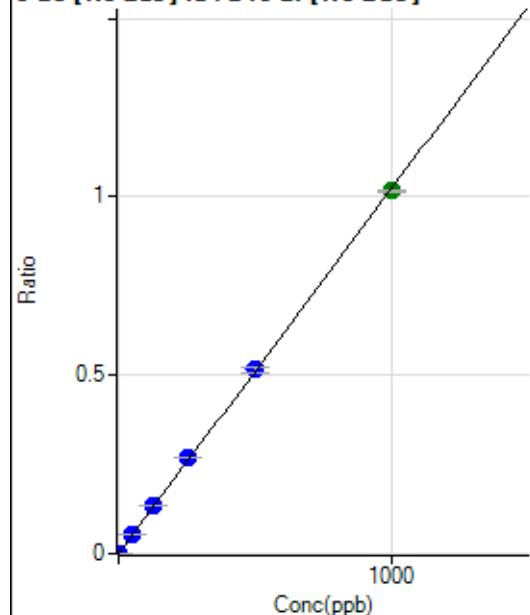


Batch Folder: D:\ICP-MS Data\P7030719-MS.b\
Analysis File: P7030719-MS.batch.bin
DA Date-Time: 2019-03-07 18:23:48
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2019-03-07 13:55:45
2			
3	005CALS.d	S02	2019-03-07 14:04:10
4	006CALS.d	S03	2019-03-07 14:08:05
5	007CALS.d	S04	2019-03-07 14:12:10
6	008CALS.d	S05	2019-03-07 14:15:58
7	009CALS.d	S06	2019-03-07 14:19:43
8	010CALS.d	S07	2019-03-07 14:23:30
9	011CALS.d	S08	2019-03-07 14:27:21

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	84.45	0.0000	P	27.0
2	☐	0.100					
3	☐	1.000	0.967	5794.52	0.0010	P	2.7
4	☐	50.000	53.472	314335.20	0.0547	P	0.5
5	☐	125.000	132.002	755804.90	0.1350	P	0.1
6	☐	250.000	261.748	1456213.68	0.2676	P	0.6
7	☐	500.000	504.254	2827386.73	0.5156	P	2.7
8	☐	1000.000	993.887	5417889.36	1.0162	A	0.3
9	☐			526.69	0.0001	P	21.6

$$y = 0.0010 * x + 1.4741E-005$$

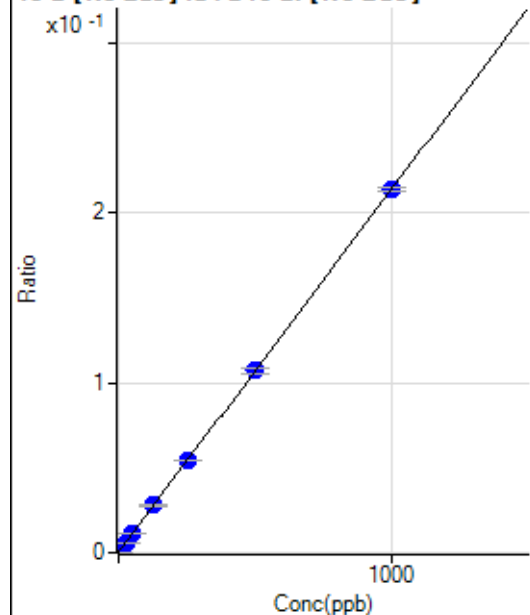
$$R = 0.9999$$

$$DL = 0.01169$$

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	2219.71	0.0004	P	8.7
2	☐	2.500					
3	☐	25.000	24.159	32007.28	0.0055	P	2.7
4	☐	50.000	51.967	65997.84	0.0115	P	1.1
5	☐	125.000	128.576	155876.14	0.0278	P	1.8
6	☐	250.000	254.049	297232.44	0.0546	P	0.3
7	☐	500.000	499.986	587401.81	0.1071	P	3.9
8	☐	1000.000	998.471	1138654.84	0.2136	P	1.2
9	☐			26527.09	0.0051	P	9.6

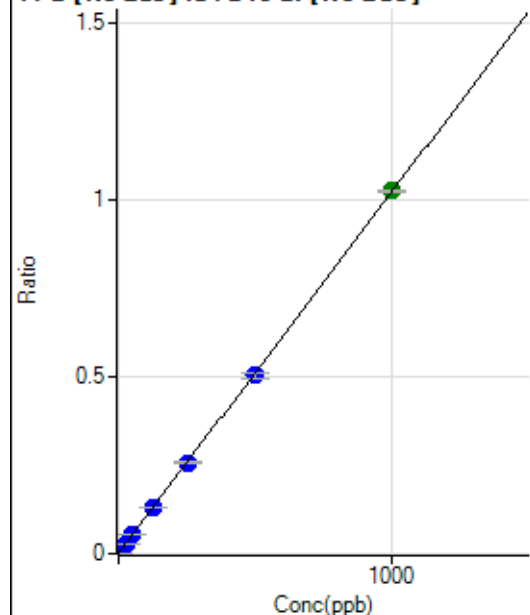
$$y = 2.1350E-004 * x + 3.8709E-004$$

$$R = 1.0000$$

$$DL = 0.4754$$

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	10451.21	0.0018	P	3.5
2	☐	2.500					
3	☐	25.000	23.448	148590.78	0.0257	P	1.6
4	☐	50.000	50.638	307406.52	0.0535	P	0.9
5	☐	125.000	126.373	732059.50	0.1307	P	1.3
6	☐	250.000	250.568	1400839.27	0.2574	P	1.9
7	☐	500.000	491.491	2758987.17	0.5032	P	4.1
8	☐	1000.000	1003.948	5470235.54	1.0260	A	0.5
9	☐			125432.20	0.0242	P	9.8

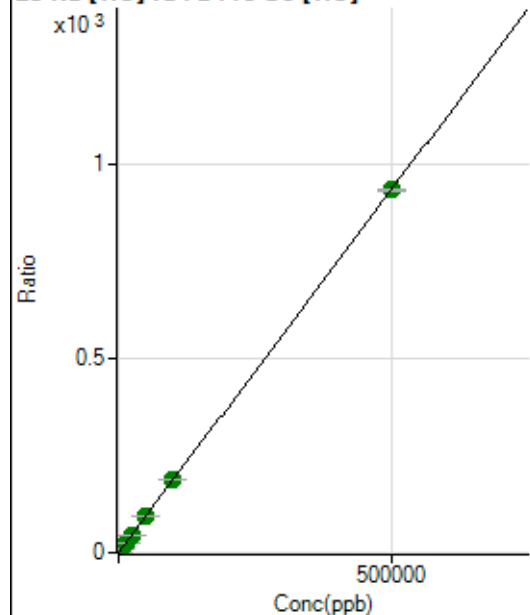
$$y = 0.0010 * x + 0.0018$$

$$R = 0.9999$$

$$DL = 0.19$$

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	26151.38	0.0352	P	2.2
2	☐	50.000					
3	☐	500.000	464.240	673094.85	0.9036	P	1.4
4	☐	5000.000	5094.792	7017581.67	9.5658	A	0.9
5	☐	12500.000	12732.913	17076373.13	23.8541	A	1.0
6	☐	25000.000	25031.117	33206653.52	46.8598	A	0.9
7	☐	50000.000	50173.495	65864913.97	93.8925	A	0.7
8	☐	100000.00	101183.89	133143540.48	189.3154	A	0.5
9	☐	500000.00	499737.58	701537965.68	934.8719	A	0.6

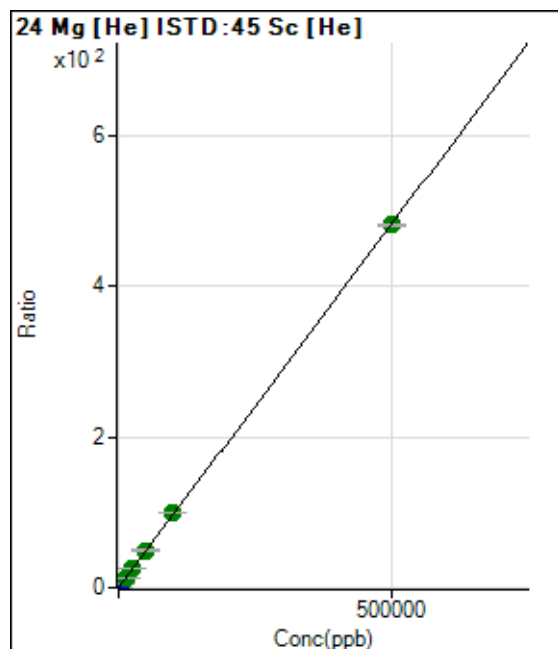
$$y = 0.0019 * x + 0.0352$$

$$R = 1.0000$$

$$DL = 1.254$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	175.01	0.0002	P	8.0
2	☐	50.000					
3	☐	500.000	498.573	358557.32	0.4814	P	0.9
4	☐	5000.000	5274.624	3733997.00	5.0903	P	2.0
5	☐	12500.000	13065.570	9026152.98	12.6086	A	0.6
6	☐	25000.000	25840.513	17671537.89	24.9366	A	0.8
7	☐	50000.000	51448.213	34826801.12	49.6482	A	0.9
8	☐	100000.00	103549.33	70279210.60	99.9263	A	0.4
9	☐	500000.00	499086.40	361418319.19	481.6232	A	0.8

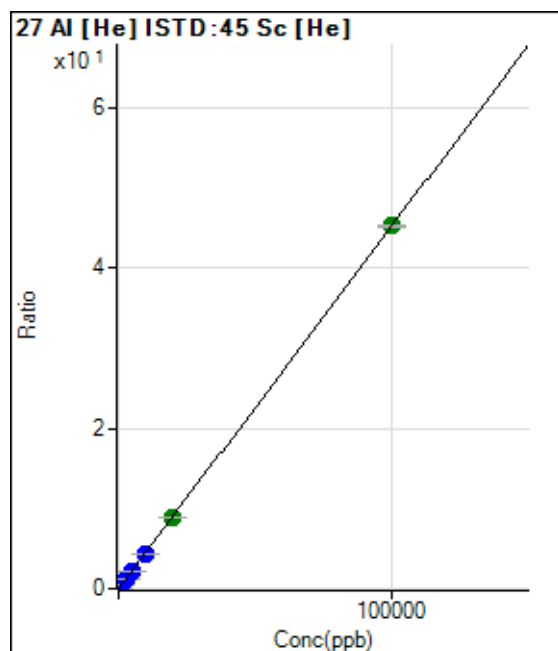
$$y = 9.6501\text{E-}004 * x + 2.3564\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.05888$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	83.33	0.0001	P	17.1
2	☐	2.000					
3	☐	20.000	18.351	6262.69	0.0084	P	2.9
4	☐	1000.000	991.371	328813.77	0.4482	P	1.6
5	☐	2500.000	2460.375	796247.54	1.1123	P	0.8
6	☐	5000.000	4869.298	1559873.62	2.2011	P	0.5
7	☐	10000.000	9638.402	3056203.02	4.3569	P	0.9
8	☐	20000.000	19451.315	6183905.65	8.7925	A	0.4
9	☐	100000.00	100153.50	33972694.51	45.2717	A	0.7

$$y = 4.5202\text{E-}004 * x + 1.1219\text{E-}004$$

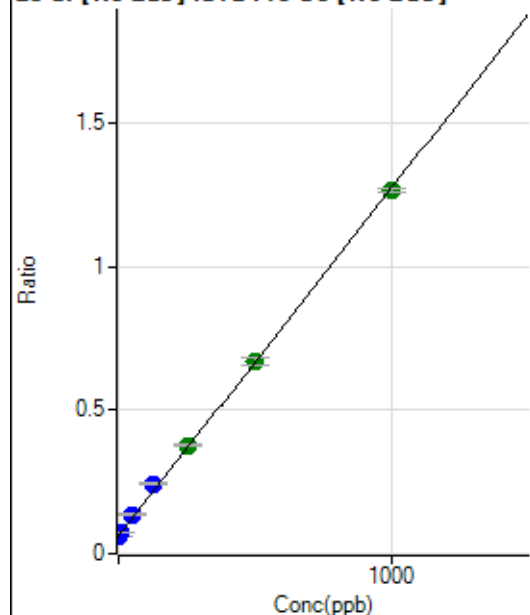
$$R = 1.0000$$

$$DL = 0.1273$$

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	851348.73	0.0619	P	1.4
2	☐	1.000					
3	☐	10.000	11.462	1038664.41	0.0757	P	0.9
4	☐	50.000	61.980	1836717.53	0.1370	P	0.7
5	☐	125.000	150.670	3232331.60	0.2445	P	0.7
6	☐	250.000	260.037	4860988.69	0.3770	A	0.9
7	☐	500.000	503.079	8921323.90	0.6716	A	4.1
8	☐	1000.000	992.129	16149433.69	1.2643	A	1.0
9	☐			2276401.81	0.1776	P	2.1

$$y = 0.0012 * x + 0.0619$$

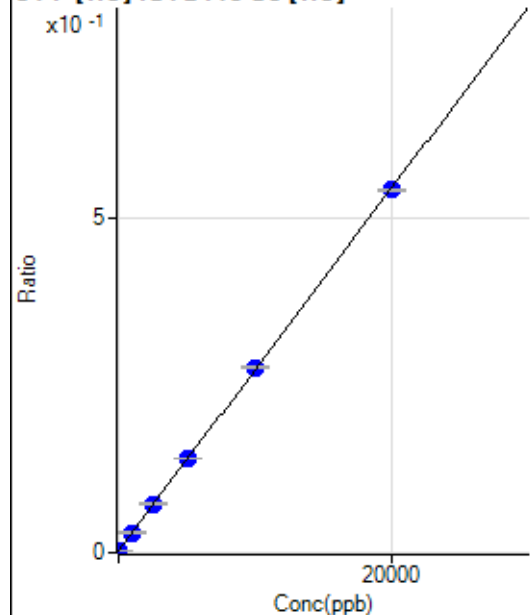
$$R = 0.9997$$

$$DL = 2.17$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-24.734	1736.28	0.0023	P	6.8
2	☐	0.000					
3	☐	0.000	24.734	2736.49	0.0037	P	5.8
4	☐	1000.000	1000.615	22028.25	0.0300	P	1.2
5	☐	2500.000	2583.162	52089.71	0.0728	P	1.7
6	☐	5000.000	5078.139	99303.08	0.1401	P	0.3
7	☐	10000.000	10121.873	193838.61	0.2763	P	0.9
8	☐	20000.000	19909.103	380203.64	0.5406	P	0.6
9	☐			1819.63	0.0024	P	6.1

$$y = 2.7003E-005 * x + 0.0030$$

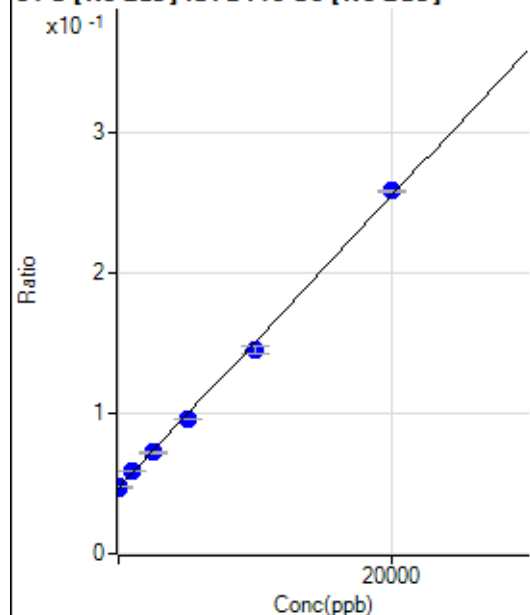
$$R = 1.0000$$

$$DL = 20.7$$

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	-93.354	632654.67	0.0460	P	0.6
2	☐	0.000					
3	☐	0.000	93.354	656859.19	0.0479	P	1.1
4	☐	1000.000	1158.148	790699.34	0.0590	P	0.3
5	☐	2500.000	2406.325	951025.87	0.0719	P	1.8
6	☐	5000.000	4738.367	1239829.71	0.0962	P	0.5
7	☐	10000.000	9486.766	1932936.48	0.1455	P	3.6
8	☐	20000.000	20325.827	3296905.45	0.2581	P	0.5
9	☐			569970.87	0.0445	P	1.3

$$y = 1.0389\text{E-}005 * x + 0.0469$$

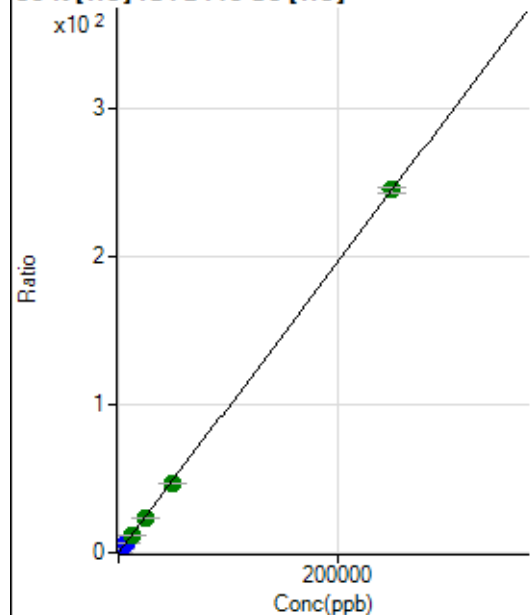
$$R = 0.9993$$

$$DL = 113.4$$

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	43102.39	0.0580	P	0.6
2	☐	50.000					
3	☐	500.000	452.298	373288.18	0.5011	P	0.3
4	☐	2500.000	2419.652	1781644.07	2.4284	P	0.4
5	☐	6250.000	6075.129	4301897.10	6.0093	P	0.9
6	☐	12500.000	12066.150	8417422.15	11.8781	A	0.8
7	☐	25000.000	24221.563	16684927.63	23.7857	A	0.8
8	☐	50000.000	48015.139	33120284.07	47.0941	A	0.9
9	☐	250000.00	250501.77	184206922.17	245.4518	A	1.7

