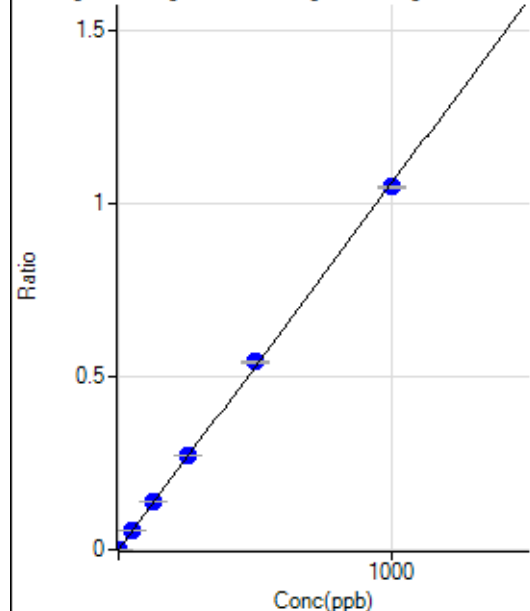


Batch Folder: D:\ICP-MS Data\P7112618-MS .b\
Analysis File: P7112618-MS .batch.bin
DA Date-Time: 2018-11-26 16:19:31
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2018-11-26 13:30:04
2			
3	006CALS.d	S02	2018-11-26 13:38:10
4	007CALS.d	S03	2018-11-26 13:42:03
5	008CALS.d	S04	2018-11-26 13:46:14
6	009CALS.d	S05	2018-11-26 13:50:02
7	010CALS.d	S06	2018-11-26 13:53:47
8	011CALS.d	S07	2018-11-26 13:57:31
9	012CALS.d	S08	2018-11-26 14:01:16

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	35.19	0.0000	P	18.2
2	☐	0.100					
3	☐	1.000	1.061	3882.07	0.0011	P	5.9
4	☐	50.000	52.711	187964.18	0.0559	P	0.3
5	☐	125.000	131.816	436917.89	0.1397	P	0.7
6	☐	250.000	258.321	747964.22	0.2738	P	0.1
7	☐	500.000	513.036	1452218.80	0.5437	P	0.5
8	☐	1000.000	990.414	2787634.93	1.0497	P	0.5
9	☐			535.21	0.0002	P	25.5

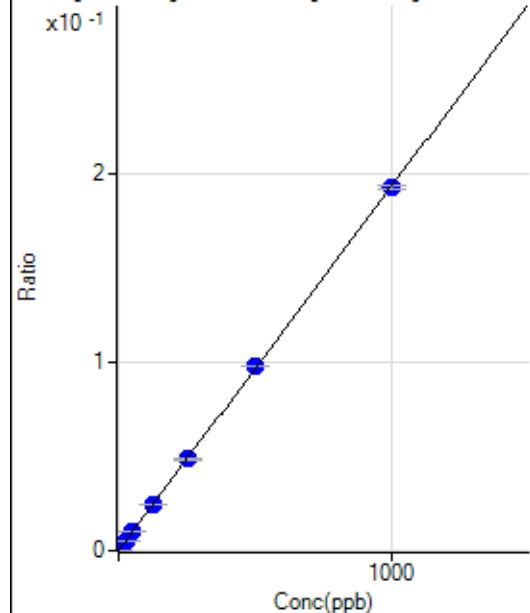
$$y = 0.0011 * x + 1.0402E-005$$

$$R = 0.9998$$

$$DL = 0.005369$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	347.24	0.0001	P	14.5
2	☐	2.500					
3	☐	25.000	25.164	16973.97	0.0050	P	3.4
4	☐	50.000	50.565	33195.74	0.0099	P	1.8
5	☐	125.000	126.031	76435.25	0.0244	P	0.4
6	☐	250.000	252.446	133448.38	0.0489	P	1.7
7	☐	500.000	506.573	261551.72	0.0979	P	1.0
8	☐	1000.000	995.941	511075.74	0.1924	P	1.2
9	☐			12858.70	0.0043	P	12.0

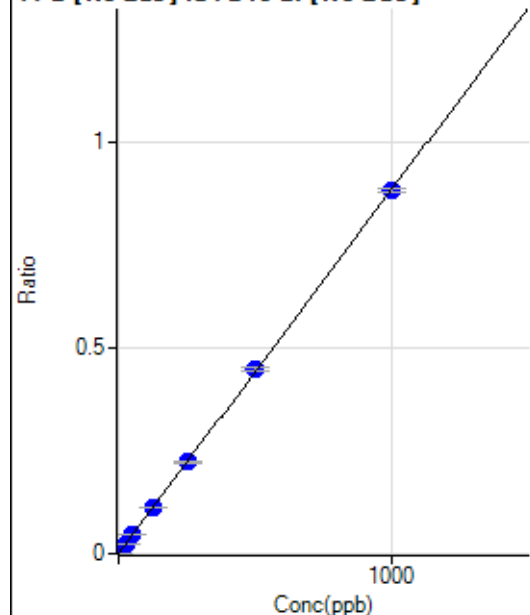
$$y = 1.9312E-004 * x + 1.0266E-004$$

$$R = 1.0000$$

$$DL = 0.2307$$

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	1539.03	0.0005	P	8.1
2	☐	2.500					
3	☐	25.000	24.735	76370.57	0.0223	P	0.6
4	☐	50.000	50.596	152035.55	0.0452	P	1.3
5	☐	125.000	126.528	351314.84	0.1123	P	0.2
6	☐	250.000	251.170	607908.48	0.2226	P	2.1
7	☐	500.000	504.881	1193547.78	0.4469	P	1.9
8	☐	1000.000	997.053	2342749.47	0.8822	P	1.1
9	☐			60352.64	0.0200	P	11.0

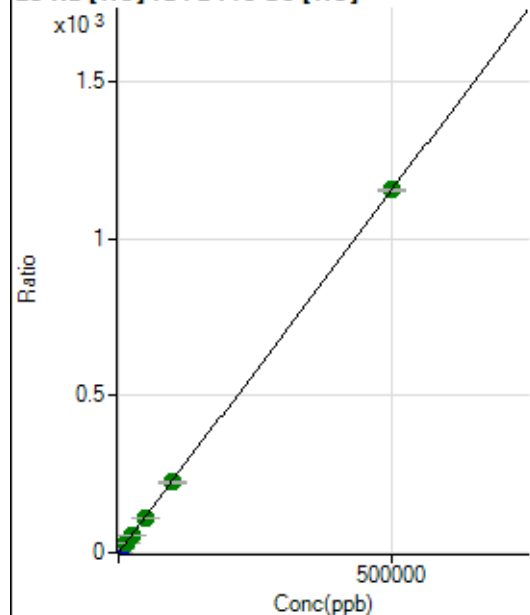
$$y = 8.8431\text{E-}004 * x + 4.5499\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.1257$$

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	14134.96	0.0437	P	2.5
2	☐	50.000					
3	☐	500.000	486.887	374524.55	1.1671	P	2.0
4	☐	5000.000	4857.361	3420759.62	11.2513	P	0.5
5	☐	12500.000	12183.016	7724386.72	28.1543	A	1.0
6	☐	25000.000	24488.500	13970333.12	56.5474	A	0.2
7	☐	50000.000	48818.432	28116387.09	112.6853	A	0.6
8	☐	100000.00	96934.254	57148520.03	223.7058	A	0.7
9	☐	500000.00	500766.24	350765024.5	1,155.491	A	0.4

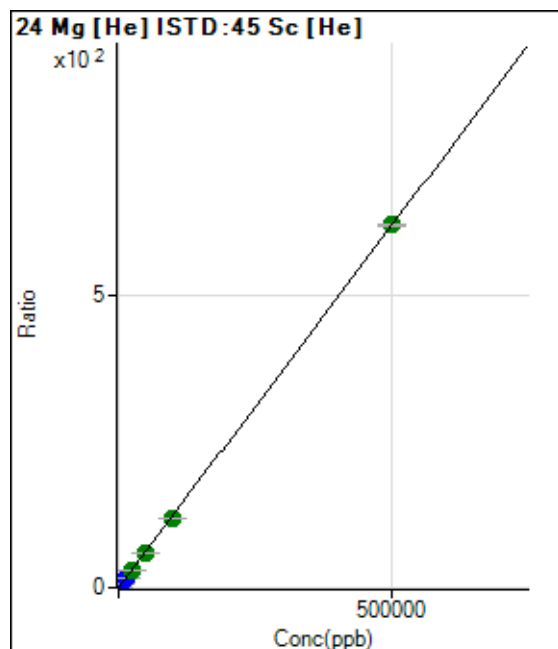
$$y = 0.0023 * x + 0.0437$$

$$R = 1.0000$$

$$DL = 1.443$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	75.00	0.0002	P	33.0
2	☐	50.000					
3	☐	500.000	484.801	192616.15	0.6002	P	1.9
4	☐	5000.000	4861.895	1829457.81	6.0174	P	1.0
5	☐	12500.000	12260.009	4162984.12	15.1735	P	0.7
6	☐	25000.000	24427.701	7469070.57	30.2325	A	0.4
7	☐	50000.000	48501.359	14977381.93	60.0266	A	0.6
8	☐	100000.00	95318.433	30137125.67	117.9684	A	0.3
9	☐	500000.00	501122.18	188265201.4	620.2000	A	0.4

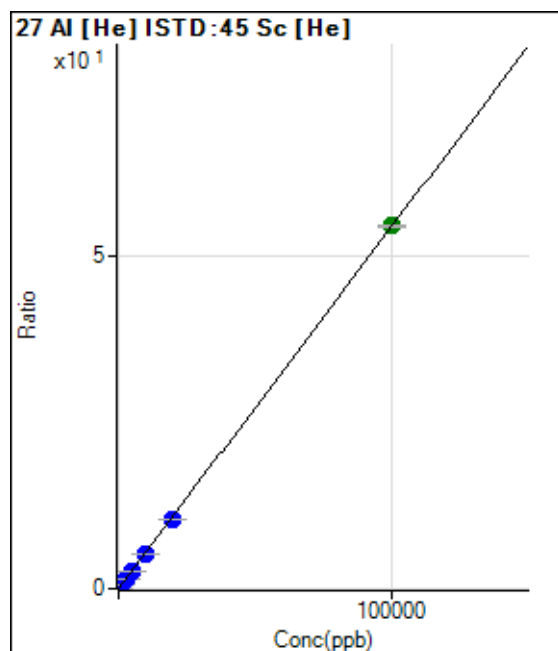
$$y = 0.0012 * x + 2.3153E-004$$

$$R = 1.0000$$

$$DL = 0.1854$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	66.67	0.0002	P	12.3
2	☐	2.000					
3	☐	20.000	19.649	3489.45	0.0109	P	5.6
4	☐	1000.000	953.597	157548.83	0.5182	P	1.3
5	☐	2500.000	2410.542	359312.63	1.3096	P	0.6
6	☐	5000.000	4769.135	640088.97	2.5909	P	0.1
7	☐	10000.000	9482.038	1285246.24	5.1510	P	0.3
8	☐	20000.000	18997.805	2636448.84	10.3201	P	0.4
9	☐	100000.00	100266.47	16533668.77	54.4664	A	0.4

$$y = 5.4321E-004 * x + 2.0594E-004$$

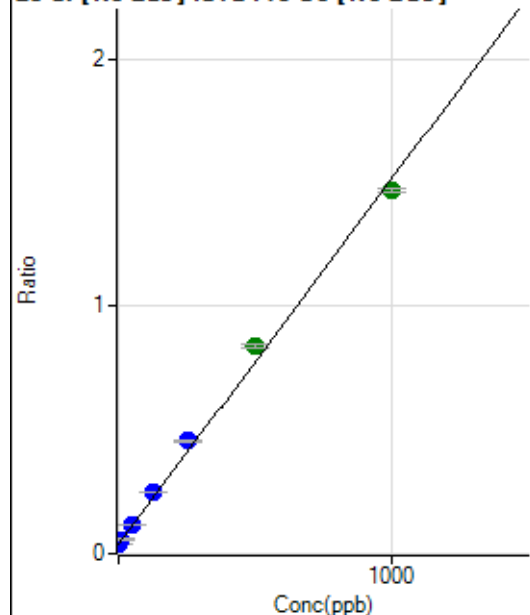
$$R = 0.9999$$

$$DL = 0.1403$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	267175.40	0.0380	P	1.3
2	☐	1.000					
3	☐	10.000	13.705	410908.46	0.0582	P	0.5
4	☐	50.000	55.238	814297.19	0.1195	P	1.0
5	☐	125.000	140.711	1563576.55	0.2456	P	0.2
6	☐	250.000	283.458	2531652.68	0.4562	P	1.5
7	☐	500.000	543.163	4554291.51	0.8394	A	1.0
8	☐	1000.000	967.791	7920595.75	1.4660	A	1.1
9	☐			718672.26	0.1161	P	1.9

$$y = 0.0015 * x + 0.0380$$

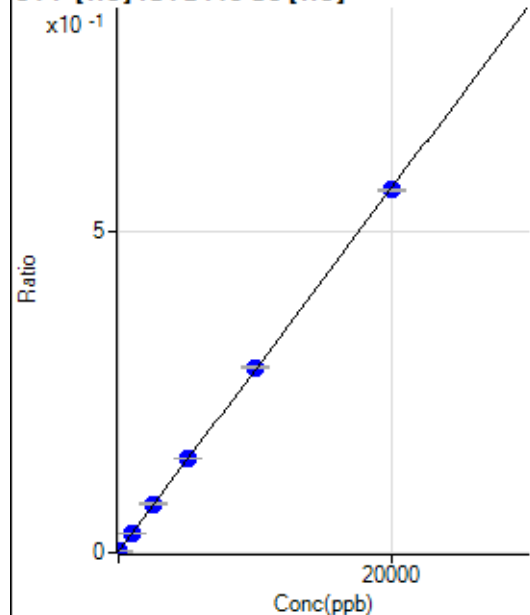
$$R = 0.9979$$

$$DL = 0.9805$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-4.343	519.48	0.0016	P	17.5
2	☐	0.000					
3	☐	0.000	4.343	594.48	0.0019	P	10.5
4	☐	1000.000	1016.117	9272.69	0.0305	P	1.3
5	☐	2500.000	2634.379	20940.34	0.0763	P	2.4
6	☐	5000.000	5120.226	36245.02	0.1467	P	1.1
7	☐	10000.000	10111.862	71870.73	0.2880	P	1.2
8	☐	20000.000	19896.410	144366.46	0.5651	P	0.3
9	☐			588.92	0.0019	P	8.4

