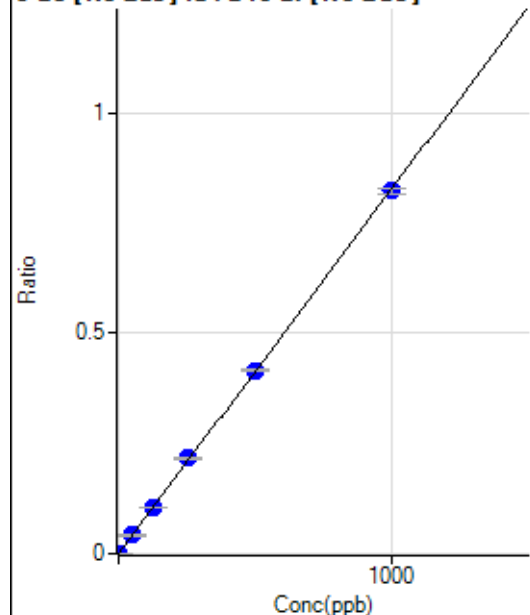


Batch Folder: C:\Agilent\ICPMH\1\DATA\P7010521IMS.b\
Analysis File: P7010521IMS.batch.bin
DA Date-Time: 2021-01-05 16:38:02
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2021-01-05 13:39:07
2	005CAL.S.d	S02	2021-01-05 13:46:22
3	006CAL.S.d	S03	2021-01-05 13:49:59
4	007CAL.S.d	S04	2021-01-05 13:53:36
5	008CAL.S.d	S05	2021-01-05 13:57:13
6	009CAL.S.d	S06	2021-01-05 14:00:47
7	010CAL.S.d	S07	2021-01-05 14:04:16
8	011CAL.S.d	S08	2021-01-05 14:07:41

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.33	0.0000	P	15.8
2	☐	1.000	0.972	931.52	0.0008	P	4.8
3	☐	50.000	50.508	47462.99	0.0418	P	1.8
4	☐	125.000	127.573	120282.91	0.1055	P	0.6
5	☐	250.000	261.199	241029.59	0.2160	P	0.8
6	☐	500.000	502.905	474130.79	0.4159	P	1.6
7	☐	1000.000	995.401	917646.70	0.8231	P	1.4
8	☐			205.56	0.0002	P	22.7

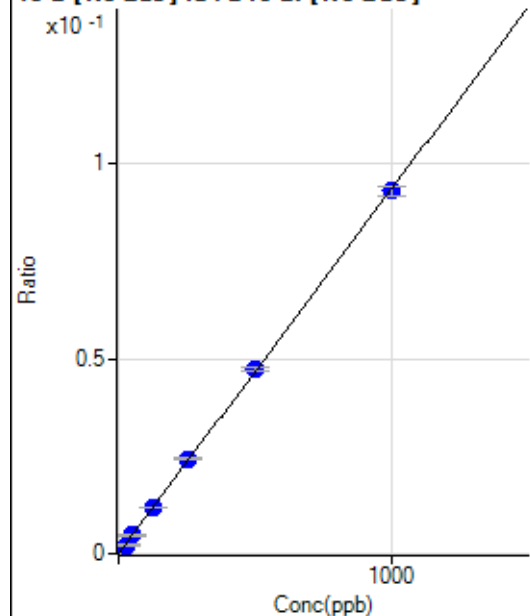
$$y = 8.2691E-004 * x + 2.9708E-005$$

$$R = 0.9999$$

$$DL = 0.01708$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38.89	0.0000	P	25.7
2	☐	25.000	23.372	2480.82	0.0022	P	0.7
3	☐	50.000	50.106	5356.63	0.0047	P	4.9
4	☐	125.000	124.407	13295.02	0.0117	P	0.8
5	☐	250.000	259.604	27113.57	0.0243	P	1.2
6	☐	500.000	504.914	53843.51	0.0472	P	1.9
7	☐	1000.000	995.251	103739.26	0.0931	P	2.4
8	☐			2605.84	0.0023	P	3.7

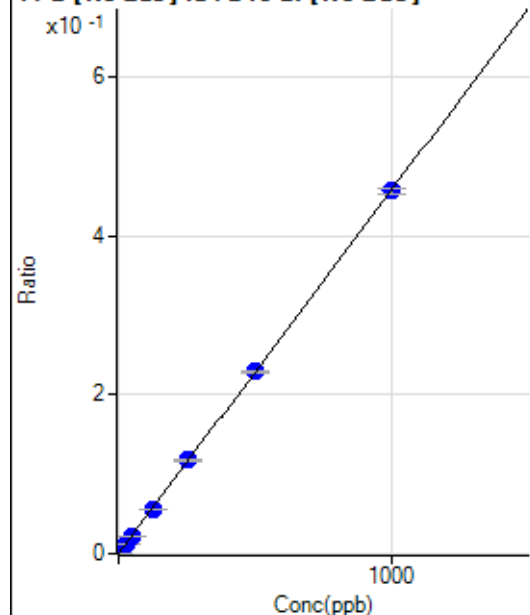
$$y = 9.3471E-005 * x + 3.4735E-005$$

$$R = 0.9999$$

$$DL = 0.2861$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	238.90	0.0002	P	5.6
2	☐	25.000	24.221	12605.51	0.0113	P	0.2
3	☐	50.000	48.594	25441.35	0.0224	P	3.1
4	☐	125.000	123.396	64493.07	0.0566	P	0.6
5	☐	250.000	258.142	131805.08	0.1181	P	1.6
6	☐	500.000	500.485	260896.58	0.2288	P	1.7
7	☐	1000.000	998.012	508455.95	0.4561	P	1.4
8	☐			11713.11	0.0105	P	9.4

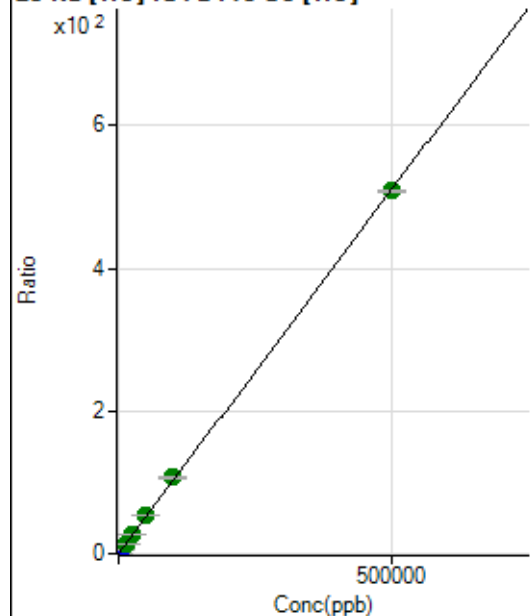
$$y = 4.5678\text{E-}004 * x + 2.1311\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.07819$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	19907.97	0.0563	P	1.7
2	☐	500.000	548.323	219248.17	0.6155	P	2.8
3	☐	5000.000	5600.090	2094378.24	5.7676	P	0.6
4	☐	12500.000	13194.588	4715993.59	13.5129	A	0.4
5	☐	25000.000	27153.935	9286322.34	27.7495	A	1.5
6	☐	50000.000	53551.898	18210736.52	54.6718	A	1.4
7	☐	100000.00	104740.04	35936063.65	106.8766	A	1.6
8	☐	500000.00	498565.69	177327263.6	508.5240	A	0.8

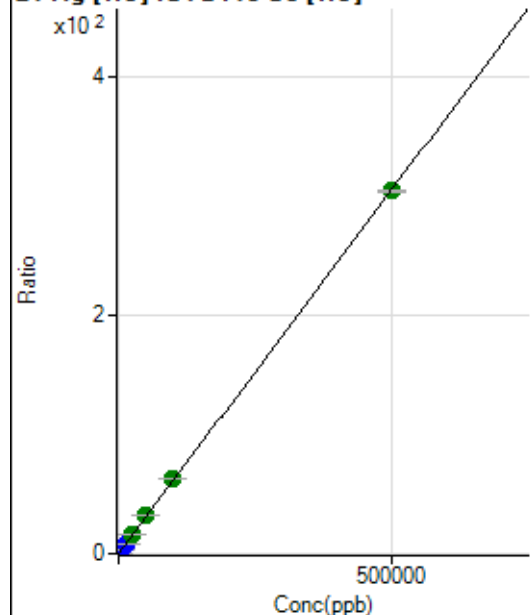
$$y = 0.0010 * x + 0.0563$$

$$R = 0.9999$$

$$DL = 2.834$$

Weight: <None>

Min Conc: 0

24 Mg [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	233.34	0.0007	P	19.6
2	☐	500.000	534.625	116418.16	0.3267	P	1.0
3	☐	5000.000	5508.264	1220142.94	3.3601	P	0.7
4	☐	12500.000	13922.431	2963635.11	8.4919	P	0.2
5	☐	25000.000	27298.801	5571476.64	16.6500	A	1.9
6	☐	50000.000	53234.637	10815085.48	32.4682	A	1.1
7	☐	100000.00	103385.06	21203177.04	63.0546	A	1.8
8	☐	500000.00	498843.90	106092610.7	304.2427	A	0.8

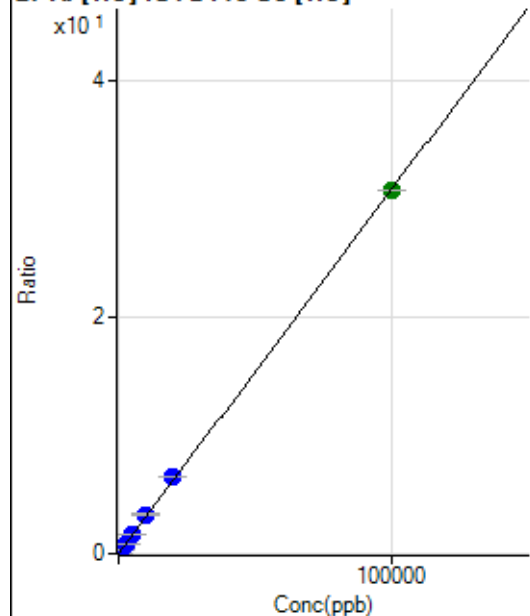
$$y = 6.0989\text{E-}004 * x + 6.6070\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.6355$$

Weight: <None>

Min Conc: 0

27 Al [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	608.36	0.0017	P	1.6
2	☐	20.000	20.375	2844.80	0.0080	P	1.0
3	☐	1000.000	1067.556	119750.18	0.3298	P	2.0
4	☐	2500.000	2692.376	289312.33	0.8290	P	1.0
5	☐	5000.000	5500.589	566204.26	1.6919	P	1.4
6	☐	10000.000	10775.044	1103408.12	3.3126	P	1.3
7	☐	20000.000	21215.614	2192734.38	6.5207	P	1.1
8	☐	100000.00	99648.858	10678217.25	30.6213	A	0.1

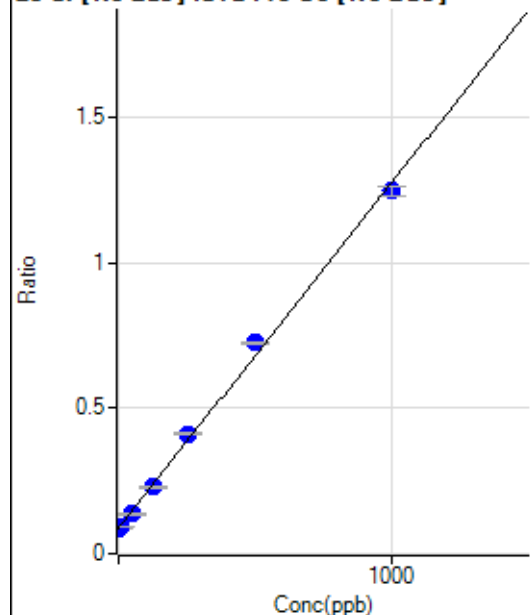
$$y = 3.0727\text{E-}004 * x + 0.0017$$

$$R = 0.9999$$

$$DL = 0.2767$$

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	308774.45	0.0881	P	0.2
2	☐	10.000	4.998	335633.87	0.0941	P	1.3
3	☐	50.000	40.903	502469.78	0.1367	P	2.1
4	☐	125.000	118.493	811455.48	0.2289	P	2.0
5	☐	250.000	273.493	1364439.74	0.4130	P	2.1
6	☐	500.000	536.304	2467261.51	0.7251	P	1.7
7	☐	1000.000	977.293	4268051.01	1.2489	P	3.0
8	☐			889446.21	0.2574	P	1.5

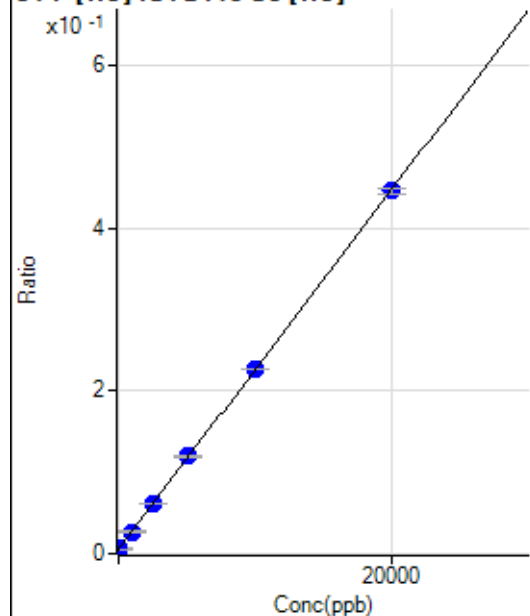
$$y = 0.0012 * x + 0.0881$$

$$R = 0.9984$$

$$DL = 0.5144$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	12.166	2164.11	0.0061	P	3.4
2	☐	0.000	-12.166	1989.07	0.0056	P	4.6
3	☐	1000.000	951.681	9750.64	0.0268	P	3.5
4	☐	2500.000	2517.510	21424.11	0.0614	P	1.4
5	☐	5000.000	5144.626	39937.15	0.1194	P	3.3
6	☐	10000.000	10042.652	75752.58	0.2274	P	0.4
7	☐	20000.000	19942.744	149906.11	0.4458	P	1.9
8	☐			1911.28	0.0055	P	7.4

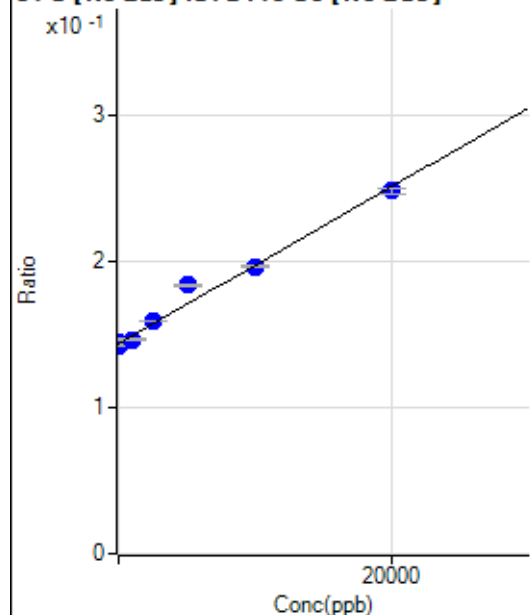
$$y = 2.2062E-005 * x + 0.0059$$

$$R = 1.0000$$

$$DL = 31.57$$

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	227.692	508943.37	0.1453	P	0.4
2	☐	0.000	-227.692	509573.91	0.1428	P	0.7
3	☐	1000.000	470.217	538747.23	0.1466	P	0.9
4	☐	2500.000	2897.786	566074.69	0.1597	P	0.6
5	☐	5000.000	7424.846	608066.72	0.1840	P	0.9
6	☐	10000.000	9843.775	670537.06	0.1971	P	0.9
7	☐	20000.000	19448.667	850353.64	0.2488	P	1.7
8	☐			440765.68	0.1276	P	1.5

