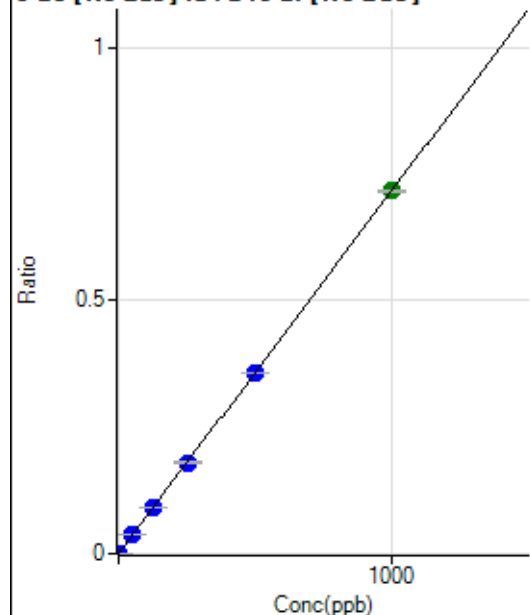


Calibration for 002CALB.d

Batch Folder: D:\ICP-MS Data\P7081018 -MS.b\
 Analysis File: P7081018 -MS.batch.bin
 DA Date-Time: 2018-08-10 16:34:31
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2018-08-10 15:41:54
2			
3	005CALS.d	S02	2018-08-10 15:50:09
4	006CALS.d	S03	2018-08-10 15:54:01
5	007CALS.d	S04	2018-08-10 15:58:24
6	008CALS.d	S05	2018-08-10 16:02:11
7	009CALS.d	S06	2018-08-10 16:05:55
8	010CALS.d	S07	2018-08-10 16:09:39
9	011CALS.d	S08	2018-08-10 16:13:28

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	88.89	0.0000	P	6.1
2	☐	0.100					
3	☐	1.000	0.974	3770.93	0.0007	P	4.2
4	☐	50.000	51.357	193190.12	0.0368	P	0.3
5	☐	125.000	126.785	474324.00	0.0909	P	1.2
6	☐	250.000	251.844	931908.18	0.1805	P	0.3
7	☐	500.000	497.728	1820781.22	0.3567	P	0.4
8	☐	1000.000	1000.384	3566619.38	0.7170	A	0.6
9	☐			437.05	0.0001	P	17.8

$$y = 7.1670\text{E-}004 * x + 1.7094\text{E-}005$$

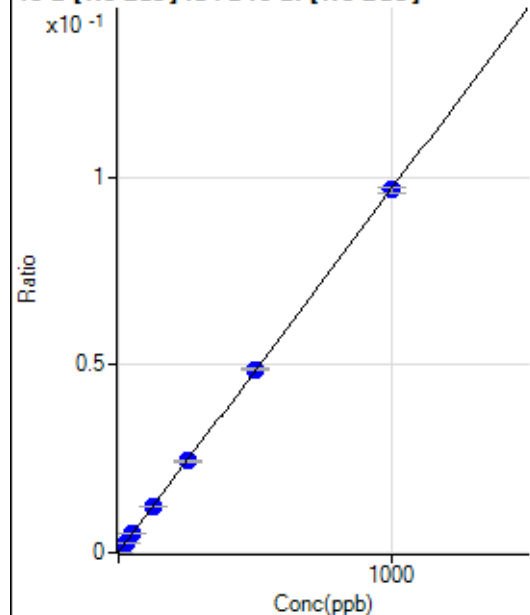
$$R = 1.0000$$

$$DL = 0.004358$$

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	622.26	0.0001	P	10.0
2	☐	2.500					
3	☐	25.000	23.560	12641.80	0.0024	P	2.9
4	☐	50.000	50.459	26220.83	0.0050	P	1.3
5	☐	125.000	126.628	64513.61	0.0124	P	1.6
6	☐	250.000	250.336	125559.65	0.0243	P	1.9
7	☐	500.000	503.983	249304.06	0.0488	P	0.7
8	☐	1000.000	997.734	480405.27	0.0966	P	1.9
9	☐			19068.31	0.0041	P	11.6

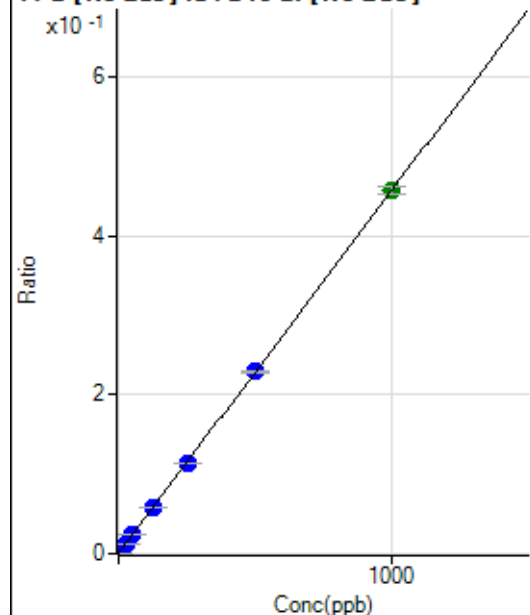
$$y = 9.6680\text{E-}005 * x + 1.1967\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.3699$$

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	2722.58	0.0005	P	11.0
2	☐	2.500					
3	☐	25.000	23.035	58132.15	0.0110	P	0.3
4	☐	50.000	49.872	122026.31	0.0233	P	2.0
5	☐	125.000	125.246	300703.55	0.0576	P	2.3
6	☐	250.000	248.577	587728.03	0.1138	P	1.3
7	☐	500.000	501.242	1169005.12	0.2290	P	1.6
8	☐	1000.000	999.760	2269721.42	0.4563	A	2.1
9	☐			88971.92	0.0193	P	12.5

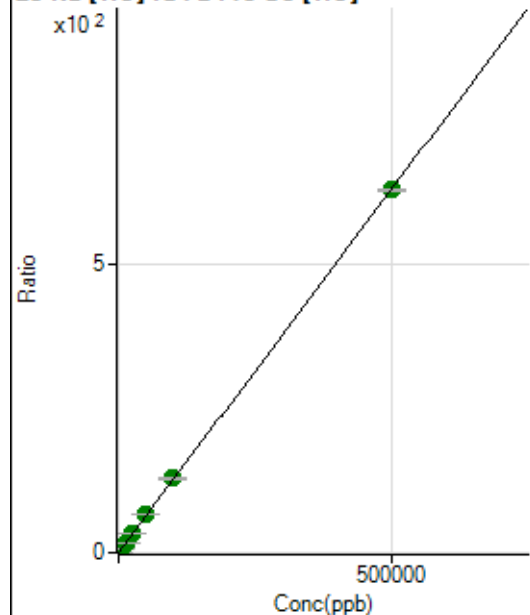
$$y = 4.5589\text{E-}004 * x + 5.2353\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.3773$$

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	13362.07	0.0255	P	8.1
2	☐	50.000					
3	☐	500.000	492.927	351161.99	0.6480	P	0.6
4	☐	5000.000	5468.231	3438713.36	6.9310	A	4.8
5	☐	12500.000	13270.600	8432482.57	16.7842	A	0.2
6	☐	25000.000	26299.821	16838174.33	33.2380	A	0.5
7	☐	50000.000	51907.845	33814475.41	65.5769	A	0.6
8	☐	100000.00	102458.01	68347190.42	129.4139	A	1.5
9	☐	500000.00	499228.68	330493390.7	630.4727	A	0.3

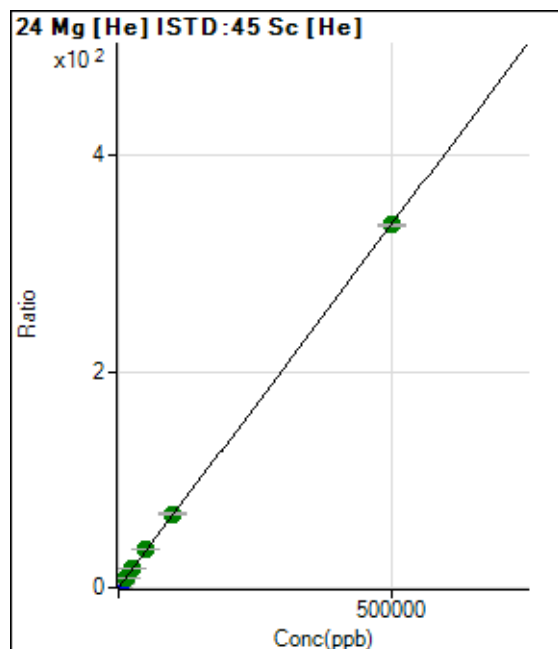
$$y = 0.0013 * x + 0.0255$$

$$R = 1.0000$$

$$DL = 4.909$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	138.89	0.0003	P	20.6
2	☐	50.000					
3	☐	500.000	479.974	175128.26	0.3232	P	0.6
4	☐	5000.000	5499.044	1835431.35	3.6997	P	5.0
5	☐	12500.000	13300.269	4495301.66	8.9478	A	0.9
6	☐	25000.000	26254.691	8947820.51	17.6627	A	0.6
7	☐	50000.000	51908.487	18006776.10	34.9209	A	0.4
8	☐	100000.00	101858.32	36188045.95	68.5239	A	1.8
9	☐	500000.00	499349.77	176090474.7	335.9301	A	0.7

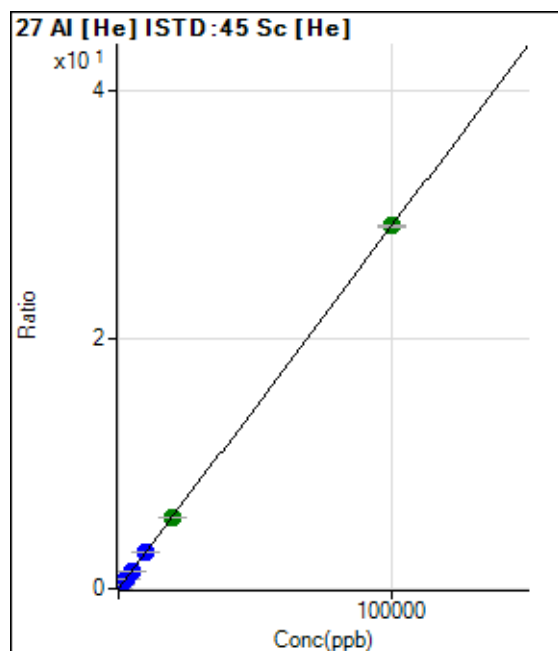
$$y = 6.7273\text{E-}004 * x + 2.6633\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.2451$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	69.45	0.0001	P	47.0
2	☐	2.000					
3	☐	20.000	19.788	3189.37	0.0059	P	3.9
4	☐	1000.000	1052.461	151879.29	0.3062	P	5.2
5	☐	2500.000	2534.413	370316.62	0.7371	P	0.8
6	☐	5000.000	4989.594	735077.37	1.4510	P	0.7
7	☐	10000.000	9888.340	1482739.53	2.8755	P	0.6
8	☐	20000.000	19539.950	3000811.57	5.6821	A	1.7
9	☐	100000.00	100102.31	15258905.72	29.1086	A	0.6