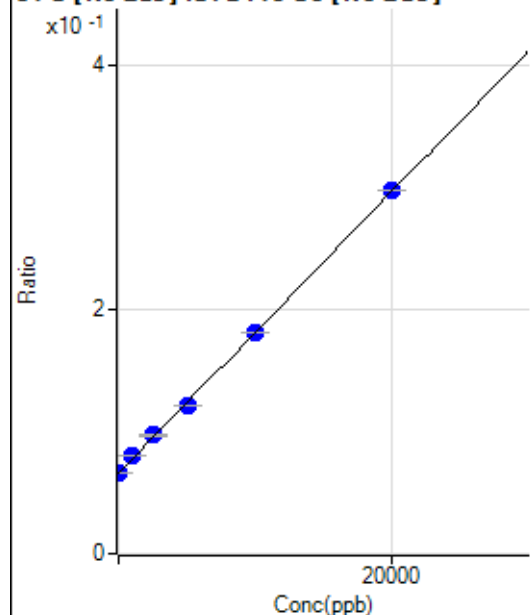
$$y = 2.8315E-005 * x + 0.0017$$

$$R = 0.9999$$

$$DL = 25.2$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-6.042	464526.74	0.0660	P	1.7
2	☐	0.000					
3	☐	0.000	6.042	467154.53	0.0662	P	0.6
4	☐	1000.000	1275.891	550722.70	0.0808	P	0.5
5	☐	2500.000	2691.230	618331.70	0.0971	P	1.3
6	☐	5000.000	4810.693	674662.94	0.1216	P	0.5
7	☐	10000.000	9926.293	979533.42	0.1805	P	0.2
8	☐	20000.000	20046.482	1605885.33	0.2972	P	0.2
9	☐			381736.05	0.0617	P	2.8

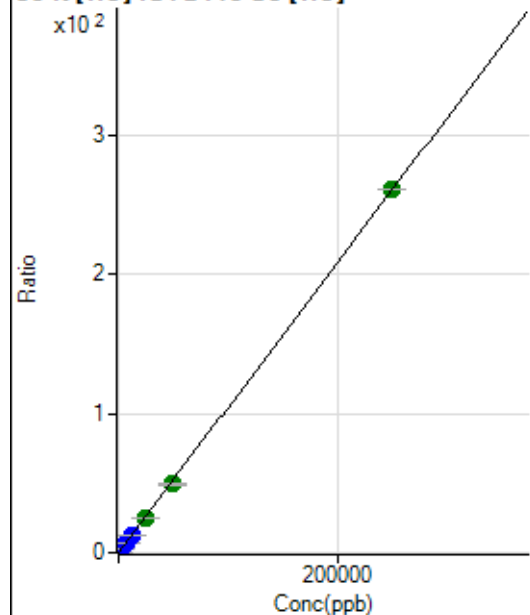
$$y = 1.1531\text{E-}005 * x + 0.0661$$

$$R = 0.9998$$

$$DL = 199.4$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	23188.55	0.0716	P	0.8
2	☐	50.000					
3	☐	500.000	498.470	189227.31	0.5897	P	2.5
4	☐	2500.000	2463.946	800331.49	2.6324	P	1.4
5	☐	6250.000	6136.314	1769381.25	6.4492	P	0.3
6	☐	12500.000	12071.604	3117297.90	12.6178	P	0.2
7	☐	25000.000	23776.425	6183613.20	24.7828	A	0.6
8	☐	50000.000	47175.478	12543929.10	49.1018	A	0.4
9	☐	250000.00	250711.88	79118655.24	260.6399	A	0.1

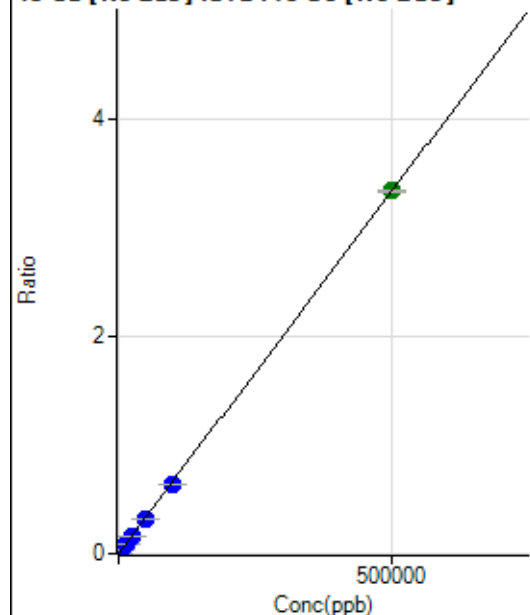
$$y = 0.0010 * x + 0.0716$$

$$R = 0.9999$$

$$DL = 1.58$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	166.68	0.0000	P	41.0
2	☐	50.000					
3	☐	500.000	484.844	22996.51	0.0033	P	2.2
4	☐	5000.000	4916.910	223626.84	0.0328	P	0.5
5	☐	12500.000	12299.240	522271.80	0.0820	P	1.0
6	☐	25000.000	24560.954	909062.19	0.1638	P	0.2
7	☐	50000.000	48913.264	1769650.67	0.3262	P	0.1
8	☐	100000.00	95953.176	3456866.57	0.6398	P	0.2
9	☐	500000.00	500945.85	20666190.57	3.3403	A	0.8

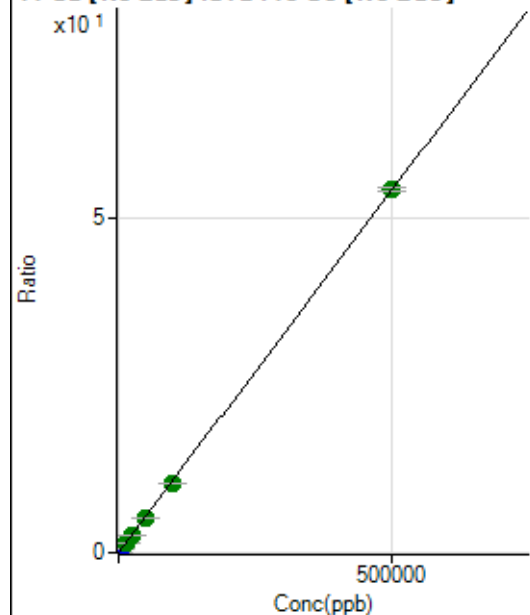
$$y = 6.6679\text{E-}006 * x + 2.3703\text{E-}005$$

$$R = 1.0000$$

$$DL = 4.376$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	5909.81	0.0008	P	5.1
2	☐	50.000					
3	☐	500.000	483.382	376099.67	0.0533	P	0.3
4	☐	5000.000	4850.595	3591127.08	0.5269	P	0.6
5	☐	12500.000	12192.245	8423242.64	1.3231	A	0.5
6	☐	25000.000	24311.729	14637423.07	2.6374	A	0.3
7	☐	50000.000	48710.534	28664790.57	5.2834	A	0.4
8	☐	100000.00	95809.972	56141069.31	10.3912	A	0.5
9	☐	500000.00	501010.57	336170410.2	54.3340	A	0.9

$$y = 1.0845\text{E-}004 * x + 8.4006\text{E-}004$$

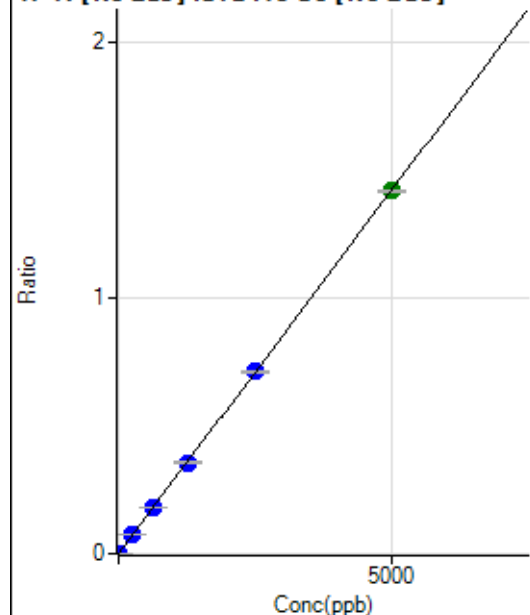
$$R = 1.0000$$

$$DL = 1.196$$

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	108.34	0.0000	P	35.1
2	☐	0.500					
3	☐	5.000	5.227	10579.29	0.0015	P	1.1
4	☐	250.000	252.977	489285.26	0.0718	P	0.5
5	☐	625.000	636.664	1150027.99	0.1806	P	0.5
6	☐	1250.000	1257.178	1979537.22	0.3567	P	0.2
7	☐	2500.000	2505.584	3856641.62	0.7108	P	0.5
8	☐	5000.000	4993.806	7654242.36	1.4167	A	0.3
9	☐			4311.95	0.0007	P	5.8

$$y = 2.8369\text{E-}004 * x + 1.5383\text{E-}005$$

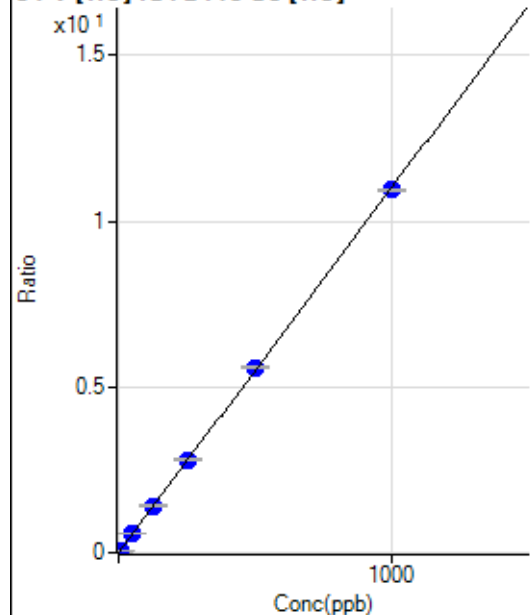
$$R = 1.0000$$

$$DL = 0.05702$$

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	3.33	0.0000	P	99.8
2	☐	0.500					
3	☐	5.000	5.102	18013.40	0.0561	P	1.9
4	☐	50.000	51.161	171114.82	0.5628	P	0.8
5	☐	125.000	128.992	389318.83	1.4190	P	0.5
6	☐	250.000	254.688	692187.78	2.8018	P	0.8
7	☐	500.000	507.058	1391794.41	5.5781	P	0.7
8	☐	1000.000	994.741	2795607.11	10.9430	P	0.2
9	☐			1503.44	0.0050	P	4.6

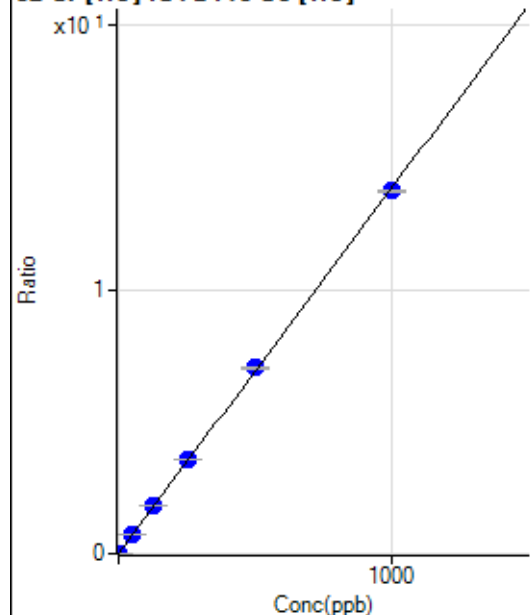
$$y = 0.0110 * x + 1.0288\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.002801$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1263.41	0.0039	P	4.8
2	☐	0.200					
3	☐	2.000	2.229	11141.03	0.0347	P	2.1
4	☐	50.000	51.559	217909.48	0.7167	P	0.6
5	☐	125.000	130.101	494556.01	1.8026	P	0.9
6	☐	250.000	257.767	881399.19	3.5676	P	0.4
7	☐	500.000	508.482	1755047.13	7.0339	P	0.5
8	☐	1000.000	993.101	3508582.20	13.7339	P	0.3
9	☐			188562.64	0.6212	P	0.2

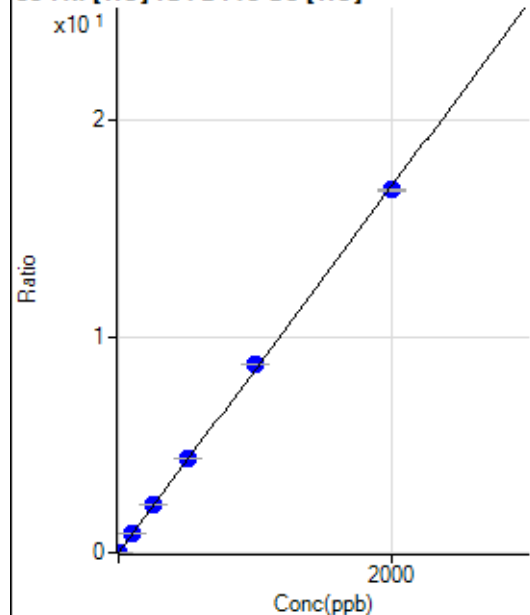
$$y = 0.0138 * x + 0.0039$$

$$R = 0.9999$$

$$DL = 0.04096$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	34.44	0.0001	P	14.7
2	☐	0.100					
3	☐	1.000	1.082	2980.35	0.0093	P	1.6
4	☐	100.000	102.812	265171.67	0.8722	P	1.0
5	☐	250.000	261.379	608314.46	2.2172	P	0.6
6	☐	500.000	517.553	1084619.47	4.3902	P	0.4
7	☐	1000.000	1026.176	2171928.70	8.7046	P	0.4
8	☐	2000.000	1980.961	4292681.39	16.8035	P	0.6
9	☐			38240.81	0.1260	P	1.1

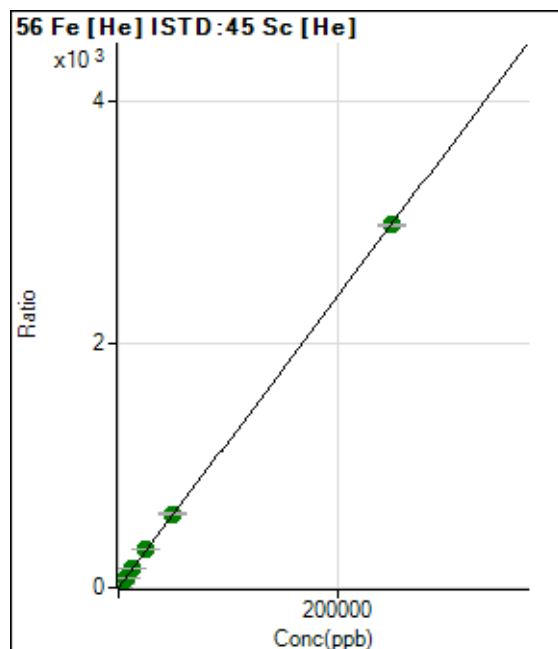
$$y = 0.0085 * x + 1.0640E-004$$

$$R = 0.9998$$

$$DL = 0.005523$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5453.01	0.0168	P	1.1
2	☐	5.000					
3	☐	50.000	53.757	211289.54	0.6584	P	2.0
4	☐	2500.000	2616.987	9500928.34	31.2500	A	0.7
5	☐	6250.000	6669.529	21843288.91	79.6163	A	0.5
6	☐	12500.000	13273.424	39141497.17	158.4324	A	0.4
7	☐	25000.000	26343.750	78452718.42	314.4240	A	0.6
8	☐	50000.000	50935.488	155298803.4	607.9212	A	1.0
9	☐	250000.00	249628.19	904345879.4	2,979.277	A	0.4