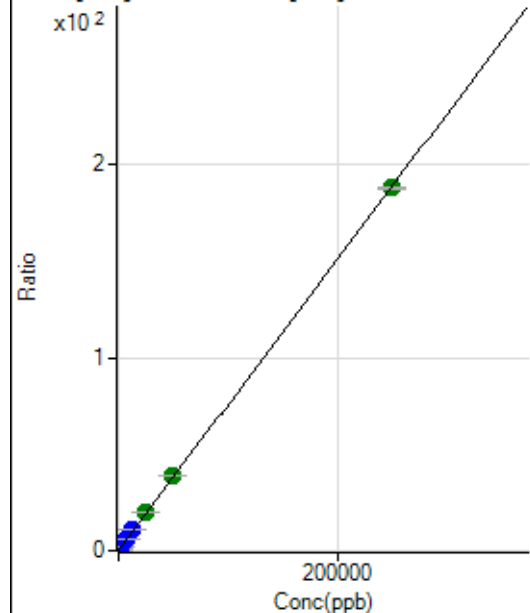
$$y = 5.3839\text{E-}006 * x + 0.1441$$

$$R = 0.9900$$

$$DL = 457.2$$

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	106112.67	0.3001	P	1.4
2	☐	500.000	529.019	248745.14	0.6984	P	3.2
3	☐	2500.000	2787.899	871125.48	2.3989	P	0.7
4	☐	6250.000	6947.727	1930012.50	5.5305	P	1.0
5	☐	12500.000	14125.980	3659104.99	10.9345	P	1.6
6	☐	25000.000	25953.143	6608088.64	19.8382	A	1.0
7	☐	50000.000	51375.180	13106702.03	38.9764	A	1.3
8	☐	250000.00	249527.97	65610753.55	188.1501	A	0.6

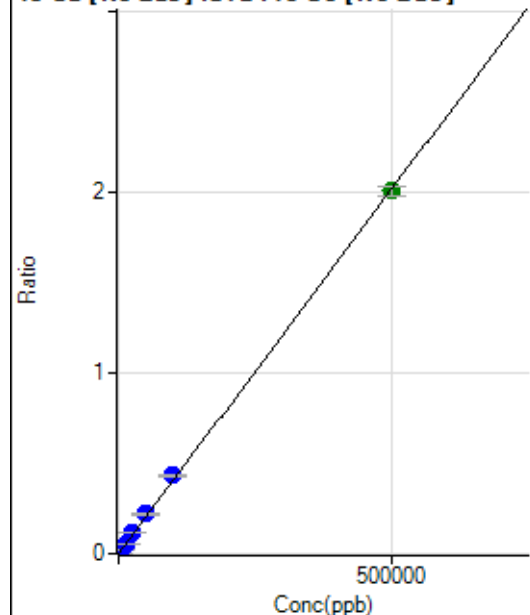
$$y = 7.5282\text{E-}004 * x + 0.3001$$

$$R = 1.0000$$

$$DL = 17.12$$

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	383.35	0.0001	P	9.2
2	☐	500.000	503.377	7621.59	0.0021	P	0.4
3	☐	5000.000	5341.019	79445.87	0.0216	P	2.0
4	☐	12500.000	13458.475	192525.26	0.0543	P	0.3
5	☐	25000.000	28642.733	381425.85	0.1154	P	1.0
6	☐	50000.000	54321.520	744629.75	0.2188	P	1.2
7	☐	100000.00	107496.40	1479797.47	0.4330	P	2.2
8	☐	500000.00	497859.05	6926485.05	2.0048	A	2.3

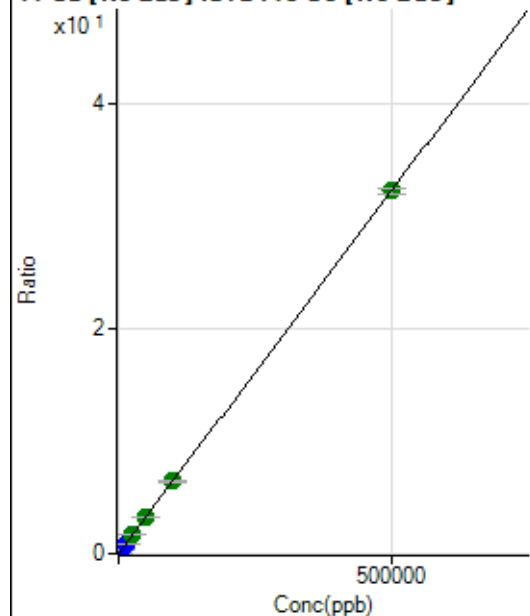
$$y = 4.0266\text{E-}006 * x + 1.0941\text{E-}004$$

$$R = 0.9999$$

$$DL = 7.461$$

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	11002.29	0.0031	P	3.0
2	☐	500.000	535.381	134193.33	0.0376	P	1.4
3	☐	5000.000	5369.470	1282333.03	0.3489	P	0.2
4	☐	12500.000	13688.107	3136266.99	0.8846	P	0.4
5	☐	25000.000	26360.459	5618916.01	1.7006	A	0.9
6	☐	50000.000	50187.110	11007508.07	3.2349	A	0.6
7	☐	100000.00	99661.578	21946357.38	6.4208	A	2.0
8	☐	500000.00	499947.51	111244478.8	32.1970	A	1.8

$$y = 6.4394\text{E-}005 * x + 0.0031$$

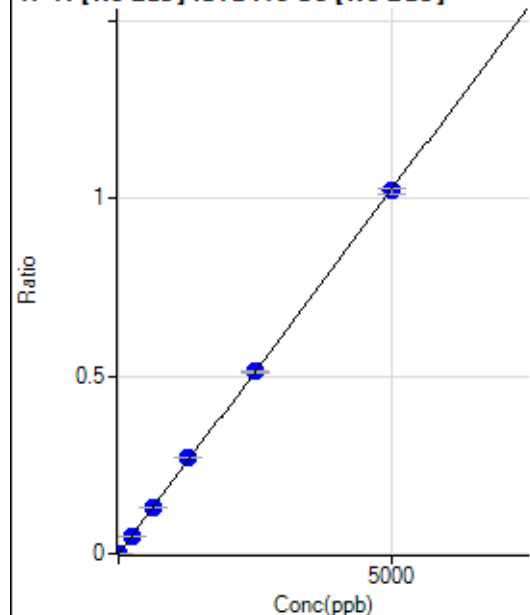
$$R = 1.0000$$

$$DL = 4.32$$

Weight: <None>

Min Conc: 0

47 Ti [No Gas] ISTD :45 Sc [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	69.45	0.0000	P	50.3
2	☐	5.000	4.586	3422.71	0.0010	P	2.6
3	☐	250.000	248.245	186983.35	0.0509	P	1.2
4	☐	625.000	631.800	459002.57	0.1295	P	0.2
5	☐	1250.000	1317.758	892089.17	0.2700	P	0.6
6	☐	2500.000	2502.522	1744541.57	0.5127	P	1.3
7	☐	5000.000	4981.038	3488148.61	1.0205	P	1.9
8	☐			855.60	0.0002	P	19.0

$$y = 2.0487E-004 * x + 1.9852E-005$$

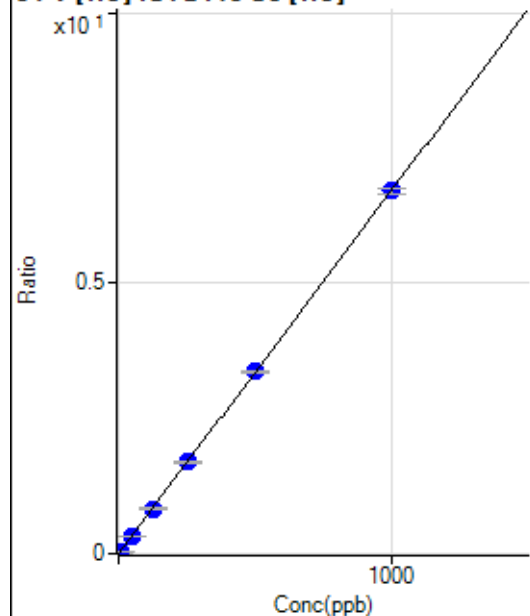
$$R = 0.9999$$

$$DL = 0.1462$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5.56	0.0000	P	34.7
2	☐	5.000	4.853	11605.75	0.0326	P	3.2
3	☐	50.000	49.456	120531.41	0.3319	P	1.3
4	☐	125.000	124.167	290800.65	0.8333	P	0.8
5	☐	250.000	252.312	566610.92	1.6933	P	1.8
6	☐	500.000	500.826	1119517.37	3.3610	P	1.4
7	☐	1000.000	999.141	2254571.98	6.7051	P	1.6
8	☐			355.56	0.0010	P	2.2

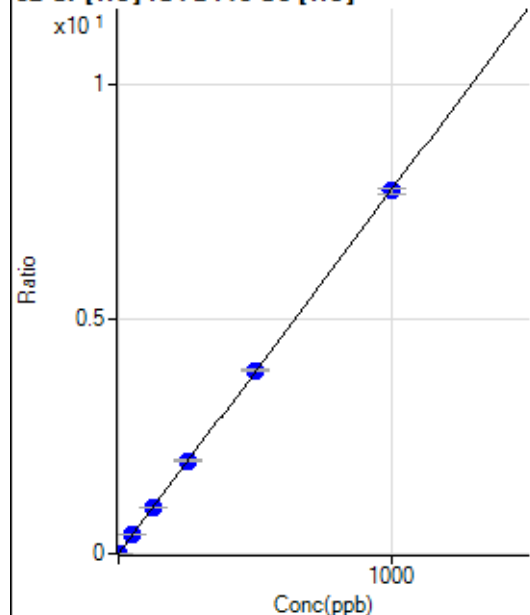
$$y = 0.0067 * x + 1.5713E-005$$

$$R = 1.0000$$

$$DL = 0.002436$$

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	1170.06	0.0033	P	4.7
2	☐	2.000	1.959	6591.53	0.0185	P	2.8
3	☐	50.000	50.083	142270.06	0.3918	P	0.6
4	☐	125.000	125.408	340627.75	0.9760	P	0.5
5	☐	250.000	254.408	661447.37	1.9766	P	1.7
6	☐	500.000	502.684	1299880.42	3.9024	P	1.1
7	☐	1000.000	997.501	2602758.02	7.7405	P	1.7
8	☐			11095.35	0.0318	P	3.6

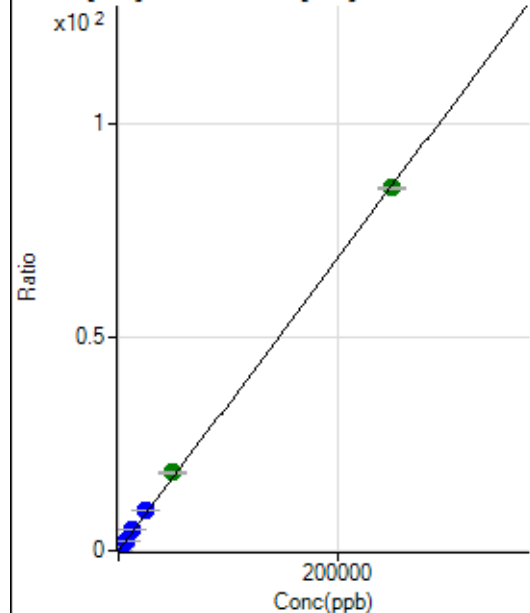
$$y = 0.0078 * x + 0.0033$$

$$R = 1.0000$$

$$DL = 0.06052$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1688.51	0.0048	P	6.9
2	☐	50.000	56.277	8544.62	0.0240	P	1.1
3	☐	2500.000	2782.915	346549.84	0.9543	P	0.2
4	☐	6250.000	6968.628	831490.57	2.3826	P	0.4
5	☐	12500.000	14226.172	1625912.79	4.8589	P	2.1
6	☐	25000.000	28048.428	3189491.57	9.5753	P	1.1
7	☐	50000.000	53438.457	6132826.78	18.2387	A	2.4
8	☐	250000.00	248900.36	29617674.55	84.9330	A	0.2

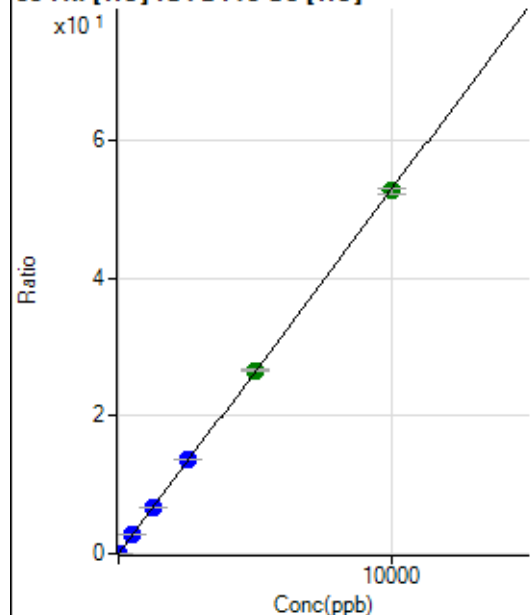
$$y = 3.4121E-004 * x + 0.0048$$

$$R = 0.9998$$

$$DL = 2.882$$

Weight: <None>

Min Conc: 0

⁵⁵Mn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	91.11	0.0003	P	20.3
2	☐	1.000	1.006	1983.49	0.0056	P	3.9
3	☐	500.000	510.549	979363.98	2.6970	P	0.6
4	☐	1250.000	1265.860	2333526.58	6.6865	P	0.4
5	☐	2500.000	2581.876	4563687.19	13.6377	P	1.6
6	☐	5000.000	5031.737	8853091.53	26.5779	A	0.9
7	☐	10000.000	9961.152	17692227.65	52.6151	A	1.3
8	☐			10081.30	0.0289	P	2.0

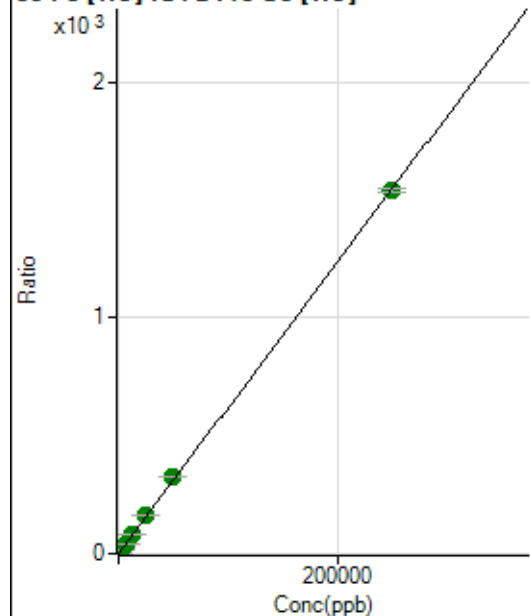
$$y = 0.0053 * x + 2.5730E-004$$

$$R = 1.0000$$

$$DL = 0.0297$$

Weight: <None>

Min Conc: 0

⁵⁶Fe [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	7502.01	0.0212	P	1.2
2	☐	50.000	54.149	126600.03	0.3554	P	2.7
3	☐	2500.000	2640.165	5924637.75	16.3150	A	1.2
4	☐	6250.000	6590.007	14200502.86	40.6915	A	0.8
5	☐	12500.000	13417.248	27716995.99	82.8259	A	1.5
6	☐	25000.000	26606.872	54704422.98	164.2259	A	0.6
7	☐	50000.000	52914.068	109807349.6	326.5811	A	1.9
8	☐	250000.00	249200.73	536299249.0	1,537.966	A	1.0