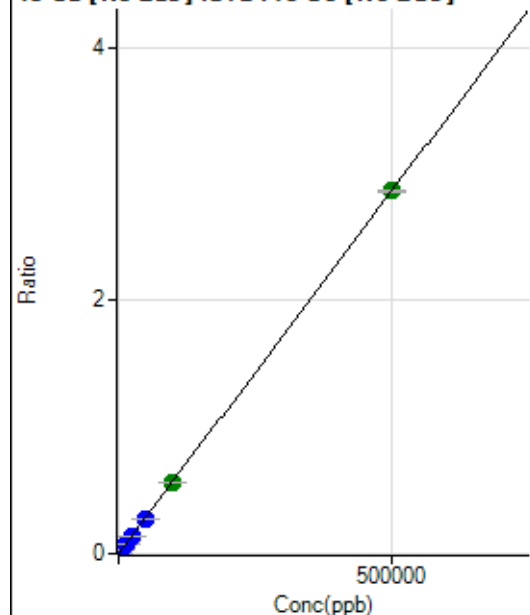
$$y = 9.7961\text{E-}004 * x + 0.0580$$

$$R = 1.0000$$

$$DL = 1.029$$

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	502.81	0.0000	P	1.3
2	☐	50.000					
3	☐	500.000	461.542	36755.45	0.0027	P	2.0
4	☐	5000.000	5024.616	386452.97	0.0288	P	0.4
5	☐	12500.000	12485.219	946078.95	0.0716	P	0.6
6	☐	25000.000	24692.225	1824173.20	0.1415	P	0.8
7	☐	50000.000	48012.894	3654083.89	0.2751	P	4.2
8	☐	100000.00	98021.678	7172884.45	0.5615	A	0.4
9	☐	500000.00	500609.92	36745223.39	2.8676	A	0.2

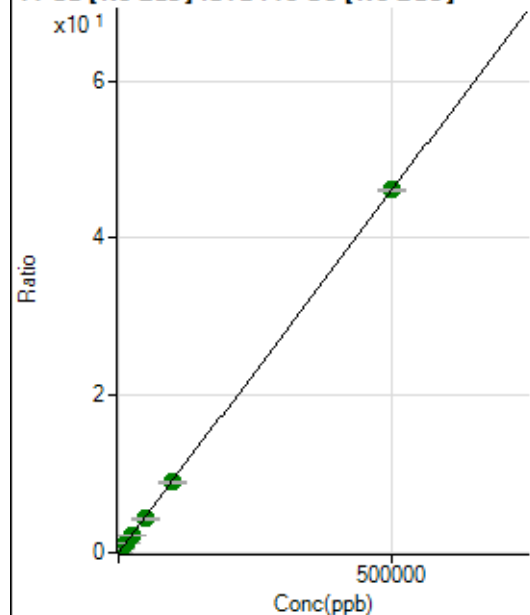
$$y = 5.7282\text{E-}006 * x + 3.6527\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.2485$$

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	89118.95	0.0065	P	1.4
2	☐	50.000					
3	☐	500.000	470.912	683178.88	0.0498	P	1.1
4	☐	5000.000	4925.196	6166075.35	0.4598	A	0.5
5	☐	12500.000	12258.195	15004117.35	1.1348	A	0.7
6	☐	25000.000	24431.759	29079343.01	2.2553	A	0.8
7	☐	50000.000	47173.522	57777399.90	4.3487	A	3.3
8	☐	100000.00	97036.546	114177744.22	8.9384	A	0.7
9	☐	500000.00	500910.57	590891107.65	46.1138	A	0.5

$$y = 9.2047\text{E-}005 * x + 0.0065$$

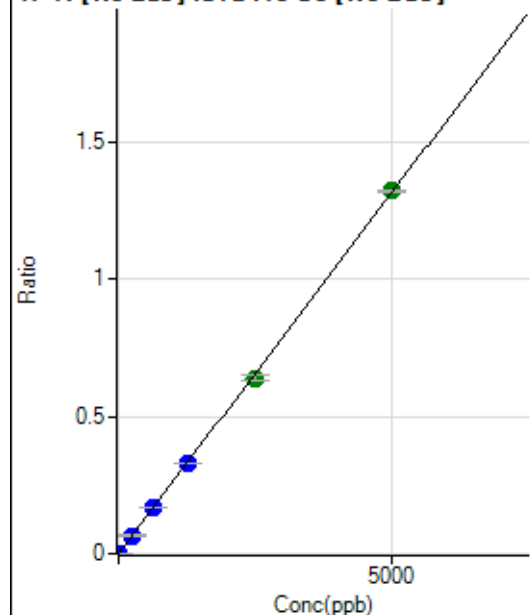
$$R = 1.0000$$

$$DL = 2.989$$

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	669.49	0.0000	P	7.4
2	☐	0.500					
3	☐	5.000	4.798	17964.46	0.0013	P	0.5
4	☐	250.000	252.037	889173.20	0.0663	P	1.0
5	☐	625.000	628.742	2186193.45	0.1653	P	0.3
6	☐	1250.000	1257.088	4261851.22	0.3305	P	1.4
7	☐	2500.000	2431.731	8494612.69	0.6393	A	3.3
8	☐	5000.000	5031.793	16898787.88	1.3229	A	0.5
9	☐			5295.62	0.0004	P	6.1

$$y = 2.6290E-004 * x + 4.8652E-005$$

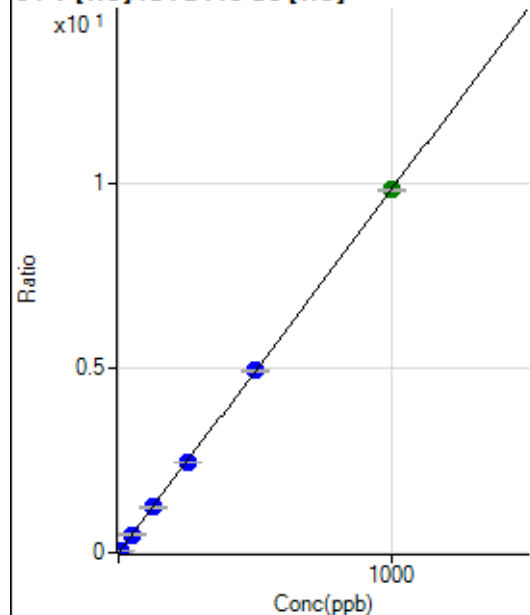
$$R = 0.9999$$

$$DL = 0.04129$$

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	17.4
2	☐	0.500					
3	☐	5.000	4.916	35997.36	0.0483	P	1.5
4	☐	50.000	50.102	361196.75	0.4924	P	1.0
5	☐	125.000	124.796	877907.58	1.2263	P	0.8
6	☐	250.000	250.036	1741199.30	2.4570	P	0.7
7	☐	500.000	501.025	3453656.55	4.9234	P	0.5
8	☐	1000.000	999.499	6907542.75	9.8217	A	0.5
9	☐			1232.29	0.0016	P	1.5

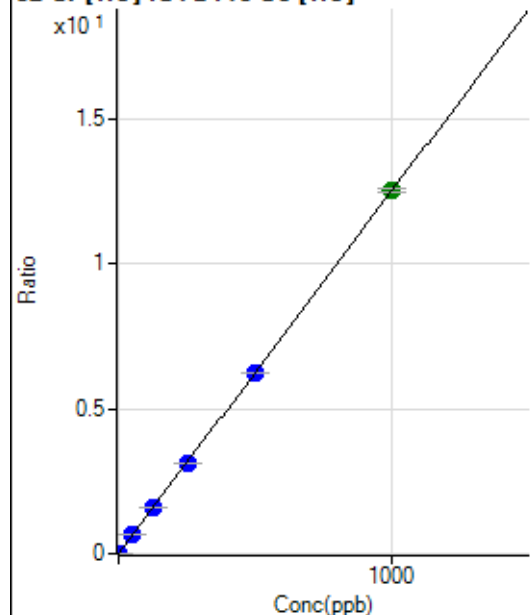
$$y = 0.0098 * x + 1.4962E-005$$

$$R = 1.0000$$

$$DL = 0.0007933$$

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	4316.26	0.0058	P	4.5
2	☐	0.200					
3	☐	2.000	1.877	21821.92	0.0293	P	1.2
4	☐	50.000	50.677	469316.31	0.6398	P	1.3
5	☐	125.000	126.001	1132498.88	1.5820	P	1.1
6	☐	250.000	249.416	2215192.34	3.1259	P	0.3
7	☐	500.000	497.915	4373346.39	6.2345	P	0.5
8	☐	1000.000	1001.030	8810793.34	12.5282	A	1.0
9	☐			62280.08	0.0830	P	2.3

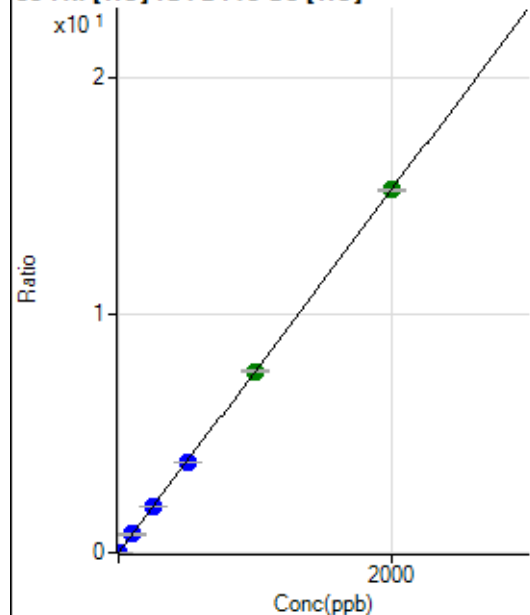
$$y = 0.0125 * x + 0.0058$$

$$R = 1.0000$$

$$DL = 0.06288$$

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	67.78	0.0001	P	24.0
2	☐	0.100					
3	☐	1.000	0.962	5534.48	0.0074	P	5.4
4	☐	100.000	101.015	565495.19	0.7709	P	1.5
5	☐	250.000	251.652	1374688.90	1.9203	P	0.6
6	☐	500.000	499.685	2701966.74	3.8129	P	0.8
7	☐	1000.000	1000.339	5354399.33	7.6331	A	0.6
8	☐	2000.000	1999.652	10730992.82	15.2583	A	0.5
9	☐			43114.58	0.0575	P	1.5

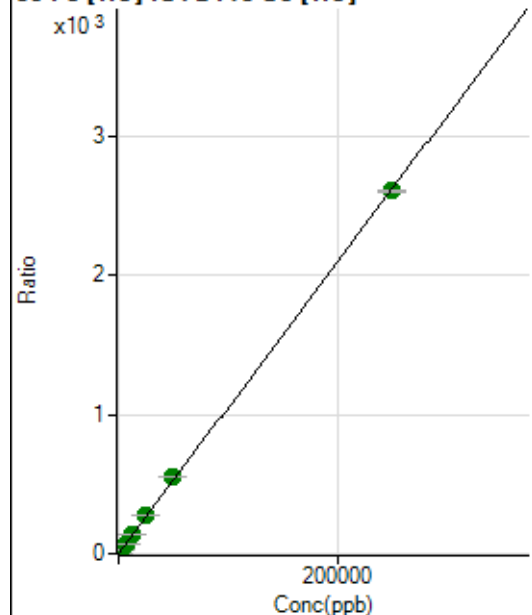
$$y = 0.0076 * x + 9.1241E-005$$

$$R = 1.0000$$

$$DL = 0.008622$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	12870.83	0.0173	P	1.6
2	☐	5.000					
3	☐	50.000	53.342	427976.38	0.5745	P	0.8
4	☐	2500.000	2722.198	20871803.24	28.4512	A	1.0
5	☐	6250.000	6777.792	50691561.32	70.8126	A	1.0
6	☐	12500.000	13424.654	99380054.07	140.2403	A	1.0
7	☐	25000.000	26688.483	195559434.00	278.7833	A	0.6
8	☐	50000.000	52854.393	388288453.12	552.0910	A	0.7
9	☐	250000.00	249198.62	1953300962.1	2,602.941	A	0.7

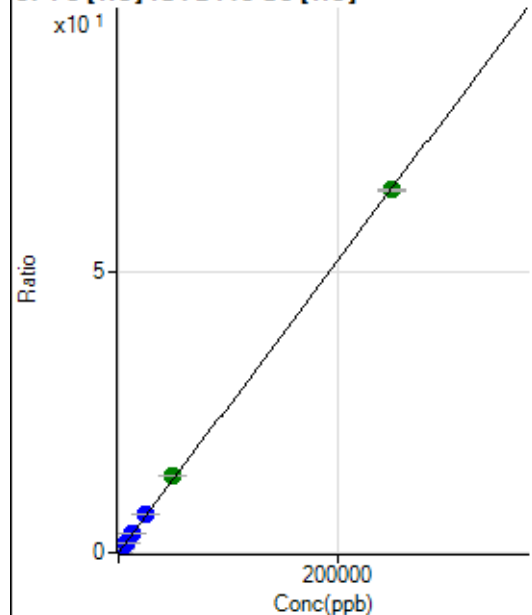
$$y = 0.0104 * x + 0.0173$$

$$R = 0.9999$$

$$DL = 0.07815$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	303.71	0.0004	P	10.9
2	☐	5.000					
3	☐	50.000	54.027	10706.08	0.0144	P	3.0
4	☐	2500.000	2685.280	509428.91	0.6944	P	1.4
5	☐	6250.000	6674.691	1235275.71	1.7255	P	0.3
6	☐	12500.000	13178.685	2414065.22	3.4065	P	0.2
7	☐	25000.000	26590.991	4821392.00	6.8731	P	0.1
8	☐	50000.000	52749.671	9588692.46	13.6340	A	0.3
9	☐	250000.00	249244.56	48343306.64	64.4195	A	0.8