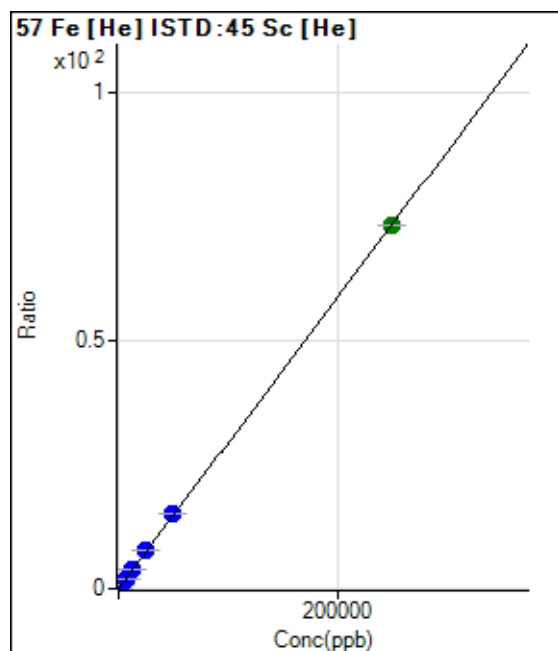
$$y = 0.0119 * x + 0.0168$$

$$R = 1.0000$$

$$DL = 0.04629$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	179.64	0.0006	P	15.4
2	☐	5.000					
3	☐	50.000	53.938	5243.67	0.0163	P	3.9
4	☐	2500.000	2642.722	235341.39	0.7741	P	1.1
5	☐	6250.000	6708.432	538864.24	1.9641	P	0.5
6	☐	12500.000	13358.014	966087.77	3.9104	P	0.5
7	☐	25000.000	26344.696	1924167.72	7.7116	P	0.3
8	☐	50000.000	51304.485	3836406.39	15.0173	P	0.5
9	☐	250000.00	249548.84	22172152.34	73.0432	A	0.2

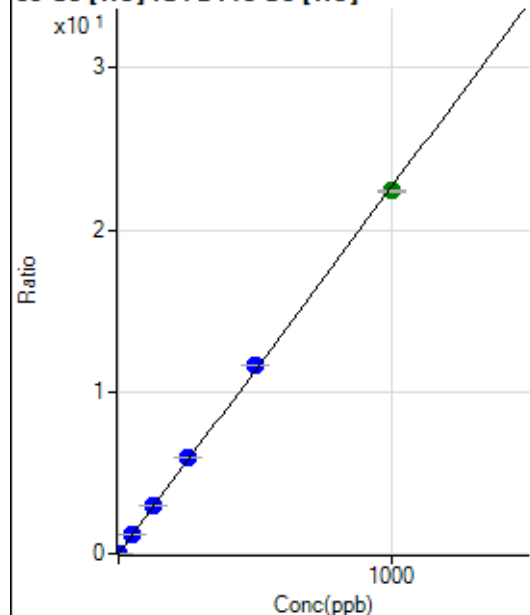
$$y = 2.9270E-004 * x + 5.5484E-004$$

$$R = 1.0000$$

$$DL = 0.8748$$

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	72.22	0.0002	P	14.4
2	☐	0.100					
3	☐	1.000	1.083	7938.94	0.0247	P	0.9
4	☐	50.000	52.935	364473.47	1.1988	P	0.7
5	☐	125.000	133.200	827522.30	3.0162	P	0.6
6	☐	250.000	261.673	1463842.93	5.9252	P	0.6
7	☐	500.000	512.921	2897907.70	11.6141	P	0.3
8	☐	1000.000	989.449	5723389.98	22.4040	A	0.7
9	☐			84987.51	0.2800	P	0.4

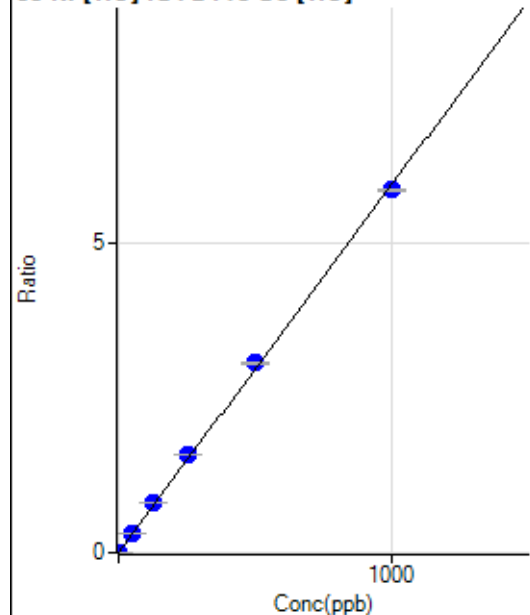
$$y = 0.0226 * x + 2.2317E-004$$

$$R = 0.9998$$

$$DL = 0.004248$$

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	115.56	0.0004	P	17.1
2	☐	0.100					
3	☐	1.000	1.188	2380.23	0.0074	P	3.6
4	☐	50.000	54.337	98285.25	0.3233	P	0.7
5	☐	125.000	135.033	220259.36	0.8028	P	0.7
6	☐	250.000	264.440	388336.68	1.5719	P	0.1
7	☐	500.000	516.439	765865.87	3.0694	P	0.5
8	☐	1000.000	986.700	1498111.47	5.8641	P	0.2
9	☐			64185.53	0.2114	P	0.9

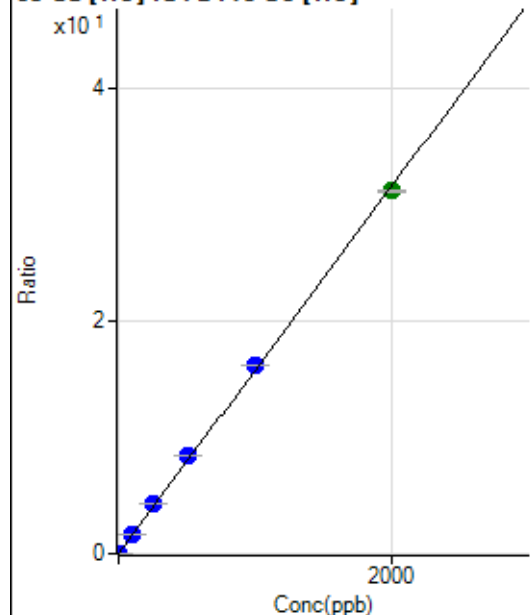
$$y = 0.0059 * x + 3.5711E-004$$

$$R = 0.9997$$

$$DL = 0.03084$$

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	354.45	0.0011	P	6.8
2	☐	0.200					
3	☐	2.000	2.313	12050.69	0.0376	P	3.4
4	☐	100.000	107.971	517921.80	1.7035	P	1.0
5	☐	250.000	270.594	1170890.19	4.2677	P	0.9
6	☐	500.000	529.879	2064395.02	8.3560	P	0.3
7	☐	1000.000	1026.889	4040314.56	16.1927	P	0.4
8	☐	2000.000	1976.112	7960123.42	31.1597	A	0.7
9	☐			23433.36	0.0772	P	2.0

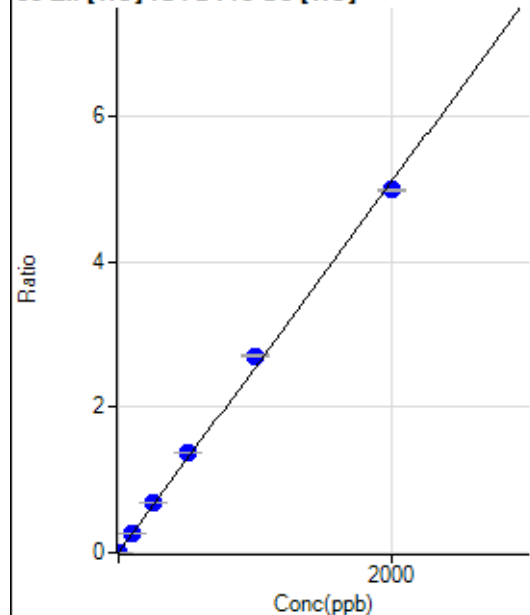
$$y = 0.0158 * x + 0.0011$$

$$R = 0.9997$$

$$DL = 0.0141$$

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	394.46	0.0012	P	6.6
2	☐	0.200					
3	☐	2.000	2.400	2350.23	0.0073	P	4.3
4	☐	100.000	105.943	82334.88	0.2708	P	0.5
5	☐	250.000	271.370	189795.17	0.6918	P	1.1
6	☐	500.000	539.306	339351.35	1.3736	P	0.6
7	☐	1000.000	1059.478	673019.79	2.6973	P	0.8
8	☐	2000.000	1957.466	1272834.79	4.9824	P	0.4
9	☐			16445.01	0.0542	P	1.4

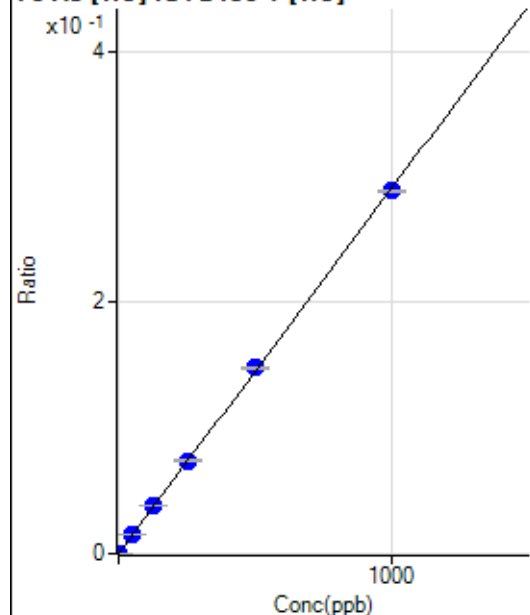
$$y = 0.0025 * x + 0.0012$$

$$R = 0.9991$$

$$DL = 0.0953$$

Weight: <None>

Min Conc: 0

75 As [He] ISTD:89 Y [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3.70	0.0000	P	132.
2	☐	0.100					
3	☐	1.000	1.133	537.67	0.0003	P	5.1
4	☐	50.000	52.684	23559.26	0.0153	P	1.3
5	☐	125.000	130.621	54326.25	0.0380	P	0.7
6	☐	250.000	254.542	96995.62	0.0741	P	0.8
7	☐	500.000	508.732	194925.68	0.1480	P	0.2
8	☐	1000.000	993.662	383253.31	0.2891	P	0.5
9	☐			668.54	0.0005	P	2.6

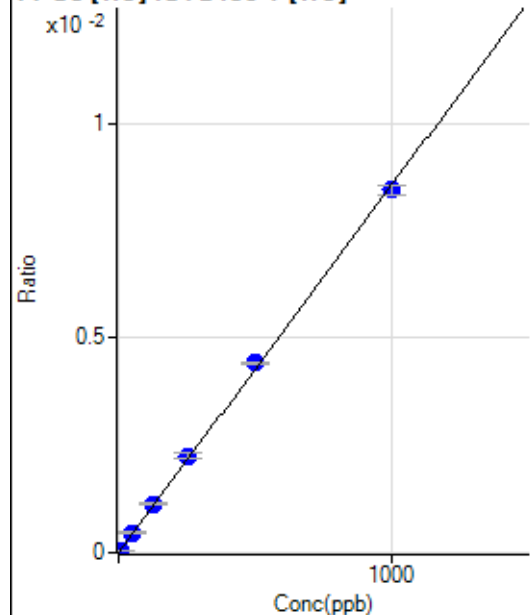
$$y = 2.9096\text{E-}004 * x + 2.2797\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.03118$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	0.500					
3	☐	5.000	4.971	68.89	0.0000	P	34.8
4	☐	50.000	54.326	714.48	0.0005	P	6.3
5	☐	125.000	133.248	1630.12	0.0011	P	4.6
6	☐	250.000	262.614	2943.69	0.0022	P	6.3
7	☐	500.000	516.138	5817.93	0.0044	P	0.3
8	☐	1000.000	987.530	11206.74	0.0085	P	3.0
9	☐			11.11	0.0000	P	17.5

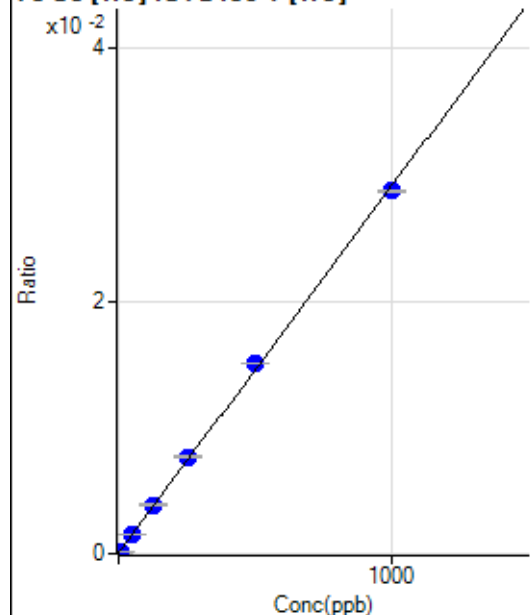
$$y = 8.5598\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9997$$

$$DL = 0$$

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	74.07	0.0000	P	15.9
2	☐	0.500					
3	☐	5.000	4.950	306.18	0.0002	P	3.6
4	☐	50.000	52.698	2419.98	0.0016	P	2.7
5	☐	125.000	131.432	5517.76	0.0039	P	2.8
6	☐	250.000	261.267	9989.31	0.0076	P	2.5
7	☐	500.000	517.909	19853.78	0.0151	P	0.2
8	☐	1000.000	987.290	38042.95	0.0287	P	0.8
9	☐			77.16	0.0001	P	28.5