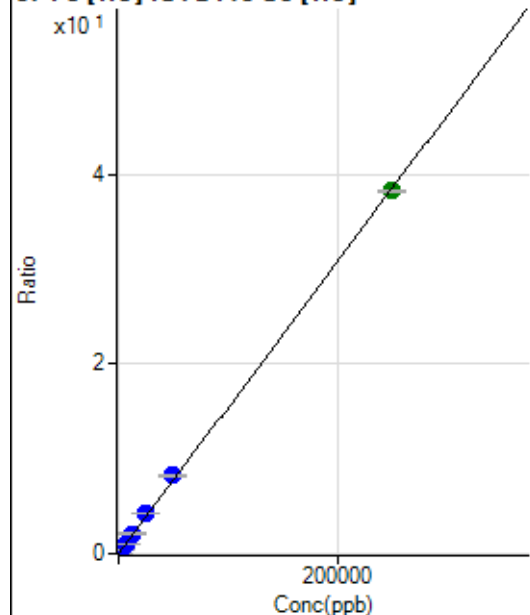
$$y = 0.0062 * x + 0.0212$$

$$R = 0.9999$$

$$DL = 0.1284$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	464.83	0.0013	P	11.8
2	☐	50.000	52.280	3328.21	0.0093	P	3.6
3	☐	2500.000	2701.586	151130.60	0.4162	P	1.7
4	☐	6250.000	6802.175	365022.52	1.0459	P	0.4
5	☐	12500.000	13771.458	708132.21	2.1162	P	1.6
6	☐	25000.000	27267.658	1395268.72	4.1887	P	0.9
7	☐	50000.000	53850.003	2781009.55	8.2709	P	1.8
8	☐	250000.00	248923.84	13330605.39	38.2279	A	0.5

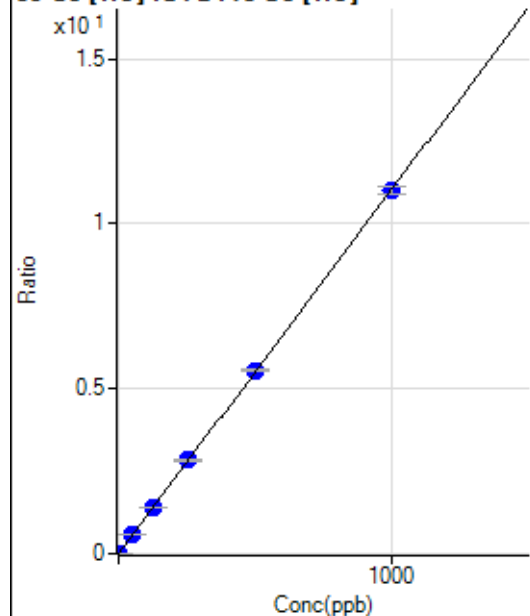
$$y = 1.5357E-004 * x + 0.0013$$

$$R = 0.9999$$

$$DL = 3.031$$

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	56.66	0.0002	P	10.3
2	☐	1.000	1.000	3983.91	0.0112	P	4.8
3	☐	50.000	50.781	203460.63	0.5603	P	0.4
4	☐	125.000	126.369	486522.30	1.3940	P	0.1
5	☐	250.000	256.601	947173.56	2.8306	P	2.0
6	☐	500.000	502.625	1846777.94	5.5443	P	1.2
7	☐	1000.000	996.827	3697234.98	10.9955	P	2.1
8	☐			5651.14	0.0162	P	4.3

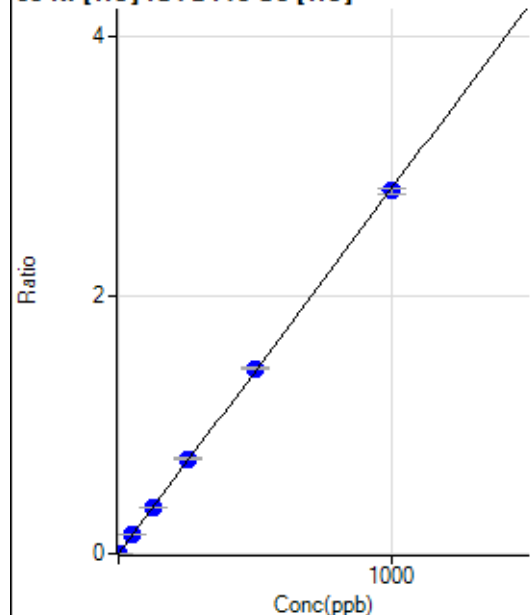
$$y = 0.0110 * x + 1.6027E-004$$

$$R = 1.0000$$

$$DL = 0.004493$$

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	86.67	0.0002	P	2.8
2	☐	1.000	1.039	1132.28	0.0032	P	6.7
3	☐	50.000	51.185	52610.57	0.1449	P	1.2
4	☐	125.000	128.374	126679.60	0.3630	P	0.4
5	☐	250.000	258.946	244923.25	0.7319	P	2.0
6	☐	500.000	506.832	477126.15	1.4324	P	1.0
7	☐	1000.000	993.866	944388.13	2.8086	P	1.4
8	☐			2862.53	0.0082	P	2.1

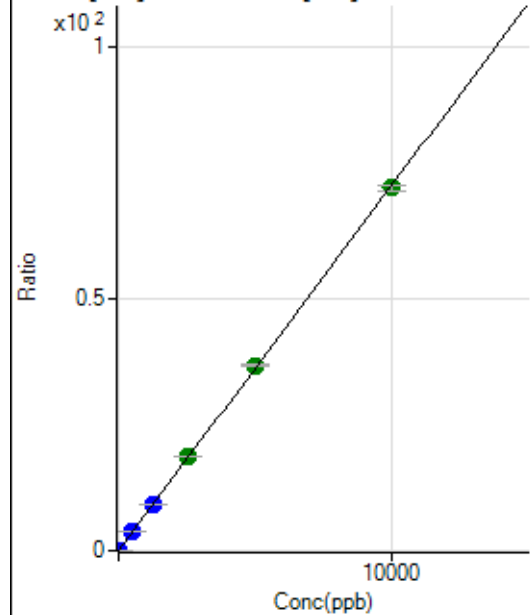
$$y = 0.0028 * x + 2.4505E-004$$

$$R = 0.9999$$

$$DL = 0.007167$$

Weight: <None>

Min Conc: 0

63 Cu [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1772.84	0.0050	P	4.0
2	☐	2.000	2.241	7565.14	0.0212	P	1.5
3	☐	500.000	504.200	1326908.74	3.6540	P	0.7
4	☐	1250.000	1253.259	3167044.08	9.0752	P	1.0
5	☐	2500.000	2584.915	6262184.91	18.7127	A	1.4
6	☐	5000.000	5080.011	12248092.72	36.7704	A	1.3
7	☐	10000.000	9938.148	24186737.06	71.9301	A	1.3
8	☐			10637.15	0.0305	P	1.5

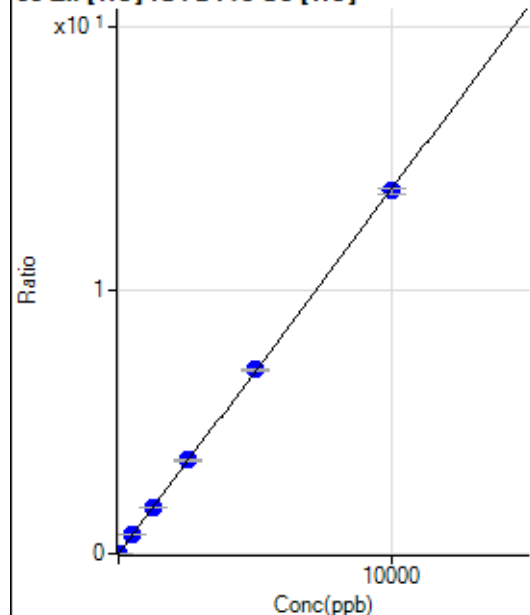
$$y = 0.0072 * x + 0.0050$$

$$R = 0.9999$$

$$DL = 0.08349$$

Weight: <None>

Min Conc: 0

66 Zn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	408.90	0.0012	P	2.1
2	☐	2.000	1.999	1396.75	0.0039	P	2.3
3	☐	500.000	506.491	254752.68	0.7015	P	1.0
4	☐	1250.000	1264.072	610406.61	1.7491	P	0.7
5	☐	2500.000	2563.987	1186826.33	3.5466	P	1.6
6	☐	5000.000	5055.427	2328972.71	6.9918	P	0.7
7	☐	10000.000	9954.206	4628658.12	13.7658	P	1.7
8	☐			6135.78	0.0176	P	2.6

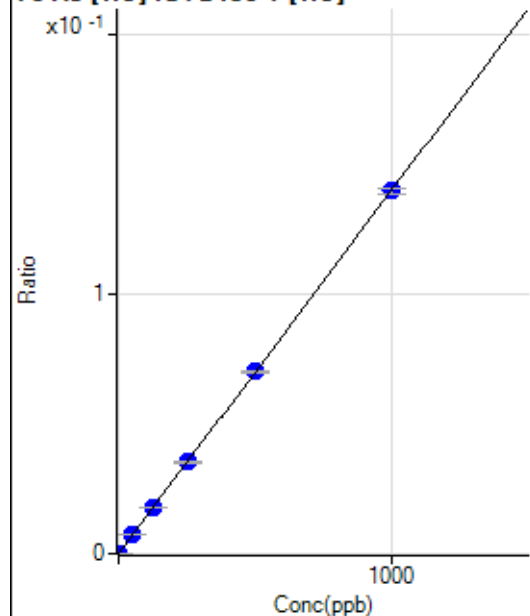
$$y = 0.0014 * x + 0.0012$$

$$R = 1.0000$$

$$DL = 0.05341$$

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	13.58	0.0000	P	21.2
2	☐	1.000	0.940	367.91	0.0001	P	2.2
3	☐	50.000	50.574	19458.07	0.0071	P	0.8
4	☐	125.000	124.666	46009.36	0.0175	P	0.1
5	☐	250.000	252.605	90129.06	0.0354	P	1.7
6	☐	500.000	501.061	178042.39	0.0702	P	1.1
7	☐	1000.000	998.831	360350.24	0.1400	P	1.6
8	☐			164.20	0.0001	P	1.9

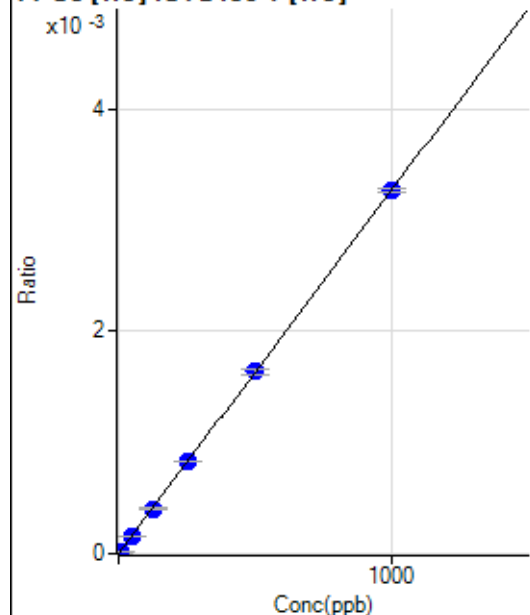
$$y = 1.4013E-004 * x + 5.1311E-006$$

$$R = 1.0000$$

$$DL = 0.02327$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2.22	0.0000	P	86.6
2	☐	5.000	3.401	32.22	0.0000	P	27.3
3	☐	50.000	47.510	427.79	0.0002	P	7.6
4	☐	125.000	123.875	1066.72	0.0004	P	7.5
5	☐	250.000	254.135	2114.62	0.0008	P	1.5
6	☐	500.000	501.787	4155.07	0.0016	P	3.0
7	☐	1000.000	998.346	8393.62	0.0033	P	1.1
8	☐			1.11	0.0000	P	173.2

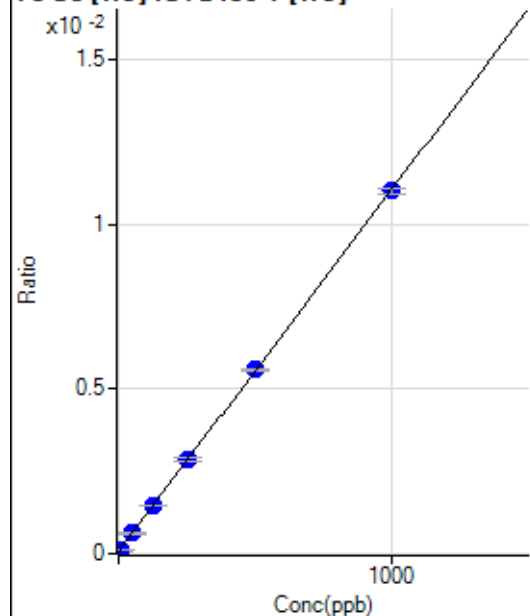
$$y = 3.2645\text{E-}006 * x + 8.3491\text{E-}007$$

$$R = 1.0000$$

$$DL = 0.6645$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	178.40	0.0001	P	6.5
2	☐	5.000	5.169	333.34	0.0001	P	7.1
3	☐	50.000	50.203	1697.02	0.0006	P	2.4
4	☐	125.000	125.623	3808.55	0.0014	P	0.7
5	☐	250.000	253.622	7258.63	0.0029	P	3.3
6	☐	500.000	503.837	14194.64	0.0056	P	1.2
7	☐	1000.000	997.087	28351.72	0.0110	P	1.3
8	☐			212.35	0.0001	P	12.8

$$y = 1.0978\text{E-}005 * x + 6.7393\text{E-}005$$

$$R = 1.0000$$

$$DL = 1.206$$

Weight: <None>

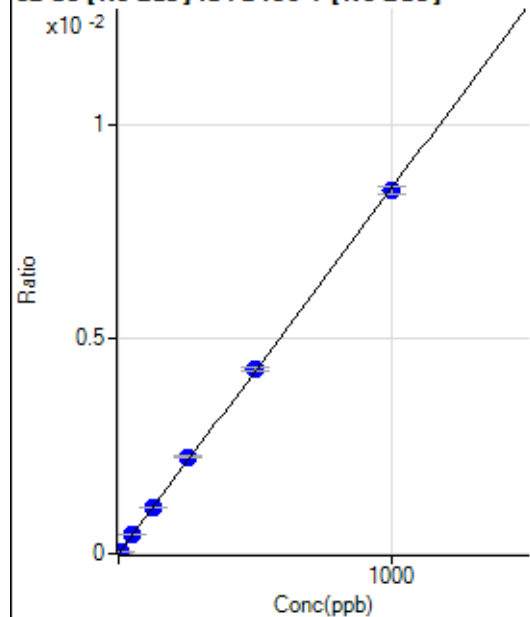
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3164.32		P	3.3
2	☐			3358.81		P	6.0
3	☐			3231.01		P	11.2
4	☐			3019.84		P	2.8
5	☐			2825.35		P	4.6
6	☐			2808.68		P	1.7
7	☐			3078.18		P	6.0
8	☐			3247.67		P	3.7

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			90.09		P	55.6
2	☐			96.76		P	11.9
3	☐			30.03		P	57.7
4	☐			63.40		P	24.1
5	☐			70.07		P	14.3
6	☐			40.04		P	66.1
7	☐			80.08		P	12.5
8	☐			66.74		P	56.8

82 Se [No Gas] ISTD:89 Y [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-24.50	0.0000	P	-187.
2	☐	5.000	4.406	324.11	0.0000	P	26.8
3	☐	50.000	50.918	4173.84	0.0004	P	3.2
4	☐	125.000	126.967	10057.89	0.0011	P	1.3
5	☐	250.000	265.015	20012.68	0.0023	P	2.0
6	☐	500.000	505.620	39188.80	0.0043	P	2.1
7	☐	1000.000	993.148	78283.47	0.0085	P	2.0
8	☐			-25.69	0.0000	P	-288.