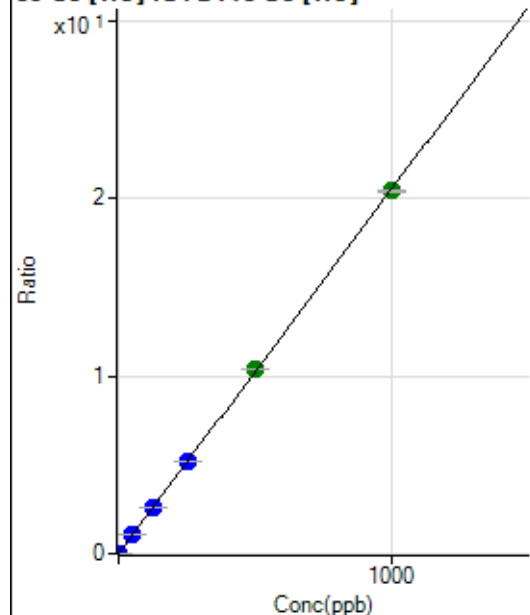
$$y = 2.5846E-004 * x + 4.0893E-004$$

$$R = 0.9999$$

$$DL = 0.5151$$

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	108.89	0.0001	P	18.6
2	☐	0.100					
3	☐	1.000	0.964	14842.13	0.0199	P	2.7
4	☐	50.000	51.686	777662.87	1.0601	P	1.6
5	☐	125.000	127.843	1876890.58	2.6219	P	1.0
6	☐	250.000	252.894	3675305.95	5.1863	P	0.4
7	☐	500.000	506.228	7282471.97	10.3816	A	0.8
8	☐	1000.000	995.723	14361000.34	20.4199	A	0.7
9	☐			162010.31	0.2159	P	1.4

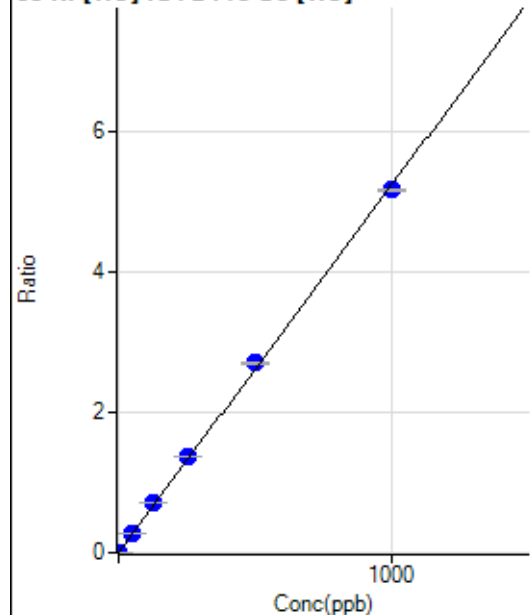
$$y = 0.0205 * x + 1.4662E-004$$

$$R = 1.0000$$

$$DL = 0.003998$$

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	155.56	0.0002	P	20.4
2	☐	0.100					
3	☐	1.000	1.042	4217.34	0.0057	P	1.7
4	☐	50.000	54.508	209466.90	0.2855	P	0.8
5	☐	125.000	134.184	502932.08	0.7025	P	0.9
6	☐	250.000	261.788	971161.63	1.3704	P	1.1
7	☐	500.000	516.436	1896282.63	2.7033	P	0.5
8	☐	1000.000	987.462	3635136.54	5.1687	P	0.3
9	☐			43324.08	0.0577	P	0.4

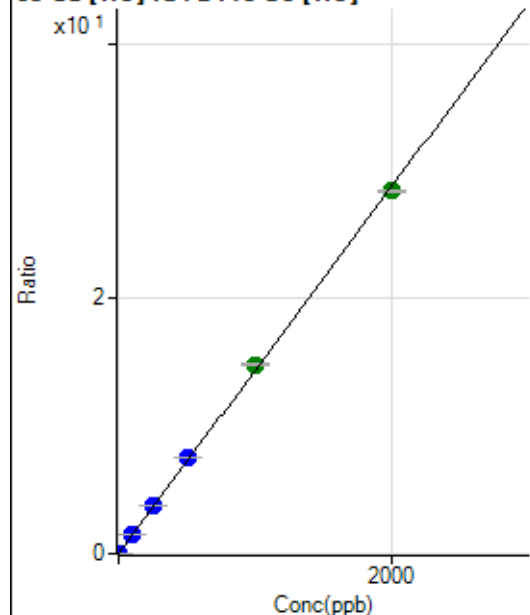
$$y = 0.0052 * x + 2.0942E-004$$

$$R = 0.9997$$

$$DL = 0.02449$$

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	1464.54	0.0020	P	2.1
2	☐	0.200					
3	☐	2.000	1.974	22607.67	0.0303	P	1.9
4	☐	100.000	106.472	1124485.61	1.5329	P	1.3
5	☐	250.000	265.075	2729826.35	3.8133	P	0.6
6	☐	500.000	522.699	5327232.07	7.5175	P	0.8
7	☐	1000.000	1028.955	10379351.79	14.7966	A	0.8
8	☐	2000.000	1977.640	19999463.04	28.4371	A	0.6
9	☐			22527.53	0.0300	P	0.4

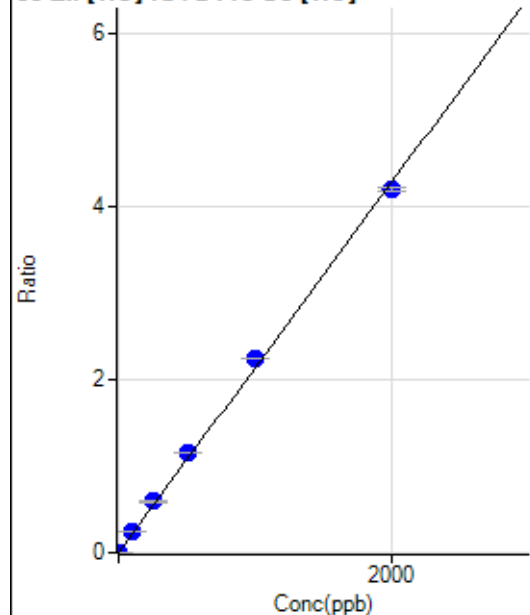
$$y = 0.0144 * x + 0.0020$$

$$R = 0.9998$$

$$DL = 0.008486$$

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	430.02	0.0006	P	2.8
2	☐	0.200					
3	☐	2.000	2.353	4185.11	0.0056	P	3.2
4	☐	100.000	112.165	176686.54	0.2408	P	0.9
5	☐	250.000	275.698	423186.06	0.5911	P	0.8
6	☐	500.000	541.719	822729.97	1.1610	P	0.4
7	☐	1000.000	1050.632	1579135.13	2.2511	P	0.1
8	☐	2000.000	1960.434	2953823.36	4.2000	P	1.0
9	☐			13585.37	0.0181	P	2.8

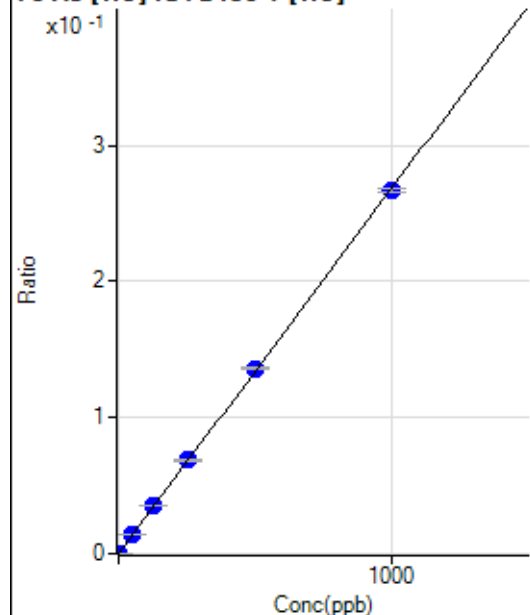
$$y = 0.0021 * x + 5.7907E-004$$

$$R = 0.9992$$

$$DL = 0.02301$$

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	17.90	0.0000	P	57.5
2	☐	0.100					
3	☐	1.000	0.973	1001.90	0.0003	P	3.4
4	☐	50.000	52.366	51959.18	0.0141	P	0.7
5	☐	125.000	129.679	127055.46	0.0348	P	0.2
6	☐	250.000	256.327	248969.52	0.0688	P	1.3
7	☐	500.000	508.135	490358.55	0.1363	P	0.5
8	☐	1000.000	993.647	941785.68	0.2666	P	0.9
9	☐			1212.41	0.0003	P	2.6

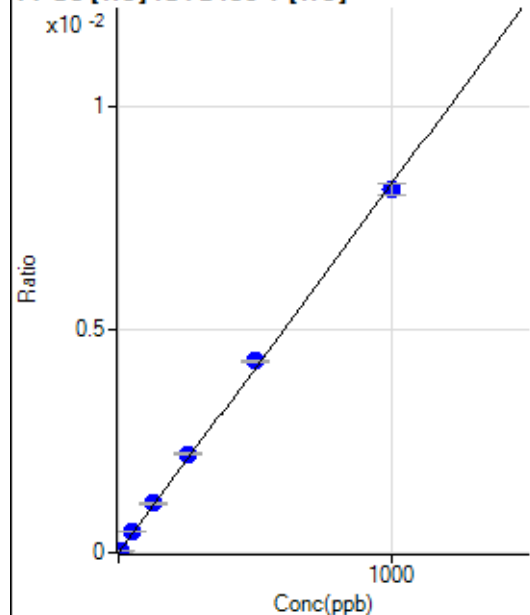
$$y = 2.6828\text{E-}004 * x + 4.7921\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.03083$$

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	1.11	0.0000	P	173.
2	☐	0.500					
3	☐	5.000	5.417	170.00	0.0000	P	16.2
4	☐	50.000	56.382	1724.57	0.0005	P	4.1
5	☐	125.000	133.318	4025.07	0.0011	P	5.0
6	☐	250.000	267.399	8004.56	0.0022	P	2.2
7	☐	500.000	520.544	15481.81	0.0043	P	1.3
8	☐	1000.000	984.017	28740.92	0.0081	P	3.1
9	☐			10.00	0.0000	P	33.0

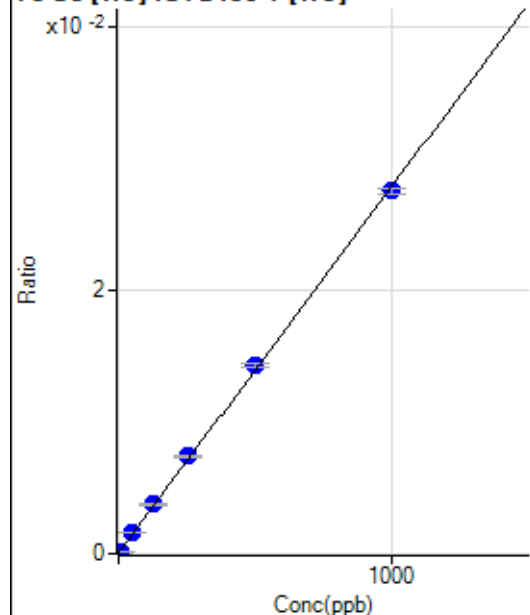
$$y = 8.2682\text{E-}006 * x + 2.9840\text{E-}007$$

$$R = 0.9995$$

$$DL = 0.1875$$

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	180.87	0.0000	P	31.1
2	☐	0.500					
3	☐	5.000	5.580	766.70	0.0002	P	3.4
4	☐	50.000	55.274	5857.40	0.0016	P	3.1
5	☐	125.000	132.580	13629.95	0.0037	P	0.7
6	☐	250.000	264.409	26775.37	0.0074	P	1.9
7	☐	500.000	512.243	51375.81	0.0143	P	1.7
8	☐	1000.000	989.062	97269.75	0.0275	P	1.7
9	☐			214.20	0.0001	P	17.6

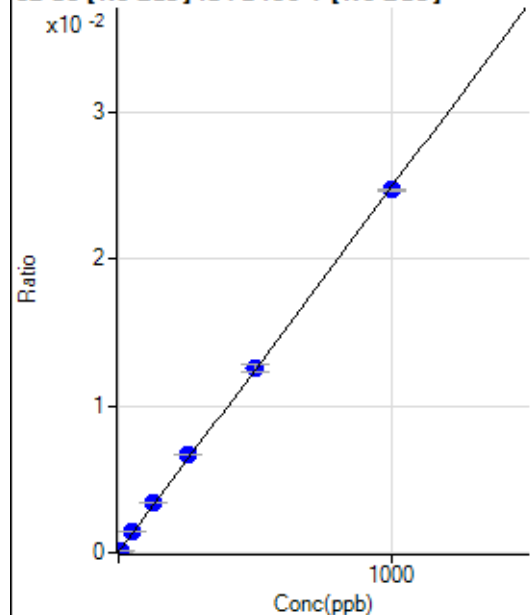
$$y = 2.7790E-005 * x + 4.8414E-005$$

$$R = 0.9998$$

$$DL = 1.624$$

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	843.61	0.0000	P	5.8
2	☐	0.500					
3	☐	5.000	5.579	3852.29	0.0002	P	6.6
4	☐	50.000	54.915	29792.16	0.0014	P	1.1
5	☐	125.000	134.369	71394.16	0.0034	P	0.5
6	☐	250.000	266.082	138361.18	0.0066	P	0.6
7	☐	500.000	504.099	266451.79	0.0125	P	4.8
8	☐	1000.000	992.510	504174.63	0.0247	P	0.3
9	☐			1103.04	0.0001	P	15.8

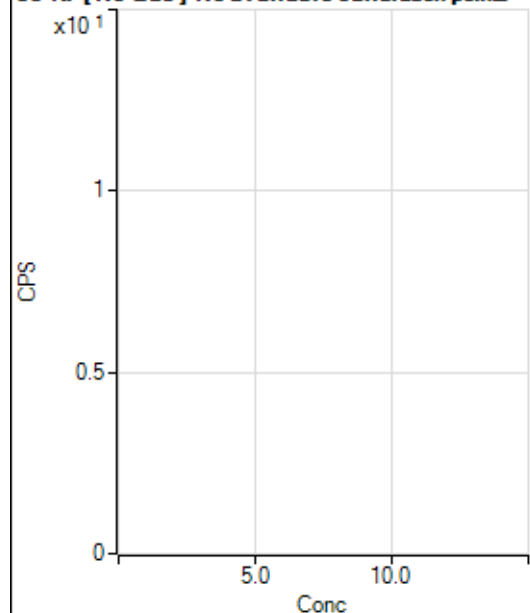
$$y = 2.4815E-005 * x + 3.8997E-005$$

$$R = 0.9998$$

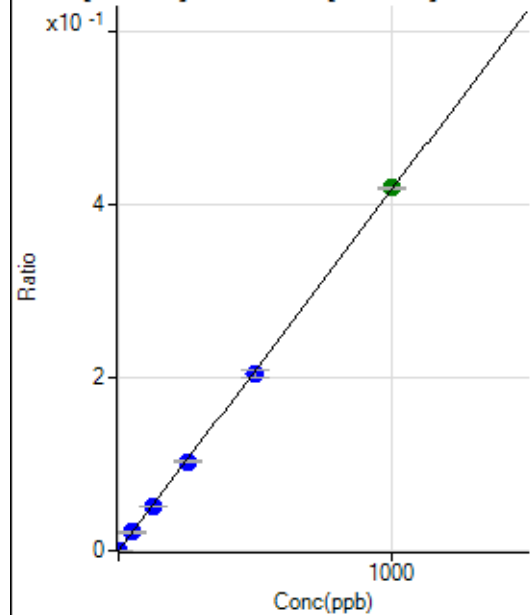
$$DL = 0.2734$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1869.04		P	4.4
2	☐						
3	☐			1916.83		P	4.0
4	☐			1879.05		P	5.1
5	☐			1866.81		P	3.6
6	☐			1762.36		P	6.4
7	☐			1850.15		P	4.1
8	☐			1776.81		P	8.2
9	☐			1770.14		P	6.2