$$y = 2.9079\text{E-}004 * x + 1.3083\text{E-}004$$

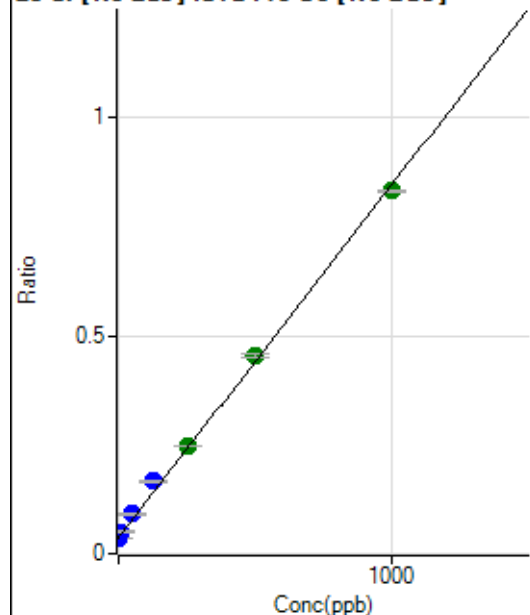
$$R = 1.0000$$

$$DL = 0.6349$$

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	437164.10	0.0369	P	0.8
2	☐	1.000					
3	☐	10.000	16.908	595995.63	0.0505	P	1.3
4	☐	50.000	66.469	1027741.65	0.0906	P	0.5
5	☐	125.000	159.976	1850274.50	0.1661	P	1.1
6	☐	250.000	261.725	2768312.15	0.2483	A	0.2
7	☐	500.000	516.278	5122588.35	0.4540	A	1.4
8	☐	1000.000	983.665	9450359.33	0.8317	A	0.7
9	☐			900446.59	0.0833	P	0.1

$$y = 8.0801\text{E-}004 * x + 0.0369$$

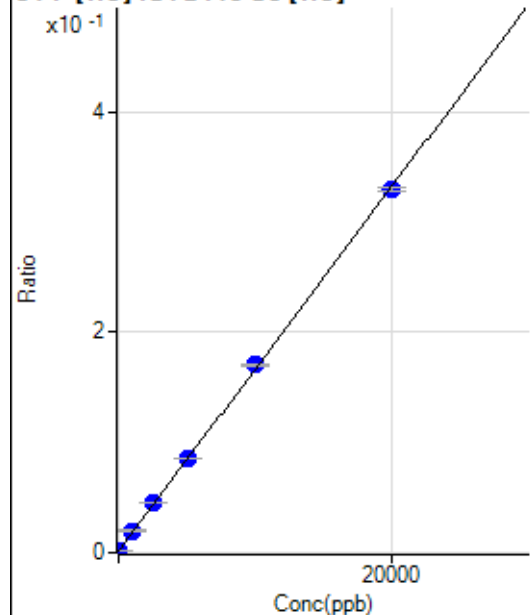
$$R = 0.9993$$

$$DL = 1.082$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-2.927	688.93	0.0013	P	23.7
2	☐	0.000					
3	☐	0.000	2.927	769.50	0.0014	P	5.8
4	☐	1000.000	1098.227	9684.03	0.0195	P	8.0
5	☐	2500.000	2671.491	22890.60	0.0456	P	0.7
6	☐	5000.000	5080.915	43269.54	0.0854	P	1.4
7	☐	10000.000	10230.827	87975.72	0.1706	P	0.7
8	☐	20000.000	19838.010	174040.58	0.3295	P	1.0
9	☐			719.49	0.0014	P	6.7

$$y = 1.6541\text{E-}005 * x + 0.0014$$

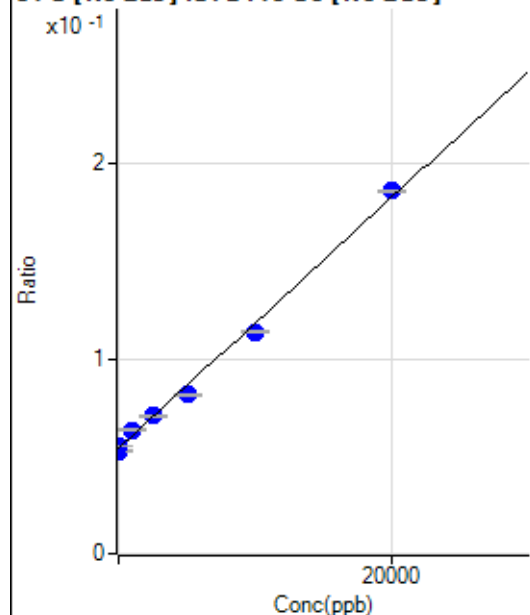
$$R = 0.9999$$

$$DL = 35.85$$

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	-207.449	625304.28	0.0527	P	0.3
2	☐	0.000					
3	☐	0.000	207.449	653458.83	0.0554	P	1.0
4	☐	1000.000	1441.506	718746.64	0.0633	P	1.3
5	☐	2500.000	2586.149	787575.60	0.0707	P	0.6
6	☐	5000.000	4294.722	910831.02	0.0817	P	1.1
7	☐	10000.000	9283.542	1284444.10	0.1138	P	0.9
8	☐	20000.000	20501.704	2114592.78	0.1861	P	0.3
9	☐			536386.26	0.0496	P	0.6

$$y = 6.4405E-006 * x + 0.0540$$

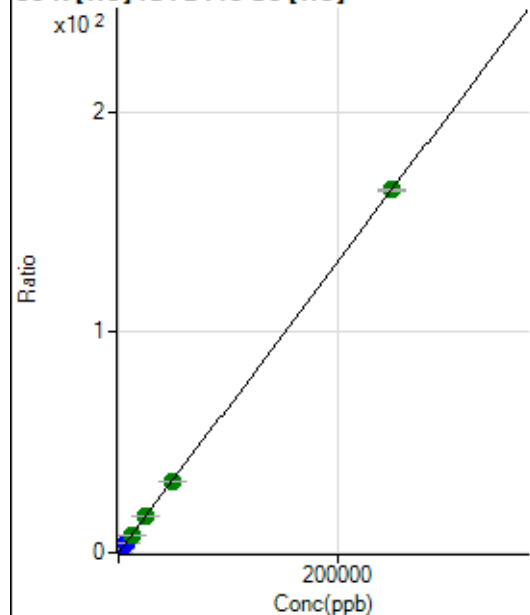
$$R = 0.9977$$

$$DL = 168.5$$

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	36609.98	0.0699	P	7.1
2	☐	50.000					
3	☐	500.000	472.468	206340.12	0.3808	P	1.2
4	☐	2500.000	2607.978	885921.31	1.7860	P	5.4
5	☐	6250.000	6220.202	2091483.21	4.1630	P	0.6
6	☐	12500.000	12403.284	4170032.43	8.2317	A	0.6
7	☐	25000.000	24684.617	8411920.33	16.3133	A	0.4
8	☐	50000.000	48801.843	16996728.16	32.1834	A	1.6
9	☐	250000.00	250275.72	86369908.88	164.7609	A	0.7

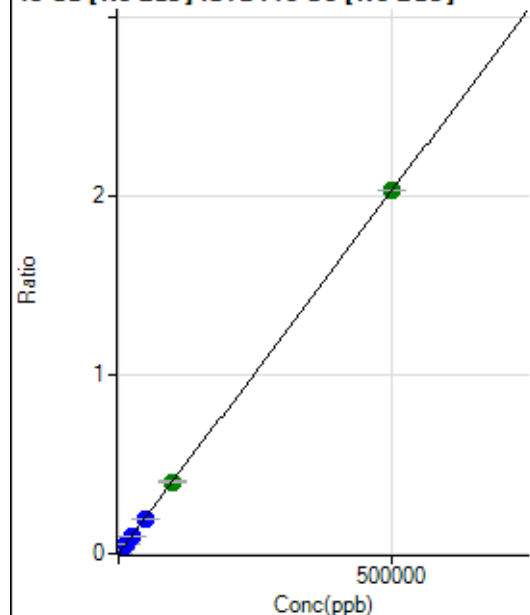
$$y = 6.5804E-004 * x + 0.0699$$

$$R = 1.0000$$

$$DL = 22.56$$

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	330.57	0.0000	P	19.7
2	☐	50.000					
3	☐	500.000	463.595	22473.29	0.0019	P	4.3
4	☐	5000.000	5028.223	231376.99	0.0204	P	0.6
5	☐	12500.000	12293.693	554791.73	0.0498	P	0.4
6	☐	25000.000	24601.673	1110800.81	0.0996	P	0.5
7	☐	50000.000	48843.429	2231847.69	0.1978	P	0.6
8	☐	100000.00	99378.991	4572878.49	0.4024	A	0.6
9	☐	500000.00	500264.68	21901510.91	2.0256	A	0.1

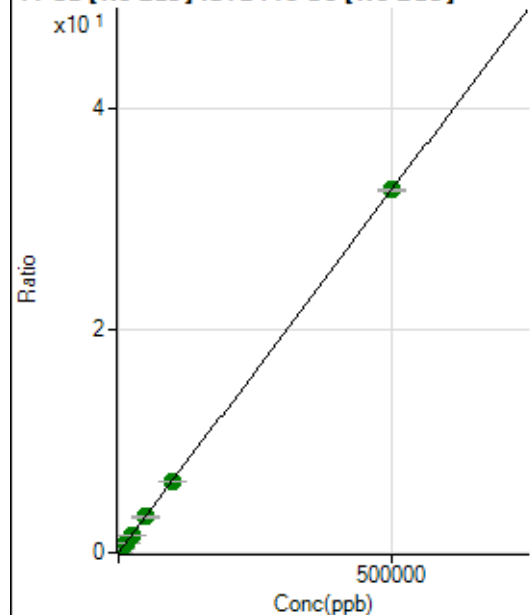
$$y = 4.0491\text{E-}006 * x + 2.7880\text{E-}005$$

$$R = 1.0000$$

$$DL = 4.066$$

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	28742.79	0.0024	P	1.9
2	☐	50.000					
3	☐	500.000	455.058	378814.42	0.0321	P	1.2
4	☐	5000.000	4966.187	3703747.13	0.3264	A	0.5
5	☐	12500.000	12322.699	8980200.90	0.8062	A	0.5
6	☐	25000.000	24698.076	17986231.13	1.6134	A	0.3
7	☐	50000.000	49204.311	36240828.59	3.2119	A	0.7
8	☐	100000.00	98700.257	73183499.55	6.4404	A	0.8
9	☐	500000.00	500359.42	352907199.5	32.6395	A	0.3

$$y = 6.5227\text{E-}005 * x + 0.0024$$

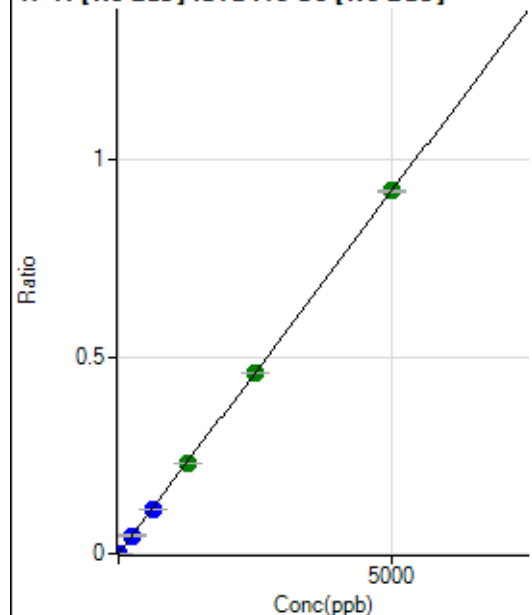
$$R = 1.0000$$

$$DL = 2.113$$

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	130.56	0.0000	P	23.9
2	☐	0.500					
3	☐	5.000	4.762	10465.24	0.0009	P	2.1
4	☐	250.000	251.529	525194.17	0.0463	P	0.6
5	☐	625.000	621.058	1272619.74	0.1142	P	0.4
6	☐	1250.000	1247.890	2558959.50	0.2295	A	0.4
7	☐	2500.000	2489.371	5166815.22	0.4579	A	0.2
8	☐	5000.000	5006.259	10464225.50	0.9209	A	0.2
9	☐			5306.73	0.0005	P	1.8