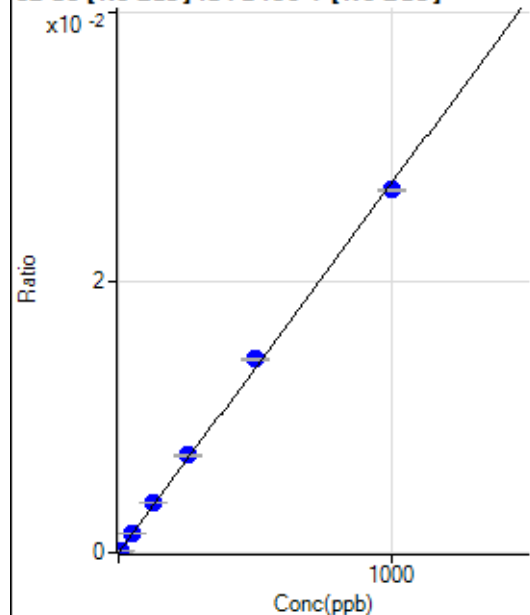
$$y = 2.9022\text{E-}005 * x + 4.5439\text{E-}005$$

$$R = 0.9997$$

$$DL = 0.7455$$

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	11.47	0.0000	P	383.
2	☐	0.500					
3	☐	5.000	5.305	1700.32	0.0001	P	3.9
4	☐	50.000	53.071	16438.00	0.0015	P	1.7
5	☐	125.000	133.762	39588.94	0.0037	P	0.5
6	☐	250.000	263.101	70416.42	0.0072	P	0.2
7	☐	500.000	525.473	138398.60	0.0144	P	0.8
8	☐	1000.000	982.738	257670.49	0.0269	P	0.3
9	☐			122.59	0.0000	P	17.1

$$y = 2.7325\text{E-}005 * x + 9.8822\text{E-}007$$

$$R = 0.9994$$

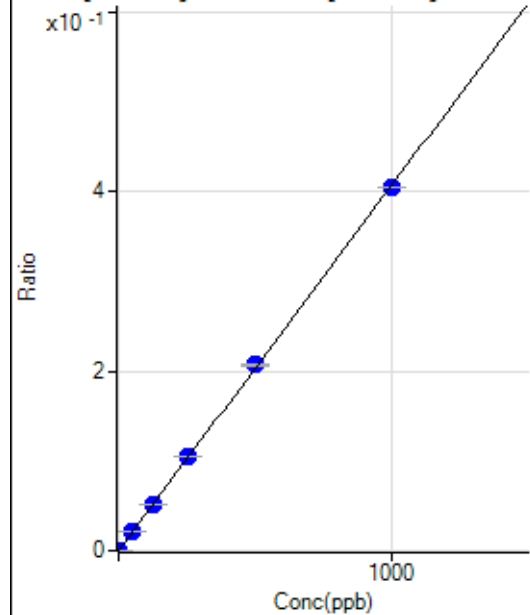
$$DL = 0.4163$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			803.37		P	6.5
2	☐						
3	☐			801.15		P	5.3
4	☐			724.47		P	5.7
5	☐			727.81		P	7.0
6	☐			636.69		P	11.3
7	☐			632.25		P	4.6
8	☐			591.13		P	5.8
9	☐			803.37		P	5.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1238.99	0.0001	P	2.2
2	☐	0.100					
3	☐	1.000	1.084	6390.56	0.0005	P	4.5
4	☐	50.000	51.101	236648.74	0.0209	P	0.9
5	☐	125.000	128.488	567064.45	0.0524	P	0.3
6	☐	250.000	255.943	1020515.00	0.1042	P	0.2
7	☐	500.000	508.799	1995618.62	0.2070	P	0.4
8	☐	1000.000	993.624	3878761.55	0.4042	P	0.1
9	☐			21194.14	0.0021	P	3.7

$$y = 4.0672E-004 * x + 1.0749E-004$$

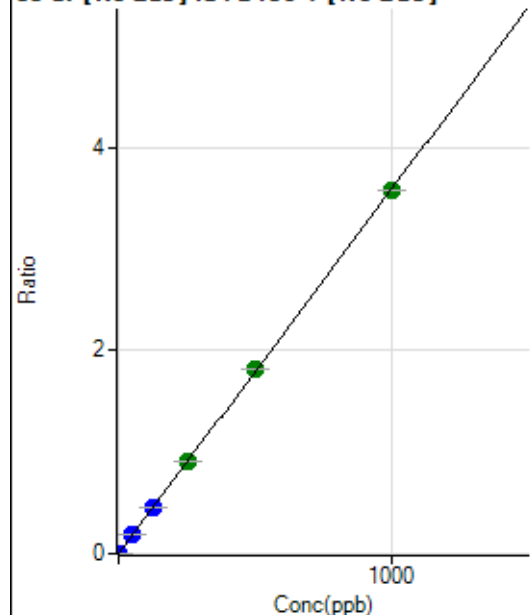
$$R = 0.9999$$

$$DL = 0.01713$$

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	163.90	0.0000	P	24.2
2	☐	0.100					
3	☐	1.000	1.033	43333.29	0.0037	P	0.7
4	☐	50.000	50.306	2043530.90	0.1804	P	0.4
5	☐	125.000	126.444	4909892.47	0.4534	P	0.5
6	☐	250.000	252.987	8884310.44	0.9072	A	0.7
7	☐	500.000	506.583	17508137.54	1.8165	A	0.7
8	☐	1000.000	995.766	34261111.53	3.5706	A	0.1
9	☐			176723.39	0.0173	P	0.3

$$y = 0.0036 * x + 1.4222E-005$$

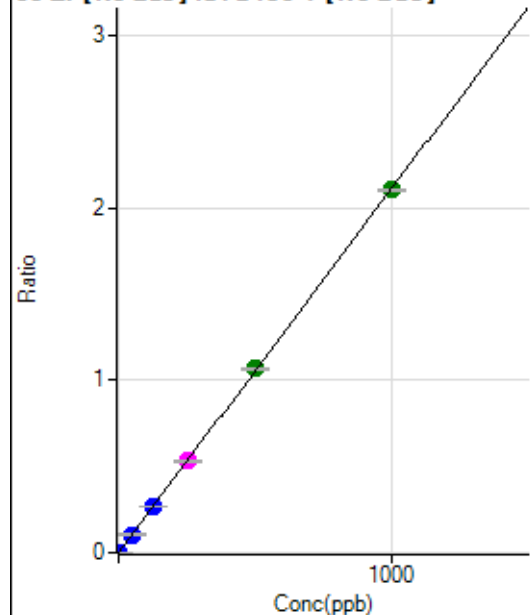
$$R = 1.0000$$

$$DL = 0.002878$$

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	808.39	0.0001	P	3.9
2	☐	0.100					
3	☐	1.000	1.045	26500.29	0.0023	P	0.5
4	☐	50.000	50.143	1198725.69	0.1058	P	0.3
5	☐	125.000	126.657	2893315.08	0.2672	P	0.4
6	☐	250.000	251.440	5193822.12	0.5304	M	0.8
7	☐	500.000	504.756	10261204.66	1.0646	A	0.4
8	☐	1000.000	997.048	20177180.66	2.1029	A	0.5
9	☐			11724.79	0.0012	P	2.7

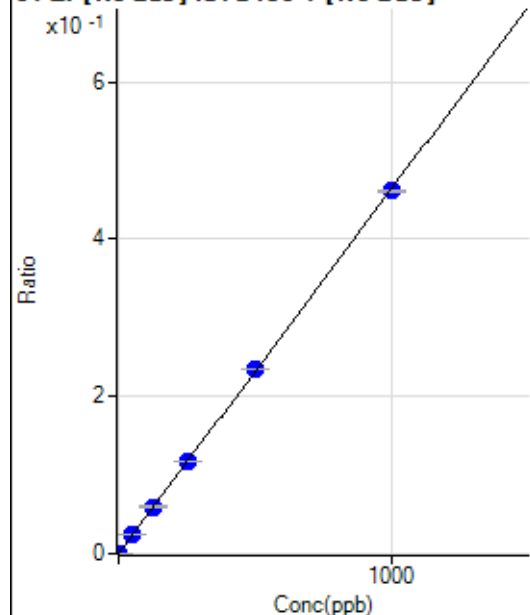
$$y = 0.0021 * x + 7.0133E-005$$

$$R = 1.0000$$

$$DL = 0.003936$$

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	155.56	0.0000	P	13.7
2	☐	0.100					
3	☐	1.000	1.030	5723.63	0.0005	P	1.0
4	☐	50.000	51.390	270090.99	0.0238	P	0.5
5	☐	125.000	129.106	648412.11	0.0599	P	1.0
6	☐	250.000	254.568	1156140.00	0.1181	P	0.4
7	☐	500.000	507.059	2266341.87	0.2351	P	0.5
8	☐	1000.000	994.746	4426011.82	0.4613	P	0.4
9	☐			2550.34	0.0003	P	4.2

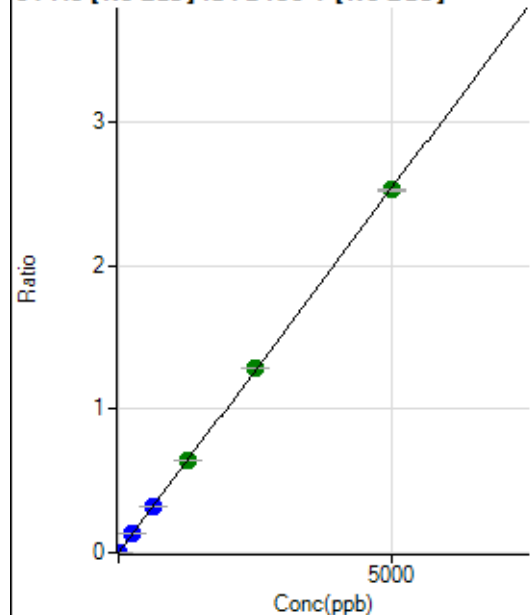
$$y = 4.6370\text{E-}004 * x + 1.3498\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.01197$$

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	280.57	0.0000	P	6.3
2	☐	0.500					
3	☐	5.000	5.125	30600.37	0.0026	P	2.1
4	☐	250.000	251.416	1446224.38	0.1277	P	0.4
5	☐	625.000	636.139	3497636.23	0.3230	P	0.4
6	☐	1250.000	1263.529	6282671.58	0.6415	A	0.5
7	☐	2500.000	2531.691	12388916.07	1.2854	A	0.9
8	☐	5000.000	4979.309	24257532.83	2.5281	A	0.3
9	☐			34200.34	0.0034	P	1.8

$$y = 5.0771\text{E-}004 * x + 2.4341\text{E-}005$$

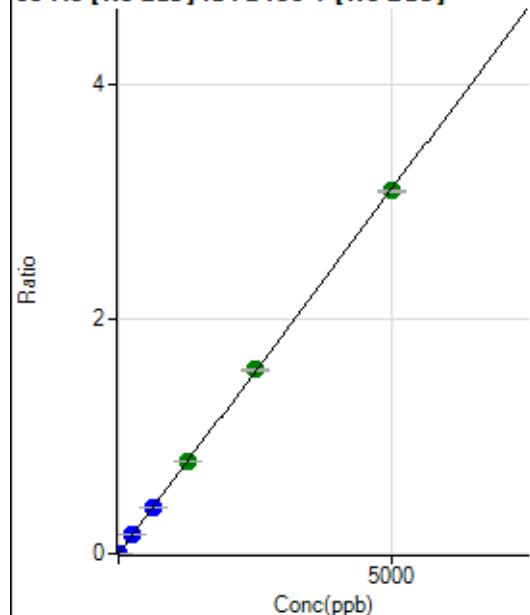
$$R = 1.0000$$

$$DL = 0.009073$$

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	33.34	0.0000	P	65.9
2	☐	0.500					
3	☐	5.000	5.117	37090.72	0.0032	P	0.5
4	☐	250.000	252.201	1775921.37	0.1568	P	0.8
5	☐	625.000	635.983	4281094.10	0.3953	P	0.2
6	☐	1250.000	1263.574	7692447.13	0.7855	A	0.3
7	☐	2500.000	2531.391	15166586.10	1.5736	A	0.9
8	☐	5000.000	4979.428	29700489.20	3.0954	A	0.2
9	☐			52686.80	0.0052	P	0.2

$$y = 6.2163\text{E-}004 * x + 2.8884\text{E-}006$$

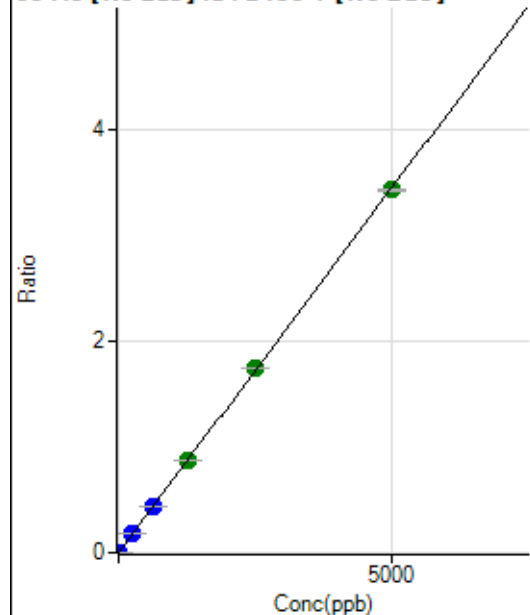
$$R = 1.0000$$

$$DL = 0.00918$$

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	113.90	0.0000	P	16.8
2	☐	0.500					
3	☐	5.000	5.256	42241.41	0.0036	P	2.1
4	☐	250.000	252.227	1965893.79	0.1735	P	0.5
5	☐	625.000	634.783	4729504.10	0.4368	P	0.3
6	☐	1250.000	1262.510	8507240.12	0.8686	A	0.4
7	☐	2500.000	2534.624	16808315.65	1.7439	A	0.5
8	☐	5000.000	4978.226	32864682.33	3.4251	A	0.4
9	☐			65866.82	0.0065	P	1.3

$$y = 6.8802\text{E-}004 * x + 9.8795\text{E-}006$$

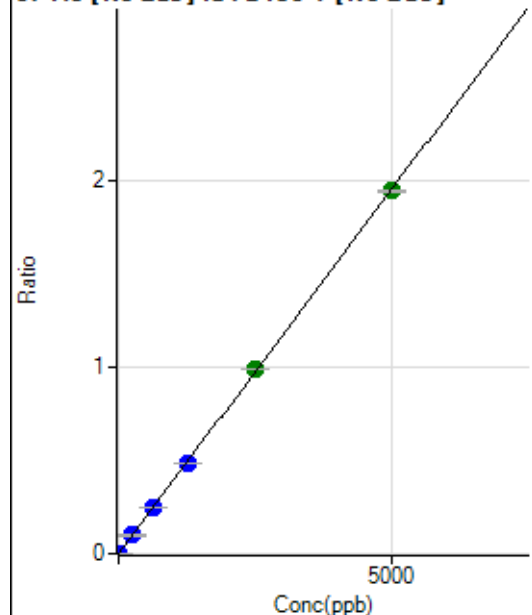
$$R = 1.0000$$

$$DL = 0.007239$$

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	27.78	0.0000	P	62.6
2	☐	0.500					
3	☐	5.000	4.975	22613.13	0.0019	P	0.6
4	☐	250.000	250.891	1107394.87	0.0978	P	0.7
5	☐	625.000	631.149	2663074.89	0.2459	P	0.8
6	☐	1250.000	1244.240	4747983.26	0.4848	P	0.1
7	☐	2500.000	2537.260	9528785.02	0.9886	A	0.5
8	☐	5000.000	4981.997	18626308.40	1.9412	A	0.2
9	☐			32293.01	0.0032	P	1.4

$$y = 3.8964\text{E-}004 * x + 2.4123\text{E-}006$$

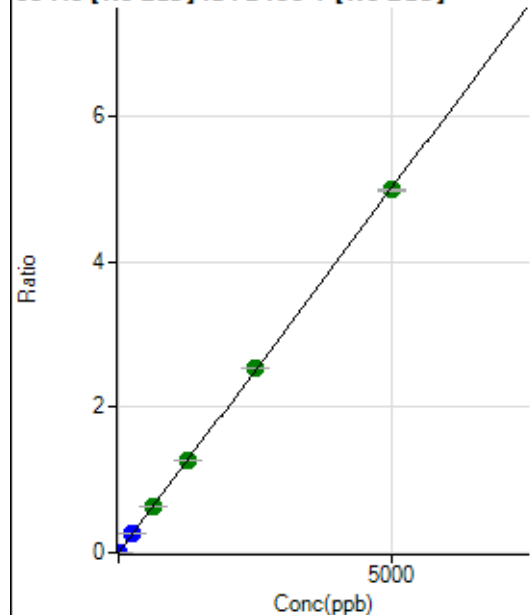
$$R = 1.0000$$

$$DL = 0.01162$$

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	61.11	0.0000	P	51.8
2	☐	0.500					
3	☐	5.000	5.134	59990.56	0.0051	P	0.6
4	☐	250.000	251.698	2857083.07	0.2522	P	0.4
5	☐	625.000	631.629	6853887.83	0.6329	A	0.7
6	☐	1250.000	1263.323	12397987.17	1.2659	A	0.3
7	☐	2500.000	2534.010	24473967.39	2.5392	A	0.7
8	☐	5000.000	4978.750	47869852.11	4.9890	A	0.5
9	☐			83178.36	0.0082	P	2.0