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3061.58	0.0001	P	4.3
2	☐	0.100					
3	☐	1.000	0.767	10020.58	0.0005	P	0.2
4	☐	50.000	50.444	450144.78	0.0212	P	0.9
5	☐	125.000	124.571	1102431.75	0.0521	P	0.2
6	☐	250.000	247.307	2151359.14	0.1033	P	0.3
7	☐	500.000	490.356	4345977.40	0.2046	P	3.9
8	☐	1000.000	1005.527	8572872.24	0.4195	A	0.4
9	☐			33175.50	0.0017	P	2.1

$$y = 4.1701\text{E-}004 * x + 1.4153\text{E-}004$$

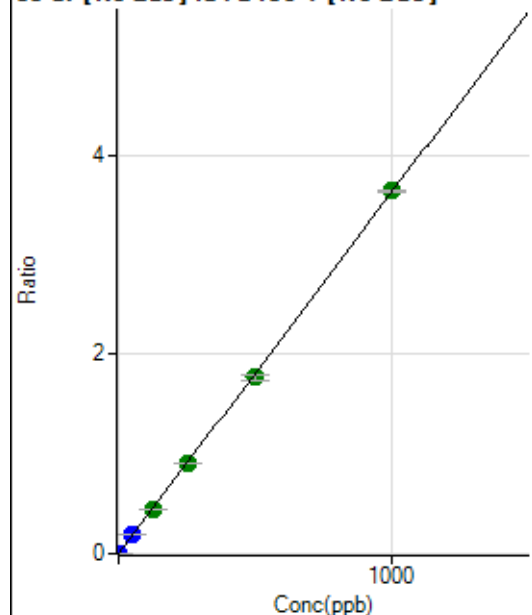
$$R = 0.9999$$

$$DL = 0.0442$$

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	269.46	0.0000	P	11.4
2	☐	0.100					
3	☐	1.000	0.803	63511.38	0.0029	P	1.0
4	☐	50.000	50.788	3913892.75	0.1841	P	0.7
5	☐	125.000	124.671	9566411.58	0.4520	A	0.4
6	☐	250.000	252.013	19034278.03	0.9137	A	0.7
7	☐	500.000	489.102	37668094.94	1.7733	A	3.2
8	☐	1000.000	1004.947	74466989.86	3.6435	A	0.5
9	☐			267506.22	0.0133	P	0.3

$$y = 0.0036 * x + 1.2456E-005$$

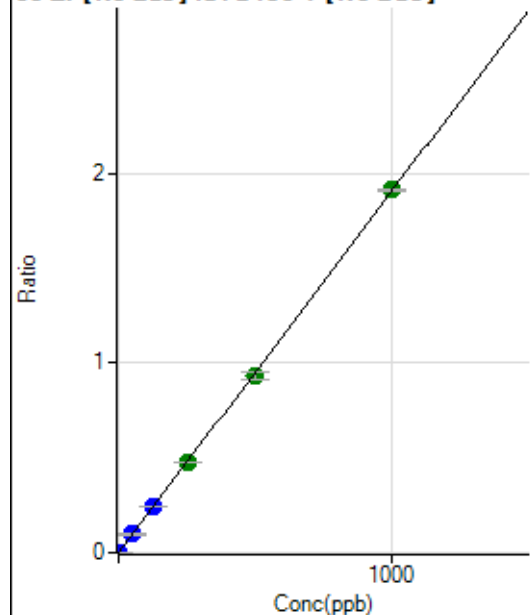
$$R = 0.9999$$

$$DL = 0.001175$$

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	1308.46	0.0001	P	2.7
2	☐	0.100					
3	☐	1.000	0.930	39814.92	0.0018	P	1.6
4	☐	50.000	50.673	2053592.82	0.0966	P	0.6
5	☐	125.000	126.518	5103846.47	0.2411	P	0.9
6	☐	250.000	248.795	9877481.21	0.4741	A	0.6
7	☐	500.000	490.133	19837639.33	0.9340	A	3.9
8	☐	1000.000	1005.012	39141803.31	1.9151	A	0.4
9	☐			10643.32	0.0005	P	5.9

$$y = 0.0019 * x + 6.0493E-005$$

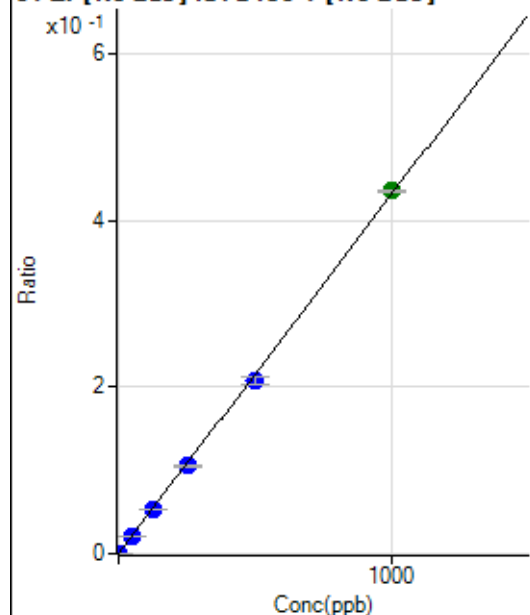
$$R = 0.9999$$

$$DL = 0.00259$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	263.90	0.0000	P	26.7
2	☐	0.100					
3	☐	1.000	0.904	8725.24	0.0004	P	2.3
4	☐	50.000	49.226	451159.50	0.0212	P	0.8
5	☐	125.000	122.596	1118460.47	0.0528	P	0.1
6	☐	250.000	244.904	2198967.93	0.1056	P	1.3
7	☐	500.000	483.191	4422743.46	0.2082	P	4.1
8	☐	1000.000	1010.018	8896381.53	0.4353	A	0.8
9	☐			2364.19	0.0001	P	8.3

$$y = 4.3096\text{E-}004 * x + 1.2211\text{E-}005$$

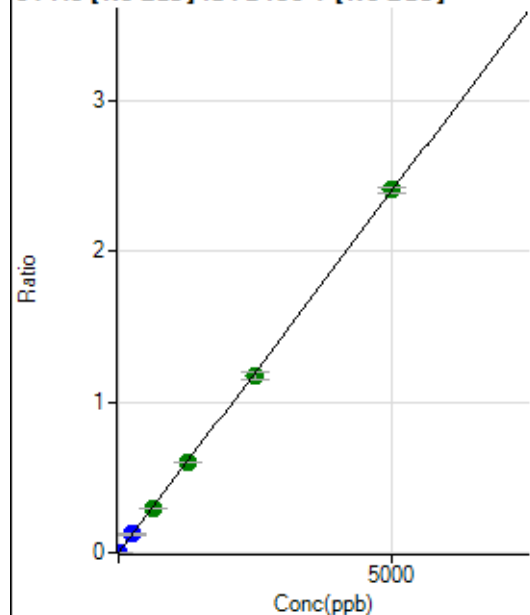
$$R = 0.9998$$

$$DL = 0.02266$$

Weight: <None>

Min Conc: 0

94 Mo [No Gas] ISTD:89 Y [No Gas]



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	530.59	0.0000	P	2.4
2	☐	0.500					
3	☐	5.000	4.653	48976.61	0.0023	P	0.7
4	☐	250.000	253.330	2582150.56	0.1215	P	0.5
5	☐	625.000	620.848	6300597.14	0.2977	A	0.5
6	☐	1250.000	1254.483	12530529.62	0.6015	A	0.7
7	☐	2500.000	2453.924	24986613.75	1.1766	A	4.3
8	☐	5000.000	5022.270	49213135.48	2.4080	A	1.4
9	☐			21491.99	0.0011	P	5.1

$$y = 4.7946\text{E-}004 * x + 2.4534\text{E-}005$$

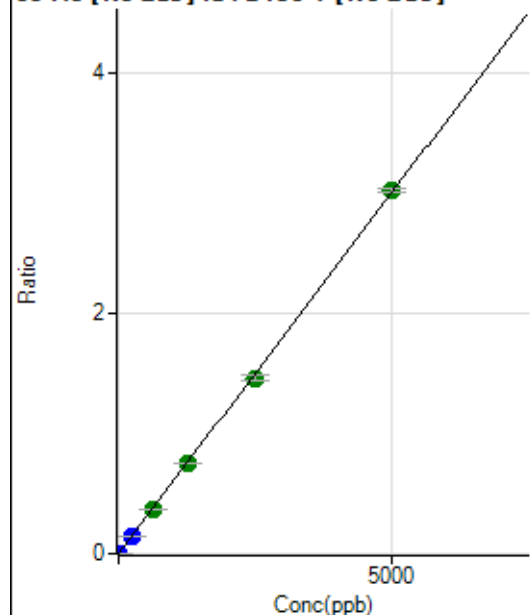
$$R = 0.9999$$

$$DL = 0.00375$$

Weight: <None>

Min Conc: 0

95 Mo [No Gas] ISTD:89 Y [No Gas]



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	175.01	0.0000	P	25.7
2	☐	0.500					
3	☐	5.000	4.610	60258.89	0.0028	P	1.6
4	☐	250.000	252.829	3225231.11	0.1517	P	0.1
5	☐	625.000	622.069	7901302.78	0.3733	A	0.7
6	☐	1250.000	1249.492	15621066.50	0.7499	A	0.3
7	☐	2500.000	2438.050	31075111.11	1.4632	A	4.0
8	☐	5000.000	5031.327	61710706.94	3.0195	A	1.1
9	☐			31469.04	0.0016	P	5.9

$$y = 6.0013\text{E-}004 * x + 8.1012\text{E-}006$$

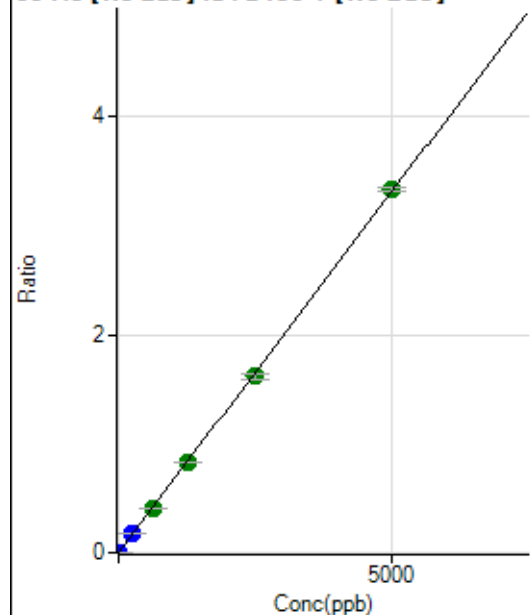
$$R = 0.9999$$

$$DL = 0.01042$$

Weight: <None>

Min Conc: 0

96 Mo [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	9.0
2	☐	0.500					
3	☐	5.000	4.630	66947.18	0.0031	P	1.5
4	☐	250.000	254.140	3578774.17	0.1684	P	0.4
5	☐	625.000	619.477	8685566.95	0.4104	A	0.8
6	☐	1250.000	1249.925	17249535.11	0.8280	A	0.5
7	☐	2500.000	2444.556	34398083.06	1.6194	A	3.6
8	☐	5000.000	5028.224	68078466.11	3.3310	A	1.2
9	☐			50392.98	0.0025	P	3.3

$$y = 6.6246\text{E-}004 * x + 1.5538\text{E-}005$$

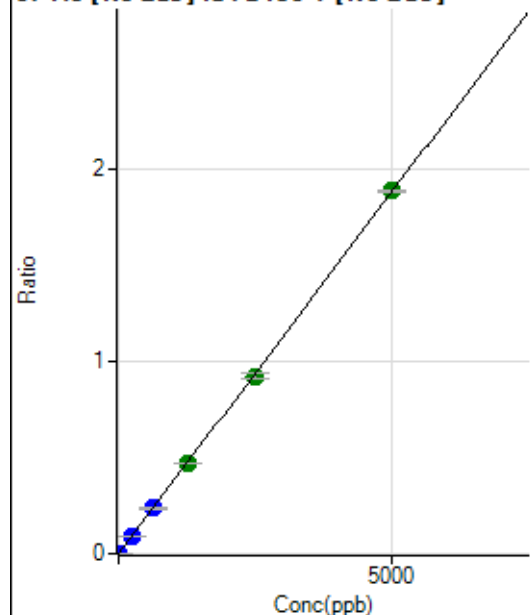
$$R = 0.9999$$

$$DL = 0.006311$$

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	119.45	0.0000	P	56.2
2	☐	0.500					
3	☐	5.000	4.582	37531.31	0.0017	P	1.2
4	☐	250.000	250.468	2001630.88	0.0942	P	0.9
5	☐	625.000	626.039	4981713.13	0.2354	P	0.6
6	☐	1250.000	1244.094	9744116.28	0.4678	A	0.7
7	☐	2500.000	2456.221	19614579.08	0.9235	A	3.8
8	☐	5000.000	5023.213	38599895.31	1.8886	A	0.3
9	☐			18849.30	0.0009	P	6.4

$$y = 3.7598\text{E-}004 * x + 5.5153\text{E-}006$$

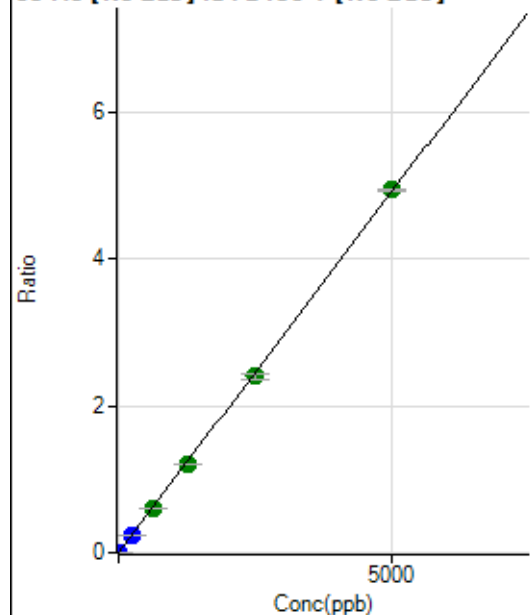
$$R = 0.9999$$

$$DL = 0.02474$$

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	283.35	0.0000	P	20.8
2	☐	0.500					
3	☐	5.000	4.538	96871.20	0.0045	P	2.4
4	☐	250.000	250.891	5226738.66	0.2459	P	0.5
5	☐	625.000	619.457	12849369.73	0.6071	A	0.8
6	☐	1250.000	1232.810	25170793.62	1.2083	A	0.2
7	☐	2500.000	2443.013	50850829.26	2.3944	A	4.2
8	☐	5000.000	5033.440	100826642.53	4.9333	A	0.5
9	☐			47059.50	0.0023	P	6.0

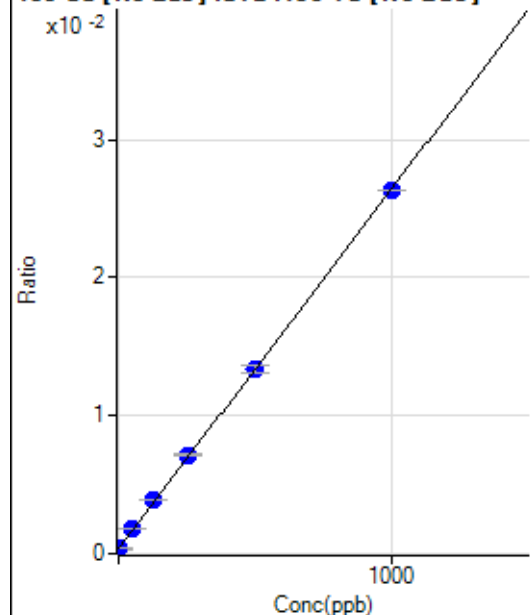
$$y = 9.8010\text{E-}004 * x + 1.3105\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.008349$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	9915.09	0.0004	P	2.7
2	☐	0.100					
3	☐	1.000	0.936	10587.72	0.0004	P	0.4
4	☐	50.000	55.928	50541.51	0.0018	P	0.5
5	☐	125.000	134.628	108618.52	0.0039	P	0.6
6	☐	250.000	261.525	200681.47	0.0072	P	0.3
7	☐	500.000	500.287	384407.13	0.0134	P	4.9
8	☐	1000.000	995.476	728073.41	0.0263	P	0.1
9	☐			9436.87	0.0004	P	2.7