$$y = 1.8394\text{E-}004 * x + 1.1001\text{E-}005$$

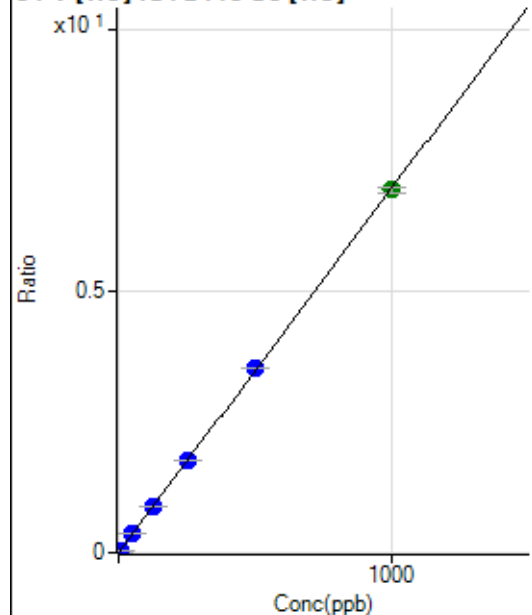
$$R = 1.0000$$

$$DL = 0.04288$$

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	10.00	0.0000	P	88.4
2	☐	0.500					
3	☐	5.000	4.786	18044.53	0.0333	P	1.1
4	☐	50.000	52.408	180807.04	0.3644	P	4.9
5	☐	125.000	127.835	446602.00	0.8889	P	0.6
6	☐	250.000	253.191	891880.36	1.7606	P	0.7
7	☐	500.000	505.424	1812240.68	3.5145	P	0.5
8	☐	1000.000	996.016	3657853.69	6.9259	A	1.3
9	☐			1466.77	0.0028	P	2.5

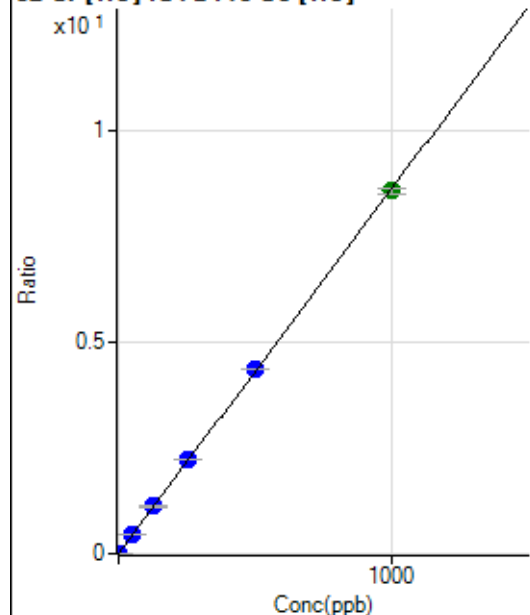
$$y = 0.0070 * x + 1.8423\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.007026$$

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	796.70	0.0015	P	9.4
2	☐	0.200					
3	☐	2.000	2.126	10775.18	0.0199	P	1.4
4	☐	50.000	53.207	228730.06	0.4611	P	5.3
5	☐	125.000	129.210	561461.33	1.1175	P	0.3
6	☐	250.000	256.493	1123061.28	2.2169	P	0.3
7	☐	500.000	505.630	2252698.18	4.3688	P	0.7
8	☐	1000.000	994.875	4538901.39	8.5946	A	1.7
9	☐			172795.45	0.3297	P	1.0

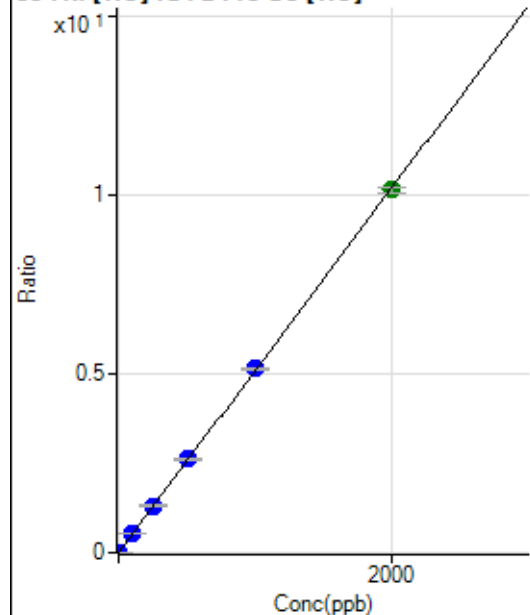
$$y = 0.0086 * x + 0.0015$$

$$R = 1.0000$$

$$DL = 0.0499$$

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	73.33	0.0001	P	19.3
2	☐	0.100					
3	☐	1.000	0.997	2828.10	0.0052	P	0.4
4	☐	100.000	106.343	269018.44	0.5422	P	4.4
5	☐	250.000	258.089	660945.03	1.3156	P	0.7
6	☐	500.000	512.080	1322254.65	2.6101	P	0.3
7	☐	1000.000	1009.233	2652517.20	5.1441	P	0.5
8	☐	2000.000	1991.035	5359459.54	10.1482	A	1.7
9	☐			27486.96	0.0524	P	1.3

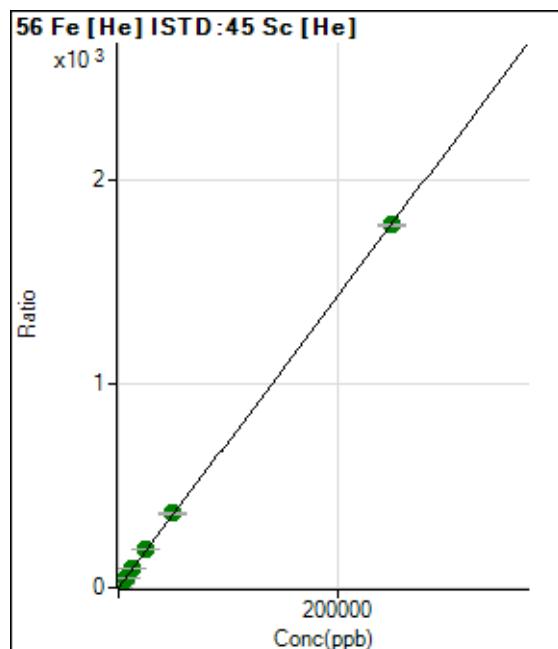
$$y = 0.0051 * x + 1.3858E-004$$

$$R = 1.0000$$

$$DL = 0.01574$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6842.58	0.0130	P	5.4
2	☐	5.000					
3	☐	50.000	51.297	205221.57	0.3787	P	0.6
4	☐	2500.000	2718.963	9621183.20	19.3938	A	5.0
5	☐	6250.000	6626.415	23736179.93	47.2461	A	0.7
6	☐	12500.000	13126.290	47404551.06	93.5771	A	0.3
7	☐	25000.000	26076.580	95847933.62	185.8866	A	1.0
8	☐	50000.000	51220.274	192820348.7	365.1105	A	1.7
9	☐	250000.00	249605.37	932657657.8	1,779.197	A	0.6

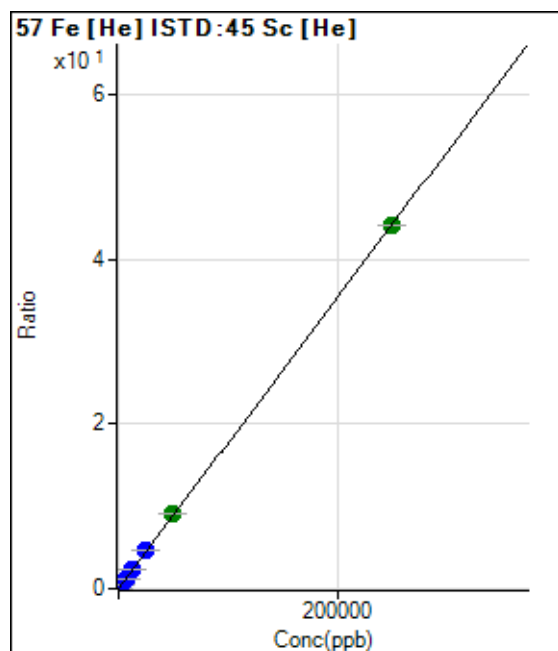
$$y = 0.0071 * x + 0.0130$$

$$R = 1.0000$$

$$DL = 0.298$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	335.20	0.0006	P	19.0
2	☐	5.000					
3	☐	50.000	50.934	5215.88	0.0096	P	2.8
4	☐	2500.000	2750.625	241122.88	0.4860	P	4.8
5	☐	6250.000	6647.548	589655.79	1.1737	P	0.3
6	☐	12500.000	13118.916	1173035.04	2.3156	P	0.7
7	☐	25000.000	25913.619	2358188.91	4.5734	P	0.7
8	☐	50000.000	51445.049	4794677.83	9.0787	A	1.6
9	☐	250000.00	249576.23	23086395.19	44.0410	A	0.2

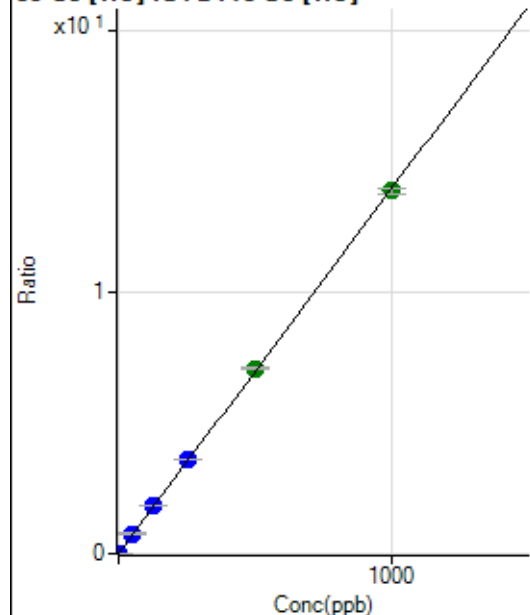
$$y = 1.7646E-004 * x + 6.3717E-004$$

$$R = 1.0000$$

$$DL = 2.058$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	108.89	0.0002	P	28.0
2	☐	0.100					
3	☐	1.000	0.993	7628.77	0.0141	P	3.3
4	☐	50.000	54.101	374824.58	0.7555	P	4.8
5	☐	125.000	130.303	914017.32	1.8193	P	0.6
6	☐	250.000	257.111	1818421.78	3.5896	P	0.7
7	☐	500.000	506.421	3645545.50	7.0701	A	0.9
8	☐	1000.000	994.144	7329794.20	13.8790	A	1.6
9	☐			87242.83	0.1664	P	0.5