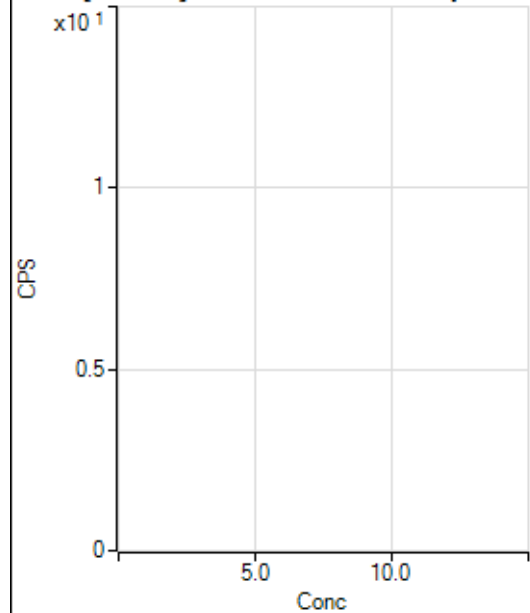
$$y = 8.5239E-006 * x - 2.7019E-006$$

$$R = 0.9998$$

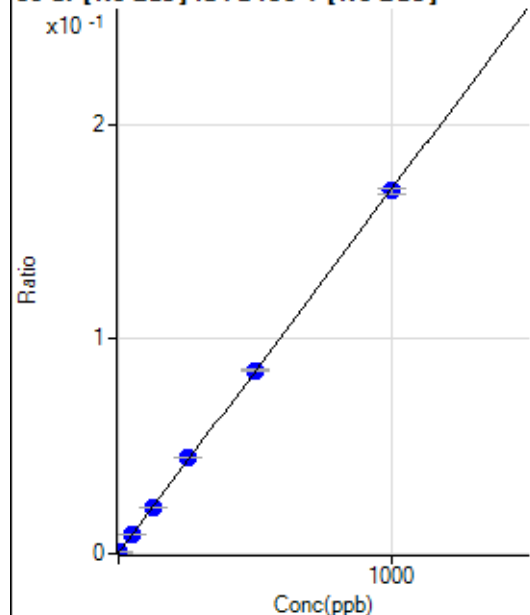
$$DL = 1.778$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1850.14		P	3.4
2	☐			1894.59		P	6.4
3	☐			1799.02		P	3.6
4	☐			1900.14		P	2.3
5	☐			1724.57		P	5.2
6	☐			1713.45		P	6.5
7	☐			1811.24		P	2.5
8	☐			1757.90		P	3.9

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

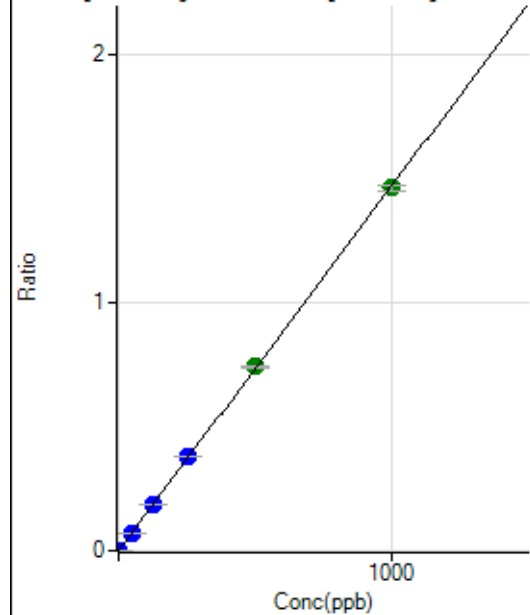
$$y = 1.6936E-004 * x + 3.0132E-004$$

$$R = 0.9999$$

$$DL = 0.192$$

Weight: <None>

Min Conc: 0

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

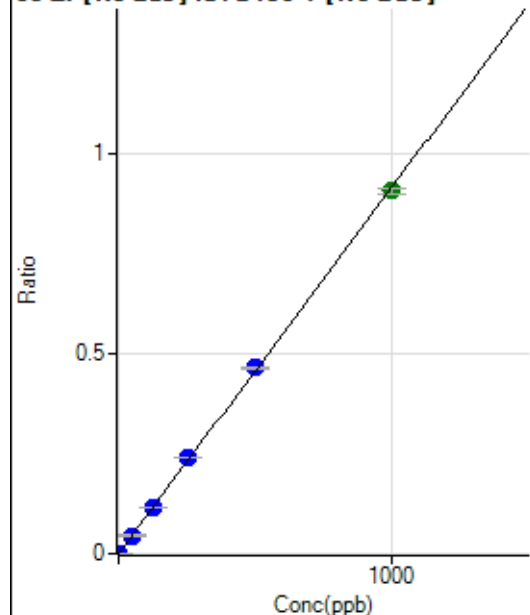
$$y = 0.0015 * x + 6.6668E-006$$

$$R = 0.9999$$

$$DL = 0.005533$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	347.24	0.0000	P	4.2
2	☐	1.000	0.969	8616.69	0.0009	P	2.4
3	☐	50.000	49.735	440671.44	0.0455	P	0.7
4	☐	125.000	126.919	1082085.62	0.1161	P	0.6
5	☐	250.000	263.752	2140651.59	0.2413	P	0.3
6	☐	500.000	509.170	4238736.90	0.4658	P	1.3
7	☐	1000.000	991.751	8393618.16	0.9073	A	1.3
8	☐			3739.48	0.0004	P	2.4

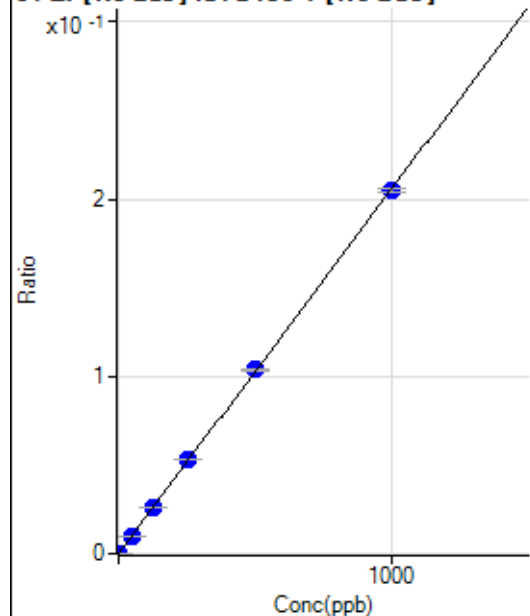
$$y = 9.1482\text{E-}004 * x + 3.8013\text{E-}005$$

$$R = 0.9998$$

$$DL = 0.005191$$

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	69.45	0.0000	P	17.3
2	☐	1.000	0.968	1925.17	0.0002	P	1.9
3	☐	50.000	49.559	98682.38	0.0102	P	0.8
4	☐	125.000	125.768	240986.83	0.0259	P	0.6
5	☐	250.000	260.086	474416.64	0.0535	P	0.5
6	☐	500.000	503.987	942908.36	0.1036	P	1.8
7	☐	1000.000	995.411	1893512.06	0.2047	P	1.0
8	☐			788.93	0.0001	P	11.0

$$y = 2.0561\text{E-}004 * x + 7.5934\text{E-}006$$

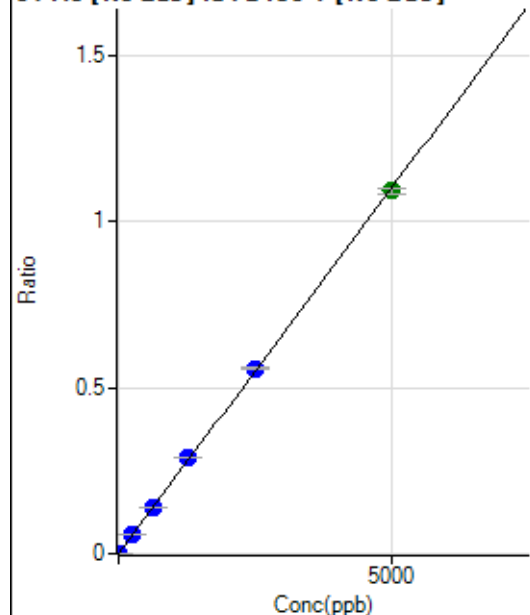
$$R = 0.9999$$

$$DL = 0.01915$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	138.89	0.0000	P	8.0
2	☐	5.000	5.054	10512.49	0.0011	P	0.9
3	☐	250.000	251.738	536784.41	0.0555	P	0.5
4	☐	625.000	632.432	1298061.75	0.1393	P	0.6
5	☐	1250.000	1315.159	2569924.62	0.2897	P	0.6
6	☐	2500.000	2535.955	5083000.94	0.5586	P	1.6
7	☐	5000.000	4964.717	10117073.40	1.0937	A	1.6
8	☐			4025.69	0.0004	P	0.6

$$y = 2.2028\text{E-}004 * x + 1.5211\text{E-}005$$

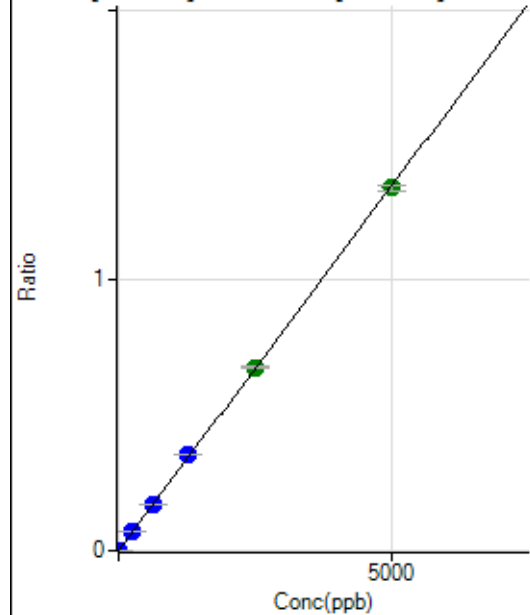
$$R = 0.9999$$

$$DL = 0.01664$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8.33	0.0000	P	173.2
2	☐	5.000	4.983	12516.86	0.0013	P	2.7
3	☐	250.000	252.999	659873.44	0.0682	P	0.6
4	☐	625.000	636.223	1597528.26	0.1715	P	0.6
5	☐	1250.000	1311.944	3136459.34	0.3536	P	0.5
6	☐	2500.000	2515.150	6168190.85	0.6779	A	1.0
7	☐	5000.000	4975.386	12404435.35	1.3409	A	1.7
8	☐			4570.30	0.0005	P	7.7

$$y = 2.6951\text{E-}004 * x + 8.9965\text{E-}007$$

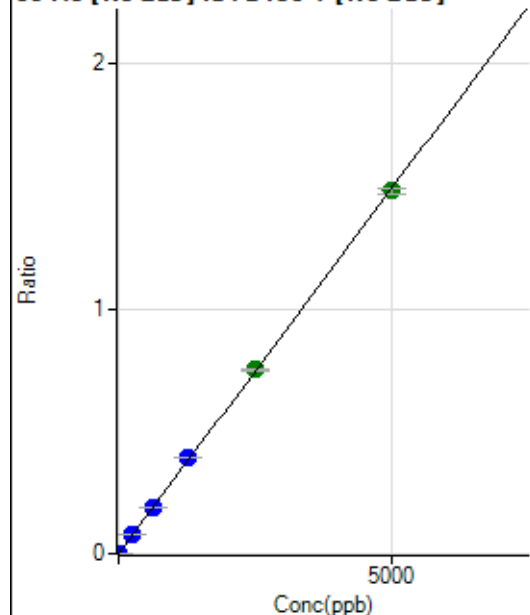
$$R = 0.9999$$

$$DL = 0.01735$$

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	47.22	0.0000	P	36.8
2	☐	5.000	5.170	14396.53	0.0015	P	2.1
3	☐	250.000	254.922	735092.58	0.0760	P	0.7
4	☐	625.000	635.961	1765397.63	0.1895	P	0.9
5	☐	1250.000	1323.908	3499155.33	0.3945	P	0.2
6	☐	2500.000	2518.084	6827256.23	0.7503	A	0.9
7	☐	5000.000	4970.864	13700677.48	1.4811	A	1.9
8	☐			5915.25	0.0006	P	6.8

$$y = 2.9795E-004 * x + 5.1673E-006$$

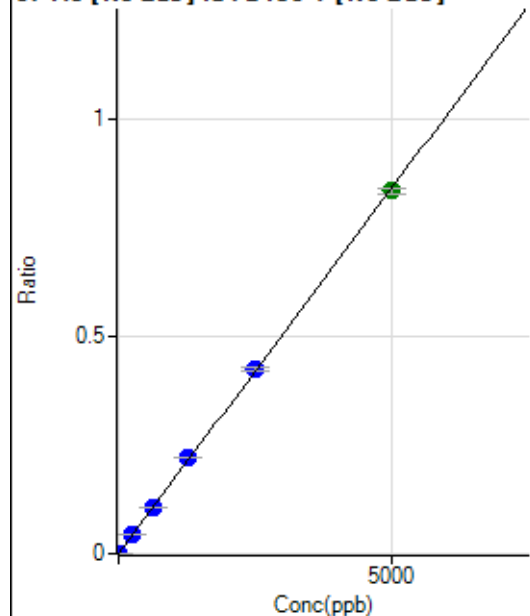
$$R = 0.9999$$

$$DL = 0.01913$$

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	8.33	0.0000	P	1.3
2	☐	5.000	5.058	7938.53	0.0009	P	4.2
3	☐	250.000	251.753	410087.14	0.0424	P	0.8
4	☐	625.000	636.065	997453.22	0.1071	P	0.7
5	☐	1250.000	1317.187	1966691.45	0.2217	P	0.2
6	☐	2500.000	2528.564	3872681.90	0.4256	P	1.4
7	☐	5000.000	4967.451	7734893.23	0.8361	A	1.5
8	☐			2844.78	0.0003	P	7.1

$$y = 1.6832E-004 * x + 9.1184E-007$$

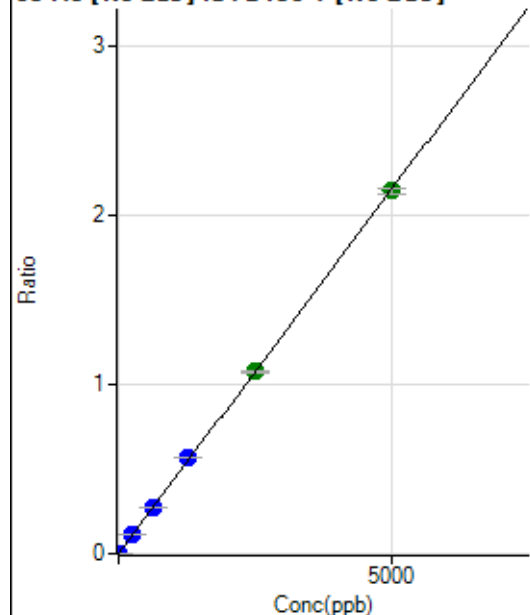
$$R = 0.9999$$

$$DL = 0.0002106$$

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	30.56	0.0000	P	42.6
2	☐	5.000	4.947	19900.36	0.0021	P	3.3
3	☐	250.000	252.242	1052659.29	0.1088	P	0.4
4	☐	625.000	637.203	2560033.61	0.2748	P	0.3
5	☐	1250.000	1319.586	5047586.05	0.5690	P	0.3
6	☐	2500.000	2501.285	9814929.38	1.0786	A	0.7
7	☐	5000.000	4980.323	19866920.76	2.1476	A	1.6
8	☐			7377.09	0.0008	P	1.4