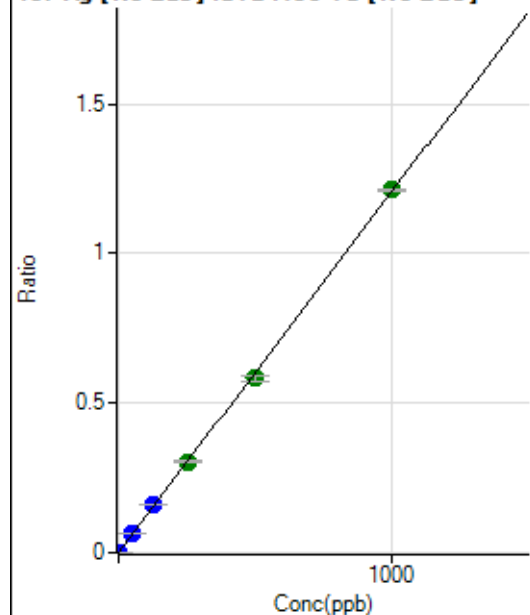
$$y = 2.6034\text{E-}005 * x + 3.5244\text{E-}004$$

$$R = 0.9999$$

$$DL = 1.113$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	266.68	0.0000	P	38.5
2	☐	0.100					
3	☐	1.000	1.030	35108.50	0.0012	P	1.4
4	☐	50.000	54.197	1824422.63	0.0653	P	0.9
5	☐	125.000	132.665	4499126.62	0.1598	P	1.3
6	☐	250.000	252.886	8535192.29	0.3046	A	1.2
7	☐	500.000	482.897	16719111.48	0.5816	A	3.4
8	☐	1000.000	1006.662	33602470.54	1.2124	A	0.6
9	☐			2483.67	0.0001	P	8.7

$$y = 0.0012 * x + 9.4895\text{E-}006$$

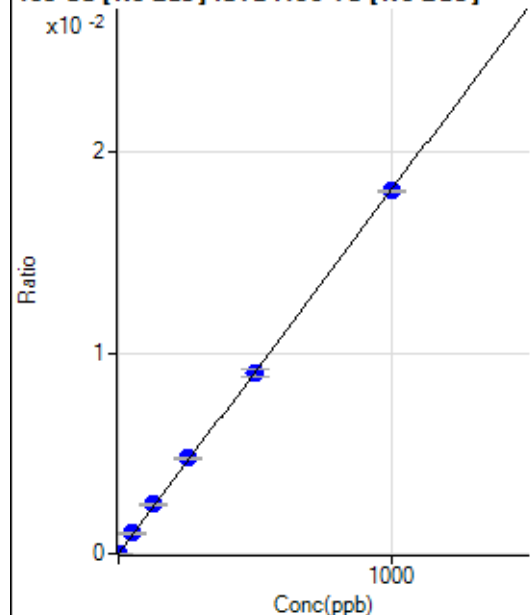
$$R = 0.9997$$

$$DL = 0.009096$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	33.33	0.0000	P	25.6
2	☐	0.100					
3	☐	1.000	1.038	562.53	0.0000	P	9.0
4	☐	50.000	55.485	28161.65	0.0010	P	1.7
5	☐	125.000	135.005	68986.86	0.0025	P	1.3
6	☐	250.000	262.431	133435.57	0.0048	P	1.9
7	☐	500.000	497.091	259206.64	0.0090	P	4.0
8	☐	1000.000	996.822	501201.14	0.0181	P	0.2
9	☐			98.62	0.0000	P	12.3

$$y = 1.8139\text{E-}005 * x + 1.1862\text{E-}006$$

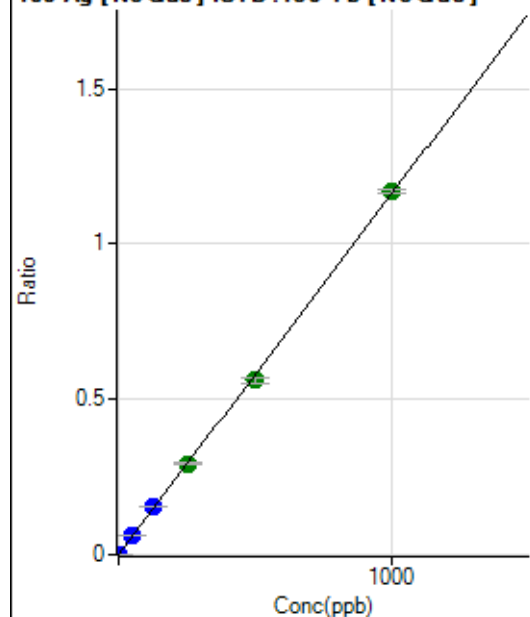
$$R = 0.9999$$

$$DL = 0.05024$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	175.01	0.0000	P	7.9
2	☐	0.100					
3	☐	1.000	1.020	33429.37	0.0012	P	1.9
4	☐	50.000	54.053	1753416.42	0.0627	P	0.6
5	☐	125.000	131.924	4311086.86	0.1531	P	1.6
6	☐	250.000	253.010	8228980.22	0.2936	A	0.8
7	☐	500.000	483.502	16132001.23	0.5611	A	3.3
8	☐	1000.000	1006.428	32373584.06	1.1680	A	1.0
9	☐			2341.97	0.0001	P	6.2

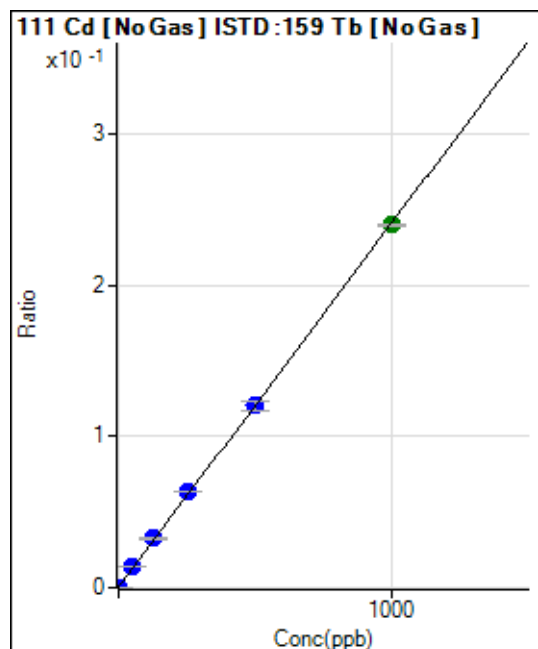
$$y = 0.0012 * x + 6.2189\text{E-}006$$

$$R = 0.9998$$

$$DL = 0.001265$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6970.01	0.0002	P	2.7
2	☐	0.100					
3	☐	1.000	1.023	13879.16	0.0005	P	1.4
4	☐	50.000	55.227	378353.02	0.0135	P	0.9
5	☐	125.000	134.230	916505.01	0.0326	P	1.8
6	☐	250.000	263.456	1783739.03	0.0636	P	1.0
7	☐	500.000	499.130	3458821.69	0.1204	P	4.9
8	☐	1000.000	995.656	6647872.19	0.2399	A	0.6
9	☐			7340.98	0.0003	P	2.0

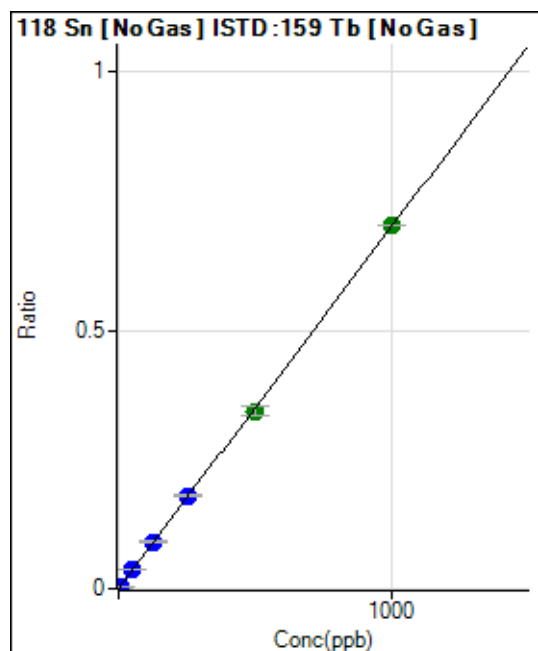
$$y = 2.4065\text{E-}004 * x + 2.4775\text{E-}004$$

$$R = 0.9999$$

$$DL = 0.08362$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1964.12	0.0001	P	8.1
2	☐	0.500					
3	☐	5.000	5.072	101834.66	0.0036	P	1.5
4	☐	50.000	52.318	1026450.65	0.0367	P	2.0
5	☐	125.000	129.270	2552442.31	0.0907	P	1.3
6	☐	250.000	256.212	5033087.96	0.1796	P	1.3
7	☐	500.000	490.830	9884600.57	0.3440	A	5.2
8	☐	1000.000	1002.382	19469468.32	0.7024	A	0.1
9	☐			11683.11	0.0005	P	3.9

$$y = 7.0071\text{E-}004 * x + 6.9784\text{E-}005$$

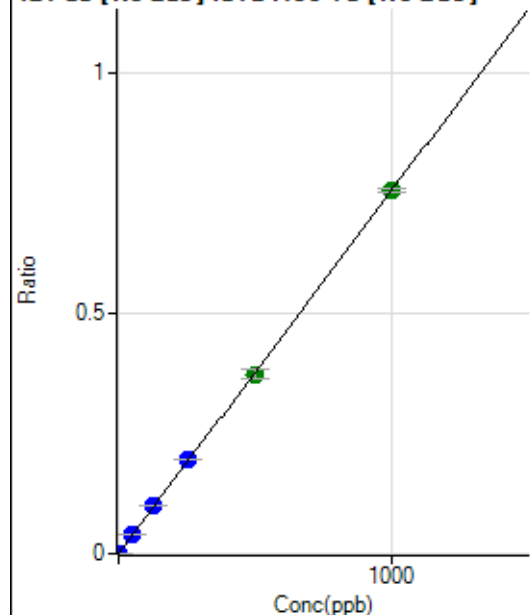
$$R = 0.9999$$

$$DL = 0.0241$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	150.01	0.0000	P	29.3
2	☐	0.200					
3	☐	2.000	1.904	40529.22	0.0014	P	1.6
4	☐	50.000	53.024	1118686.62	0.0400	P	0.6
5	☐	125.000	131.141	2787280.70	0.0990	P	1.4
6	☐	250.000	260.164	5503514.19	0.1964	P	1.1
7	☐	500.000	494.074	10716526.02	0.3729	A	5.0
8	☐	1000.000	999.503	20910378.59	0.7544	A	0.9
9	☐			22466.12	0.0009	P	2.5

$$y = 7.5481\text{E-}004 * x + 5.3359\text{E-}006$$

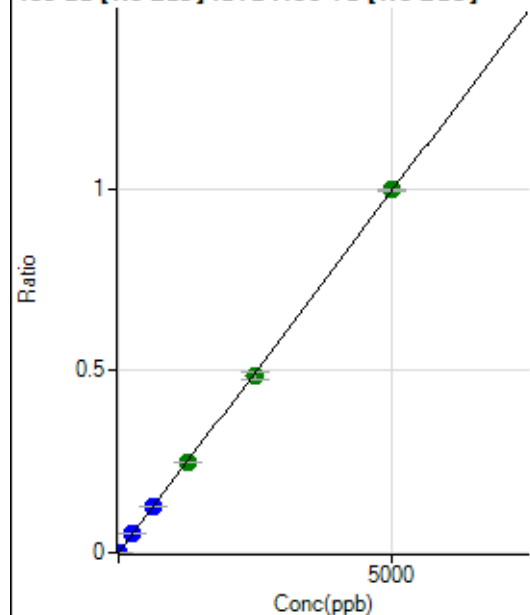
$$R = 0.9999$$

$$DL = 0.006214$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	61.11	0.0000	P	27.8
2	☐	1.000					
3	☐	10.000	9.796	54653.24	0.0019	P	1.9
4	☐	250.000	256.072	1419516.22	0.0508	P	0.9
5	☐	625.000	639.215	3569801.73	0.1268	P	1.6
6	☐	1250.000	1252.036	6959283.23	0.2483	A	0.5
7	☐	2500.000	2445.645	13939624.62	0.4851	A	4.7
8	☐	5000.000	5024.589	27621001.66	0.9966	A	0.8
9	☐			3564.53	0.0001	P	1.7

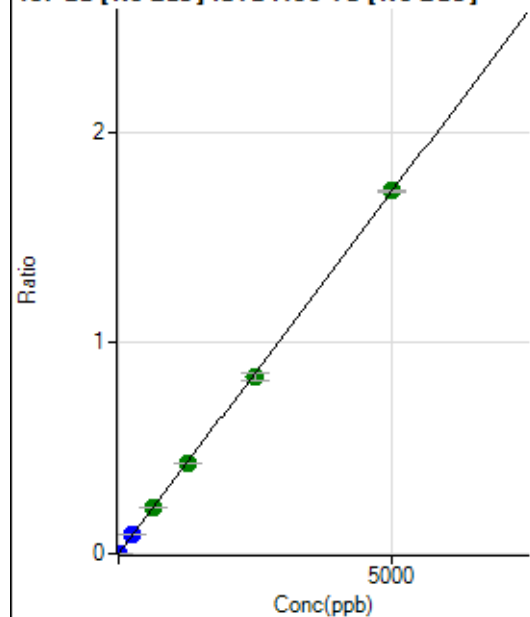
$$y = 1.9834\text{E-}004 * x + 2.1698\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.009139$$

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	94.45	0.0000	P	33.0
2	☐	1.000					
3	☐	10.000	9.735	93918.06	0.0033	P	1.0
4	☐	250.000	261.659	2508340.55	0.0898	P	0.5
5	☐	625.000	636.276	6144842.59	0.2182	A	1.9
6	☐	1250.000	1260.235	12113803.22	0.4323	A	0.2
7	☐	2500.000	2458.620	24236485.27	0.8433	A	4.4
8	☐	5000.000	5016.139	47686121.90	1.7205	A	0.6
9	☐			6037.68	0.0002	P	5.5