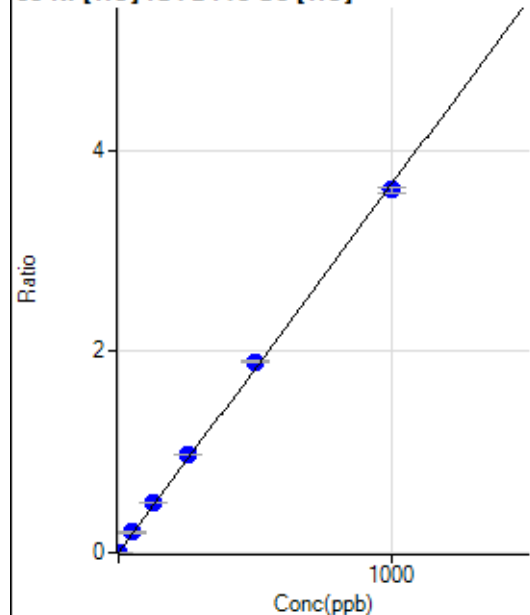
$$y = 0.0140 * x + 2.0847E-004$$

$$R = 0.9999$$

$$DL = 0.01254$$

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	81.11	0.0002	P	22.1
2	☐	0.100					
3	☐	1.000	1.117	2298.00	0.0042	P	3.7
4	☐	50.000	55.755	101248.75	0.2041	P	5.3
5	☐	125.000	133.782	245949.77	0.4895	P	0.6
6	☐	250.000	265.677	492405.28	0.9720	P	1.0
7	☐	500.000	518.642	978343.33	1.8974	P	1.0
8	☐	1000.000	985.374	1903686.62	3.6047	P	1.9
9	☐			59789.11	0.1141	P	1.3

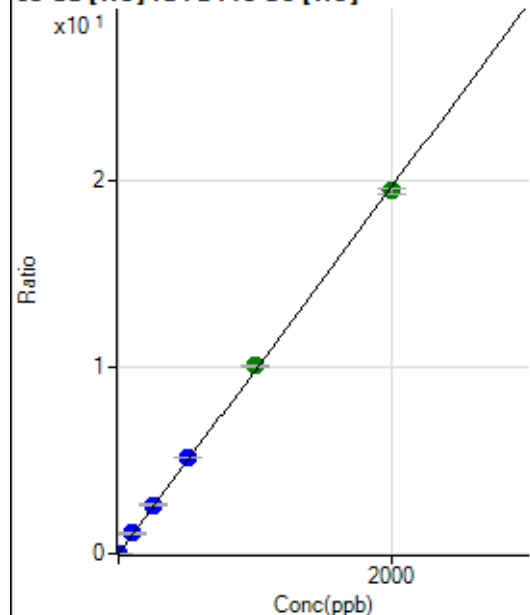
$$y = 0.0037 * x + 1.5500E-004$$

$$R = 0.9996$$

$$DL = 0.02808$$

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	1127.85	0.0022	P	7.9
2	☐	0.200					
3	☐	2.000	2.343	13644.32	0.0252	P	2.3
4	☐	100.000	111.059	542453.72	1.0935	P	5.2
5	☐	250.000	266.447	1316478.85	2.6204	P	0.8
6	☐	500.000	522.008	2599627.24	5.1317	P	0.6
7	☐	1000.000	1025.971	5199626.45	10.0839	A	0.7
8	☐	2000.000	1978.904	10270735.26	19.4480	A	1.8
9	☐			23772.86	0.0454	P	0.3

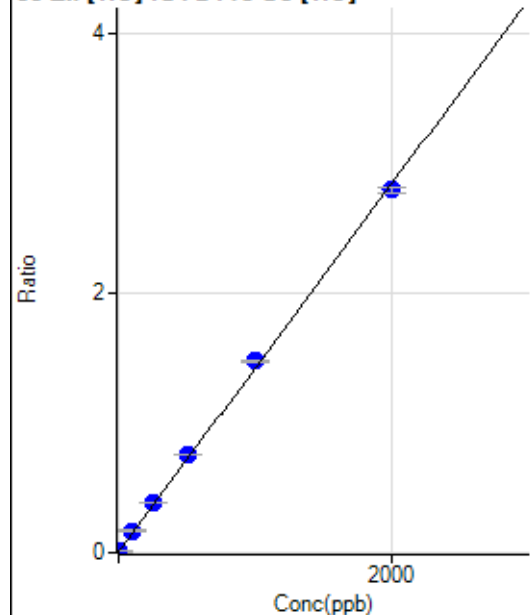
$$y = 0.0098 * x + 0.0022$$

$$R = 0.9998$$

$$DL = 0.05209$$

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	2552.49	0.0049	P	2.9
2	☐	0.200					
3	☐	2.000	2.133	4267.35	0.0079	P	3.1
4	☐	100.000	115.333	83482.40	0.1683	P	5.8
5	☐	250.000	273.007	196833.97	0.3918	P	0.1
6	☐	500.000	531.220	383856.57	0.7577	P	0.4
7	☐	1000.000	1039.846	762407.32	1.4786	P	0.9
8	☐	2000.000	1968.629	1476091.90	2.7950	P	1.5
9	☐			13637.65	0.0260	P	2.4

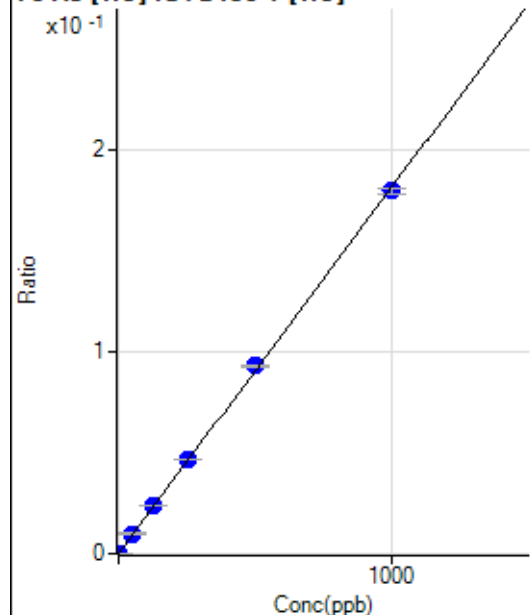
$$y = 0.0014 * x + 0.0049$$

$$R = 0.9995$$

$$DL = 0.3005$$

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	15.43	0.0000	P	56.7
2	☐	0.100					
3	☐	1.000	1.004	522.86	0.0002	P	4.6
4	☐	50.000	53.586	24803.93	0.0097	P	6.1
5	☐	125.000	129.807	61032.19	0.0235	P	1.0
6	☐	250.000	255.940	122308.11	0.0463	P	0.3
7	☐	500.000	513.597	249077.78	0.0929	P	0.6
8	☐	1000.000	990.936	496235.92	0.1793	P	1.9
9	☐			805.59	0.0003	P	1.8

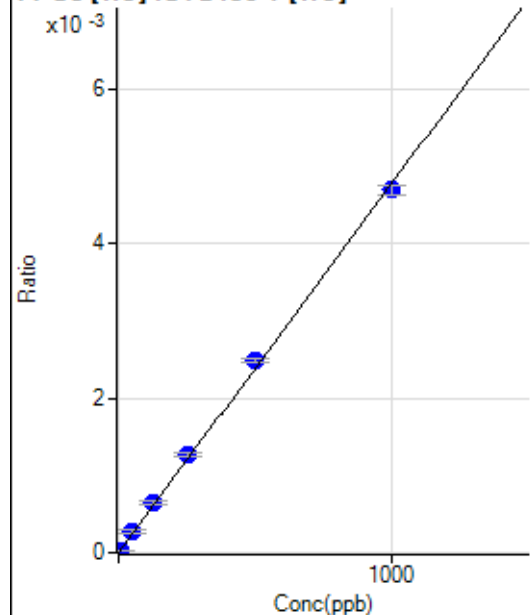
$$y = 1.8093E-004 * x + 5.7067E-006$$

$$R = 0.9998$$

$$DL = 0.05368$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	0.500					
3	☐	5.000	4.092	54.44	0.0000	P	15.3
4	☐	50.000	56.364	685.59	0.0003	P	15.2
5	☐	125.000	135.914	1684.57	0.0006	P	5.5
6	☐	250.000	267.044	3363.79	0.0013	P	3.7
7	☐	500.000	521.348	6664.96	0.0025	P	2.5
8	☐	1000.000	983.387	12981.56	0.0047	P	2.9
9	☐			5.55	0.0000	P	68.5

$$y = 4.7698E-006 * x + 0.0000E+000$$

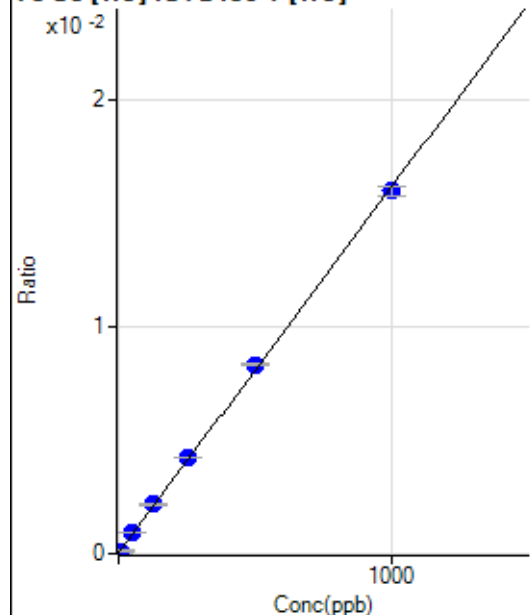
$$R = 0.9995$$

$$DL = 0$$

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	82.72	0.0000	P	11.4
2	☐	0.500					
3	☐	5.000	5.846	347.54	0.0001	P	7.7
4	☐	50.000	55.906	2381.08	0.0009	P	5.0
5	☐	125.000	132.128	5608.54	0.0022	P	2.0
6	☐	250.000	260.292	11152.51	0.0042	P	0.5
7	☐	500.000	513.783	22261.57	0.0083	P	1.2
8	☐	1000.000	989.345	44184.90	0.0160	P	2.4
9	☐			111.11	0.0000	P	9.3

$$y = 1.6106E-005 * x + 3.0456E-005$$

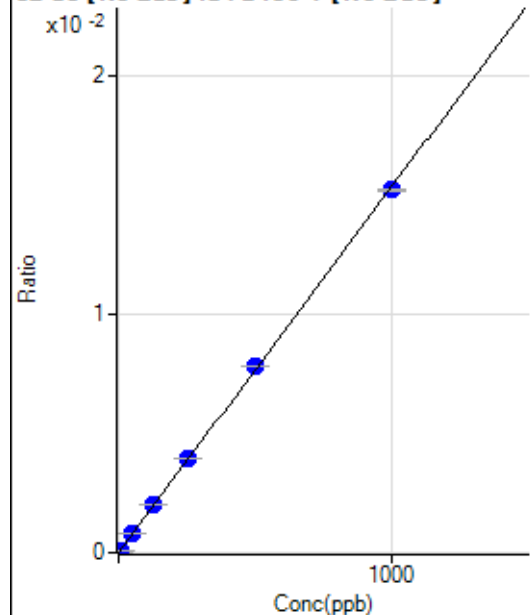
$$R = 0.9998$$

$$DL = 0.647$$

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	35.57	0.0000	P	301.
2	☐	0.500					
3	☐	5.000	4.756	1347.45	0.0001	P	7.8
4	☐	50.000	52.679	13994.88	0.0008	P	1.4
5	☐	125.000	130.149	33880.50	0.0020	P	0.6
6	☐	250.000	257.278	67909.80	0.0039	P	0.3
7	☐	500.000	510.546	136453.29	0.0078	P	0.2
8	☐	1000.000	992.131	266346.97	0.0152	P	0.6
9	☐			288.61	0.0000	P	15.3