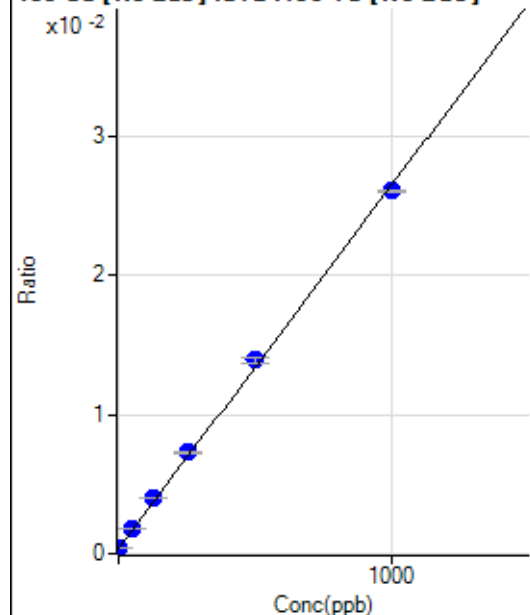
$$y = 0.0010 * x + 5.3066\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.008225$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5495.73	0.0004	P	0.5
2	☐	0.100					
3	☐	1.000	0.551	5818.12	0.0004	P	3.8
4	☐	50.000	57.153	28871.93	0.0018	P	1.6
5	☐	125.000	140.108	61905.42	0.0040	P	1.2
6	☐	250.000	264.664	108017.79	0.0073	P	0.7
7	☐	500.000	518.371	205696.73	0.0139	P	2.2
8	☐	1000.000	984.903	384764.81	0.0260	P	0.4
9	☐			4995.56	0.0003	P	1.3

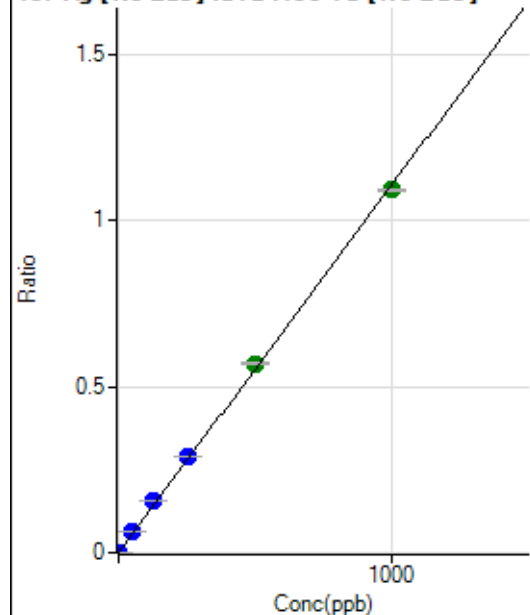
$$y = 2.6073\text{E-}005 * x + 3.5214\text{E-}004$$

$$R = 0.9996$$

$$DL = 0.2178$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	100.01	0.0000	P	1.1
2	☐	0.100					
3	☐	1.000	1.219	21528.31	0.0014	P	1.5
4	☐	50.000	58.656	1018200.26	0.0650	P	0.7
5	☐	125.000	141.367	2420131.28	0.1566	P	1.1
6	☐	250.000	260.226	4292589.50	0.2882	P	0.6
7	☐	500.000	514.848	8458101.32	0.5702	A	0.9
8	☐	1000.000	987.541	16166120.15	1.0937	A	0.2
9	☐			1872.43	0.0001	P	1.4

$$y = 0.0011 * x + 6.4086\text{E-}006$$

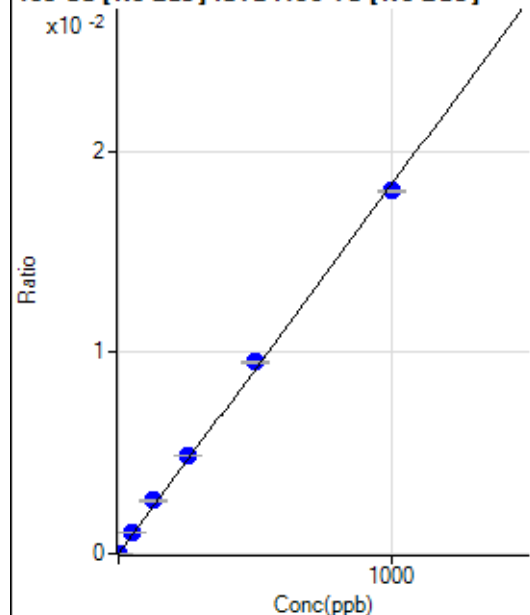
$$R = 0.9997$$

$$DL = 0.0001889$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	15.28	0.0000	P	68.3
2	☐	0.100					
3	☐	1.000	1.256	380.57	0.0000	P	15.3
4	☐	50.000	57.290	16458.40	0.0011	P	1.6
5	☐	125.000	143.646	40677.97	0.0026	P	1.9
6	☐	250.000	266.188	72621.04	0.0049	P	1.1
7	☐	500.000	519.065	141021.49	0.0095	P	1.0
8	☐	1000.000	983.725	266299.89	0.0180	P	0.8
9	☐			94.45	0.0000	P	32.7

$$y = 1.8314\text{E-}005 * x + 9.7487\text{E-}007$$

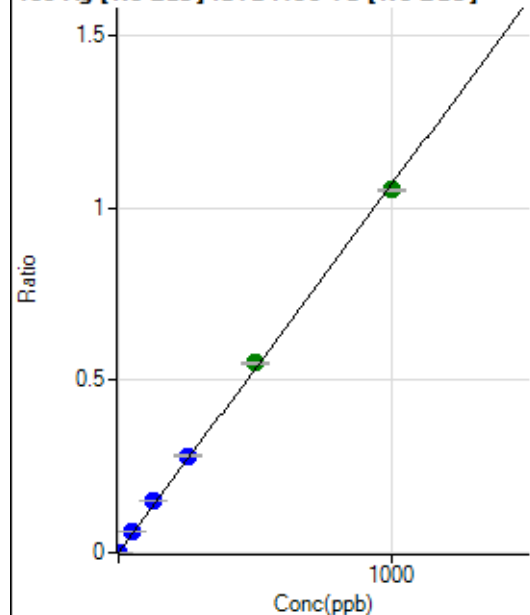
$$R = 0.9995$$

$$DL = 0.109$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	86.12	0.0000	P	6.7
2	☐	0.100					
3	☐	1.000	1.195	20326.49	0.0013	P	2.2
4	☐	50.000	58.648	980682.56	0.0626	P	0.5
5	☐	125.000	142.588	2351416.96	0.1521	P	1.0
6	☐	250.000	263.639	4189321.10	0.2813	P	0.6
7	☐	500.000	516.007	8166239.42	0.5505	A	0.5
8	☐	1000.000	985.956	15548024.65	1.0519	A	0.7
9	☐			1844.65	0.0001	P	9.4

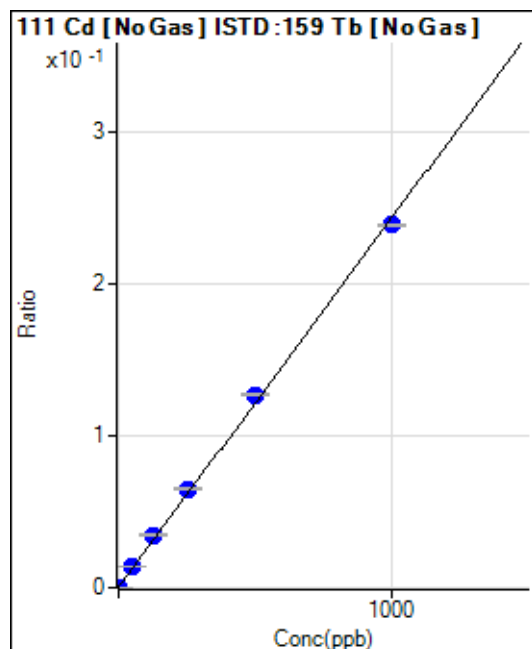
$$y = 0.0011 * x + 5.5207\text{E-}006$$

$$R = 0.9996$$

$$DL = 0.001041$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3843.26	0.0002	P	0.6
2	☐	0.100					
3	☐	1.000	1.113	8194.57	0.0005	P	4.6
4	☐	50.000	57.533	222494.99	0.0142	P	0.4
5	☐	125.000	141.714	534945.65	0.0346	P	1.1
6	☐	250.000	267.087	968257.33	0.0650	P	0.6
7	☐	500.000	521.815	1880571.84	0.1268	P	0.4
8	☐	1000.000	982.354	3524516.24	0.2384	P	0.5
9	☐			4123.87	0.0003	P	1.6

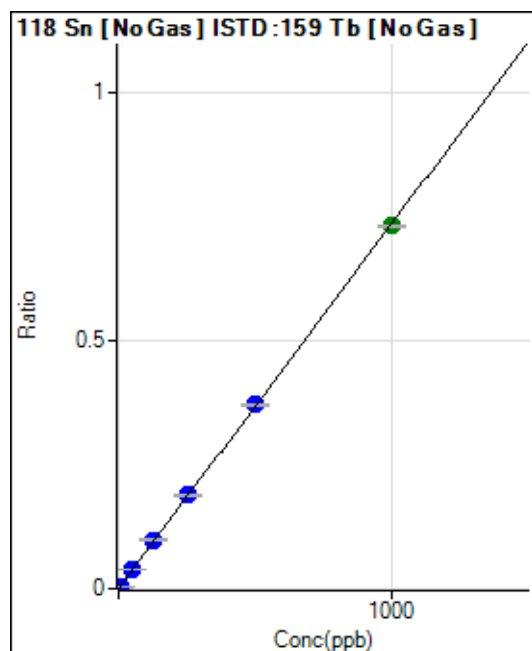
$$y = 2.4248\text{E-}004 * x + 2.4626\text{E-}004$$

$$R = 0.9994$$

$$DL = 0.01892$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1380.69	0.0001	P	7.1
2	☐	0.500					
3	☐	5.000	5.485	65408.63	0.0041	P	1.4
4	☐	50.000	54.186	625656.75	0.0399	P	0.8
5	☐	125.000	134.308	1527449.55	0.0988	P	0.2
6	☐	250.000	255.804	2802026.80	0.1881	P	0.5
7	☐	500.000	504.436	5501888.23	0.3709	P	0.5
8	☐	1000.000	994.956	10812152.85	0.7315	A	0.3
9	☐			19322.33	0.0013	P	1.9

$$y = 7.3511\text{E-}004 * x + 8.8463\text{E-}005$$

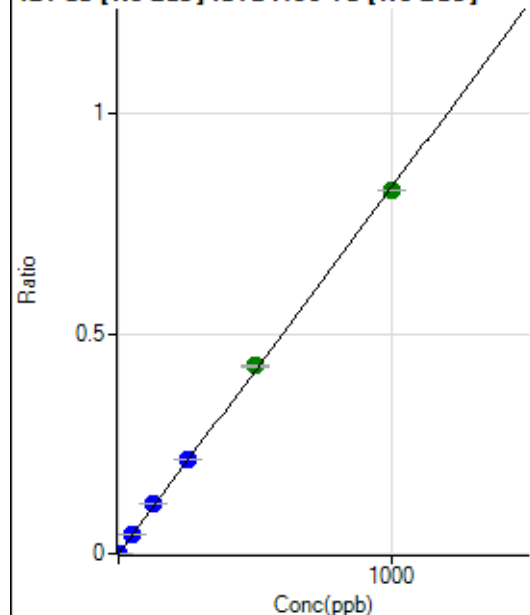
$$R = 0.9999$$

$$DL = 0.02564$$

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	30.56	0.0000	P	30.8
2	☐	0.200					
3	☐	2.000	2.141	28304.42	0.0018	P	0.7
4	☐	50.000	53.846	701943.56	0.0448	P	0.6
5	☐	125.000	134.524	1729556.07	0.1119	P	0.3
6	☐	250.000	256.895	3182493.45	0.2137	P	0.4
7	☐	500.000	512.248	6320272.32	0.4261	A	0.2
8	☐	1000.000	990.769	12180839.07	0.8241	A	0.1
9	☐			20924.71	0.0014	P	2.2

$$y = 8.3177\text{E-}004 * x + 1.9555\text{E-}006$$

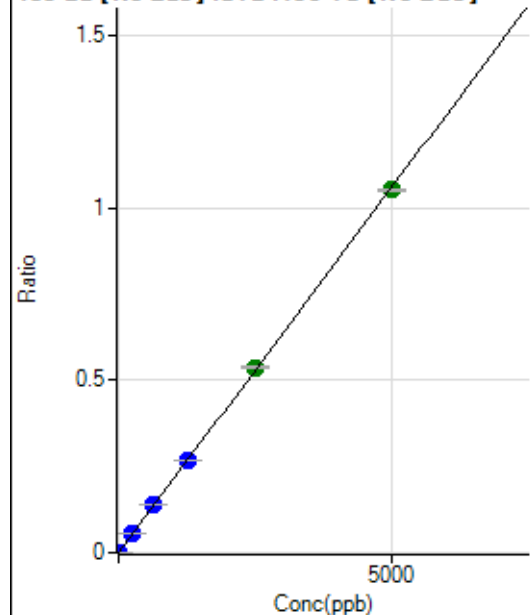
$$R = 0.9998$$

$$DL = 0.002172$$

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	30.55	0.0000	P	68.3
2	☐	1.000					
3	☐	10.000	10.655	35847.08	0.0023	P	0.7
4	☐	250.000	267.307	887046.33	0.0566	P	0.3
5	☐	625.000	662.172	2167189.17	0.1402	P	0.8
6	☐	1250.000	1270.710	4007319.10	0.2691	P	0.3
7	☐	2500.000	2539.355	7975895.75	0.5377	A	0.6
8	☐	5000.000	4969.632	15553588.19	1.0523	A	0.2
9	☐			3936.85	0.0003	P	8.2

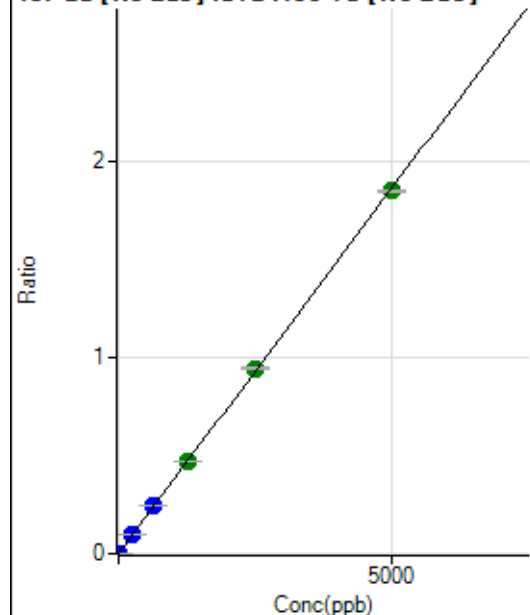
$$y = 2.1174\text{E-}004 * x + 1.9493\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.01887$$

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	22.22	0.0000	P	57.1
2	☐	1.000					
3	☐	10.000	10.588	62734.13	0.0040	P	0.9
4	☐	250.000	265.978	1555251.10	0.0992	P	0.3
5	☐	625.000	659.527	3803509.07	0.2461	P	0.9
6	☐	1250.000	1269.954	7057068.30	0.4738	A	0.3
7	☐	2500.000	2540.554	14060970.45	0.9479	A	0.5
8	☐	5000.000	4969.618	27406698.88	1.8542	A	0.5
9	☐			7074.36	0.0005	P	8.3