$$y = 4.3122\text{E-}004 * x + 3.3569\text{E-}006$$

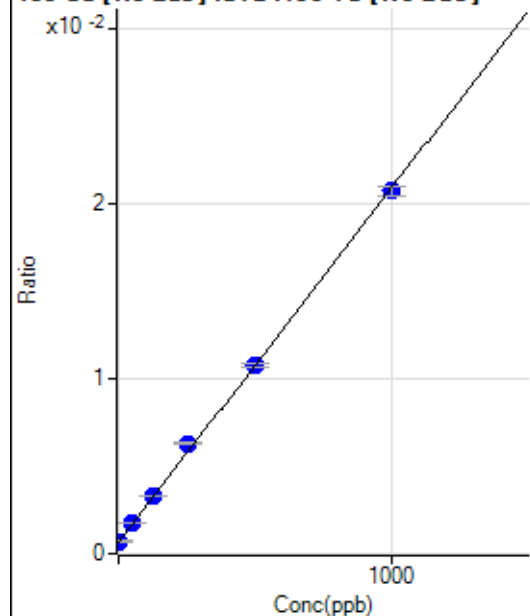
$$R = 0.9999$$

$$DL = 0.00996$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4311.87	0.0007	P	2.6
2	☐	1.000	2.157	4656.45	0.0007	P	6.4
3	☐	50.000	52.764	11894.17	0.0017	P	1.4
4	☐	125.000	131.008	22281.80	0.0033	P	2.1
5	☐	250.000	278.916	39873.16	0.0063	P	1.2
6	☐	500.000	499.785	72822.72	0.0108	P	1.4
7	☐	1000.000	991.988	142150.33	0.0207	P	2.6
8	☐			4453.61	0.0007	P	4.6

$$y = 2.0246\text{E-}005 * x + 6.6016\text{E-}004$$

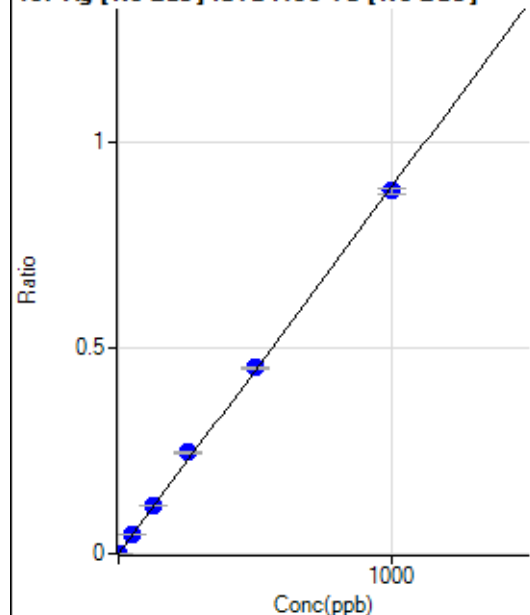
$$R = 0.9995$$

$$DL = 2.524$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	63.89	0.0000	P	51.8
2	☐	1.000	1.039	6179.27	0.0009	P	4.2
3	☐	50.000	53.059	324629.07	0.0472	P	1.3
4	☐	125.000	132.690	793597.48	0.1180	P	0.5
5	☐	250.000	275.375	1547306.43	0.2448	P	2.1
6	☐	500.000	506.180	3040046.23	0.4500	P	1.1
7	☐	1000.000	989.452	6027777.35	0.8796	P	1.8
8	☐			2514.18	0.0004	P	3.2

$$y = 8.8893\text{E-}004 * x + 9.8577\text{E-}006$$

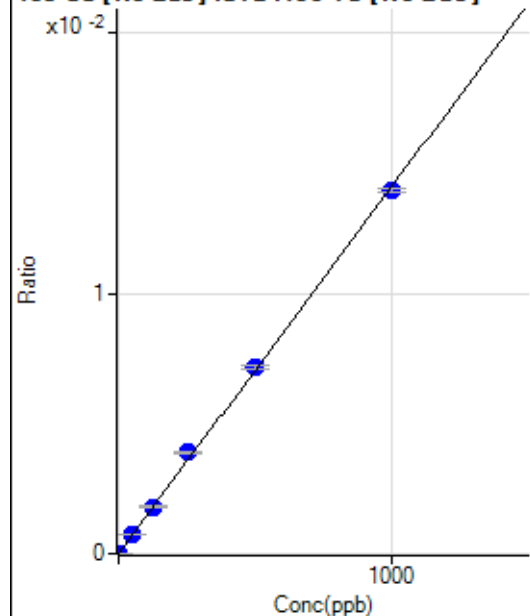
$$R = 0.9996$$

$$DL = 0.01724$$

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	31.94	0.0000	P	44.5
2	☐	1.000	1.370	159.73	0.0000	P	21.2
3	☐	50.000	51.541	5031.51	0.0007	P	1.3
4	☐	125.000	127.694	12135.83	0.0018	P	2.8
5	☐	250.000	275.404	24562.94	0.0039	P	2.5
6	☐	500.000	508.161	48412.67	0.0072	P	1.3
7	☐	1000.000	989.154	95569.55	0.0139	P	1.0
8	☐			91.67	0.0000	P	23.7

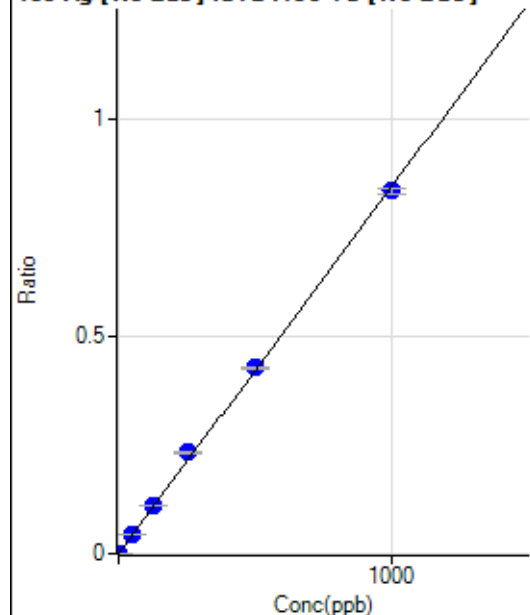
$$y = 1.4092\text{E-}005 * x + 4.8635\text{E-}006$$

$$R = 0.9996$$

$$DL = 0.4606$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.34	0.0000	P	44.1
2	☐	1.000	1.030	5798.55	0.0009	P	3.2
3	☐	50.000	53.259	309934.03	0.0450	P	0.6
4	☐	125.000	131.492	747967.04	0.1112	P	1.0
5	☐	250.000	275.754	1473742.60	0.2332	P	2.5
6	☐	500.000	506.874	2895626.26	0.4286	P	1.2
7	☐	1000.000	989.150	5732012.24	0.8364	P	1.6
8	☐			2475.28	0.0004	P	4.8

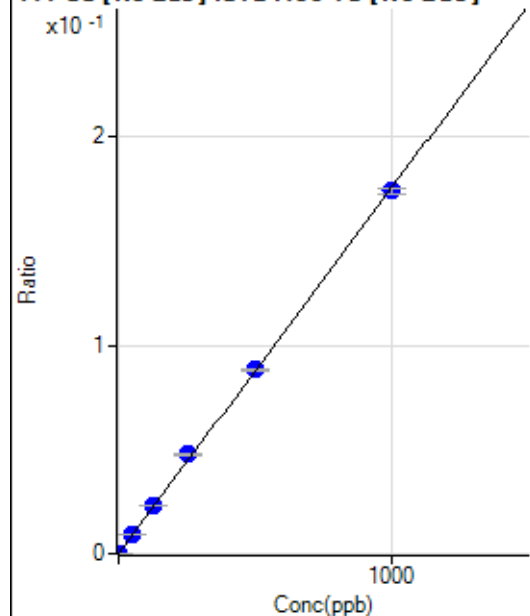
$$y = 8.4556E-004 * x + 5.1237E-006$$

$$R = 0.9996$$

$$DL = 0.008015$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	198.79	0.0000	P	5.0
2	☐	1.000	1.206	1603.06	0.0002	P	2.9
3	☐	50.000	52.494	63619.41	0.0092	P	0.7
4	☐	125.000	129.579	153217.67	0.0228	P	0.7
5	☐	250.000	272.601	302660.65	0.0479	P	1.6
6	☐	500.000	502.823	596536.74	0.0883	P	0.8
7	☐	1000.000	992.241	1193912.80	0.1742	P	1.3
8	☐			740.48	0.0001	P	11.2

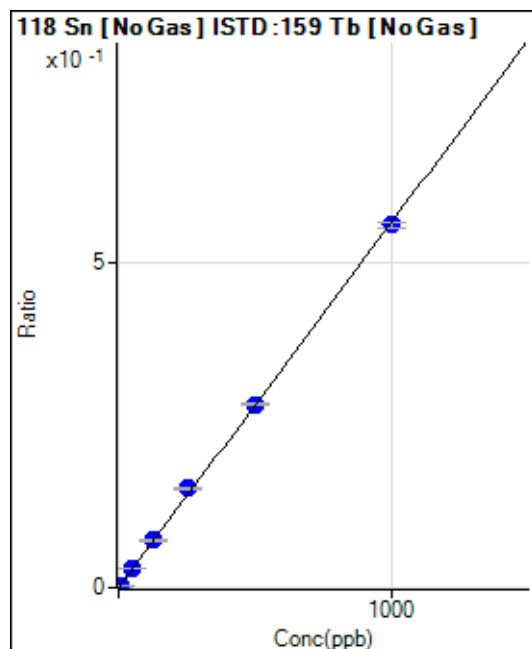
$$y = 1.7554E-004 * x + 3.0460E-005$$

$$R = 0.9997$$

$$DL = 0.02603$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	444.46	0.0001	P	8.1
2	☐	5.000	5.114	19530.70	0.0030	P	1.8
3	☐	50.000	51.927	201887.22	0.0293	P	0.3
4	☐	125.000	128.887	489164.65	0.0727	P	1.4
5	☐	250.000	271.141	966503.78	0.1529	P	1.8
6	☐	500.000	502.191	1912883.66	0.2831	P	1.2
7	☐	1000.000	993.036	3836508.81	0.5598	P	1.7
8	☐			2583.69	0.0004	P	11.0

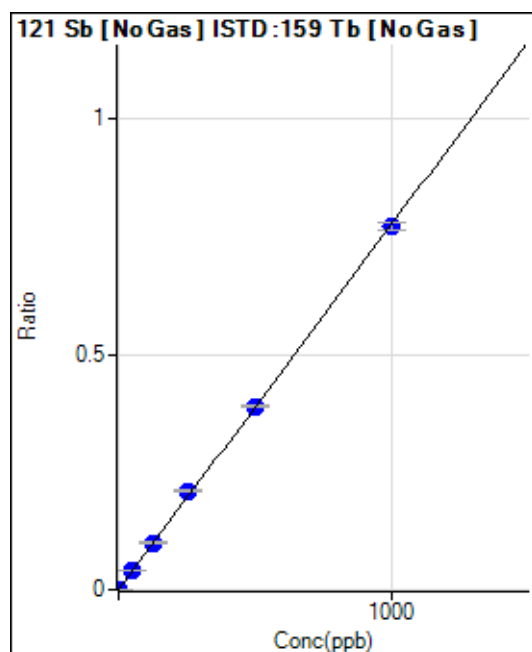
$$y = 5.6367\text{E-}004 * x + 6.8009\text{E-}005$$

$$R = 0.9997$$

$$DL = 0.02924$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	58.34	0.0000	P	52.0
2	☐	2.000	1.970	10178.94	0.0015	P	4.2
3	☐	50.000	51.208	273611.44	0.0398	P	0.5
4	☐	125.000	128.307	670052.19	0.0996	P	1.3
5	☐	250.000	269.975	1324737.51	0.2096	P	1.9
6	☐	500.000	502.681	2636301.19	0.3902	P	1.5
7	☐	1000.000	993.192	5283517.52	0.7710	P	2.1
8	☐			3700.59	0.0006	P	4.5

$$y = 7.7627\text{E-}004 * x + 9.0013\text{E-}006$$

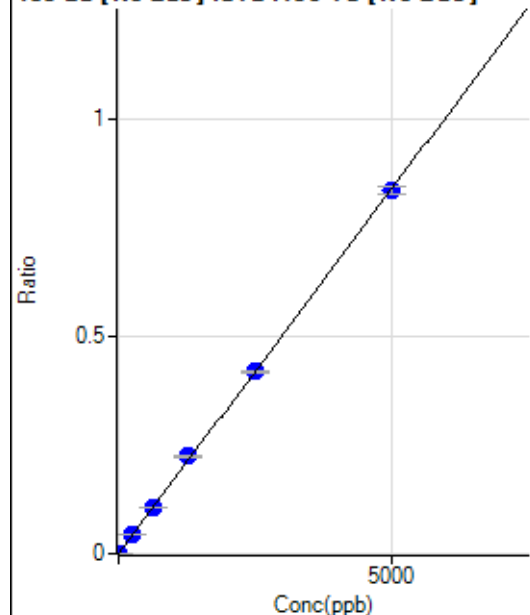
$$R = 0.9998$$

$$DL = 0.01807$$

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	11.11	0.0000	P	42.0
2	☐	10.000	10.330	11488.33	0.0017	P	2.9
3	☐	250.000	254.895	294514.30	0.0428	P	1.0
4	☐	625.000	634.630	716739.74	0.1066	P	1.7
5	☐	1250.000	1340.041	1422122.05	0.2250	P	2.0
6	☐	2500.000	2498.329	2833836.61	0.4195	P	1.6
7	☐	5000.000	4976.876	5726323.00	0.8356	P	2.2
8	☐			1961.31	0.0003	P	2.9

$$y = 1.6790\text{E-}004 * x + 1.6961\text{E-}006$$

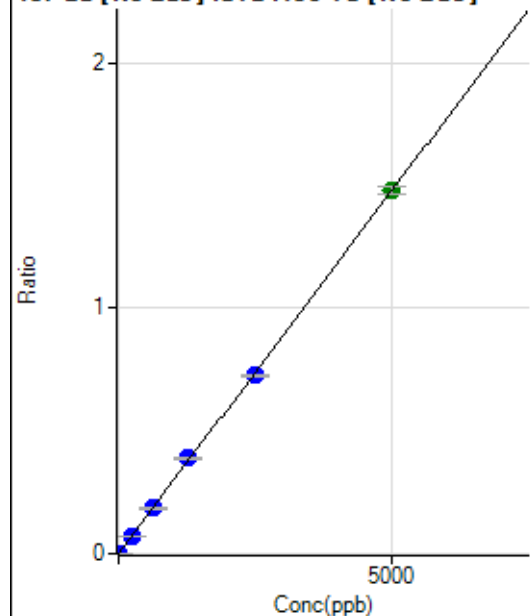
$$R = 0.9998$$

$$DL = 0.01274$$

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	27.78	0.0000	P	74.7
2	☐	10.000	10.210	19984.28	0.0030	P	3.6
3	☐	250.000	249.175	506402.00	0.0736	P	0.4
4	☐	625.000	624.638	1240849.97	0.1845	P	1.7
5	☐	1250.000	1321.875	2467395.50	0.3904	P	2.2
6	☐	2500.000	2458.355	4904638.04	0.7260	P	1.6
7	☐	5000.000	5002.940	10125199.79	1.4774	A	1.9
8	☐			3089.32	0.0005	P	9.2