$$y = 1.5340E-005 * x + 1.9784E-006$$

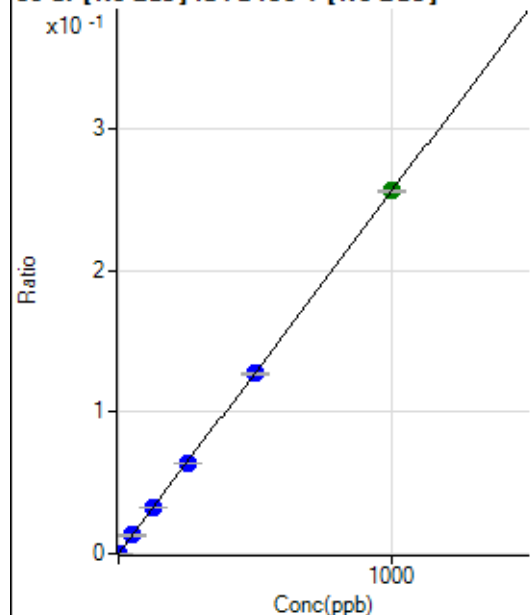
$$R = 0.9999$$

$$DL = 1.168$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1061.20	0.0001	P	5.0
2	☐	0.100					
3	☐	1.000	0.922	5312.30	0.0003	P	3.9
4	☐	50.000	50.249	223419.65	0.0129	P	0.3
5	☐	125.000	125.925	547915.33	0.0323	P	0.4
6	☐	250.000	249.523	1100398.53	0.0640	P	0.3
7	☐	500.000	496.962	2218638.33	0.1274	P	0.4
8	☐	1000.000	1001.510	4490597.58	0.2566	A	0.3
9	☐			21714.38	0.0013	P	2.3

$$y = 2.5617\text{E-}004 * x + 5.9236\text{E-}005$$

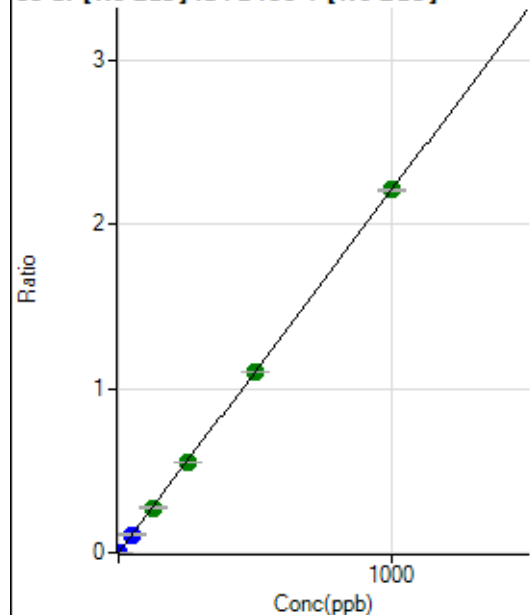
$$R = 1.0000$$

$$DL = 0.03467$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	163.89	0.0000	P	3.2
2	☐	0.100					
3	☐	1.000	0.972	38825.79	0.0022	P	1.3
4	☐	50.000	50.360	1923604.34	0.1113	P	0.4
5	☐	125.000	124.557	4668578.36	0.2754	A	0.2
6	☐	250.000	250.206	9513296.74	0.5531	A	0.6
7	☐	500.000	498.965	19214601.82	1.1031	A	0.2
8	☐	1000.000	1000.503	38704596.35	2.2118	A	0.4
9	☐			180425.81	0.0110	P	0.4

$$y = 0.0022 * x + 9.1497\text{E-}006$$

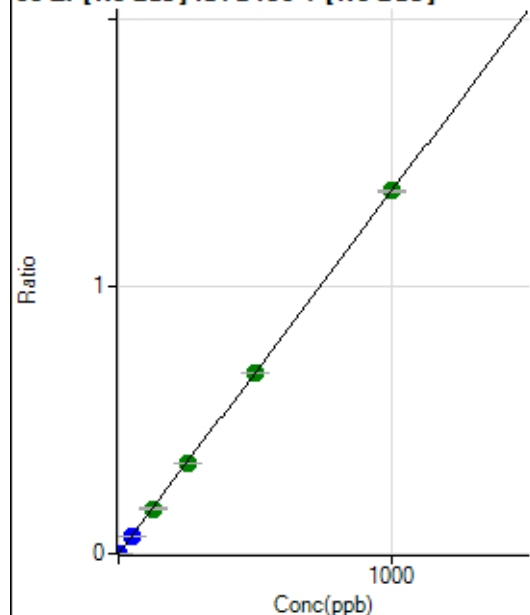
$$R = 1.0000$$

$$DL = 0.0003913$$

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	1647.39	0.0001	P	10.6
2	☐	0.100					
3	☐	1.000	0.967	25264.76	0.0014	P	1.3
4	☐	50.000	49.898	1171534.98	0.0678	P	0.2
5	☐	125.000	124.023	2855046.44	0.1684	A	1.0
6	☐	250.000	248.474	5801039.28	0.3373	A	0.7
7	☐	500.000	498.903	11795401.13	0.6772	A	0.4
8	☐	1000.000	1001.057	23774351.75	1.3586	A	0.7
9	☐			4945.52	0.0003	P	9.4

$$y = 0.0014 * x + 9.1979E-005$$

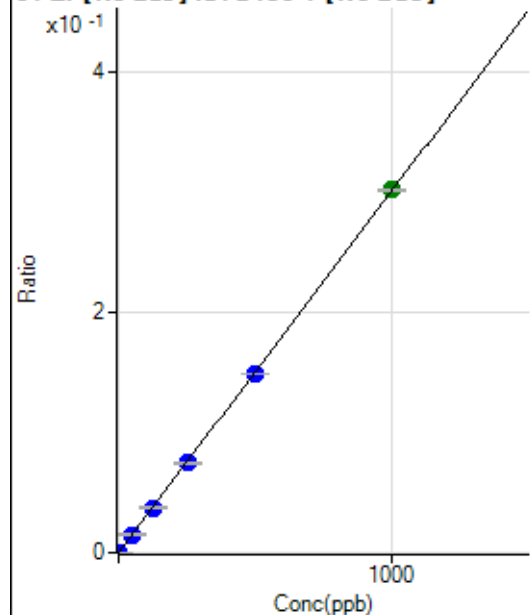
$$R = 1.0000$$

$$DL = 0.02147$$

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	338.91	0.0000	P	27.8
2	☐	0.100					
3	☐	1.000	0.945	5459.60	0.0003	P	1.4
4	☐	50.000	50.442	262841.67	0.0152	P	0.2
5	☐	125.000	124.597	636638.32	0.0376	P	0.9
6	☐	250.000	248.195	1286174.04	0.0748	P	0.8
7	☐	500.000	493.605	2590395.17	0.1487	P	0.1
8	☐	1000.000	1003.677	5290964.79	0.3024	A	0.6
9	☐			1147.32	0.0001	P	10.1

$$y = 3.0123E-004 * x + 1.8911E-005$$

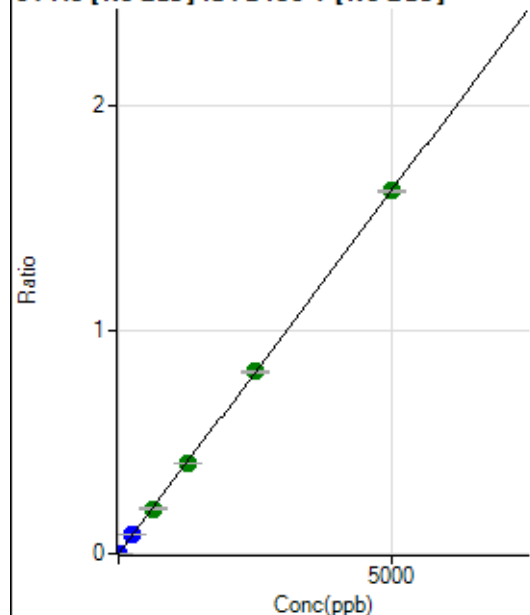
$$R = 1.0000$$

$$DL = 0.05234$$

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	575.04	0.0000	P	17.7
2	☐	0.500					
3	☐	5.000	4.752	28323.38	0.0016	P	1.1
4	☐	250.000	251.978	1413388.22	0.0818	P	0.2
5	☐	625.000	622.053	3423209.89	0.2019	A	0.3
6	☐	1250.000	1245.872	6954466.74	0.4044	A	0.8
7	☐	2500.000	2505.250	14163148.41	0.8131	A	0.2
8	☐	5000.000	4998.677	28387914.87	1.6223	A	0.8
9	☐			33643.28	0.0021	P	2.4

$$y = 3.2454\text{E-}004 * x + 3.2104\text{E-}005$$

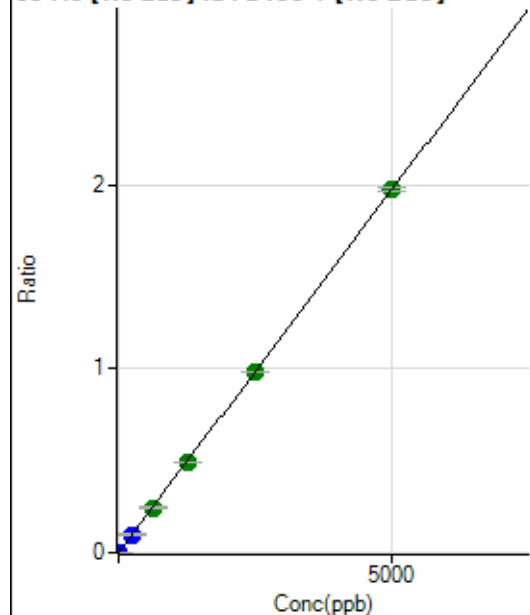
$$R = 1.0000$$

$$DL = 0.05255$$

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	138.90	0.0000	P	29.4
2	☐	0.500					
3	☐	5.000	4.717	33560.01	0.0019	P	1.2
4	☐	250.000	251.458	1710843.75	0.0990	P	0.7
5	☐	625.000	622.934	4158921.27	0.2453	A	0.4
6	☐	1250.000	1244.621	8429298.63	0.4901	A	0.7
7	☐	2500.000	2494.159	17108420.52	0.9822	A	0.3
8	☐	5000.000	5004.451	34483861.19	1.9707	A	0.9
9	☐			57703.75	0.0035	P	0.5

$$y = 3.9378\text{E-}004 * x + 7.7499\text{E-}006$$

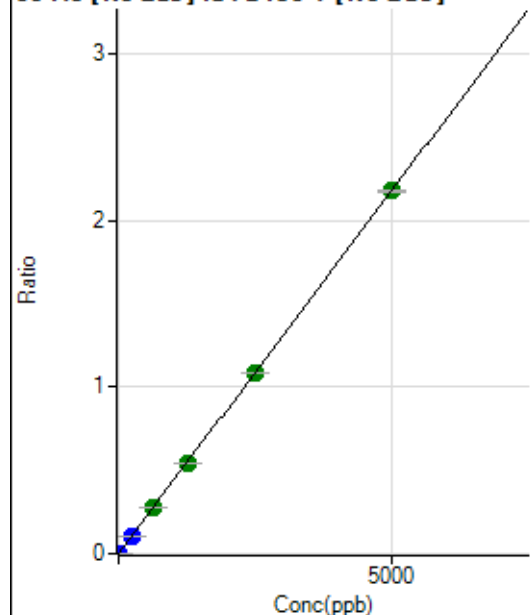
$$R = 1.0000$$

$$DL = 0.01736$$

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	286.13	0.0000	P	10.5
2	☐	0.500					
3	☐	5.000	4.777	37731.36	0.0021	P	0.9
4	☐	250.000	250.805	1888175.67	0.1093	P	0.5
5	☐	625.000	624.455	4612994.16	0.2721	A	0.4
6	☐	1250.000	1250.147	9368157.85	0.5447	A	0.5
7	☐	2500.000	2498.244	18960680.98	1.0885	A	0.2
8	☐	5000.000	5000.869	38127704.32	2.1789	A	0.7
9	☐			65950.39	0.0040	P	2.3