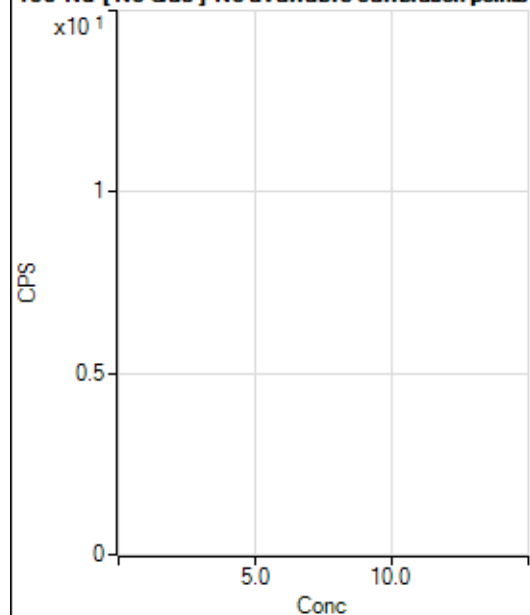
$$y = 3.7311\text{E-}004 * x + 1.4245\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.006536$$

Weight: <None>

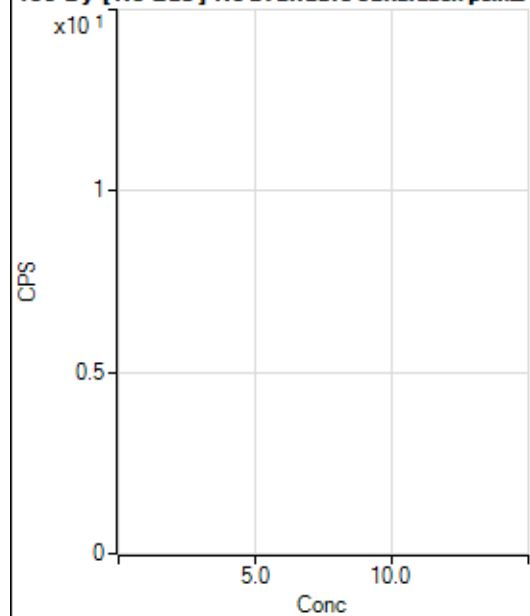
Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.45		P	86.6
2	☐						
3	☐			4.45		P	86.6
4	☐			102.23		P	15.1
5	☐			217.79		P	15.1
6	☐			424.47		P	5.0
7	☐			786.72		P	1.7
8	☐			1397.90		P	6.0
9	☐			264.46		P	17.9

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.
2	☐						
3	☐			1.11		P	173.
4	☐			4.45		P	86.6
5	☐			16.67		P	87.2
6	☐			24.44		P	34.3
7	☐			77.78		P	13.8
8	☐			116.67		P	17.4
9	☐			86.67		P	3.8

156 Dy [No Gas] No available calibration points

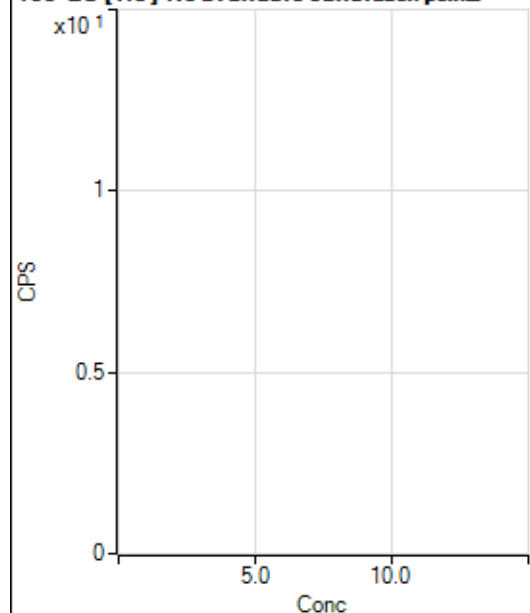
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			11.11		P	43.3
2	☐						
3	☐			5.55		P	86.6
4	☐			19.45		P	24.7
5	☐			61.11		P	15.7
6	☐			66.67		P	37.5
7	☐			163.90		P	24.0
8	☐			305.57		P	16.0
9	☐			194.45		P	25.1

156 Dy [He] No available calibration points

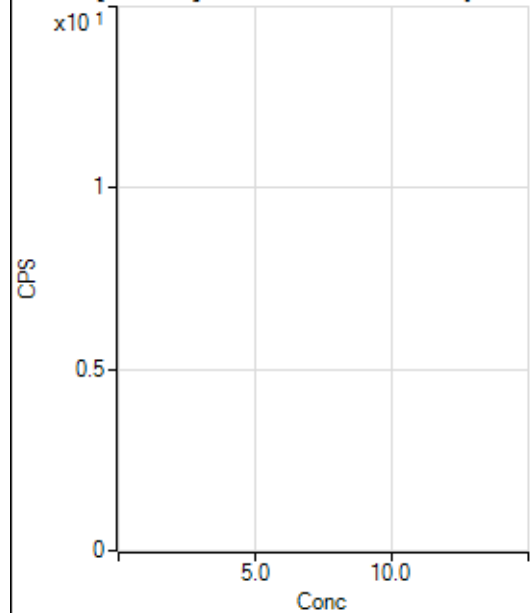
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	43.4
2	☐						
3	☐			2.22		P	173.
4	☐			16.67		P	20.0
5	☐			30.00		P	33.3
6	☐			74.44		P	18.6
7	☐			130.00		P	10.3
8	☐			232.23		P	8.4
9	☐			85.56		P	26.5

160 Gd [No Gas] Noavailable calibration poin_

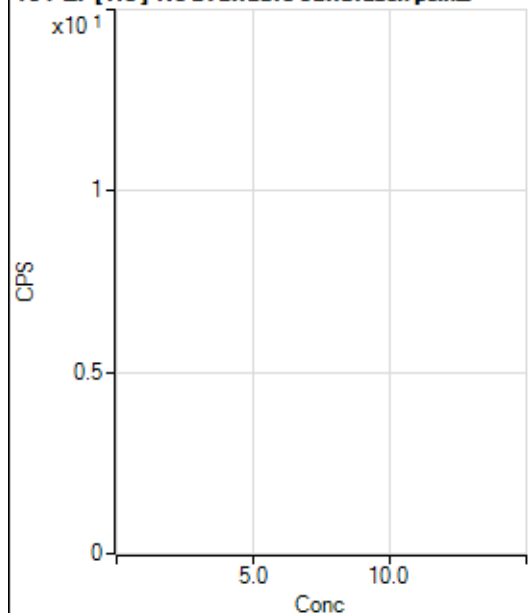
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			172.23		P	31.1
2	☐						
3	☐			150.01		P	11.1
4	☐			100.01		P	22.0
5	☐			150.01		P	20.0
6	☐			136.12		P	9.4
7	☐			147.23		P	21.4
8	☐			169.45		P	20.5
9	☐			222.23		P	21.3

160 Gd [He] No available calibration points

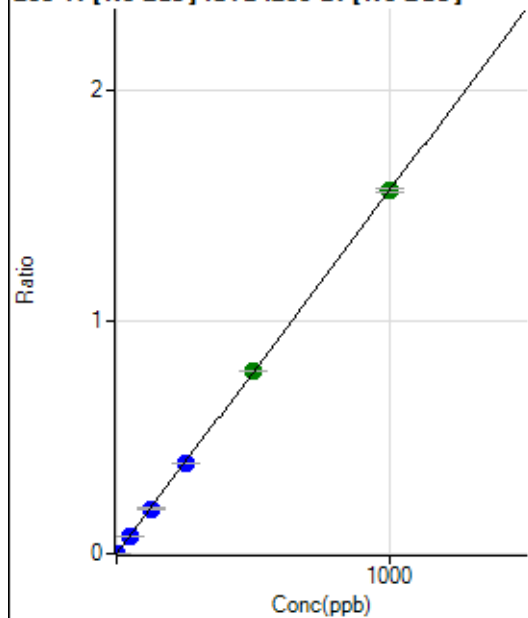
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			244.45		P	3.1
2	☐						
3	☐			247.78		P	15.3
4	☐			254.45		P	16.6
5	☐			200.01		P	20.3
6	☐			210.00		P	4.2
7	☐			211.12		P	6.0
8	☐			194.45		P	13.0
9	☐			273.34		P	3.2

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			66.67		P	57.3
2	☐						
3	☐			88.89		P	28.6
4	☐			36.11		P	53.3
5	☐			33.34		P	66.1
6	☐			88.89		P	35.5
7	☐			52.78		P	32.9
8	☐			80.56		P	6.0
9	☐			83.34		P	45.8

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			15.56		P	65.5
2	☐						
3	☐			56.67		P	40.8
4	☐			22.22		P	22.9
5	☐			24.45		P	43.8
6	☐			27.78		P	54.1
7	☐			46.67		P	0.0
8	☐			26.67		P	54.5
9	☐			32.22		P	65.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	172.23	0.0000	P	3.2
2	☐	0.100					
3	☐	1.000	1.003	17826.47	0.0016	P	0.6
4	☐	50.000	49.089	857563.94	0.0769	P	0.4
5	☐	125.000	124.287	2146432.29	0.1947	P	0.7
6	☐	250.000	246.801	4126824.31	0.3866	P	0.3
7	☐	500.000	503.448	8346492.89	0.7887	A	0.4
8	☐	1000.000	999.210	16058122.75	1.5653	A	1.1
9	☐			5851.56	0.0006	P	5.1

$$y = 0.0016 * x + 1.5279E-005$$

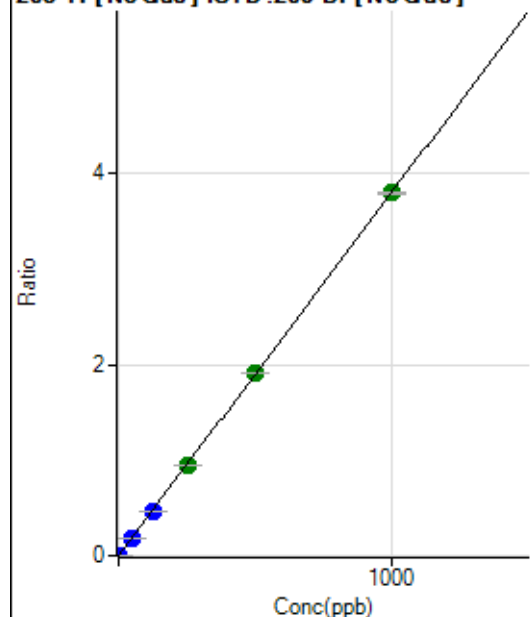
$$R = 1.0000$$

$$DL = 0.0009236$$

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	347.24	0.0000	P	10.9
2	☐	0.100					
3	☐	1.000	0.994	42809.01	0.0038	P	0.9
4	☐	50.000	48.928	2073651.95	0.1860	P	0.9
5	☐	125.000	123.795	5186815.09	0.4705	P	0.6
6	☐	250.000	247.730	10049822.28	0.9415	A	0.4
7	☐	500.000	502.411	20207856.70	1.9095	A	0.7
8	☐	1000.000	999.566	38973637.33	3.7990	A	0.7
9	☐			14497.44	0.0016	P	2.7

$$y = 0.0038 * x + 3.0803E-005$$

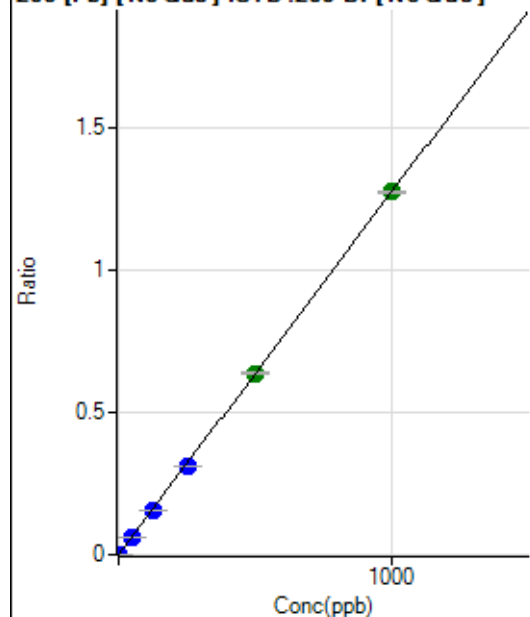
$$R = 1.0000$$

$$DL = 0.002644$$

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	596.33	0.0001	P	4.1
2	☐	0.100					
3	☐	1.000	1.028	15316.57	0.0014	P	2.5
4	☐	50.000	49.096	698249.58	0.0626	P	0.4
5	☐	125.000	123.646	1737721.45	0.1576	P	0.7
6	☐	250.000	245.336	3337967.15	0.3127	P	0.7
7	☐	500.000	501.242	6761090.20	0.6389	A	0.7
8	☐	1000.000	1000.760	13085385.83	1.2755	A	0.8
9	☐			17673.26	0.0019	P	2.2

$$y = 0.0013 * x + 5.2894E-005$$

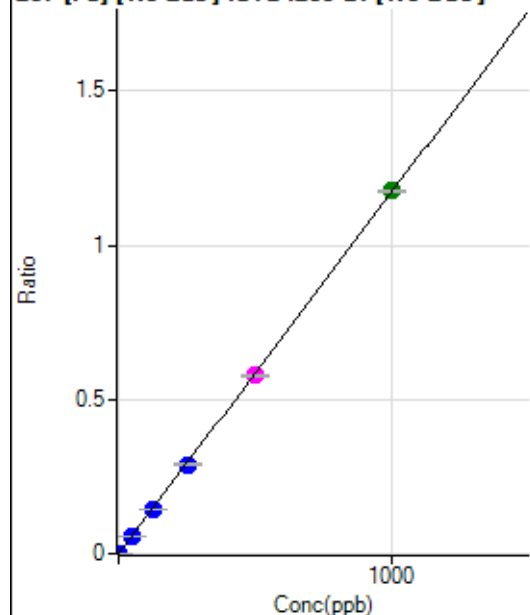
$$R = 1.0000$$

$$DL = 0.005142$$

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	572.25	0.0001	P	7.8
2	☐	0.100					
3	☐	1.000	0.991	13625.88	0.0012	P	0.8
4	☐	50.000	48.991	640382.18	0.0574	P	0.5
5	☐	125.000	124.027	1602028.45	0.1453	P	0.7
6	☐	250.000	247.178	3090849.29	0.2896	P	0.7
7	☐	500.000	493.707	6120746.03	0.5783	M	1.3
8	☐	1000.000	1004.024	12065713.11	1.1761	A	0.5
9	☐			15661.46	0.0017	P	1.8

$$y = 0.0012 * x + 5.0764E-005$$

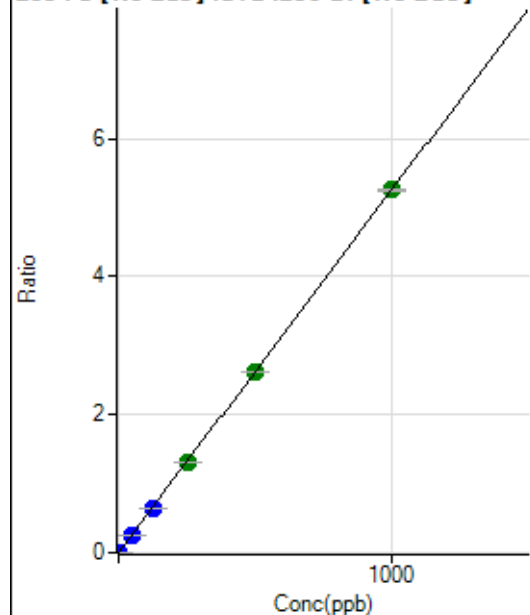
$$R = 1.0000$$

$$DL = 0.01019$$

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	2570.55	0.0002	P	4.6
2	☐	0.100					
3	☐	1.000	1.006	61956.15	0.0055	P	1.0
4	☐	50.000	49.209	2884601.45	0.2587	P	0.2
5	☐	125.000	124.210	7194893.57	0.6527	P	0.6
6	☐	250.000	247.630	13886275.45	1.3010	A	0.6
7	☐	500.000	499.626	27776795.01	2.6247	A	0.4
8	☐	1000.000	1000.918	53941216.95	5.2579	A	0.5
9	☐			71675.56	0.0078	P	1.0

