1.000		13806698.75		A	0.3
9	☐	1.000		12557222.24		A	0.6

103 Rh (ISTD) [He]

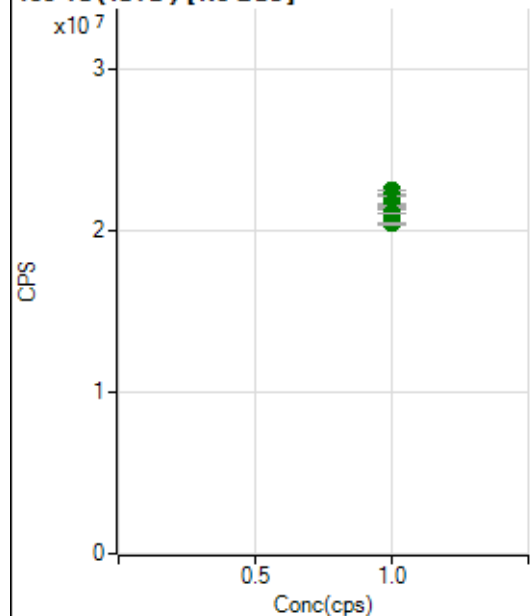
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		7914939.05		A	0.3
2	☐	1.000					
3	☐	1.000		7836948.42		A	0.1
4	☐	1.000		7625135.23		A	0.6
5	☐	1.000		7325596.63		A	0.5
6	☐	1.000		7052254.69		A	0.5
7	☐	1.000		6854904.55		A	0.8
8	☐	1.000		6664234.62		A	0.9
9	☐	1.000		6113573.87		A	0.7

115 In (ISTD) [No Gas]

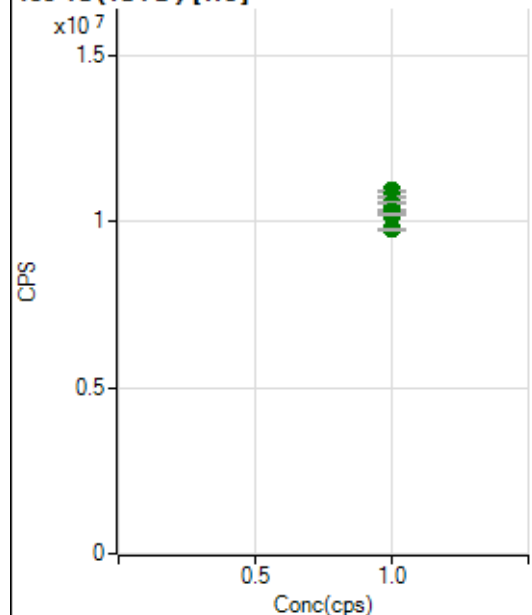
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		17483900.68		A	0.3
2	☐	1.000					
3	☐	1.000		17199126.96		A	0.5
4	☐	1.000		17001409.66		A	0.2
5	☐	1.000		16457365.59		A	0.8
6	☐	1.000		15964540.61		A	0.8
7	☐	1.000		15770500.66		A	0.1
8	☐	1.000		15138567.79		A	0.2
9	☐	1.000		14547188.26		A	0.3

115 In (ISTD) [He]

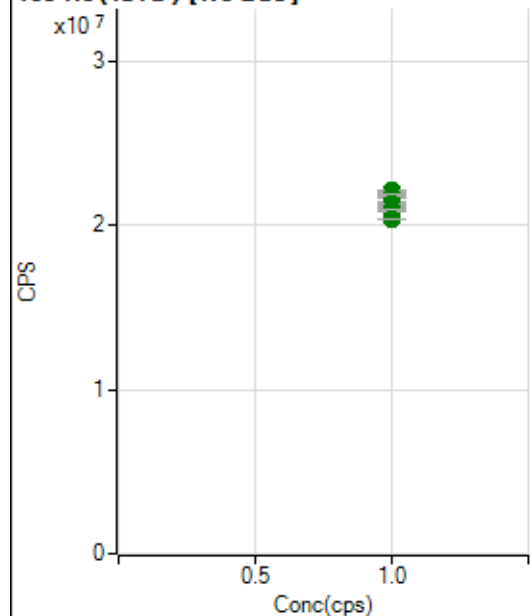
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3320668.05		P	0.5
2	☐	1.000					
3	☐	1.000		3386702.80		P	0.9
4	☐	1.000		3355505.05		P	0.1
5	☐	1.000		3235885.18		P	0.3
6	☐	1.000		3134274.58		P	0.4
7	☐	1.000		3054548.86		P	0.5
8	☐	1.000		2971599.61		P	0.9
9	☐	1.000		2861946.70		P	0.8