$$y = 4.3570\text{E-}004 * x + 1.5976\text{E-}005$$

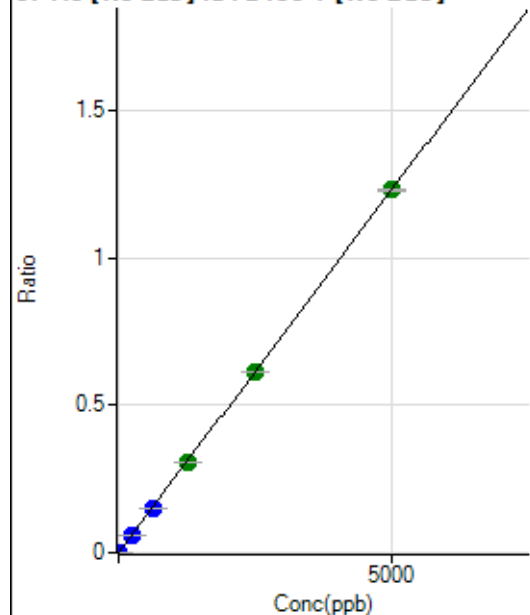
$$R = 1.0000$$

$$DL = 0.01156$$

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	102.78	0.0000	P	17.0
2	☐	0.500					
3	☐	5.000	4.672	20799.28	0.0012	P	4.6
4	☐	250.000	250.658	1066729.82	0.0617	P	0.4
5	☐	625.000	620.483	2591073.19	0.1528	P	0.6
6	☐	1250.000	1247.200	5283309.93	0.3072	A	0.5
7	☐	2500.000	2496.523	10710995.72	0.6149	A	0.2
8	☐	5000.000	5002.971	21562946.66	1.2322	A	0.5
9	☐			33470.75	0.0020	P	0.4

$$y = 2.4630\text{E-}004 * x + 5.7386\text{E-}006$$

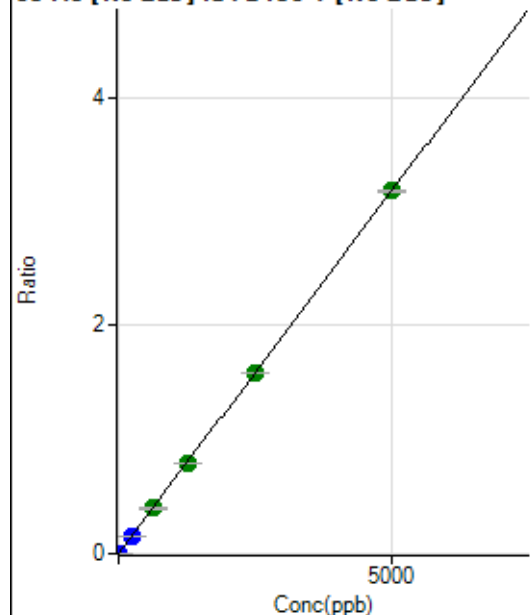
$$R = 1.0000$$

$$DL = 0.01188$$

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	830.77	0.0000	P	122.
2	☐	0.500					
3	☐	5.000	4.680	54421.18	0.0030	P	1.2
4	☐	250.000	250.371	2753819.18	0.1594	P	0.4
5	☐	625.000	623.139	6724671.50	0.3966	A	0.7
6	☐	1250.000	1248.147	13663302.91	0.7944	A	0.3
7	☐	2500.000	2495.965	27672248.19	1.5886	A	0.2
8	☐	5000.000	5002.695	55717638.05	3.1840	A	0.5
9	☐			84796.61	0.0052	P	2.4

$$y = 6.3646\text{E-}004 * x + 4.6354\text{E-}005$$

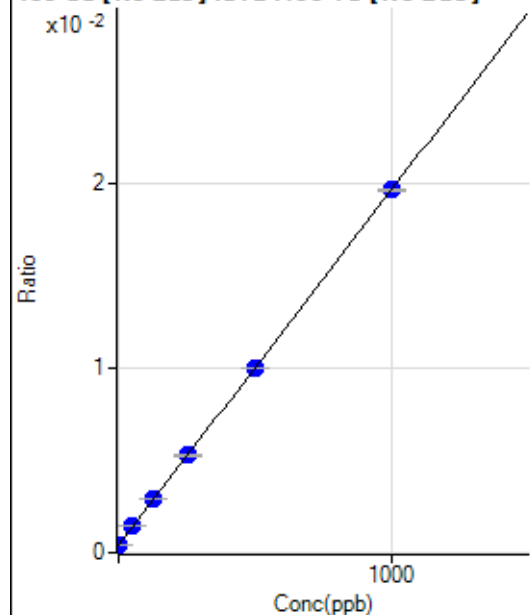
$$R = 1.0000$$

$$DL = 0.2666$$

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	8411.19	0.0004	P	3.7
2	☐	0.100					
3	☐	1.000	1.679	9039.38	0.0004	P	3.2
4	☐	50.000	52.121	28543.44	0.0014	P	0.9
5	☐	125.000	129.295	58808.81	0.0029	P	2.0
6	☐	250.000	252.034	108849.71	0.0053	P	0.6
7	☐	500.000	498.304	208703.83	0.0100	P	0.4
8	☐	1000.000	999.696	404258.28	0.0196	P	0.3
9	☐			8230.54	0.0004	P	4.5

$$y = 1.9225\text{E-}005 * x + 4.0981\text{E-}004$$

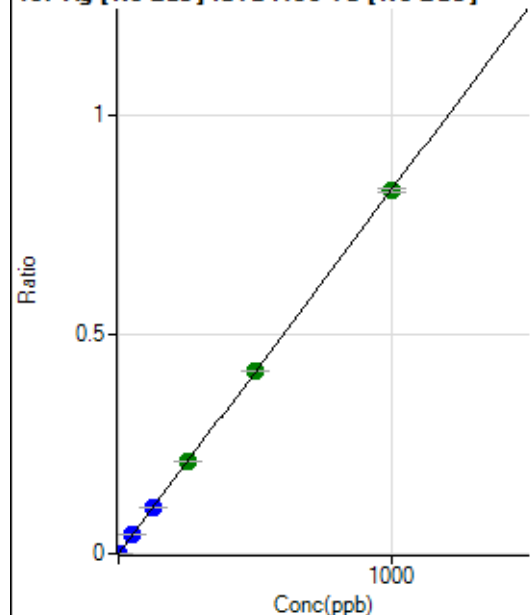
$$R = 1.0000$$

$$DL = 2.336$$

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	155.56	0.0000	P	27.7
2	☐	0.100					
3	☐	1.000	1.033	17664.40	0.0009	P	2.8
4	☐	50.000	53.714	900052.38	0.0445	P	0.4
5	☐	125.000	128.979	2171058.77	0.1069	P	0.6
6	☐	250.000	253.936	4358817.93	0.2104	A	0.4
7	☐	500.000	502.128	8693034.40	0.4161	A	0.9
8	☐	1000.000	997.269	17019614.44	0.8264	A	1.0
9	☐			1789.08	0.0001	P	8.0

$$y = 8.2869E-004 * x + 7.5837E-006$$

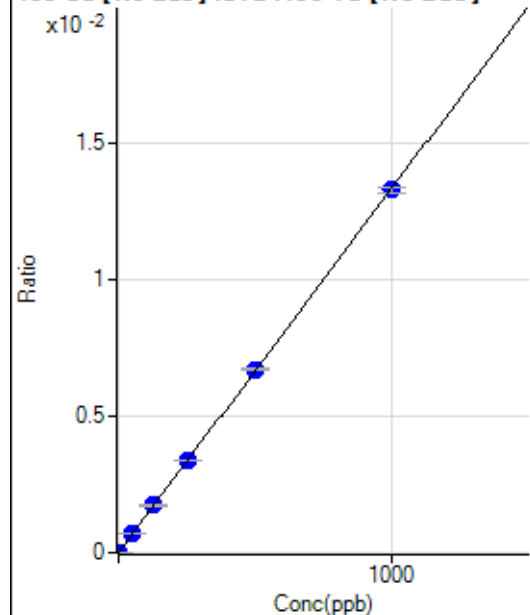
$$R = 1.0000$$

$$DL = 0.007615$$

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	15.6
2	☐	0.100					
3	☐	1.000	1.026	294.45	0.0000	P	21.4
4	☐	50.000	53.166	14342.23	0.0007	P	1.9
5	☐	125.000	129.673	35121.59	0.0017	P	0.8
6	☐	250.000	254.092	70167.20	0.0034	P	1.1
7	☐	500.000	502.987	140079.33	0.0067	P	0.9
8	☐	1000.000	996.741	273618.72	0.0133	P	1.8
9	☐			102.78	0.0000	P	17.0

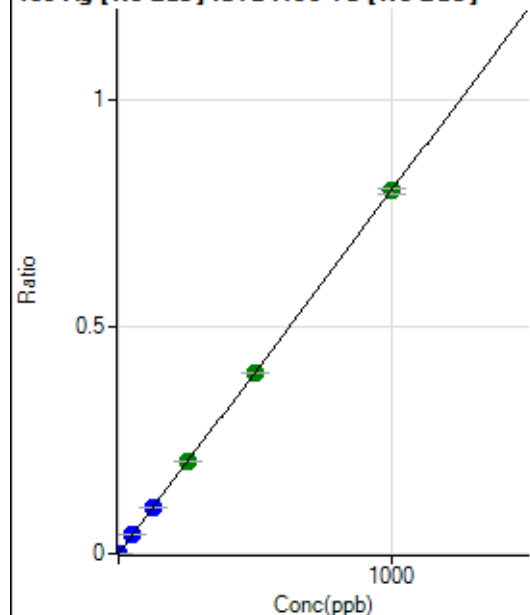
$$y = 1.3329E-005 * x + 7.4437E-007$$

$$R = 1.0000$$

$$DL = 0.02618$$

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	20.1
2	☐	0.100					
3	☐	1.000	1.032	16952.42	0.0008	P	1.0
4	☐	50.000	53.480	864147.11	0.0427	P	0.3
5	☐	125.000	129.221	2097579.97	0.1033	P	0.5
6	☐	250.000	252.495	4179658.04	0.2018	A	0.4
7	☐	500.000	499.593	8341507.57	0.3993	A	0.2
8	☐	1000.000	998.878	16439685.61	0.7983	A	1.3
9	☐			1580.72	0.0001	P	9.9

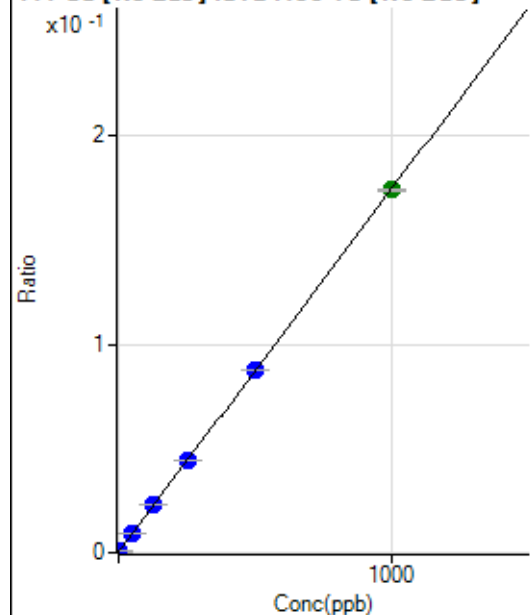
$$y = 7.9918\text{E-}004 * x + 4.1954\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.003166$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	5893.80	0.0003	P	3.7
2	☐	0.100					
3	☐	1.000	1.037	9562.22	0.0005	P	1.4
4	☐	50.000	53.024	192488.30	0.0095	P	0.8
5	☐	125.000	130.295	466687.98	0.0230	P	1.1
6	☐	250.000	252.937	918300.23	0.0443	P	0.7
7	☐	500.000	501.275	1829755.36	0.0876	P	0.5
8	☐	1000.000	997.815	3584518.91	0.1741	A	0.5
9	☐			6418.64	0.0003	P	4.1