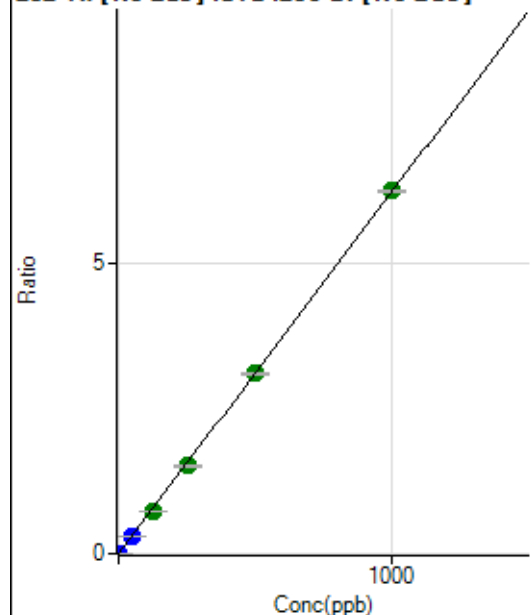
$$y = 0.0053 * x + 2.2800E-004$$

$$R = 1.0000$$

$$DL = 0.005951$$

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	53.70	0.0000	P	53.3
2	☐	0.100					
3	☐	1.000	0.932	65284.86	0.0058	P	0.6
4	☐	50.000	46.200	3205876.34	0.2875	P	0.4
5	☐	125.000	119.196	8177648.51	0.7418	A	0.5
6	☐	250.000	242.369	16100420.73	1.5084	A	0.6
7	☐	500.000	497.592	32773211.61	3.0968	A	0.3
8	☐	1000.000	1004.027	64105190.32	6.2486	A	0.6
9	☐			12133.75	0.0013	P	9.1

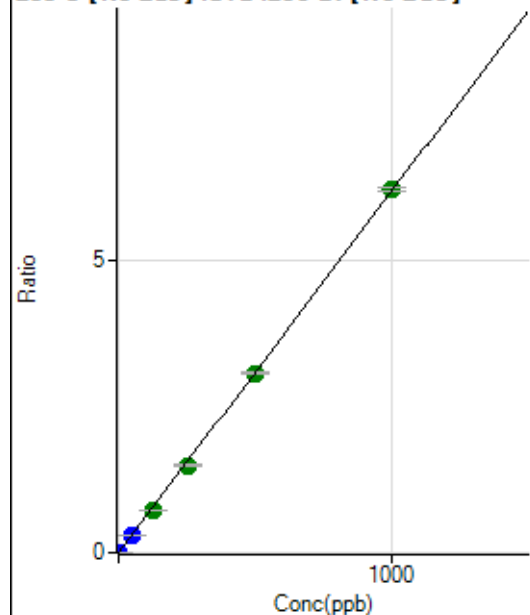
$$y = 0.0062 * x + 4.7696E-006$$

$$R = 1.0000$$

$$DL = 0.001225$$

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	66.67	0.0000	P	76.3
2	☐	0.100					
3	☐	1.000	0.943	65677.24	0.0058	P	1.9
4	☐	50.000	46.120	3184005.89	0.2856	P	0.6
5	☐	125.000	117.949	8050914.59	0.7303	A	0.3
6	☐	250.000	241.362	15951760.77	1.4945	A	0.9
7	☐	500.000	497.572	32604381.28	3.0809	A	0.6
8	☐	1000.000	1004.449	63803908.37	6.2194	A	1.0
9	☐			13040.44	0.0014	P	1.5

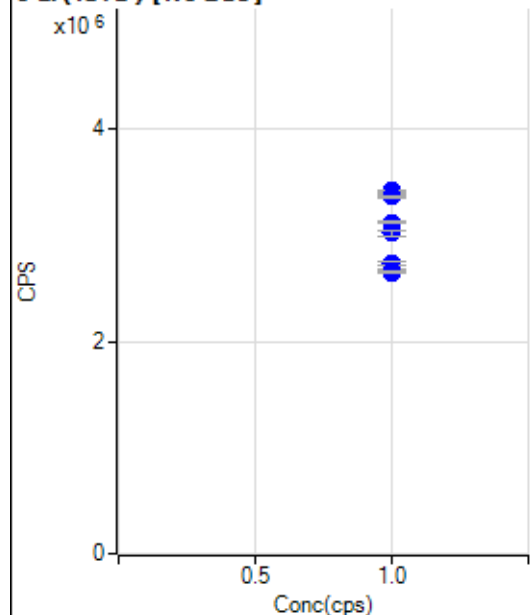
$$y = 0.0062 * x + 5.9215E-006$$

$$R = 0.9999$$

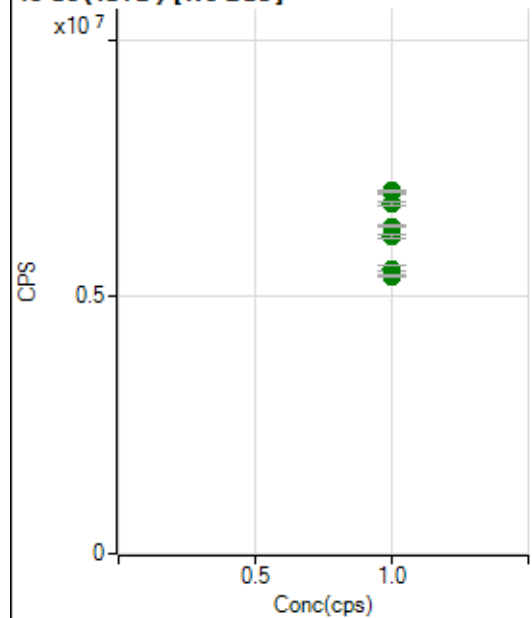
$$DL = 0.002188$$

Weight: <None>

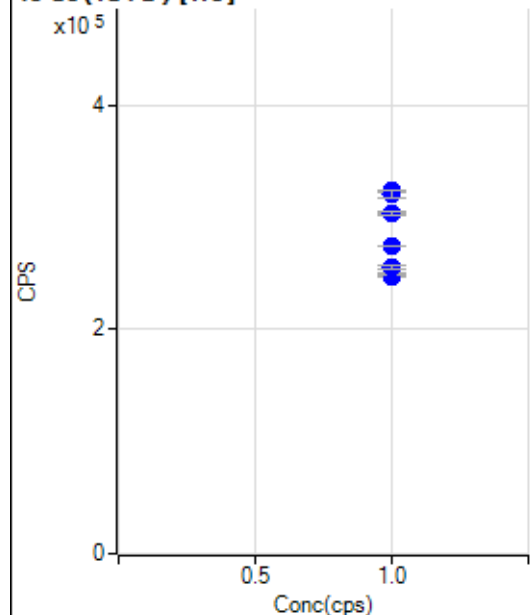
Min Conc: 0

6 Li (ISTD) [No Gas]

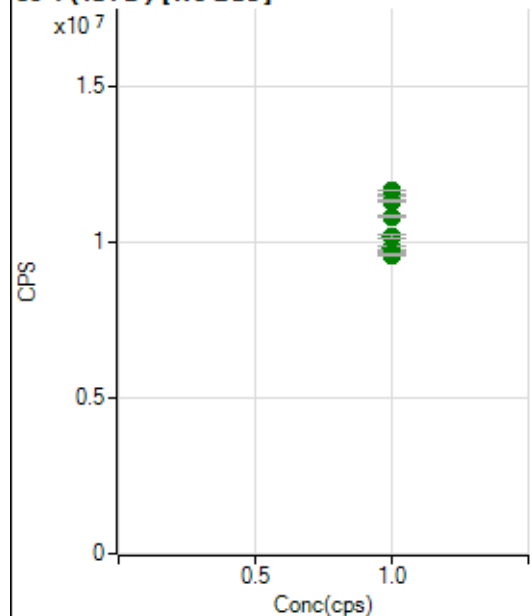
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3382573.35		P	0.0
2	☐	1.000					
3	☐	1.000		3420295.37		P	0.3
4	☐	1.000		3363980.19		P	0.6
5	☐	1.000		3127144.43		P	0.7
6	☐	1.000		2731859.44		P	1.3
7	☐	1.000		2670811.80		P	0.7
8	☐	1.000		2655674.98		P	0.5
9	☐	1.000		3018787.07		P	1.5

45 Sc (ISTD) [No Gas]

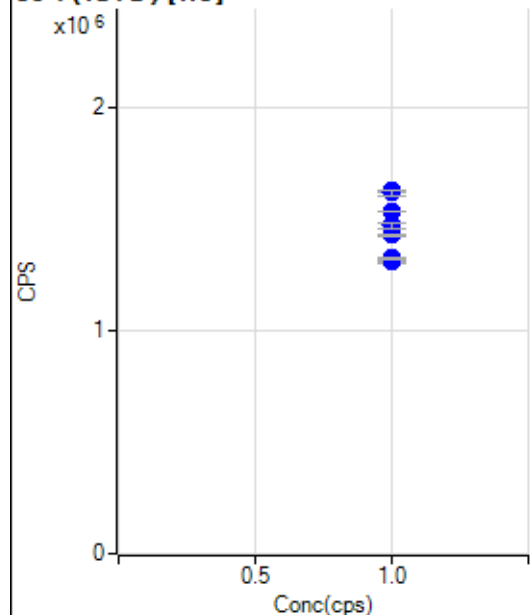
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7037376.80		A	1.0
2	☐	1.000					
3	☐	1.000		7061441.74		A	0.5
4	☐	1.000		6816180.62		A	1.1
5	☐	1.000		6366591.42		A	0.7
6	☐	1.000		5550187.97		A	1.9
7	☐	1.000		5425517.53		A	0.2
8	☐	1.000		5402786.49		A	0.5
9	☐	1.000		6186657.43		A	1.3

45 Sc (ISTD) [He]

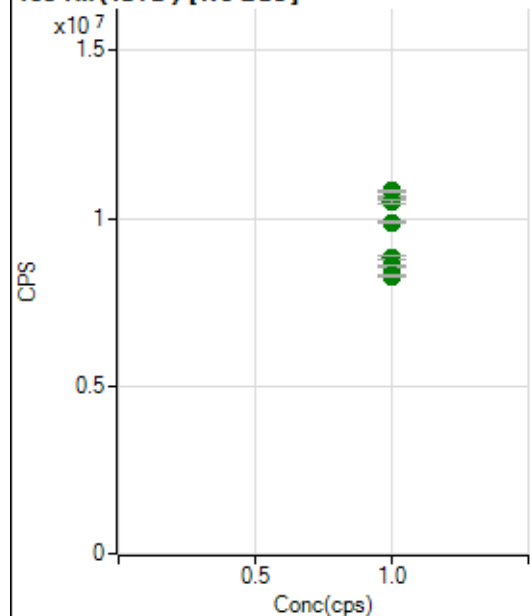
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		323692.09		P	0.3
2	☐	1.000					
3	☐	1.000		320986.25		P	2.1
4	☐	1.000		304036.17		P	0.5
5	☐	1.000		274356.62		P	0.3
6	☐	1.000		247055.73		P	0.2
7	☐	1.000		249517.35		P	0.5
8	☐	1.000		255472.74		P	0.9
9	☐	1.000		303552.92		P	1.4

89 Y (ISTD) [No Gas]

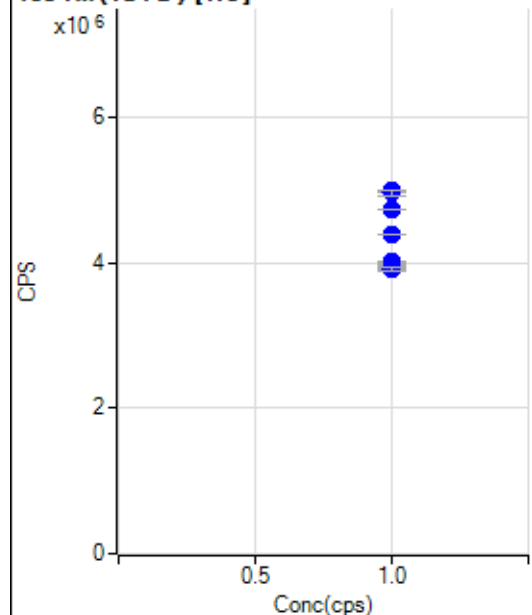
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11527226.08		A	0.3
2	☐	1.000					
3	☐	1.000		11650098.30		A	0.2
4	☐	1.000		11327809.69		A	0.5
5	☐	1.000		10828613.59		A	0.5
6	☐	1.000		9793387.22		A	1.2
7	☐	1.000		9638611.11		A	0.7
8	☐	1.000		9595269.58		A	0.6
9	☐	1.000		10195245.26		A	0.8

89 Y(ISTD) [He]

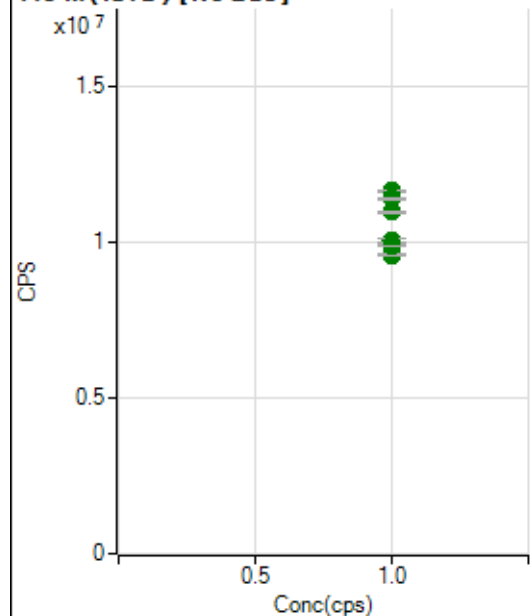
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1629269.84		P	0.5
2	☐	1.000					
3	☐	1.000		1619712.06		P	1.8
4	☐	1.000		1536760.96		P	0.5
5	☐	1.000		1429386.73		P	1.0
6	☐	1.000		1309662.13		P	0.6
7	☐	1.000		1316874.53		P	0.6
8	☐	1.000		1325631.83		P	0.9
9	☐	1.000		1474285.07		P	1.5