$$y = 2.9531\text{E-}004 * x + 4.2176\text{E-}006$$

$$R = 0.9998$$

$$DL = 0.03202$$

Weight: <None>

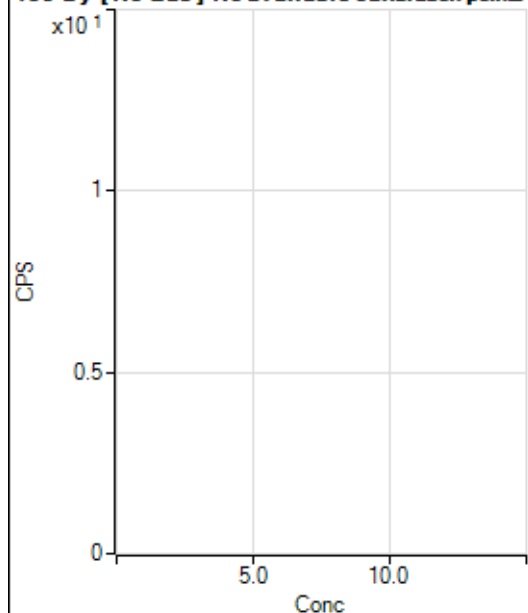
Min Conc: 0

150 Nd [No Gas] No available calibration points

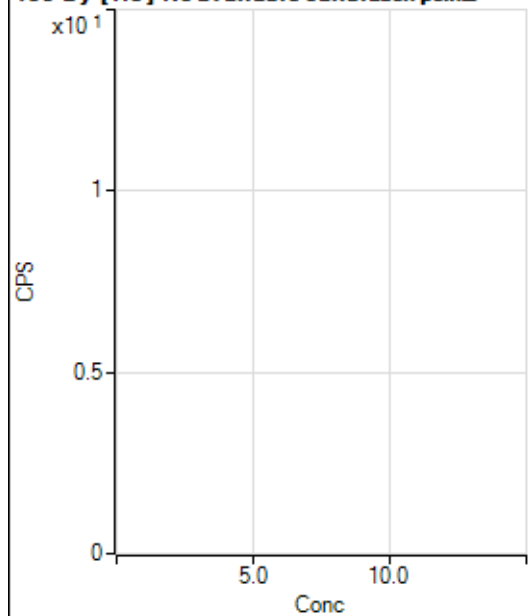
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐			0.00		P	
3	☐			17.78		P	114.6
4	☐			53.33		P	25.0
5	☐			115.56		P	23.3
6	☐			160.00		P	11.0
7	☐			351.12		P	2.9
8	☐			33.33		P	20.0

150 Nd [He] No available calibration points

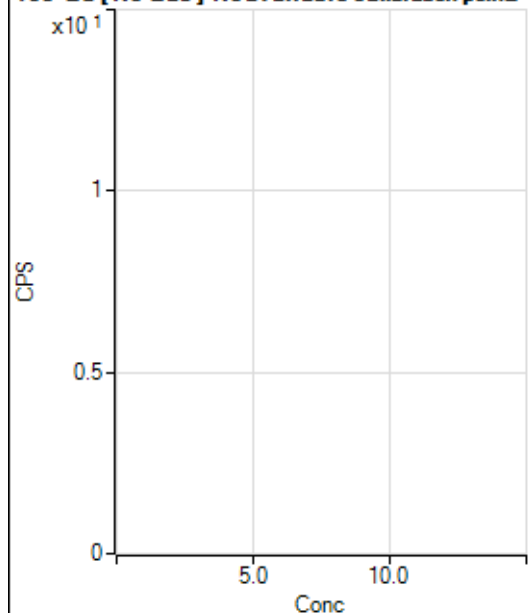
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐			0.00		P	
3	☐			6.67		P	50.0
4	☐			11.11		P	17.3
5	☐			16.67		P	20.0
6	☐			41.11		P	36.6
7	☐			81.11		P	14.4
8	☐			13.33		P	50.0

156 Dy [No Gas] No available calibration points

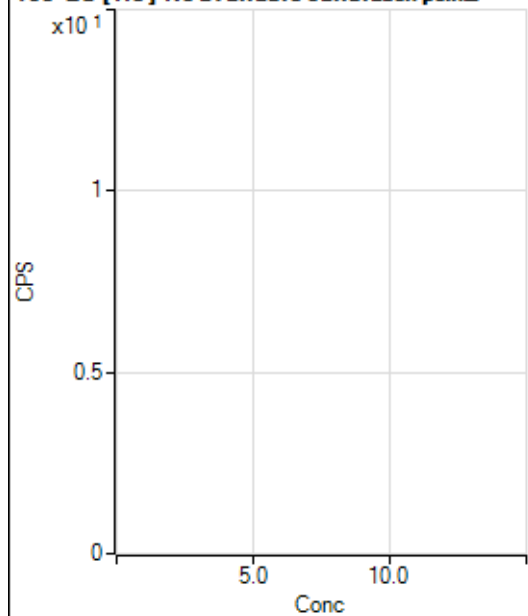
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.33		P	0.0
2	☐			8.33		P	100.0
3	☐			16.67		P	50.0
4	☐			22.22		P	108.3
5	☐			50.00		P	44.1
6	☐			122.23		P	20.8
7	☐			163.89		P	12.8
8	☐			1219.53		P	5.2

156 Dy [He] No available calibration points

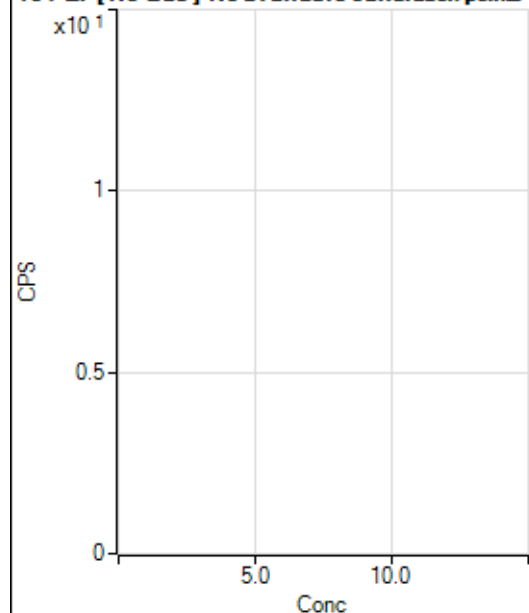
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	43.3
2	☐			1.11		P	173.2
3	☐			20.00		P	28.9
4	☐			15.56		P	12.4
5	☐			32.22		P	15.8
6	☐			50.00		P	29.1
7	☐			108.89		P	11.6
8	☐			882.26		P	1.4

160 Gd [No Gas] Noavailable calibration poin...

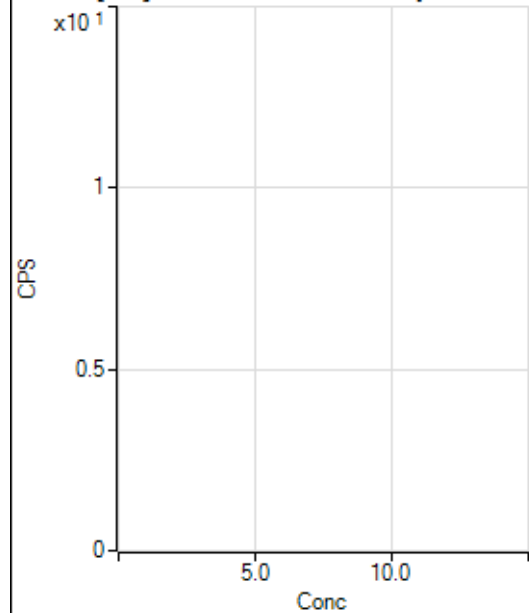
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			55.56		P	31.2
2	☐			50.00		P	16.7
3	☐			47.22		P	56.7
4	☐			72.23		P	26.7
5	☐			86.11		P	29.6
6	☐			122.22		P	3.9
7	☐			177.79		P	21.7
8	☐			1414.00		P	5.1

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			57.78		P	27.3
2	☐			61.11		P	6.3
3	☐			67.78		P	32.0
4	☐			71.11		P	31.2
5	☐			82.22		P	8.4
6	☐			98.89		P	13.6
7	☐			122.23		P	6.9
8	☐			1053.39		P	9.0

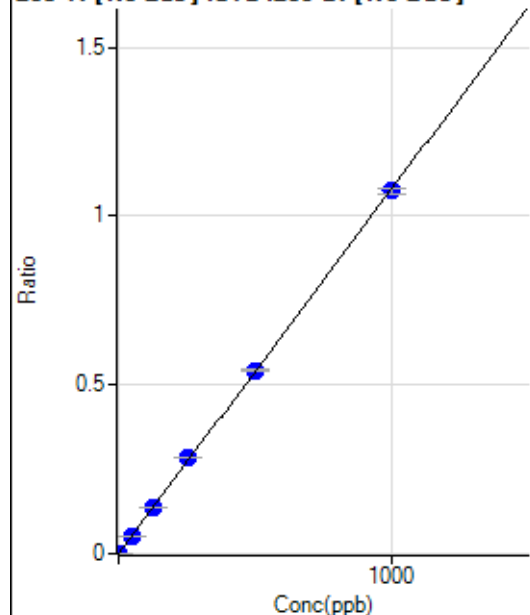
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			38.89		P	32.7
2	☐			36.11		P	26.7
3	☐			33.33		P	90.1
4	☐			22.22		P	43.3
5	☐			41.67		P	52.9
6	☐			33.33		P	86.6
7	☐			77.78		P	30.9
8	☐			150.01		P	33.8

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			15.56		P	61.9
2	☐			25.55		P	27.1
3	☐			24.44		P	34.3
4	☐			18.89		P	20.4
5	☐			24.44		P	56.8
6	☐			46.66		P	32.7
7	☐			26.66		P	21.7
8	☐			155.56		P	16.4

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	366.68	0.0001	P	9.5
2	☐	1.000	0.952	4423.07	0.0011	P	3.2
3	☐	50.000	49.616	217703.13	0.0536	P	0.7
4	☐	125.000	125.004	537419.15	0.1350	P	0.6
5	☐	250.000	262.092	1075799.63	0.2829	P	0.1
6	☐	500.000	503.389	2149199.42	0.5433	P	1.2
7	☐	1000.000	995.301	4282461.90	1.0741	P	1.4
8	☐			1844.61	0.0005	P	9.3

$$y = 0.0011 * x + 9.2789E-005$$

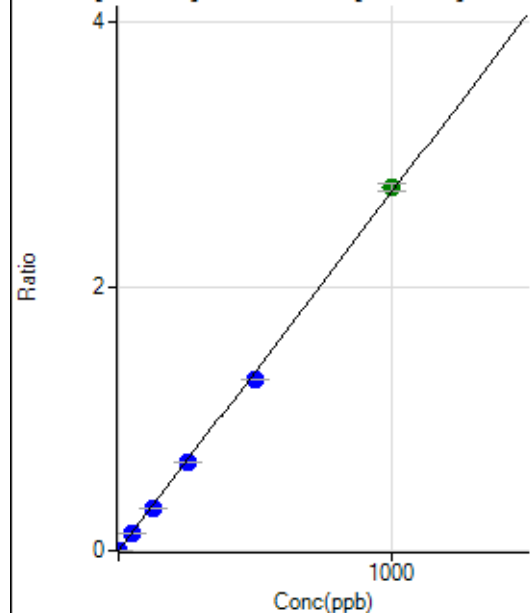
$$R = 0.9999$$

$$DL = 0.02451$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	800.05	0.0002	P	4.2
2	☐	1.000	0.920	10651.78	0.0027	P	3.8
3	☐	50.000	46.626	514407.27	0.1267	P	1.8
4	☐	125.000	117.910	1274737.77	0.3202	P	0.7
5	☐	250.000	248.496	2565050.14	0.6745	P	0.2
6	☐	500.000	477.803	5130224.77	1.2968	P	0.8
7	☐	1000.000	1012.530	10955272.73	2.7479	A	2.3
8	☐			4256.36	0.0012	P	12.0

$$y = 0.0027 * x + 2.0247E-004$$

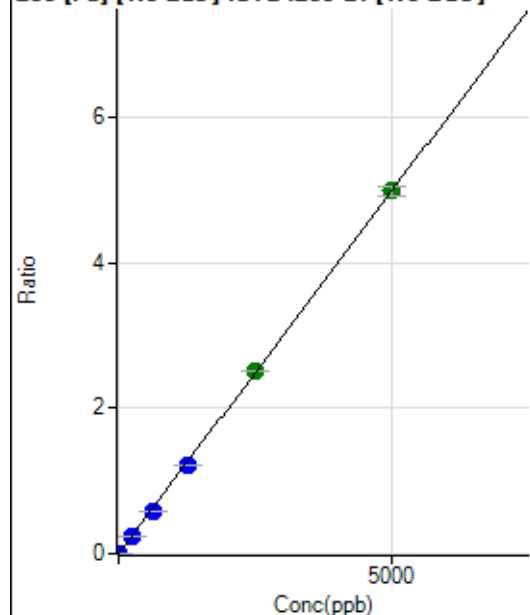
$$R = 0.9996$$

$$DL = 0.009363$$

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	531.50	0.0001	P	15.4
2	☐	1.000	0.821	3754.31	0.0010	P	2.9
3	☐	250.000	227.463	919283.18	0.2265	P	0.5
4	☐	625.000	574.423	2276215.59	0.5717	P	0.5
5	☐	1250.000	1214.697	4596621.92	1.2088	P	0.3
6	☐	2500.000	2518.214	9913362.49	2.5058	A	0.5
7	☐	5000.000	5007.168	19863877.99	4.9824	A	2.4
8	☐			22124.15	0.0060	P	2.0

$$y = 9.9503\text{E-}004 * x + 1.3466\text{E-}004$$

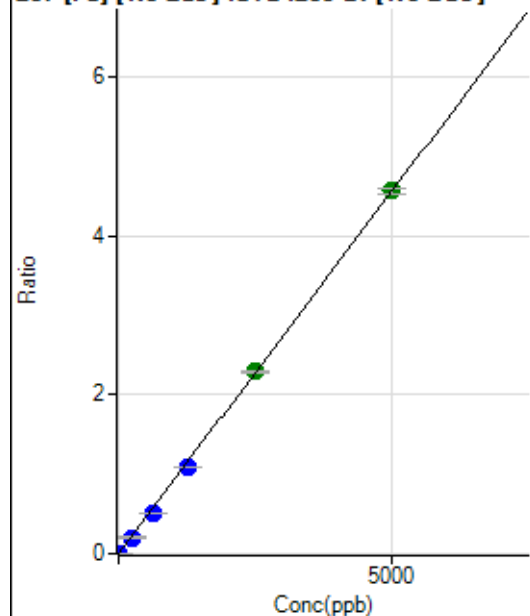
$$R = 0.9999$$

$$DL = 0.06264$$

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	401.86	0.0001	P	9.1
2	☐	1.000	0.867	3519.04	0.0009	P	4.7
3	☐	250.000	224.927	832147.63	0.2050	P	0.9
4	☐	625.000	568.885	2063781.56	0.5183	P	0.4
5	☐	1250.000	1199.337	4155062.59	1.0927	P	0.3
6	☐	2500.000	2518.081	9075122.48	2.2940	A	0.8
7	☐	5000.000	5011.893	18204553.42	4.5658	A	1.4
8	☐			20052.31	0.0055	P	1.6