159 Tb (ISTD) [No Gas]

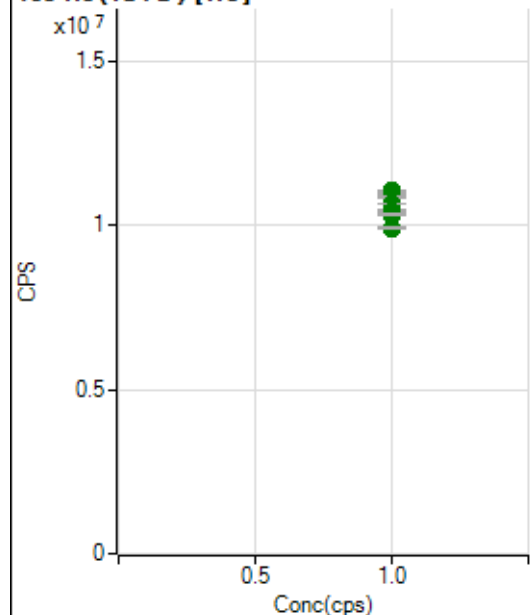
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		22481236.05		A	0.1
2	☐	1.000					
3	☐	1.000		22201843.00		A	0.7
4	☐	1.000		22138029.95		A	0.1
5	☐	1.000		21644232.45		A	0.3
6	☐	1.000		21387022.32		A	1.1
7	☐	1.000		21465978.02		A	0.5
8	☐	1.000		21089131.21		A	0.5
9	☐	1.000		20448463.03		A	0.3

159 Tb (ISTD) [He]

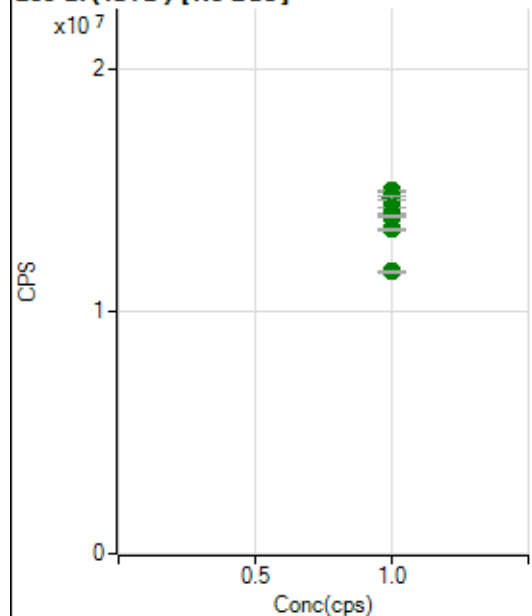
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		10909262.75		A	0.1
2	☐	1.000					
3	☐	1.000		10890250.81		A	0.3
4	☐	1.000		10749001.44		A	0.5
5	☐	1.000		10528854.91		A	0.6
6	☐	1.000		10319207.14		A	0.4
7	☐	1.000		10247036.17		A	0.3
8	☐	1.000		10195672.62		A	0.4
9	☐	1.000		9765668.81		A	0.5

165 Ho (ISTD) [No Gas]

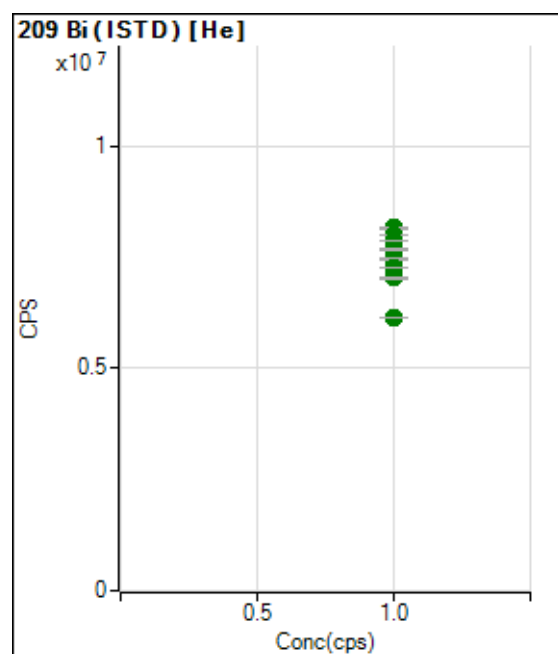
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		22101055.35		A	0.3
2	☐	1.000					
3	☐	1.000		21783106.39		A	0.6
4	☐	1.000		21803471.84		A	0.4
5	☐	1.000		21365751.52		A	0.9
6	☐	1.000		21152258.63		A	0.4
7	☐	1.000		21255352.04		A	0.4
8	☐	1.000		20930839.53		A	0.5
9	☐	1.000		20366934.83		A	0.2