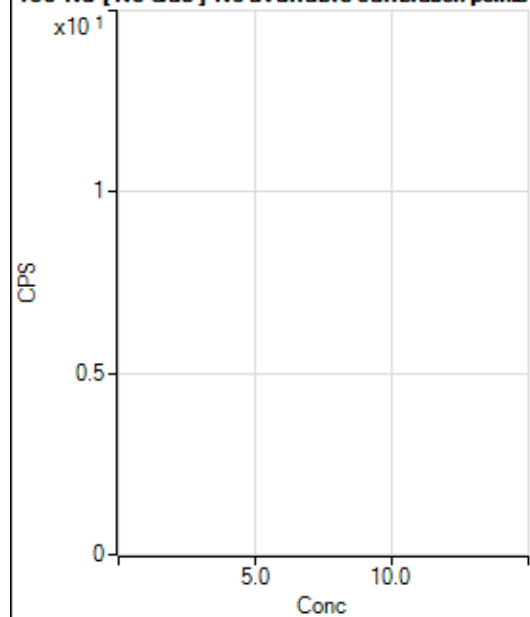
$$y = 3.4299\text{E-}004 * x + 3.3532\text{E-}006$$

$$R = 0.9999$$

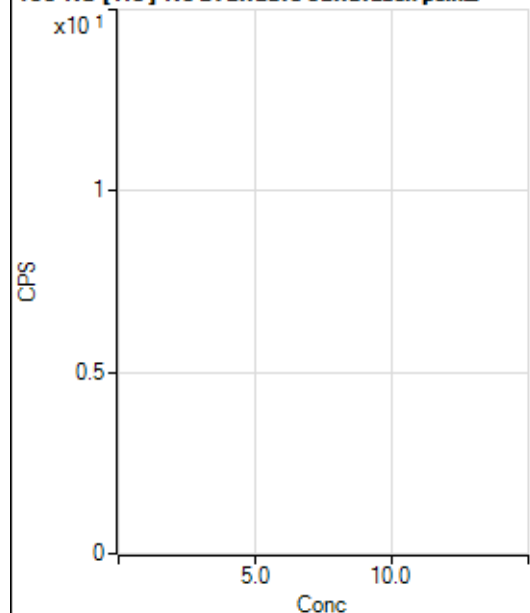
$$DL = 0.009671$$

Weight: <None>

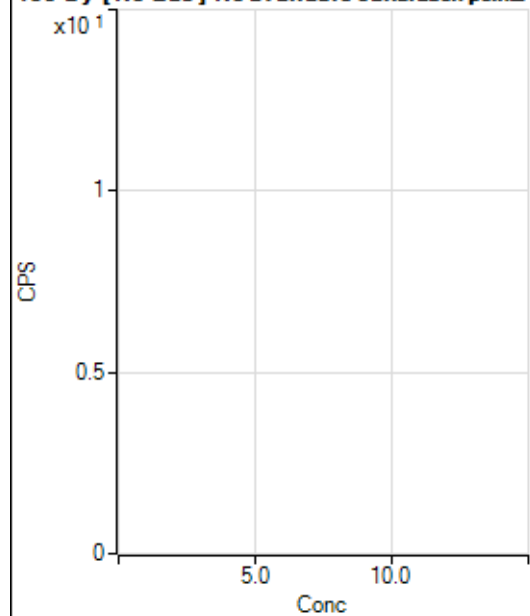
Min Conc: 0

150 Nd [No Gas] No available calibration points

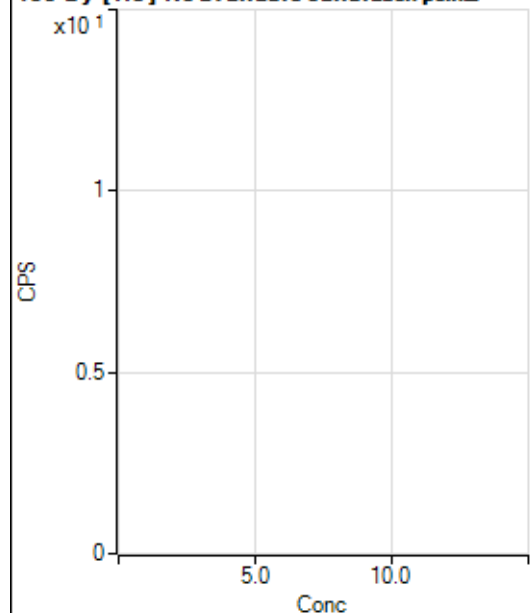
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			2.22		P	173.
2	☐						
3	☐			4.44		P	173.
4	☐			88.89		P	8.7
5	☐			257.79		P	42.7
6	☐			460.03		P	17.6
7	☐			937.84		P	2.3
8	☐			1989.11		P	10.6
9	☐			377.80		P	17.8

150 Nd [He] No available calibration points

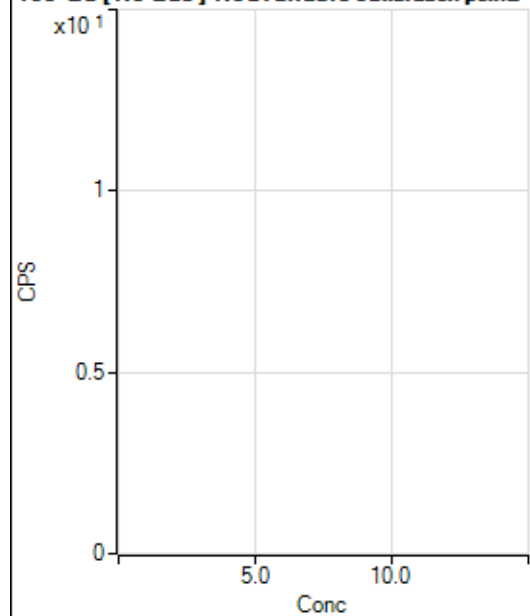
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			1.11		P	173.
4	☐			16.66		P	34.6
5	☐			34.44		P	14.8
6	☐			77.78		P	24.7
7	☐			125.56		P	20.3
8	☐			207.79		P	6.5
9	☐			205.56		P	24.3

156 Dy [No Gas] No available calibration points

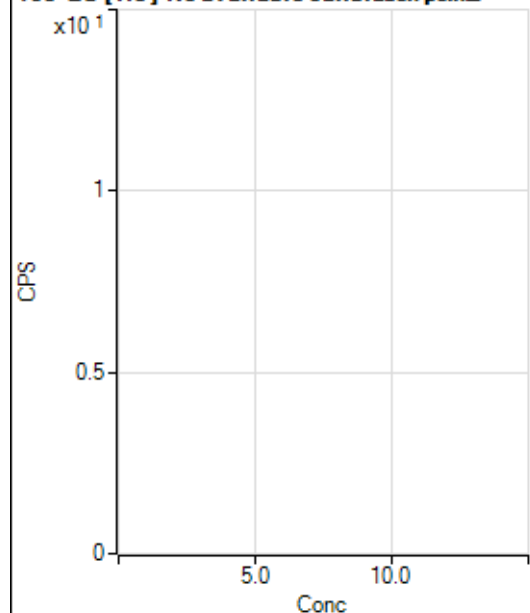
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			16.67		P	173.
2	☐						
3	☐			13.89		P	91.6
4	☐			47.22		P	10.2
5	☐			75.00		P	22.2
6	☐			91.67		P	9.1
7	☐			258.35		P	29.6
8	☐			419.47		P	8.0
9	☐			219.46		P	18.7

156 Dy [He] No available calibration points

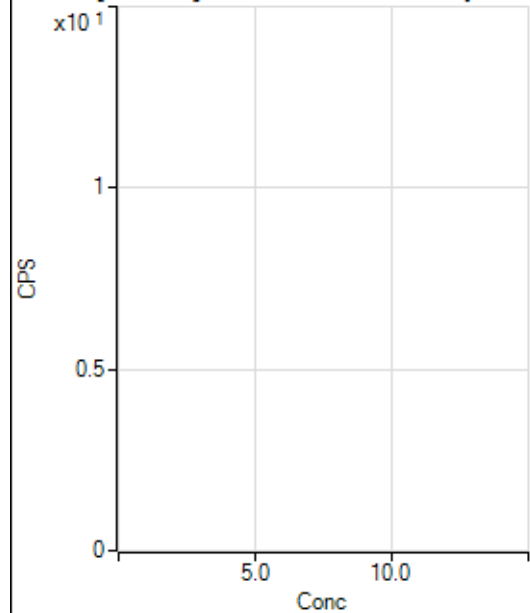
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	0.0
2	☐						
3	☐			7.78		P	24.7
4	☐			23.33		P	49.5
5	☐			62.22		P	27.0
6	☐			103.34		P	3.2
7	☐			221.12		P	17.7
8	☐			372.23		P	12.7
9	☐			116.67		P	7.6

160 Gd [No Gas] Noavailable calibration poin_

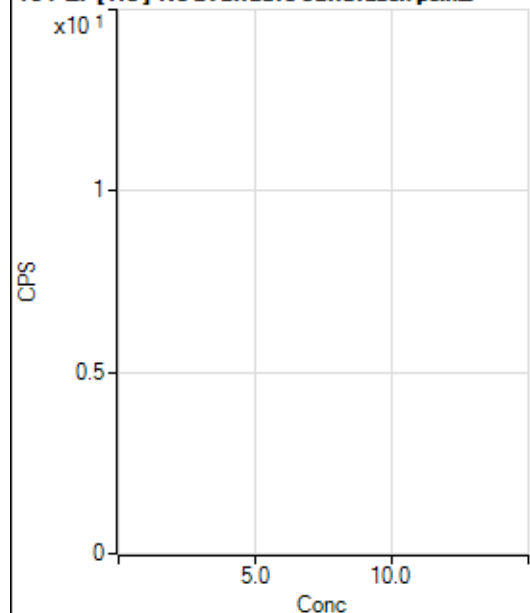
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			177.79		P	11.8
2	☐						
3	☐			213.90		P	12.5
4	☐			141.67		P	40.8
5	☐			211.12		P	32.1
6	☐			183.35		P	29.8
7	☐			227.79		P	14.8
8	☐			197.23		P	13.6
9	☐			380.58		P	26.3

160 Gd [He] No available calibration points

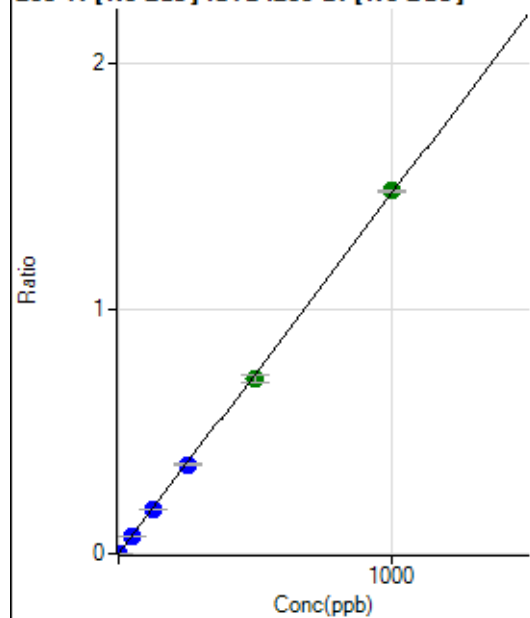
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			335.57		P	15.2
2	☐						
3	☐			355.57		P	7.0
4	☐			391.12		P	3.0
5	☐			354.46		P	7.9
6	☐			347.79		P	19.4
7	☐			332.23		P	15.6
8	☐			406.68		P	5.1
9	☐			445.57		P	12.0

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			72.22		P	6.7
2	☐						
3	☐			102.78		P	20.4
4	☐			91.67		P	15.7
5	☐			108.34		P	27.7
6	☐			122.23		P	27.6
7	☐			130.56		P	19.5
8	☐			172.23		P	7.4
9	☐			175.01		P	26.5

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			47.78		P	17.6
2	☐						
3	☐			47.78		P	33.0
4	☐			45.56		P	33.0
5	☐			58.89		P	22.9
6	☐			55.56		P	25.0
7	☐			64.45		P	13.0
8	☐			63.34		P	9.1
9	☐			78.89		P	21.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	458.36	0.0000	P	12.6
2	☐	0.100					
3	☐	1.000	0.870	23363.03	0.0013	P	3.7
4	☐	50.000	48.997	1280981.45	0.0719	P	0.4
5	☐	125.000	124.384	3231215.55	0.1826	P	0.4
6	☐	250.000	247.568	6335692.68	0.3634	P	1.5
7	☐	500.000	484.643	12465689.17	0.7114	A	4.6
8	☐	1000.000	1008.414	24397042.56	1.4803	A	0.5
9	☐			2864.35	0.0002	P	10.4

$$y = 0.0015 * x + 2.5238E-005$$

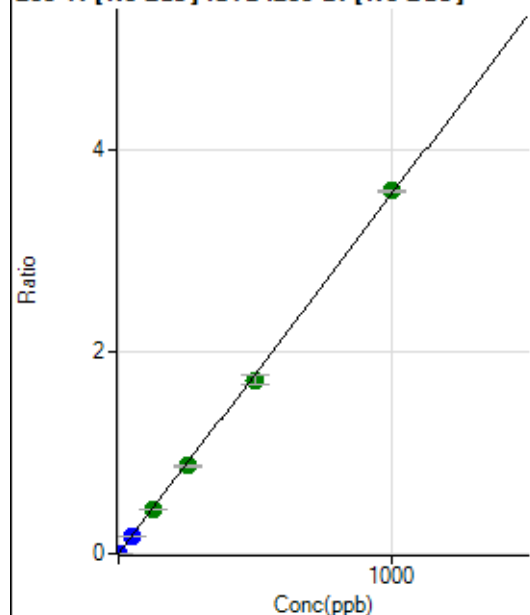
$$R = 0.9998$$

$$DL = 0.006521$$

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	975.08	0.0001	P	17.6
2	☐	0.100					
3	☐	1.000	0.868	56342.94	0.0031	P	1.8
4	☐	50.000	49.007	3102306.06	0.1743	P	0.6
5	☐	125.000	121.309	7630734.20	0.4312	A	0.8
6	☐	250.000	244.229	15134713.01	0.8682	A	1.1
7	☐	500.000	484.050	30142003.45	1.7206	A	5.3
8	☐	1000.000	1009.929	59164745.77	3.5899	A	0.4
9	☐			6963.27	0.0005	P	10.4

$$y = 0.0036 * x + 5.3697E-005$$

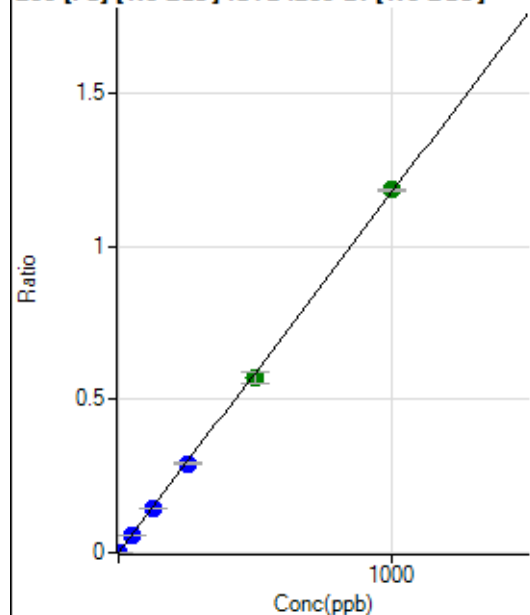
$$R = 0.9998$$

$$DL = 0.007967$$

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	1103.79	0.0001	P	7.1
2	☐	0.100					
3	☐	1.000	0.900	20110.08	0.0011	P	1.8
4	☐	50.000	49.476	1037632.32	0.0583	P	0.9
5	☐	125.000	123.968	2582396.64	0.1459	P	1.5
6	☐	250.000	248.149	5091840.57	0.2921	P	0.6
7	☐	500.000	485.647	10010612.95	0.5716	A	5.9
8	☐	1000.000	1007.795	19546949.74	1.1860	A	0.6
9	☐			15409.37	0.0012	P	3.9