$$y = 9.1097\text{E-}004 * x + 1.0176\text{E-}004$$

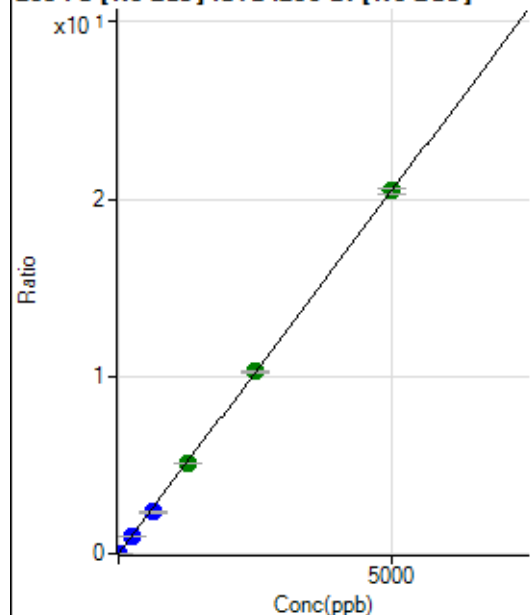
$$R = 0.9999$$

$$DL = 0.03063$$

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	1924.16	0.0005	P	4.6
2	☐	1.000	0.847	15600.15	0.0040	P	1.4
3	☐	250.000	226.031	3756175.72	0.9254	P	0.7
4	☐	625.000	569.939	9287079.78	2.3325	P	0.2
5	☐	1250.000	1253.631	19507736.72	5.1300	A	0.3
6	☐	2500.000	2513.054	40681001.66	10.2833	A	0.8
7	☐	5000.000	5000.647	81582547.20	20.4619	A	1.6
8	☐			90387.61	0.0247	P	1.8

$$y = 0.0041 * x + 4.8718E-004$$

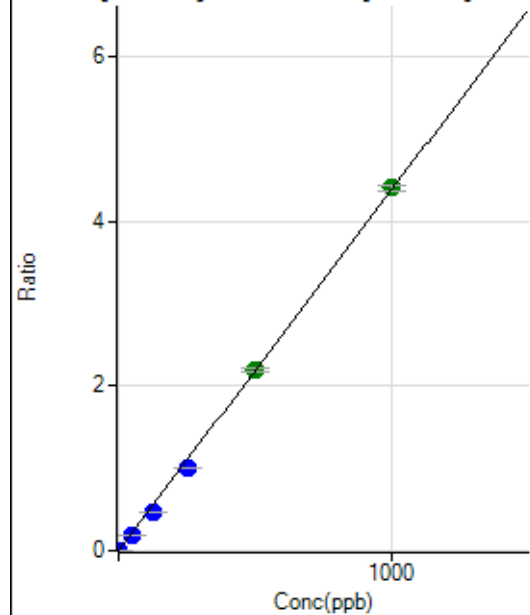
$$R = 0.9999$$

$$DL = 0.01658$$

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	194.45	0.0000	P	18.7
2	☐	1.000	-0.001	175.93	0.0000	P	37.6
3	☐	50.000	42.194	751251.17	0.1851	P	0.5
4	☐	125.000	108.373	1892229.96	0.4753	P	1.1
5	☐	250.000	231.312	3857271.30	1.0144	P	0.3
6	☐	500.000	501.797	8704821.14	2.2005	A	1.4
7	☐	1000.000	1006.243	17593678.75	4.4125	A	1.3
8	☐			6405.40	0.0017	P	16.8

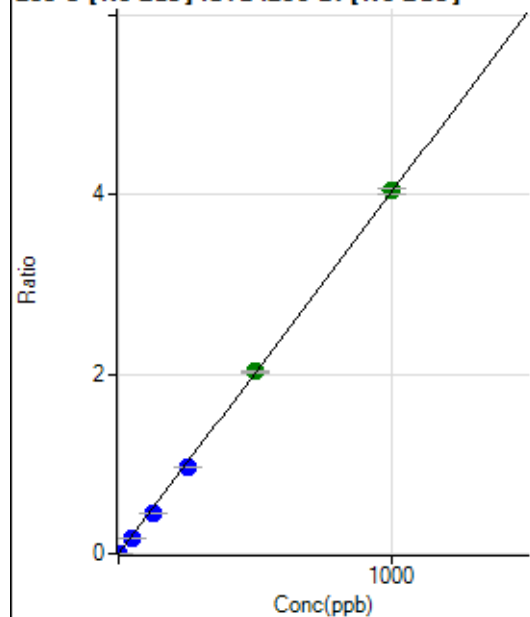
$$y = 0.0044 * x + 4.9279E-005$$

$$R = 0.9997$$

$$DL = 0.006308$$

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	11.11	0.0000	P	115.3
2	☐	1.000	0.886	14113.49	0.0036	P	1.6
3	☐	50.000	43.555	712889.46	0.1756	P	0.7
4	☐	125.000	111.418	1788691.10	0.4493	P	0.6
5	☐	250.000	237.192	3636820.35	0.9564	P	0.2
6	☐	500.000	503.403	8029639.07	2.0298	A	1.5
7	☐	1000.000	1003.521	16132412.00	4.0463	A	1.8
8	☐			3039.34	0.0008	P	15.2

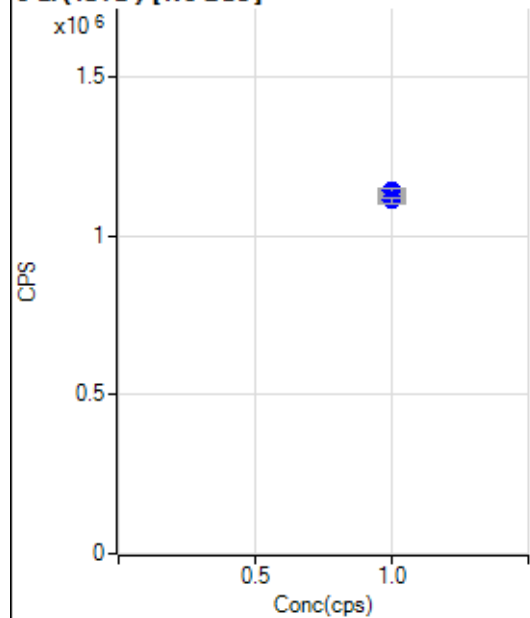
$$y = 0.0040 * x + 2.8210E-006$$

$$R = 0.9998$$

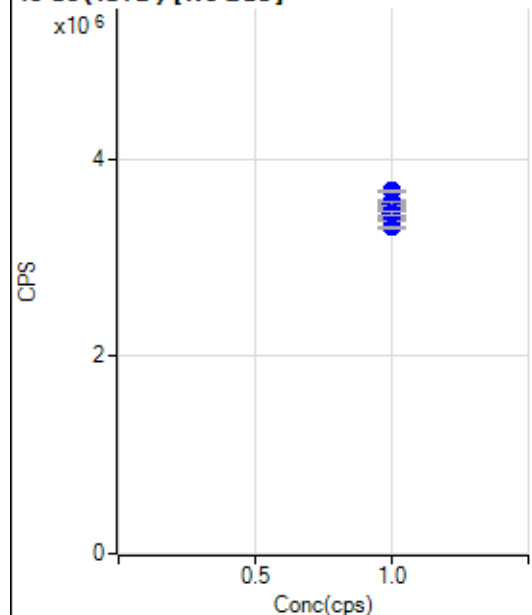
$$DL = 0.002421$$

Weight: <None>

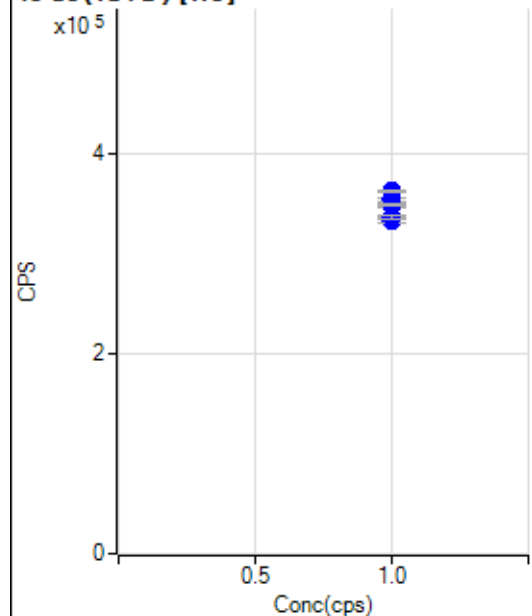
Min Conc: 0

6 Li (ISTD) [No Gas]

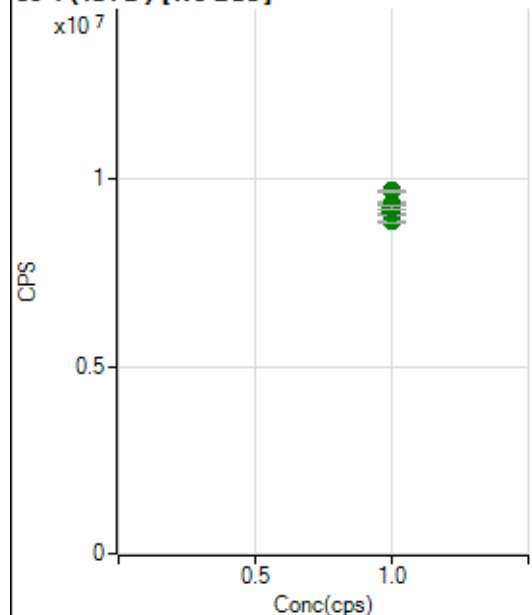
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		1121146.88		P	1.1
2	☐	1.000		1117848.77		P	0.3
3	☐	1.000		1135517.22		P	1.0
4	☐	1.000		1139914.05		P	0.5
5	☐	1.000		1115806.30		P	0.5
6	☐	1.000		1140218.33		P	1.4
7	☐	1.000		1114964.81		P	1.4
8	☐	1.000		1111484.96		P	1.5

45 Sc (ISTD) [No Gas]

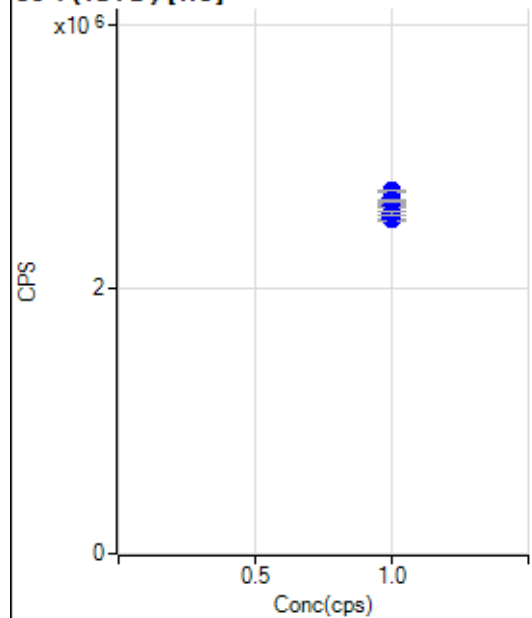
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3502999.91		P	0.7
2	☐	1.000		3567724.25		P	0.9
3	☐	1.000		3675307.44		P	0.7
4	☐	1.000		3545556.23		P	0.7
5	☐	1.000		3304160.82		P	0.7
6	☐	1.000		3402782.42		P	0.8
7	☐	1.000		3419119.74		P	2.5
8	☐	1.000		3455637.27		P	1.2

45 Sc (ISTD) [He]

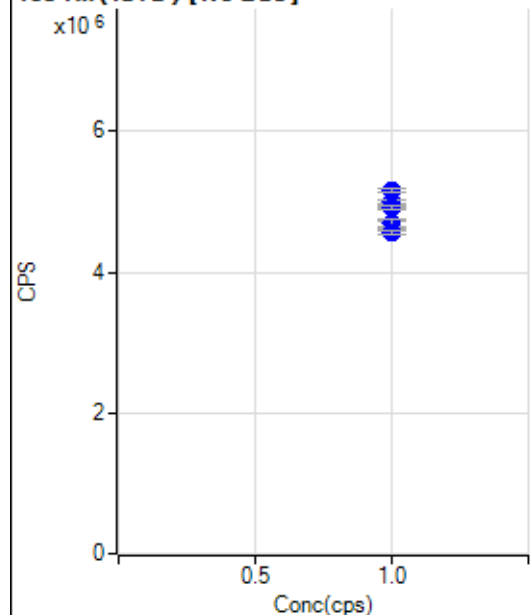
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		353600.42		P	1.1
2	☐	1.000		356385.90		P	2.8
3	☐	1.000		363126.16		P	0.6
4	☐	1.000		348998.63		P	1.0
5	☐	1.000		334693.30		P	1.7
6	☐	1.000		333113.90		P	0.7
7	☐	1.000		336279.21		P	1.3
8	☐	1.000		348720.06		P	0.6

89 Y (ISTD) [No Gas]

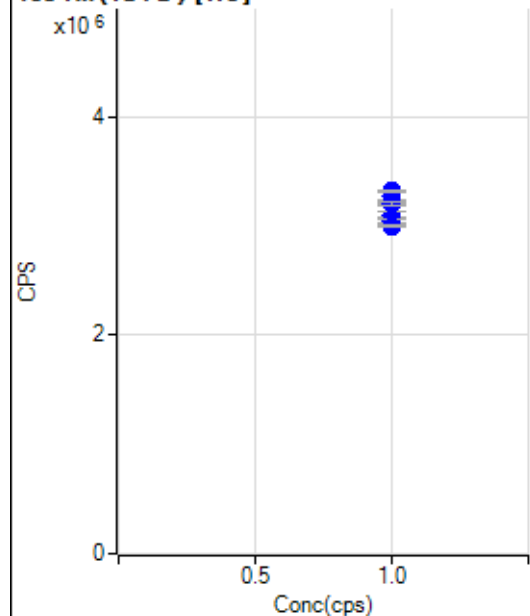
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9136423.13		A	1.3
2	☐	1.000		9316571.18		A	1.2
3	☐	1.000		9677410.48		A	0.4
4	☐	1.000		9316886.25		A	0.9
5	☐	1.000		8870570.15		A	0.6
6	☐	1.000		9100252.16		A	1.4
7	☐	1.000		9252607.43		A	1.9
8	☐	1.000		9238701.94		A	1.2

89 Y (ISTD) [He]

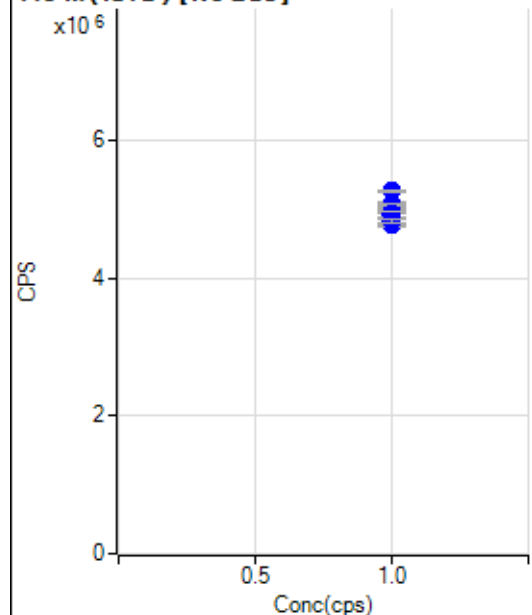
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2648151.68		P	0.9
2	☐	1.000		2689183.50		P	3.3
3	☐	1.000		2743741.35		P	0.8
4	☐	1.000		2632974.75		P	1.2
5	☐	1.000		2546193.23		P	1.4
6	☐	1.000		2535803.09		P	1.3
7	☐	1.000		2574600.90		P	0.9
8	☐	1.000		2668788.76		P	0.4