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		11042612.20		A	0.3
2	☐	1.000					
3	☐	1.000		10934006.78		A	0.6
4	☐	1.000		10863114.00		A	0.6
5	☐	1.000		10652651.44		A	0.5
6	☐	1.000		10427473.66		A	0.5
7	☐	1.000		10419699.36		A	0.2
8	☐	1.000		10308096.51		A	0.5
9	☐	1.000		9909818.47		A	0.3

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		14999093.67		A	0.3
2	☐	1.000					
3	☐	1.000		14801359.09		A	0.1
4	☐	1.000		14696581.59		A	0.8
5	☐	1.000		14311427.98		A	0.2
6	☐	1.000		14081558.68		A	0.1
7	☐	1.000		13916188.82		A	0.6
8	☐	1.000		13409060.22		A	0.4
9	☐	1.000		11646850.66		A	0.1



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		8164348.21		A	0.4
2	☐	1.000					
3	☐	1.000		8011977.24		A	0.2
4	☐	1.000		7879557.73		A	0.3
5	☐	1.000		7677875.17		A	0.4
6	☐	1.000		7459611.48		A	0.3
7	☐	1.000		7262236.56		A	0.3
8	☐	1.000		7039642.32		A	0.5
9	☐	1.000		6142494.63		A	0.4

US EPA Tune Check Sample Report

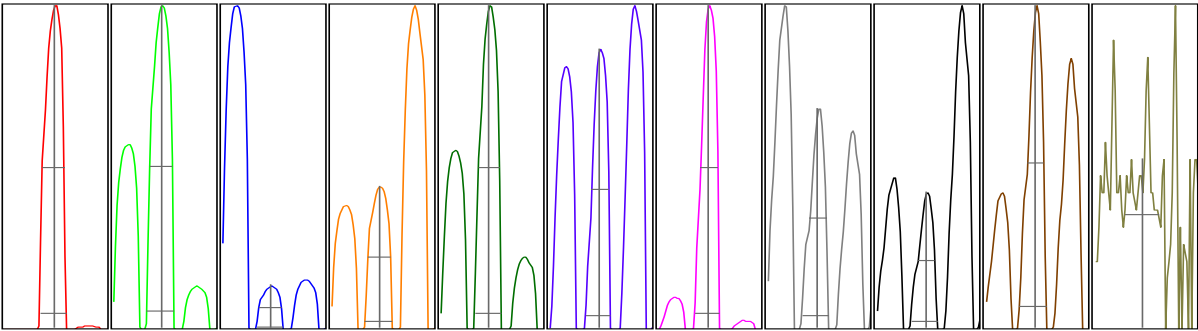
Batch Folder D:\ICP-MS Data\P7102718-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	24765	0.63	5.00	
24	186157	0.34	5.00	
25	24549	0.63	5.00	
26	28429	0.31	5.00	
59	153712	0.32	5.00	
113	18559	0.66	5.00	
115	216248	0.97	5.00	
206	54108	0.27	5.00	
207	49640	0.24	5.00	
208	115321	0.28	5.00	
220	0	27.06		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	24578	24723	24690	24848	24985
24	185315	186064	186265	186068	187075
25	24372	24569	24453	24570	24780
26	28320	28371	28460	28441	28554
59	153324	154525	153387	153762	153561
113	18680	18683	18450	18554	18428
115	219522	217160	214975	214974	214609
206	53925	54254	54127	54233	53999
207	49680	49823	49592	49595	49510
208	115316	115238	115013	115185	115854
220	1	1	0	1	0

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	42334	9.00	8.9 - 9.1		0.781	0.900	
24	302453	23.95	23.9 - 24.1		0.787	0.900	
25	40271	24.95	24.9 - 25.1		0.782	0.900	
26	46463	25.95	25.9 - 26.1		0.785	0.900	
59	267537	58.95	58.9 - 59.1		0.780	0.900	
113	36285	113.00	112.9 - 113.1		0.717	0.900	
115	421984	115.00	114.9 - 115.1		0.716	0.900	
206	108889	206.00	205.9 - 206.1		0.775	0.900	
207	98139	207.00	206.9 - 207.1		0.775	0.900	
208	231938	208.00	207.9 - 208.1		0.777	0.900	
220	1	219.95	-				

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	6.6	V	Deflect	14.0	V
Extract 2	-125.0	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	38795	0.33	
89	19981	0.34	
205	42882	0.49	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	38628	38698	38841	38944	38863
89	20012	20002	20025	20007	19860
205	42962	42678	42814	43204	42753

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	6.7	V	Deflect	1.6	V
Extract 2	-120.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-65	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			