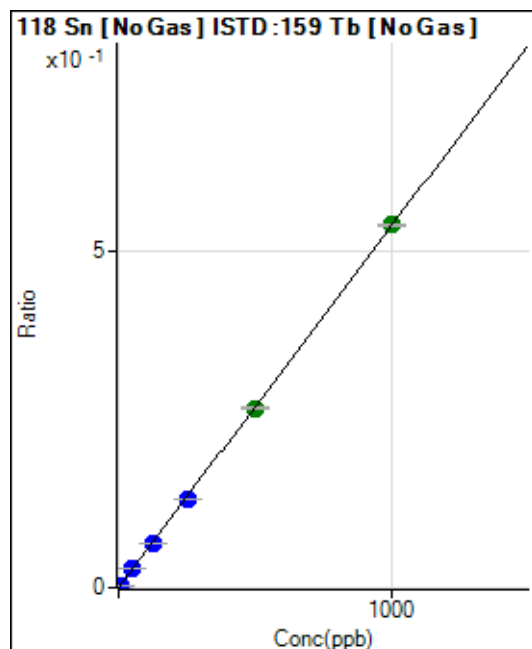
$$y = 1.7415\text{E-}004 * x + 2.8716\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.1826$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3119.94	0.0002	P	6.6
2	☐	0.500					
3	☐	5.000	4.848	56497.32	0.0028	P	0.7
4	☐	50.000	50.928	557630.97	0.0276	P	0.3
5	☐	125.000	124.385	1363820.31	0.0671	P	0.1
6	☐	250.000	245.298	2739699.74	0.1323	P	0.4
7	☐	500.000	495.927	5583366.62	0.2673	A	0.9
8	☐	1000.000	1003.243	11131270.82	0.5405	A	0.8
9	☐			44992.20	0.0024	P	1.3

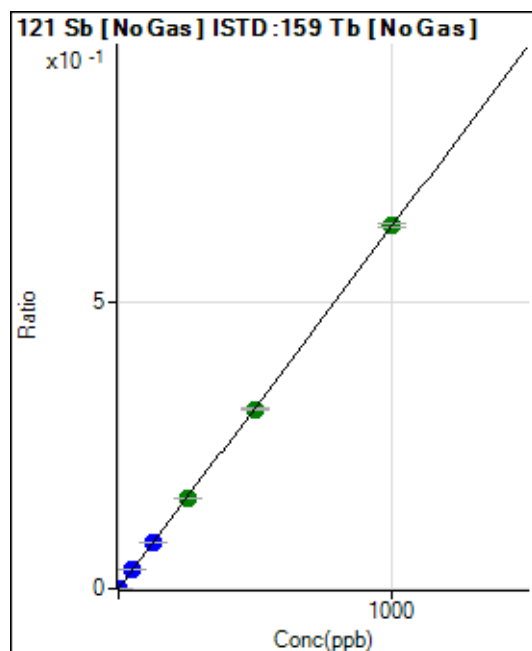
$$y = 5.3861\text{E-}004 * x + 1.5199\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.05596$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	197.23	0.0000	P	8.5
2	☐	0.200					
3	☐	2.000	1.950	25309.88	0.0012	P	1.4
4	☐	50.000	50.988	649573.74	0.0321	P	0.9
5	☐	125.000	125.808	1609929.49	0.0793	P	0.1
6	☐	250.000	247.675	3231920.82	0.1560	A	0.1
7	☐	500.000	496.509	6534623.45	0.3128	A	0.6
8	☐	1000.000	1002.177	13001911.84	0.6313	A	0.9
9	☐			19959.35	0.0011	P	2.6

$$y = 6.2997\text{E-}004 * x + 9.6081\text{E-}006$$

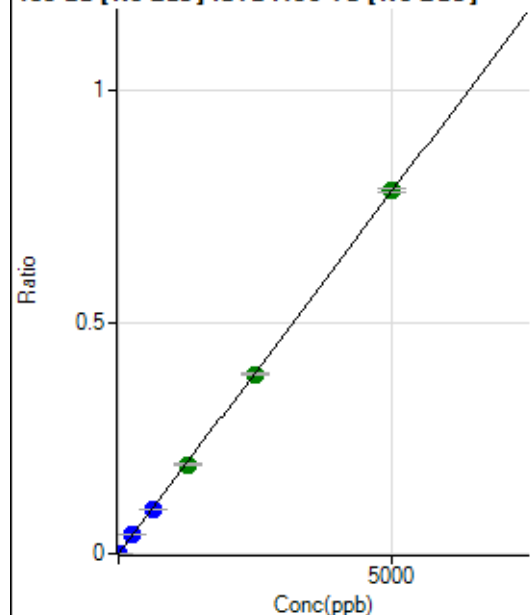
$$R = 1.0000$$

$$DL = 0.003882$$

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	66.67	0.0000	P	24.7
2	☐	1.000					
3	☐	10.000	9.627	30810.04	0.0015	P	1.1
4	☐	250.000	253.512	800551.93	0.0396	P	0.2
5	☐	625.000	621.970	1973156.34	0.0971	P	0.6
6	☐	1250.000	1234.628	3994144.79	0.1928	A	0.2
7	☐	2500.000	2479.192	8089448.53	0.3872	A	0.7
8	☐	5000.000	5014.451	16128877.96	0.7832	A	1.2
9	☐			2778.19	0.0001	P	3.1

$$y = 1.5619\text{E-}004 * x + 3.2469\text{E-}006$$

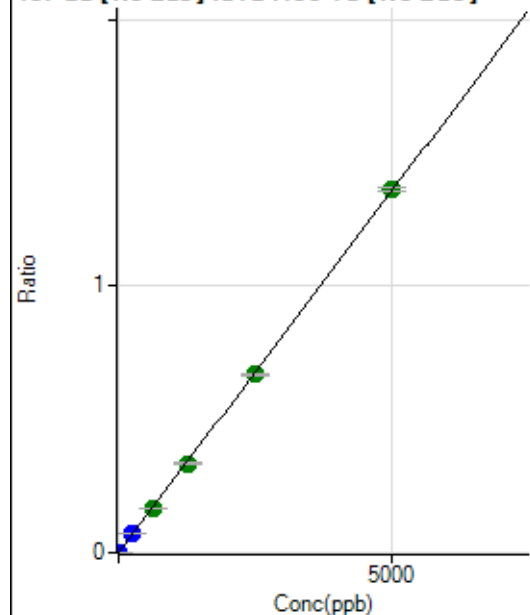
$$R = 1.0000$$

$$DL = 0.01542$$

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	108.34	0.0000	P	20.6
2	☐	1.000					
3	☐	10.000	9.632	53537.05	0.0026	P	2.5
4	☐	250.000	255.298	1400617.30	0.0693	P	0.3
5	☐	625.000	620.321	3418893.95	0.1683	A	0.5
6	☐	1250.000	1236.569	6950082.01	0.3355	A	0.4
7	☐	2500.000	2467.667	13988604.31	0.6696	A	0.9
8	☐	5000.000	5019.845	28051685.00	1.3621	A	1.1
9	☐			4553.71	0.0002	P	2.6

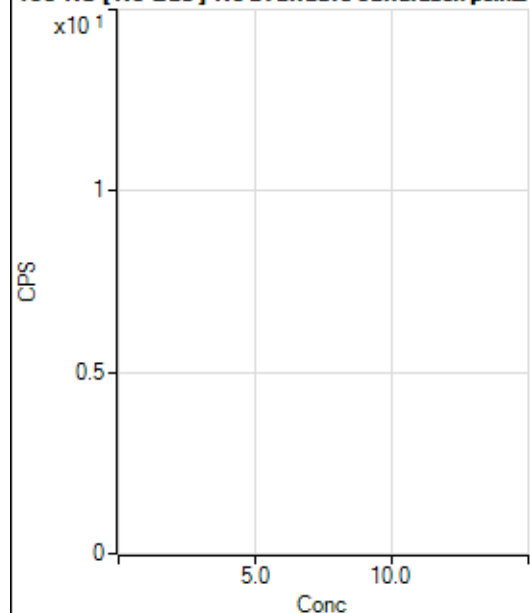
$$y = 2.7135\text{E-}004 * x + 5.2809\text{E-}006$$

$$R = 1.0000$$

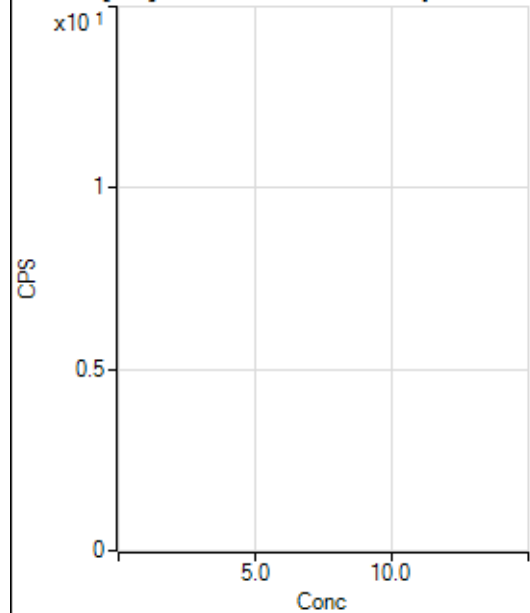
$$DL = 0.01204$$

Weight: <None>

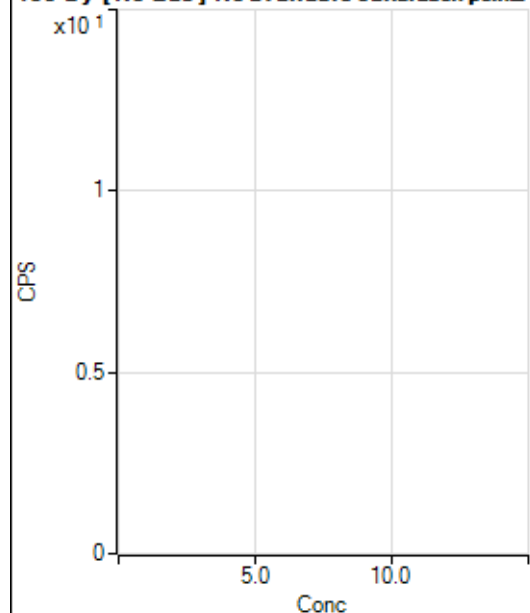
Min Conc: 0

150 Nd [No Gas] No available calibration points

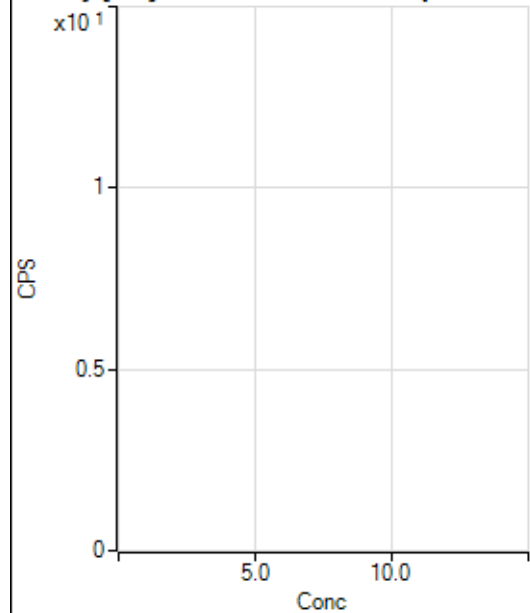
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	114.
2	☐						
3	☐			8.89		P	114.
4	☐			64.45		P	53.1
5	☐			153.34		P	8.7
6	☐			284.46		P	12.9
7	☐			553.36		P	11.5
8	☐			1213.43		P	17.3
9	☐			173.34		P	13.9