103 Rh(ISTD) [No Gas]

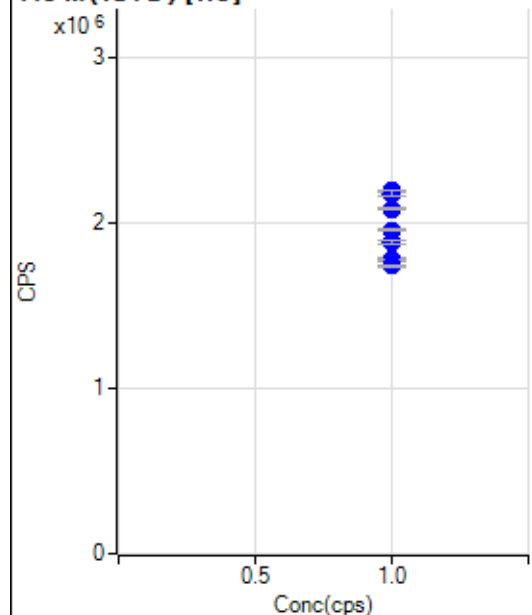
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10629207.88		A	0.7
2	☐	1.000					
3	☐	1.000		10814594.17		A	0.6
4	☐	1.000		10464521.59		A	1.1
5	☐	1.000		9884131.38		A	0.4
6	☐	1.000		8847184.57		A	1.4
7	☐	1.000		8590282.92		A	0.6
8	☐	1.000		8320459.82		A	0.3
9	☐	1.000		8265021.45		A	0.6

103 Rh (ISTD) [He]

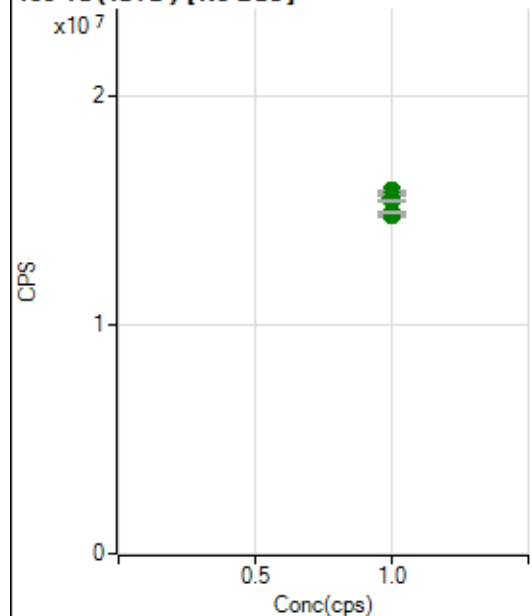
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4982789.68		P	0.8
2	☐	1.000					
3	☐	1.000		4953878.82		P	1.8
4	☐	1.000		4728311.35		P	0.3
5	☐	1.000		4386333.37		P	0.3
6	☐	1.000		4005073.45		P	0.3
7	☐	1.000		3985616.40		P	0.3
8	☐	1.000		3933854.49		P	1.1
9	☐	1.000		3906608.97		P	1.6

115 In (ISTD) [No Gas]

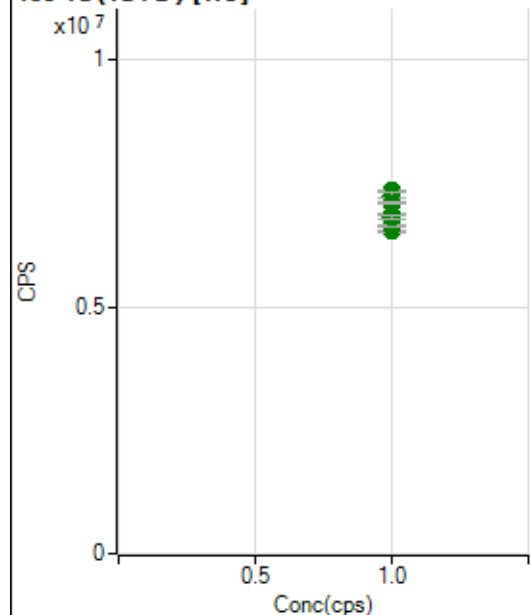
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11625664.13		A	0.6
2	☐	1.000					
3	☐	1.000		11650509.82		A	0.1
4	☐	1.000		11401460.70		A	0.8
5	☐	1.000		10961607.80		A	0.2
6	☐	1.000		10062171.15		A	1.2
7	☐	1.000		9926333.85		A	0.5
8	☐	1.000		9599649.78		A	0.4
9	☐	1.000		9887654.35		A	0.4

115 In (ISTD) [He]

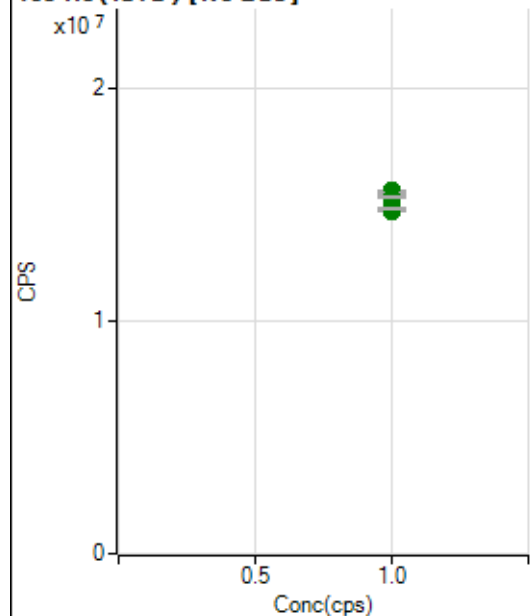
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2193069.61		P	0.6
2	☐	1.000					
3	☐	1.000		2178884.37		P	1.5
4	☐	1.000		2085714.25		P	0.2
5	☐	1.000		1953768.80		P	0.6
6	☐	1.000		1783801.62		P	0.3
7	☐	1.000		1771963.23		P	0.6
8	☐	1.000		1738367.37		P	1.1
9	☐	1.000		1881877.57		P	1.4

159 Tb (ISTD) [No Gas]

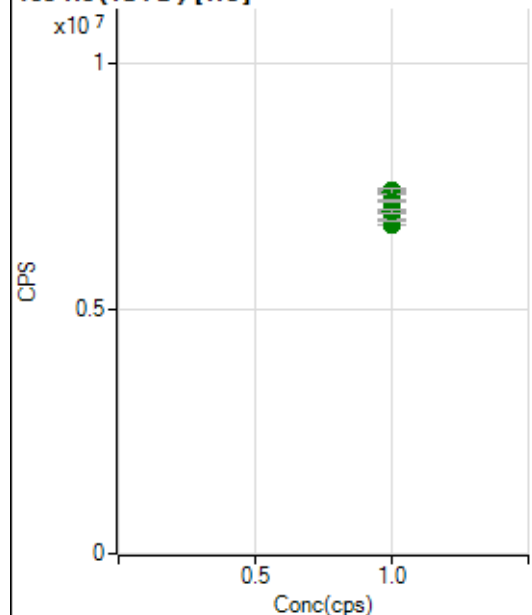
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		15606383.52		A	1.1
2	☐	1.000					
3	☐	1.000		15874445.74		A	0.3
4	☐	1.000		15671829.91		A	0.4
5	☐	1.000		15456897.55		A	0.3
6	☐	1.000		14893709.50		A	0.6
7	☐	1.000		14833923.11		A	0.5
8	☐	1.000		14780979.78		A	0.3
9	☐	1.000		14924895.20		A	0.9

159 Tb (ISTD) [He]

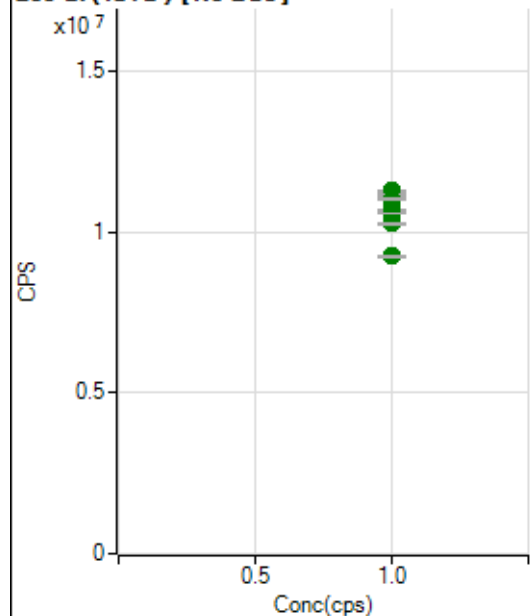
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7349183.78		A	0.2
2	☐	1.000					
3	☐	1.000		7254932.46		A	1.9
4	☐	1.000		7096266.84		A	0.5
5	☐	1.000		6863831.64		A	0.4
6	☐	1.000		6541206.85		A	0.6
7	☐	1.000		6619974.28		A	0.2
8	☐	1.000		6652768.03		A	0.6
9	☐	1.000		6831937.33		A	1.1

165 Ho (ISTD) [No Gas]

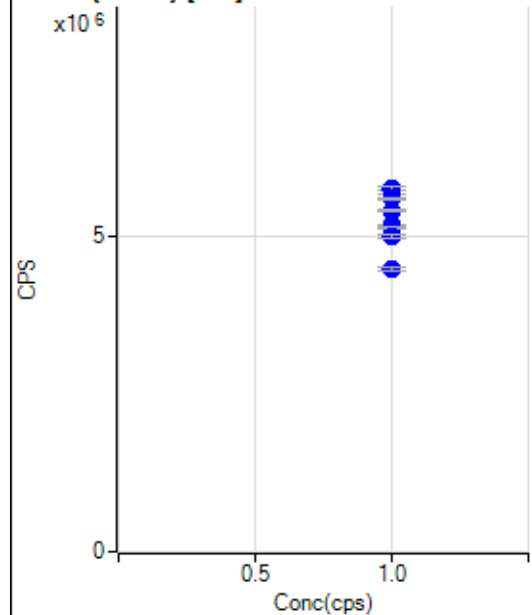
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		15484014.58		A	0.2
2	☐	1.000					
3	☐	1.000		15573174.83		A	0.7
4	☐	1.000		15480619.79		A	0.6
5	☐	1.000		15290197.04		A	0.6
6	☐	1.000		14711352.07		A	0.3
7	☐	1.000		14830062.66		A	0.3
8	☐	1.000		14767581.23		A	0.2
9	☐	1.000		14808300.16		A	0.5

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7408114.54		A	0.2
2	☐	1.000					
3	☐	1.000		7389323.92		A	1.7
4	☐	1.000		7194176.42		A	0.3
5	☐	1.000		6992656.08		A	0.3
6	☐	1.000		6709984.00		A	0.3
7	☐	1.000		6789816.36		A	0.5
8	☐	1.000		6818554.14		A	0.8
9	☐	1.000		6987344.62		A	0.9

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11273210.94		A	0.4
2	☐	1.000					
3	☐	1.000		11241433.58		A	0.4
4	☐	1.000		11149642.75		A	0.1
5	☐	1.000		11023753.86		A	0.5
6	☐	1.000		10673734.21		A	0.3
7	☐	1.000		10582963.52		A	0.4
8	☐	1.000		10259290.47		A	0.6
9	☐	1.000		9232797.85		A	0.4

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5738870.40		P	1.0
2	☐	1.000					
3	☐	1.000		5714518.66		P	1.8
4	☐	1.000		5586243.53		P	0.7
5	☐	1.000		5393963.25		P	0.4
6	☐	1.000		5165017.35		P	0.5
7	☐	1.000		5110417.77		P	0.6
8	☐	1.000		4995803.92		P	1.1
9	☐	1.000		4478901.08		P	1.1

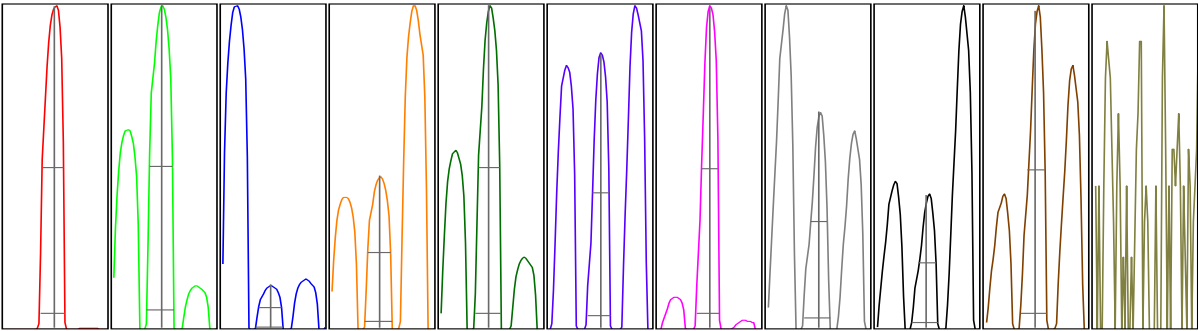
US EPA Tune Check Sample Report

Batch Folder D:\ICP-MS Data\P7112618-MS .b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]				
Mass	Count	RSD%	RSD%	RSD%
	(Mean)	(Actual)	(Required)	(Flag)
9	14706	1.67	5.00	
24	126195	1.37	5.00	
25	16746	1.40	5.00	
26	19319	1.11	5.00	
59	112407	1.28	5.00	
113	14542	1.15	5.00	
115	170153	1.16	5.00	
206	47490	1.13	5.00	
207	43275	1.29	5.00	
208	102891	1.01	5.00	
220	0	62.83		

Mass	Replicate 1	Replicate 2	Replicate 3	Replicate 4	Replicate 5
	Count	Count	Count	Count	Count
9	14953	14622	14626	14951	14379
24	127565	125690	125561	128251	123909
25	16935	16644	16660	17033	16459
26	19450	19254	19276	19592	19024
59	113507	111543	111811	114313	110862
113	14637	14445	14495	14779	14354
115	170770	169858	168989	173153	167995
206	47662	47203	47271	48341	46973
207	43709	43005	42870	44023	42766
208	102998	102010	102445	104630	102370
220	0	0	0	0	0

Integration Time [sec] = 0.1



Mass	Peak	Axis	Axis	Axis	Width-X%	Width-X%	Width-
	Height	(Actual)	(Required)	(Flag)	(Actual)	(Required)	X% (Flag)
9	25126	9.00	8.9 - 9.1		0.740	0.900	
24	203105	23.95	23.9 - 24.1		0.786	0.900	
25	27158	24.95	24.9 - 25.1		0.787	0.900	
26	31366	25.95	25.9 - 26.1		0.785	0.900	
59	196182	58.95	58.9 - 59.1		0.772	0.900	
113	29076	113.05	112.9 - 113.1		0.685	0.900	
115	340607	115.05	114.9 - 115.1		0.682	0.900	
206	95912	206.05	205.9 - 206.1		0.777	0.900	
207	86325	207.00	206.9 - 207.1		0.751	0.900	
208	205637	208.00	207.9 - 208.1		0.764	0.900	
220			-				

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

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.5	V	Deflect	14.2	V
Extract 2	-140.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-75	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	RSD%	RSD%
	(Mean)	(Actual)	(Required)
59	28083	0.52	
89	34319	0.75	
205	37143	0.86	

Mass	Replicate 1	Replicate 2	Replicate 3	Replicate 4	Replicate 5
	Count	Count	Count	Count	Count
59	28270	28195	28036	28003	27910
89	34489	34667	34241	34167	34028
205	37457	37480	36734	37054	36990

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	7.5	V	Deflect	1.6	V
Extract 2	-135.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-70	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			