$$y = 0.0012 * x + 6.0779E-005$$

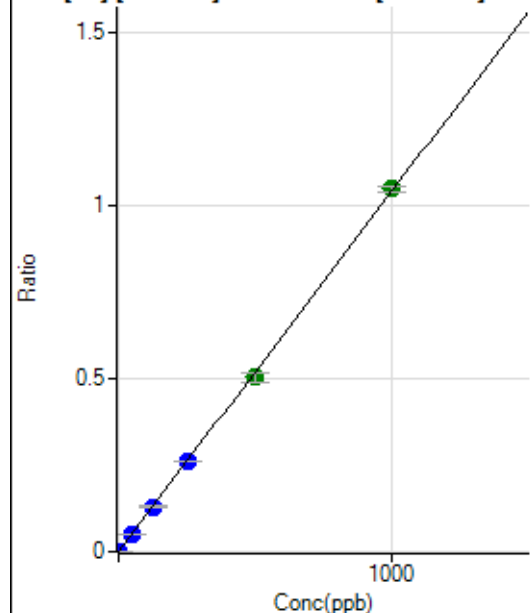
$$R = 0.9998$$

$$DL = 0.01107$$

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	940.80	0.0001	P	5.0
2	☐	0.100					
3	☐	1.000	0.886	17447.15	0.0010	P	1.3
4	☐	50.000	49.680	919226.31	0.0516	P	0.6
5	☐	125.000	124.906	2295584.37	0.1297	P	1.2
6	☐	250.000	249.821	4522479.82	0.2594	P	1.1
7	☐	500.000	483.885	8801383.88	0.5024	A	5.3
8	☐	1000.000	1008.130	17250670.87	1.0467	A	1.4
9	☐			12943.67	0.0010	P	1.4

$$y = 0.0010 * x + 5.1807E-005$$

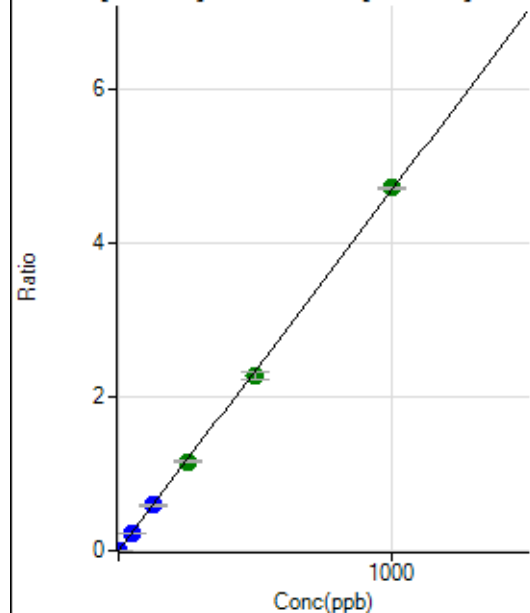
$$R = 0.9998$$

$$DL = 0.007458$$

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	4407.85	0.0002	P	2.3
2	☐	0.100					
3	☐	1.000	0.890	79245.74	0.0044	P	1.5
4	☐	50.000	49.659	4148670.30	0.2330	P	0.2
5	☐	125.000	125.614	10423055.15	0.5890	P	1.0
6	☐	250.000	247.450	20224812.06	1.1601	A	0.9
7	☐	500.000	485.911	39907701.93	2.2779	A	5.0
8	☐	1000.000	1007.622	77846452.55	4.7234	A	0.5
9	☐			60179.03	0.0045	P	2.3

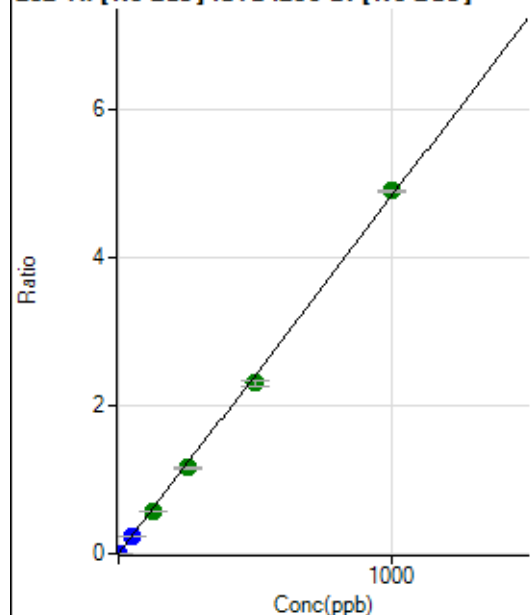
$$y = 0.0047 * x + 2.4272E-004$$

$$R = 0.9998$$

$$DL = 0.003609$$

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	863.02	0.0000	P	2.4
2	☐	0.100					
3	☐	1.000	0.813	71391.81	0.0040	P	0.4
4	☐	50.000	46.792	4027846.68	0.2262	P	0.7
5	☐	125.000	117.441	10045457.92	0.5677	A	1.2
6	☐	250.000	240.055	20229786.68	1.1604	A	0.6
7	☐	500.000	476.502	40364981.69	2.3034	A	4.2
8	☐	1000.000	1015.341	80890064.77	4.9080	A	0.7
9	☐			16969.23	0.0013	P	9.8

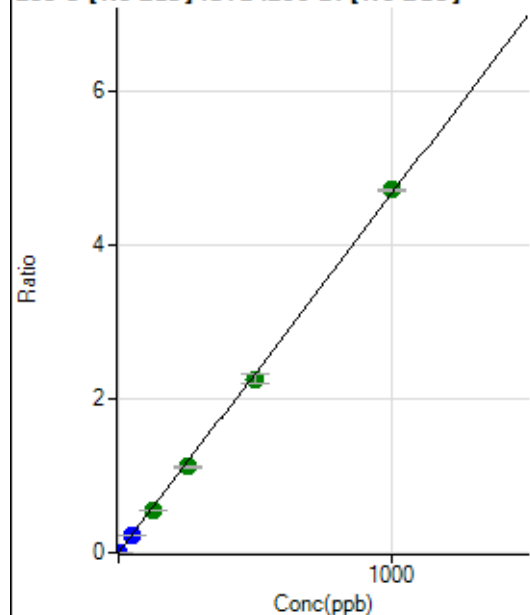
$$y = 0.0048 * x + 4.7523E-005$$

$$R = 0.9995$$

$$DL = 0.0007196$$

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	186.12	0.0000	P	31.8
2	☐	0.100					
3	☐	1.000	0.822	68814.64	0.0038	P	0.6
4	☐	50.000	47.542	3939340.04	0.2213	P	1.4
5	☐	125.000	118.409	9749935.90	0.5510	A	1.6
6	☐	250.000	240.300	19494254.78	1.1183	A	1.6
7	☐	500.000	483.550	39413184.91	2.2502	A	5.8
8	☐	1000.000	1011.597	77586268.40	4.7075	A	0.4
9	☐			4617.72	0.0003	P	15.7

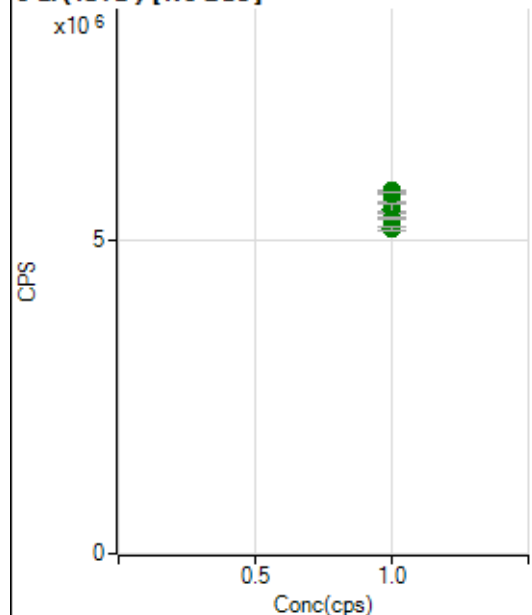
$$y = 0.0047 * x + 1.0248E-005$$

$$R = 0.9997$$

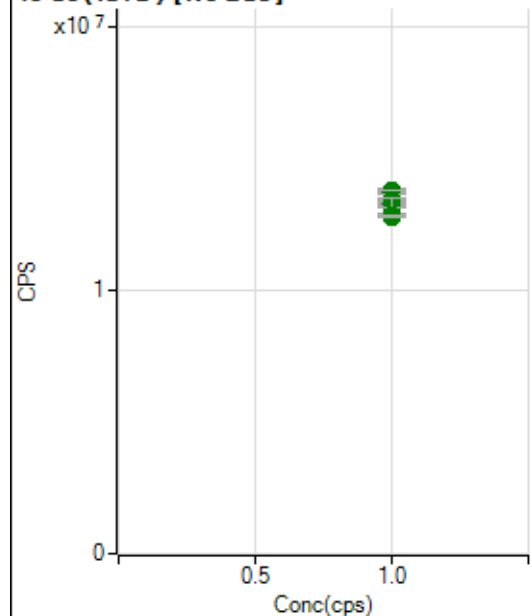
$$DL = 0.002098$$

Weight: <None>

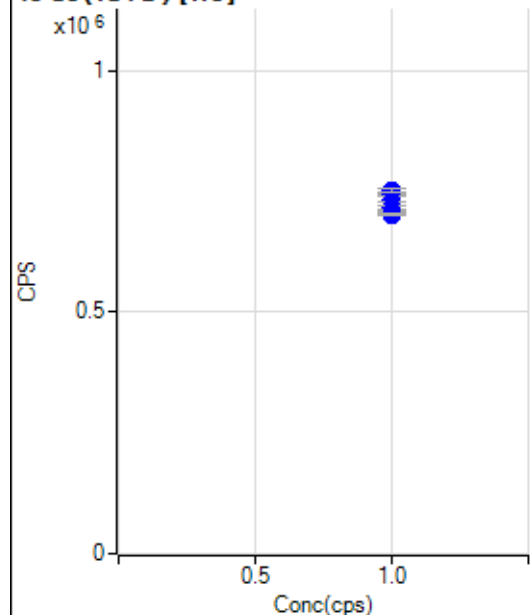
Min Conc: 0

6 Li (ISTD) [No Gas]

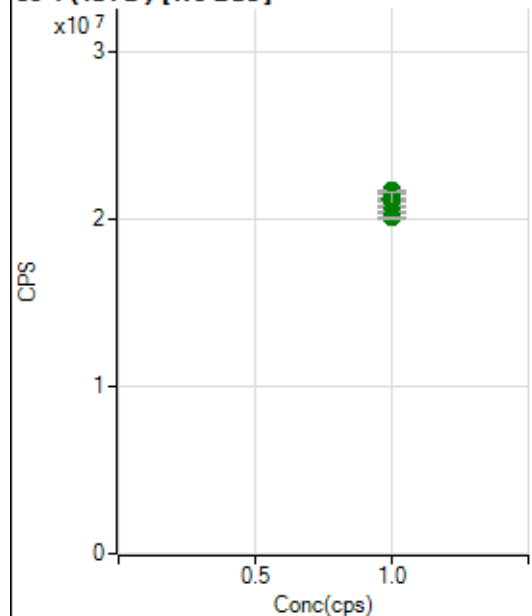
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		5736880.33		A	0.9
2	☐	1.000					
3	☐	1.000		5772435.01		A	0.5
4	☐	1.000		5747923.28		A	0.3
5	☐	1.000		5599388.46		A	0.4
6	☐	1.000		5441062.18		A	0.5
7	☐	1.000		5486225.30		A	2.4
8	☐	1.000		5331497.06		A	0.5
9	☐	1.000		5179546.97		A	1.0

45 Sc (ISTD) [No Gas]

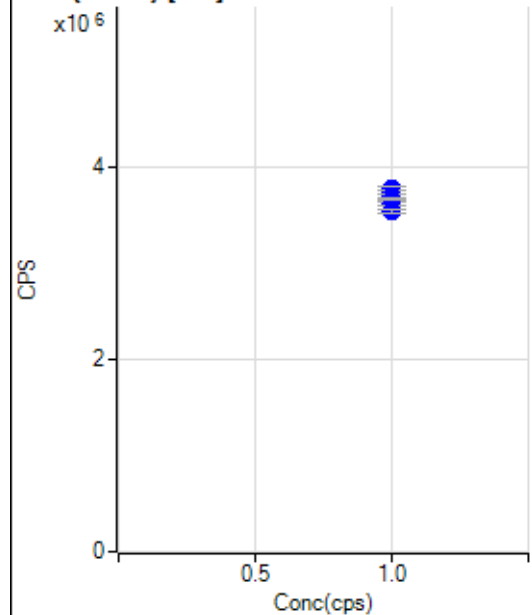
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		13765109.68		A	1.0
2	☐	1.000					
3	☐	1.000		13713240.41		A	0.8
4	☐	1.000		13409736.24		A	0.4
5	☐	1.000		13222143.26		A	0.6
6	☐	1.000		12893321.21		A	0.5
7	☐	1.000		13294488.93		A	2.8
8	☐	1.000		12773913.74		A	0.2
9	☐	1.000		12813688.66		A	0.6

45 Sc (ISTD) [He]

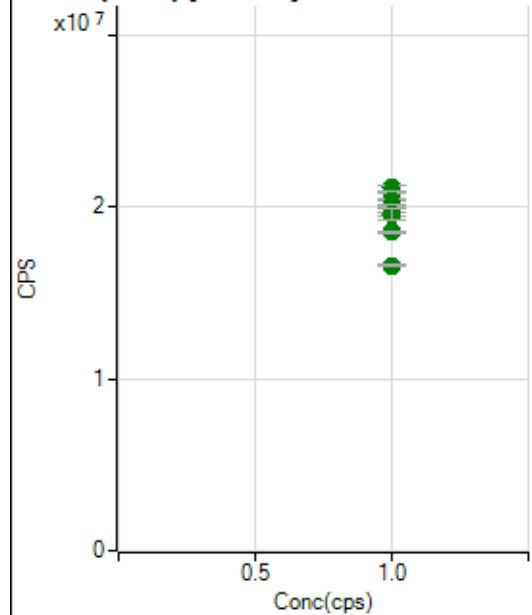
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		742620.29		P	0.2
2	☐	1.000					
3	☐	1.000		744923.95		P	1.0
4	☐	1.000		733663.60		P	1.3
5	☐	1.000		715890.47		P	0.7
6	☐	1.000		708656.62		P	0.6
7	☐	1.000		701488.95		P	0.6
8	☐	1.000		703302.90		P	0.6
9	☐	1.000		750434.54		P	0.9

89 Y (ISTD) [No Gas]

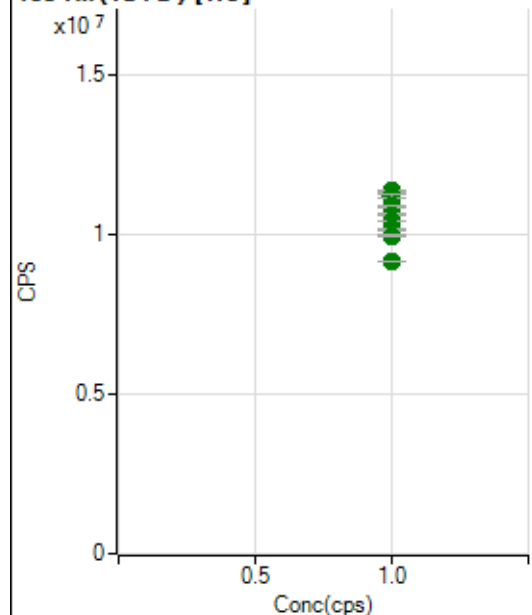
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		21627351.07		A	0.6
2	☐	1.000					
3	☐	1.000		21716477.46		A	0.8
4	☐	1.000		21255233.85		A	0.9
5	☐	1.000		21164487.46		A	0.7
6	☐	1.000		20831945.52		A	0.6
7	☐	1.000		21258818.01		A	3.6
8	☐	1.000		20438269.70		A	0.4
9	☐	1.000		20094030.67		A	0.1