103 Rh (ISTD) [No Gas]

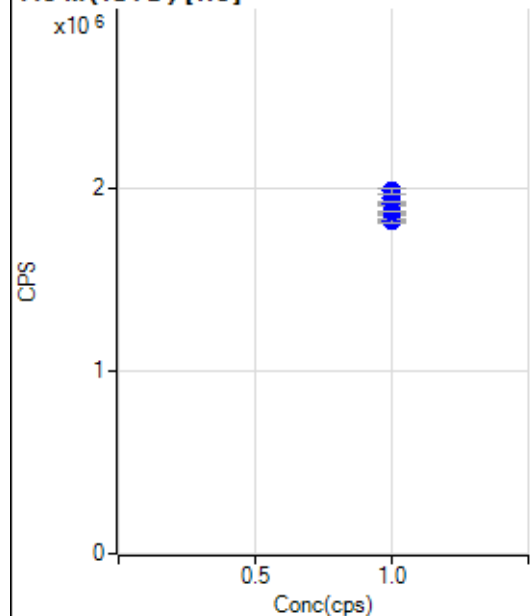
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4931967.98		P	0.5
2	☐	1.000		4993436.38		P	1.2
3	☐	1.000		5154594.20		P	1.1
4	☐	1.000		4914792.56		P	0.7
5	☐	1.000		4613775.56		P	0.5
6	☐	1.000		4687147.99		P	1.4
7	☐	1.000		4697514.48		P	2.2
8	☐	1.000		4555635.07		P	1.0

103 Rh (ISTD) [He]

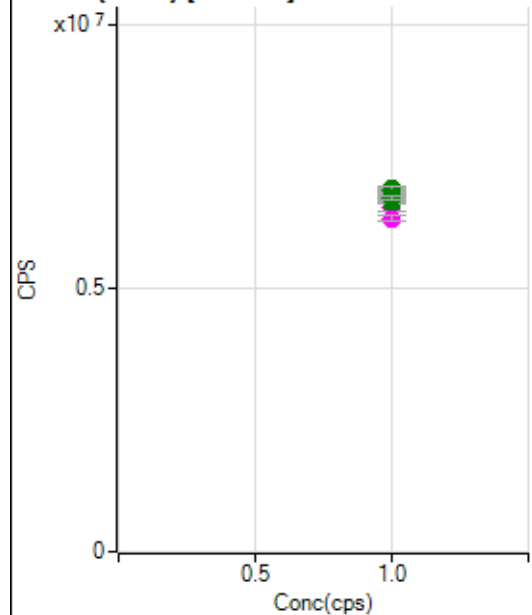
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3214574.74		P	1.1
2	☐	1.000		3272085.12		P	3.3
3	☐	1.000		3318693.08		P	0.7
4	☐	1.000		3197644.15		P	1.2
5	☐	1.000		3095558.22		P	1.9
6	☐	1.000		3053836.38		P	1.4
7	☐	1.000		3044219.96		P	1.5
8	☐	1.000		2993078.64		P	0.4

115 In (ISTD) [No Gas]

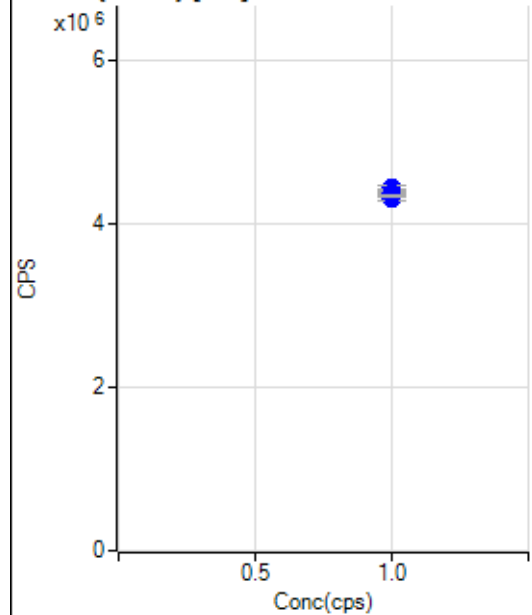
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5025148.11		P	0.9
2	☐	1.000		5071608.86		P	1.5
3	☐	1.000		5266846.79		P	0.7
4	☐	1.000		5070054.40		P	0.7
5	☐	1.000		4759954.36		P	0.6
6	☐	1.000		4901358.14		P	1.2
7	☐	1.000		4932387.73		P	1.6
8	☐	1.000		4821380.89		P	1.0

115 In (ISTD) [He]

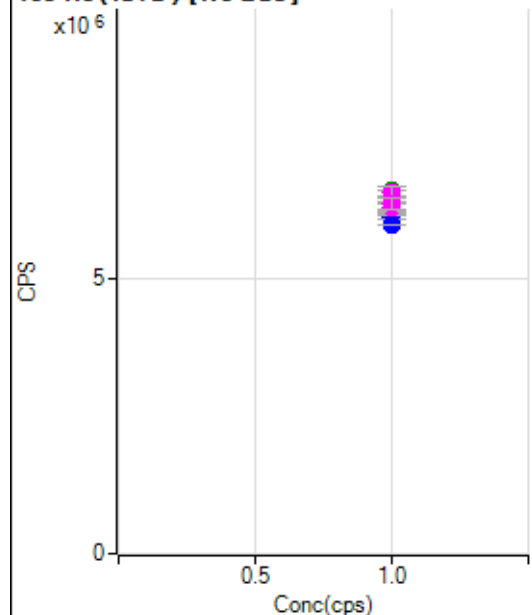
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1912743.89		P	1.1
2	☐	1.000		1942634.50		P	2.8
3	☐	1.000		1982534.97		P	1.2
4	☐	1.000		1910058.54		P	1.1
5	☐	1.000		1844354.71		P	1.5
6	☐	1.000		1831887.22		P	1.5
7	☐	1.000		1821631.96		P	1.3
8	☐	1.000		1870546.06		P	0.4

159 Tb (ISTD) [No Gas]

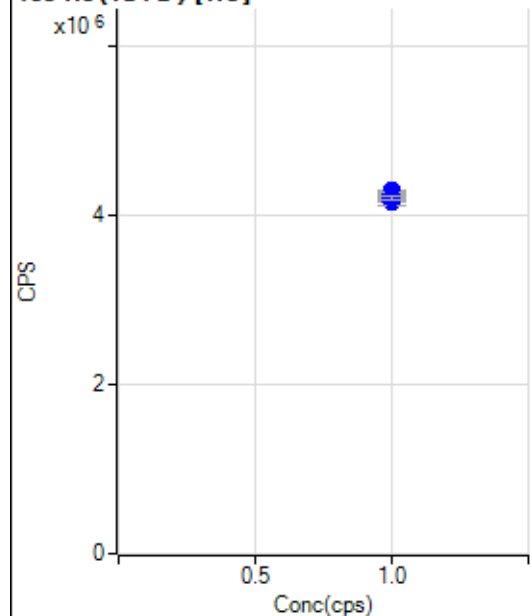
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6530437.26		M	2.2
2	☐	1.000		6618319.76		A	0.9
3	☐	1.000		6881582.33		A	0.6
4	☐	1.000		6727561.50		A	1.5
5	☐	1.000		6322291.92		M	1.8
6	☐	1.000		6756815.53		A	1.5
7	☐	1.000		6854646.98		A	1.9
8	☐	1.000		6706499.62		A	1.0

159 Tb (ISTD) [He]

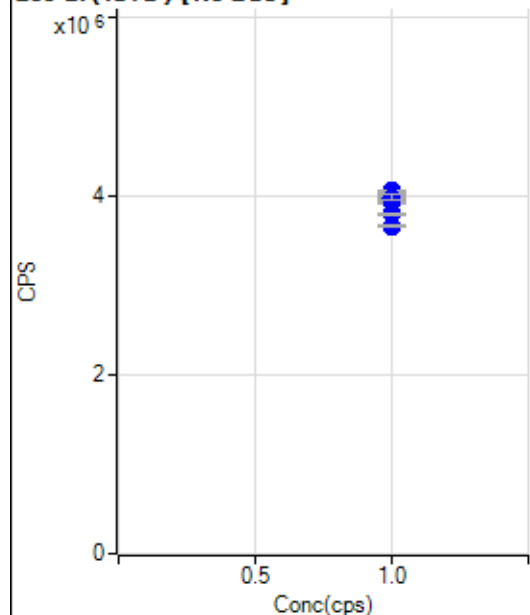
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4313660.42		P	1.3
2	☐	1.000		4332867.05		P	3.0
3	☐	1.000		4435247.61		P	1.1
4	☐	1.000		4351315.91		P	1.3
5	☐	1.000		4308094.69		P	1.4
6	☐	1.000		4345505.91		P	1.2
7	☐	1.000		4361350.11		P	1.7
8	☐	1.000		4340263.83		P	0.8

165 Ho (ISTD) [No Gas]

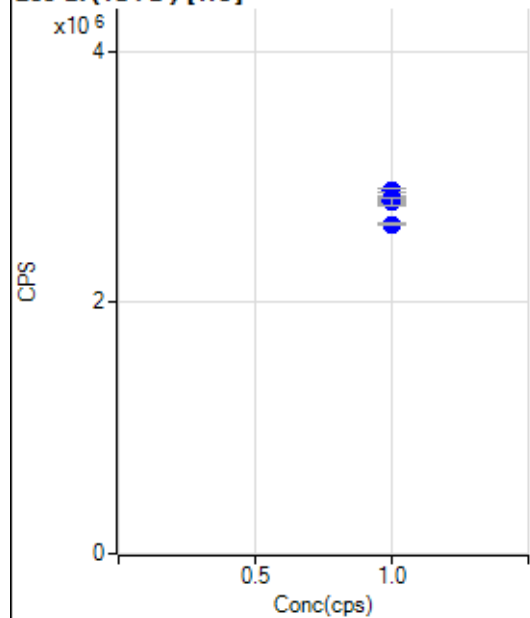
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6137882.13		P	0.9
2	☐	1.000		6303020.12		M	3.5
3	☐	1.000		6608371.22		A	0.1
4	☐	1.000		6301412.20		M	2.5
5	☐	1.000		5994922.00		P	0.4
6	☐	1.000		6487857.61		A	0.6
7	☐	1.000		6580118.93		M	3.0
8	☐	1.000		6374103.31		M	3.7

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4177959.45		P	0.8
2	☐	1.000		4175920.35		P	2.7
3	☐	1.000		4295883.27		P	0.5
4	☐	1.000		4209500.70		P	1.2
5	☐	1.000		4172288.79		P	2.0
6	☐	1.000		4228355.74		P	1.5
7	☐	1.000		4249036.53		P	1.6
8	☐	1.000		4208220.63		P	0.8

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3950849.11		P	1.1
2	☐	1.000		3946757.79		P	1.4
3	☐	1.000		4059304.56		P	0.6
4	☐	1.000		3981564.77		P	0.9
5	☐	1.000		3802664.81		P	0.4
6	☐	1.000		3956135.67		P	0.6
7	☐	1.000		3987712.58		P	1.6
8	☐	1.000		3663661.41		P	0.8

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2828447.60		P	0.9
2	☐	1.000		2808395.52		P	2.8
3	☐	1.000		2886573.81		P	0.9
4	☐	1.000		2830391.62		P	0.6
5	☐	1.000		2800140.44		P	1.6
6	☐	1.000		2818253.81		P	1.2
7	☐	1.000		2801404.78		P	1.8
8	☐	1.000		2622641.26		P	0.8

US EPA Tune Check Sample Report

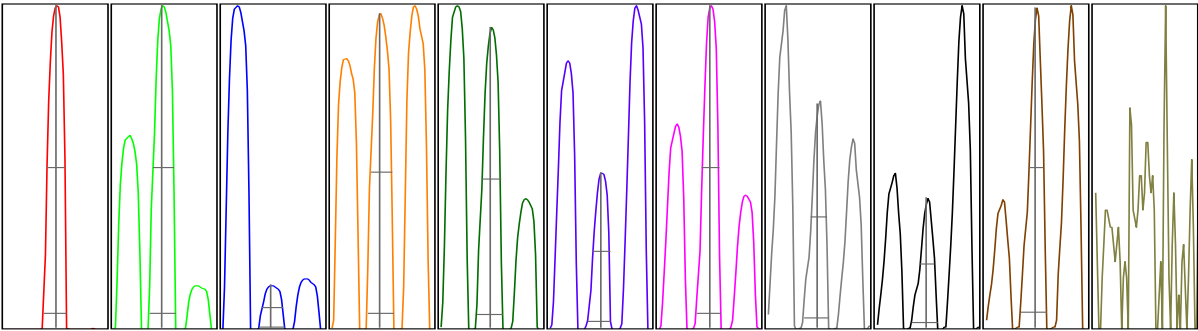
Batch Folder C:\Agilent\ICPMH\1\DATA\P7010521IMS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	2936	0.73	5.00	
24	41008	0.44	5.00	
25	5447	0.56	5.00	
26	6443	0.38	5.00	
59	8100	0.46	5.00	
113	4530	0.72	5.00	
115	14784	4.72	5.00	
206	5241	0.69	5.00	
207	4363	0.38	5.00	
208	10847	0.43	5.00	
220	0	65.62		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	2924	2922	2916	2967	2949
24	40888	40779	41231	41123	41022
25	5410	5428	5438	5477	5480
26	6414	6430	6446	6445	6481
59	8093	8073	8075	8094	8164
113	4569	4557	4511	4491	4520
115	15804	15133	14587	14367	14028
206	5280	5228	5185	5258	5253
207	4350	4349	4366	4361	4390
208	10836	10882	10836	10780	10899
220	1	0	0	0	1

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	5577	9.05	8.9 - 9.1		0.686	0.900	
24	69872	23.95	23.9 - 24.1		0.775	0.900	
25	9416	24.95	24.9 - 25.1		0.740	0.900	
26	10936	25.95	25.9 - 26.1		0.780	0.900	
59	15344	59.00	58.9 - 59.1		0.759	0.900	
113	9369	113.05	112.9 - 113.1		0.660	0.900	
115	30581	115.05	114.9 - 115.1		0.719	0.900	
206	11463	206.00	205.9 - 206.1		0.732	0.900	
207	9717	207.00	206.9 - 207.1		0.751	0.900	
208	24082	208.00	207.9 - 208.1		0.760	0.900	
220			-				

X% = 5 Integration Time [sec] = 0.1 Acquisition Time [sec] = 256.8 Y Axis = Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.62	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		0.40 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	11.6	V	Deflect	14.0	V
Extract 2	-180.0	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	190	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	3414	0.82	
89	179226	0.56	
205	4910	0.69	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	3406	3455	3404	3380	3426
89	178963	180341	179491	177679	179657
205	4923	4875	4959	4913	4882

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.62	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		0.40 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	11.4	V	Deflect	1.8	V
Extract 2	-175.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-90	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	3.9	mL/min	OctP RF	200	V			