89 Y (ISTD) [He]

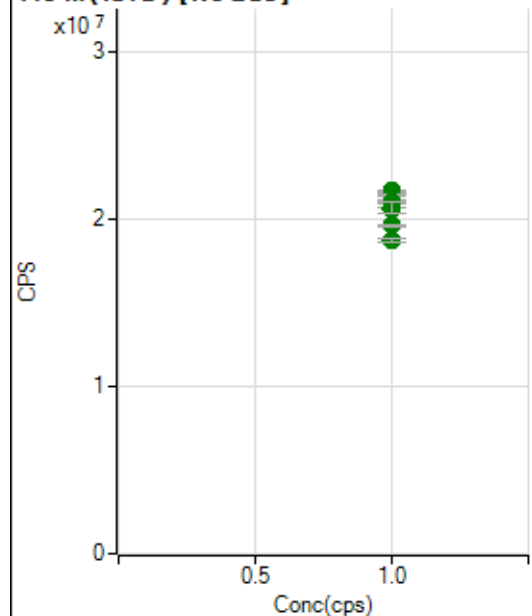
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3741462.20		P	1.0
2	☐	1.000					
3	☐	1.000		3766972.86		P	0.9
4	☐	1.000		3697349.70		P	0.8
5	☐	1.000		3651568.70		P	0.9
6	☐	1.000		3620478.28		P	1.0
7	☐	1.000		3596924.39		P	0.2
8	☐	1.000		3533040.75		P	1.0
9	☐	1.000		3660444.56		P	0.8

103 Rh (ISTD) [No Gas]

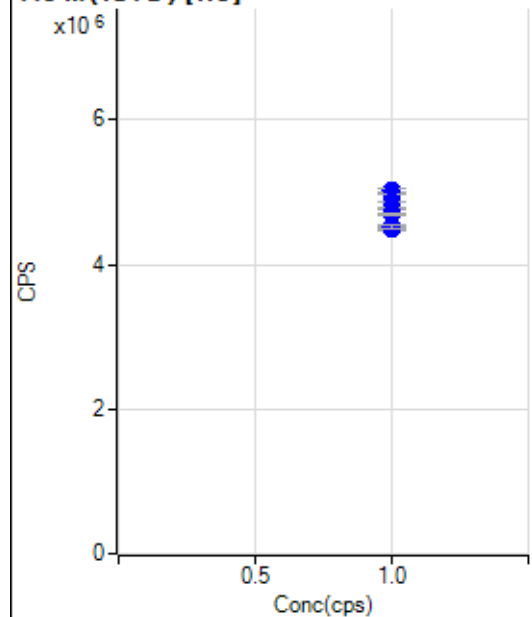
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		21102217.66		A	1.4
2	☐	1.000					
3	☐	1.000		20910534.84		A	0.6
4	☐	1.000		20378792.64		A	0.7
5	☐	1.000		20091000.97		A	0.6
6	☐	1.000		19554490.19		A	0.8
7	☐	1.000		19578618.32		A	3.8
8	☐	1.000		18535876.63		A	0.7
9	☐	1.000		16582052.11		A	0.7

103 Rh (ISTD) [He]

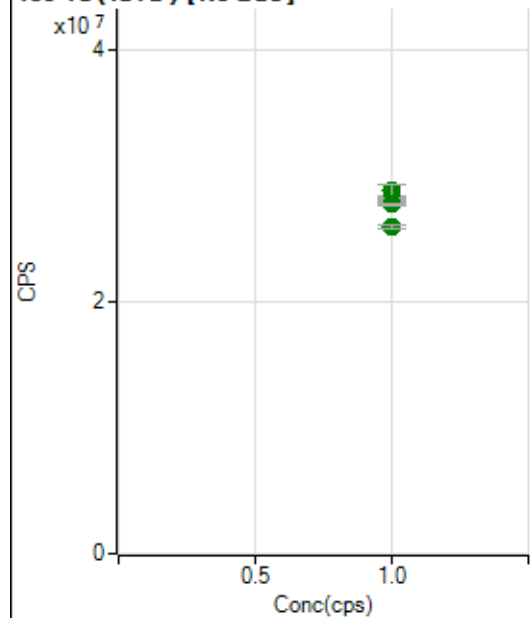
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		11383058.44		A	0.6
2	☐	1.000					
3	☐	1.000		11221427.19		A	0.7
4	☐	1.000		10894231.50		A	0.7
5	☐	1.000		10635813.03		A	0.6
6	☐	1.000		10436937.20		A	0.3
7	☐	1.000		10183938.11		A	0.6
8	☐	1.000		9976056.73		A	0.8
9	☐	1.000		9169348.27		A	0.5

115 In (ISTD) [No Gas]

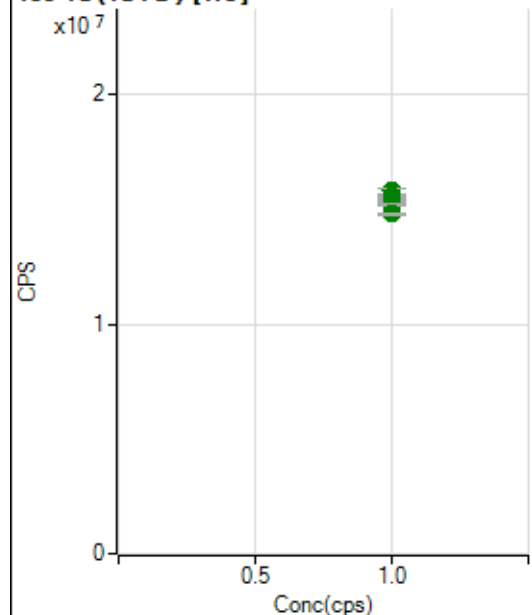
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		21662430.12		A	0.8
2	☐	1.000					
3	☐	1.000		21421067.03		A	0.6
4	☐	1.000		21065300.78		A	0.3
5	☐	1.000		20982738.73		A	0.3
6	☐	1.000		20520719.01		A	1.4
7	☐	1.000		20707087.85		A	3.2
8	☐	1.000		19584928.19		A	0.4
9	☐	1.000		18677404.44		A	1.1

115 In (ISTD) [He]

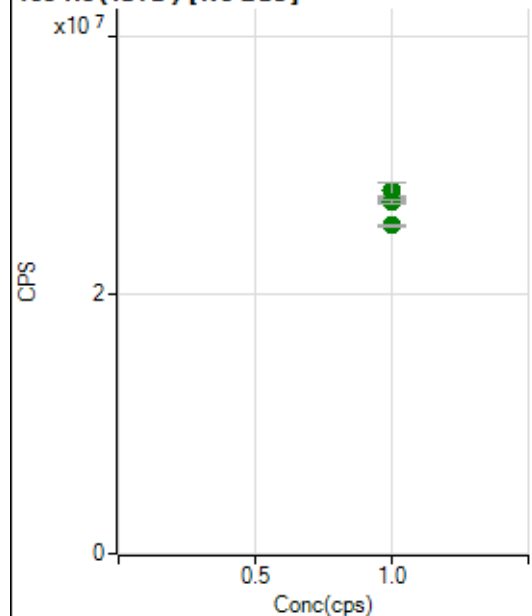
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4995216.10		P	0.1
2	☐	1.000					
3	☐	1.000		5019119.24		P	0.9
4	☐	1.000		4969283.76		P	0.3
5	☐	1.000		4865156.67		P	0.2
6	☐	1.000		4781110.09		P	0.6
7	☐	1.000		4696797.05		P	0.4
8	☐	1.000		4498583.67		P	1.2
9	☐	1.000		4531880.60		P	1.0

159 Tb (ISTD) [No Gas]

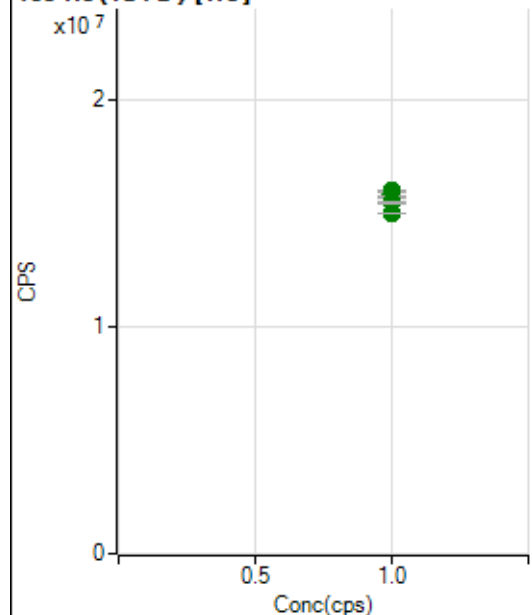
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		28135591.53		A	0.8
2	☐	1.000					
3	☐	1.000		28098325.14		A	0.3
4	☐	1.000		27947801.53		A	0.4
5	☐	1.000		28159763.74		A	1.2
6	☐	1.000		28024871.25		A	0.5
7	☐	1.000		28773347.35		A	3.9
8	☐	1.000		27716726.81		A	0.4
9	☐	1.000		25957494.06		A	1.4

159 Tb (ISTD) [He]

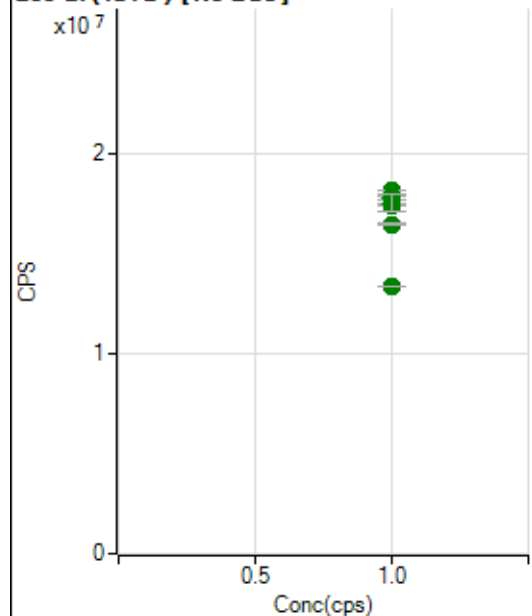
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		15798676.99		A	1.4
2	☐	1.000					
3	☐	1.000		15505319.77		A	0.9
4	☐	1.000		15537987.96		A	0.5
5	☐	1.000		15499902.27		A	0.2
6	☐	1.000		15378482.83		A	0.6
7	☐	1.000		15238621.58		A	0.8
8	☐	1.000		15173909.64		A	0.8
9	☐	1.000		14794072.28		A	0.3

165 Ho (ISTD) [No Gas]

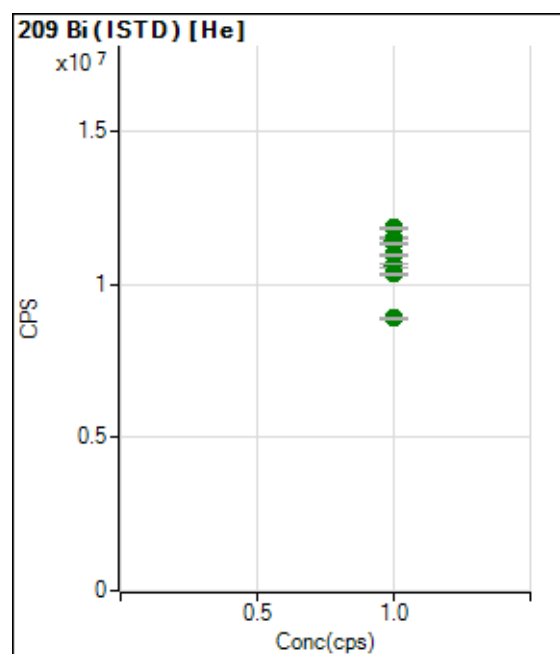
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		27447256.17		A	0.2
2	☐	1.000					
3	☐	1.000		27495672.49		A	0.3
4	☐	1.000		27464725.96		A	1.3
5	☐	1.000		27325714.50		A	0.6
6	☐	1.000		27571386.38		A	0.8
7	☐	1.000		28028963.13		A	4.3
8	☐	1.000		27191928.04		A	0.8
9	☐	1.000		25371109.77		A	0.8

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		15961447.54		A	0.7
2	☐	1.000					
3	☐	1.000		15806064.21		A	1.1
4	☐	1.000		15717179.21		A	0.4
5	☐	1.000		15746971.29		A	0.4
6	☐	1.000		15698018.10		A	0.6
7	☐	1.000		15449987.41		A	0.6
8	☐	1.000		15443354.63		A	0.3
9	☐	1.000		14984142.97		A	0.1

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		18160035.42		A	0.1
2	☐	1.000					
3	☐	1.000		17949802.37		A	0.6
4	☐	1.000		17804221.96		A	0.7
5	☐	1.000		17694619.04		A	0.4
6	☐	1.000		17433531.68		A	0.5
7	☐	1.000		17548292.93		A	4.9
8	☐	1.000		16481203.78		A	0.5
9	☐	1.000		13389039.80		A	0.3



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		11855221.35		A	0.5
2	☐	1.000					
3	☐	1.000		11525240.52		A	0.4
4	☐	1.000		11429338.51		A	1.1
5	☐	1.000		11356060.80		A	0.7
6	☐	1.000		10971302.41		A	0.5
7	☐	1.000		10614889.08		A	0.9
8	☐	1.000		10345807.49		A	0.7
9	☐	1.000		8896564.80		A	0.3

US EPA Tune Check Sample Report

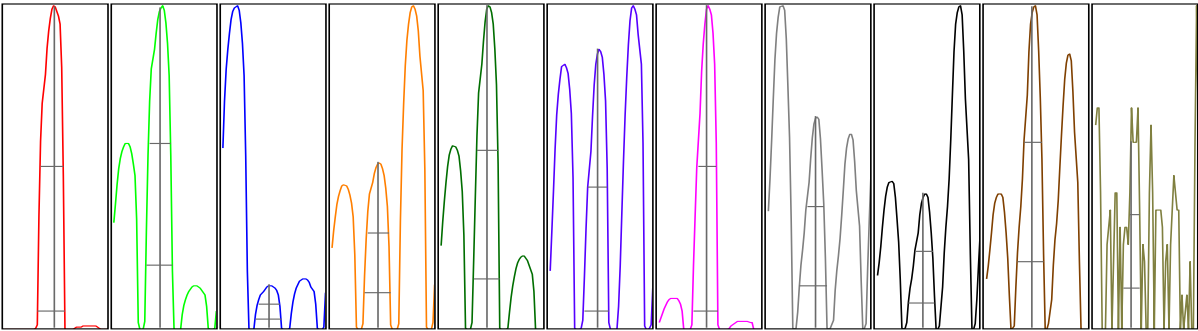
Batch Folder D:\ICP-MS Data\P7030719-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	28556	0.50	5.00	
24	276259	0.47	5.00	
25	38433	0.26	5.00	
26	45346	0.41	5.00	
59	237299	0.50	5.00	
113	29968	0.82	5.00	
115	357361	1.51	5.00	
206	86474	0.36	5.00	
207	87018	0.75	5.00	
208	188297	0.45	5.00	
220	0	20.20		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	28360	28750	28621	28510	28539
24	276300	277756	276910	274215	276116
25	38541	38495	38481	38324	38325
26	45579	45316	45380	45396	45060
59	237318	238648	237844	237243	235441
113	30267	30082	30053	29784	29653
115	364299	361744	355298	353795	351666
206	86446	86457	86058	86947	86460
207	86454	86653	86615	87354	88015
208	186870	188707	188164	188834	188910
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	45377	9.00	8.9 - 9.1		0.788	0.900	
24	449506	23.90	23.9 - 24.1		0.766	0.900	
25	61409	24.90	24.9 - 25.1		0.744	0.900	
26	70739	25.90	25.9 - 26.1		0.747	0.900	
59	405421	58.90	58.9 - 59.1		0.750	0.900	
113	55423	112.95	112.9 - 113.1		0.736	0.900	
115	658541	114.95	114.9 - 115.1		0.734	0.900	
206	158251	205.95	205.9 - 206.1		0.767	0.900	
207	145063	206.90	206.9 - 207.1		0.761	0.900	
208	345476	207.90	207.9 - 208.1		0.769	0.900	
220	1	219.65	-		0.508		

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	9.1	V	Deflect	13.8	V
Extract 2	-145.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-80	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	67698	0.96	
89	58975	0.73	
205	84098	0.93	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	67381	67288	67044	68253	68525
89	58509	58726	58788	59314	59535
205	83359	83939	83773	84000	85420

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	9.3	V	Deflect	2.4	V
Extract 2	-165.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-80	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			