150 Nd [He] No available calibration points

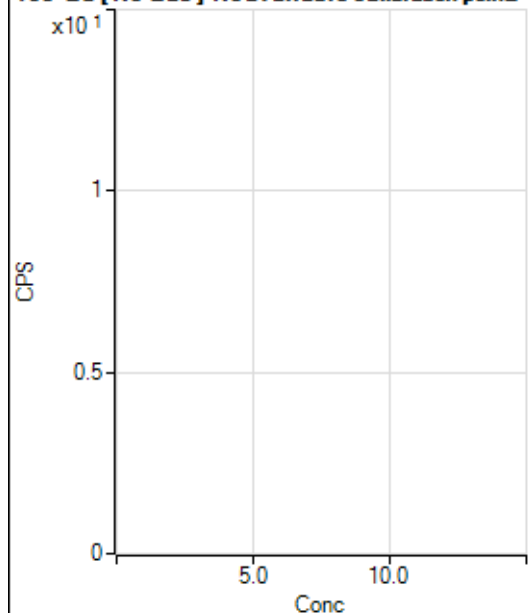
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			354.82		P	171.
2	☐						
3	☐			5.55		P	69.3
4	☐			8.89		P	21.6
5	☐			14.44		P	53.3
6	☐			22.22		P	43.3
7	☐			80.00		P	7.2
8	☐			110.01		P	21.0
9	☐			90.00		P	9.8

156 Dy [No Gas] No available calibration points

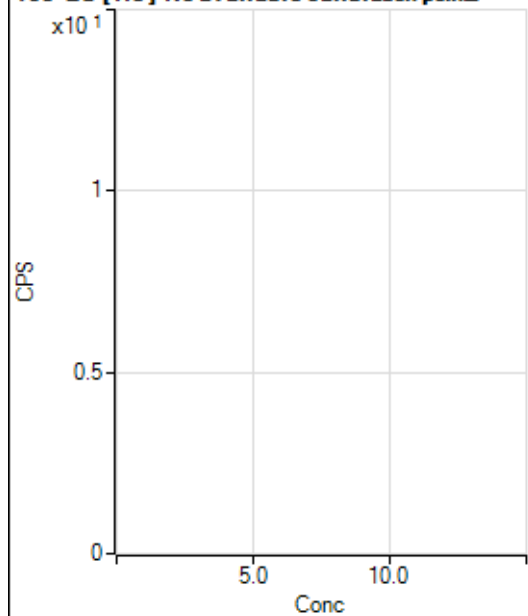
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			63.92		P	128.
2	☐						
3	☐			13.89		P	91.6
4	☐			22.22		P	78.1
5	☐			50.00		P	44.1
6	☐			52.78		P	50.8
7	☐			158.34		P	15.8
8	☐			225.01		P	9.8
9	☐			186.12		P	36.2

156 Dy [He] No available calibration points

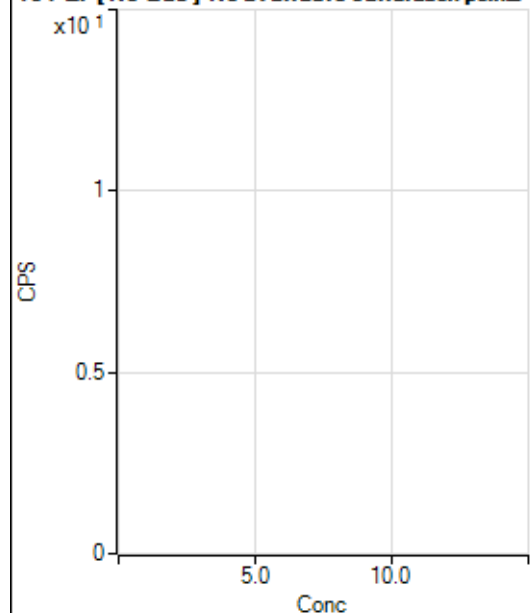
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.66		P	86.6
2	☐						
3	☐			4.44		P	43.4
4	☐			11.11		P	45.8
5	☐			28.89		P	26.6
6	☐			65.55		P	10.6
7	☐			111.11		P	11.4
8	☐			214.45		P	3.6
9	☐			74.45		P	5.2

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

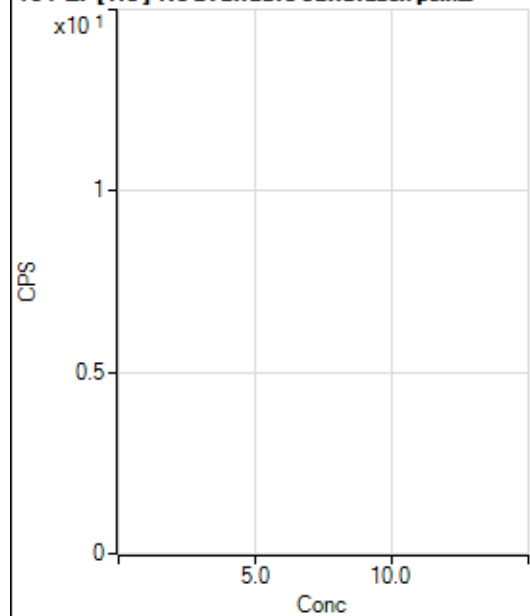
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			147.23		P	43.2
2	☐						
3	☐			144.45		P	8.8
4	☐			200.01		P	19.1
5	☐			250.01		P	10.0
6	☐			208.34		P	25.0
7	☐			291.69		P	27.3
8	☐			258.35		P	25.2
9	☐			313.91		P	22.9

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			321.12		P	7.1
2	☐						
3	☐			318.90		P	2.2
4	☐			302.23		P	10.0
5	☐			312.23		P	12.8
6	☐			288.90		P	7.4
7	☐			363.34		P	4.2
8	☐			337.79		P	10.3
9	☐			366.68		P	2.4

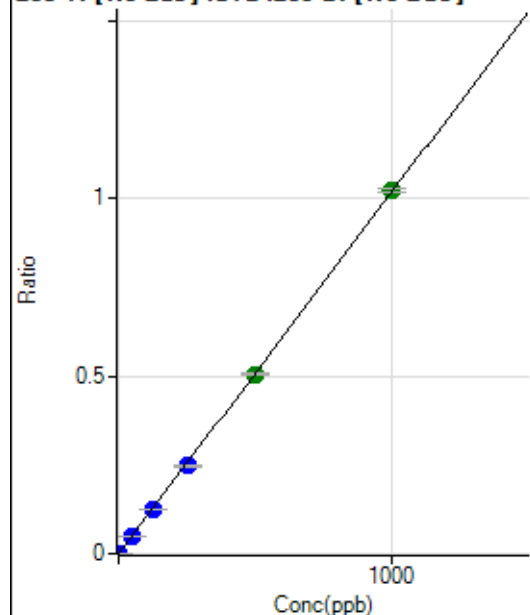
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			66.67		P	12.5
2	☐						
3	☐			108.34		P	35.3
4	☐			72.23		P	26.7
5	☐			44.45		P	10.8
6	☐			66.67		P	21.6
7	☐			83.34		P	43.6
8	☐			97.23		P	35.7
9	☐			102.78		P	28.5

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			31.11		P	24.7
2	☐						
3	☐			73.34		P	41.7
4	☐			27.78		P	18.3
5	☐			27.78		P	6.9
6	☐			41.11		P	4.7
7	☐			180.28		P	123.
8	☐			41.11		P	24.8
9	☐			44.45		P	15.6

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	457.78	0.0000	P	138.
2	☐	0.100					
3	☐	1.000	0.890	11477.61	0.0009	P	4.9
4	☐	50.000	49.185	605771.47	0.0500	P	1.1
5	☐	125.000	121.928	1533852.18	0.1239	P	0.2
6	☐	250.000	242.632	3061099.59	0.2464	P	0.9
7	☐	500.000	495.822	6201566.76	0.5035	A	0.8
8	☐	1000.000	1004.356	12124437.16	1.0200	A	1.2
9	☐			5959.91	0.0006	P	5.2

$$y = 0.0010 * x + 3.7401E-005$$

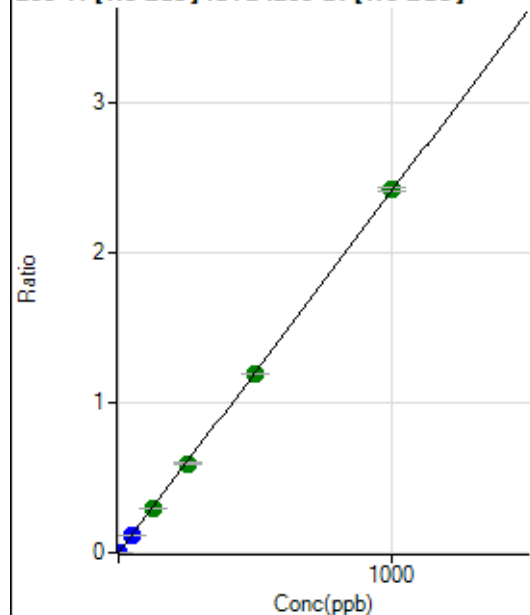
$$R = 1.0000$$

$$DL = 0.153$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	211.12	0.0000	P	22.4
2	☐	0.100					
3	☐	1.000	0.931	27504.31	0.0023	P	3.3
4	☐	50.000	49.455	1441617.97	0.1190	P	0.7
5	☐	125.000	121.132	3607744.53	0.2913	A	0.6
6	☐	250.000	246.862	7374741.40	0.5937	A	0.7
7	☐	500.000	494.416	14643859.53	1.1890	A	0.7
8	☐	1000.000	1004.087	28704519.74	2.4147	A	0.9
9	☐			13696.49	0.0014	P	5.3

$$y = 0.0024 * x + 1.7259E-005$$

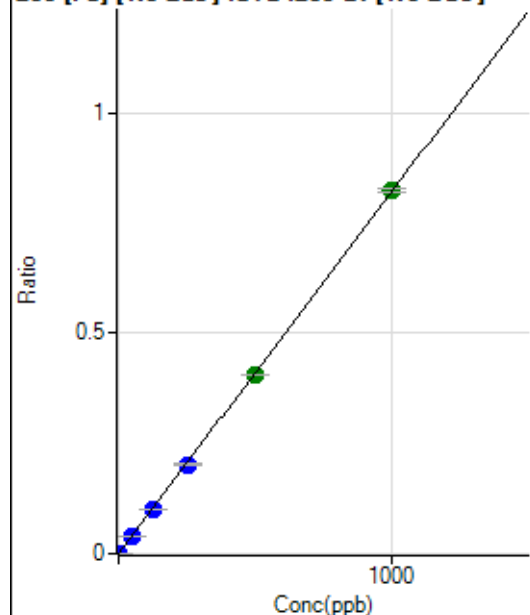
$$R = 1.0000$$

$$DL = 0.00482$$

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	475.95	0.0000	P	15.2
2	☐	0.100					
3	☐	1.000	0.941	9879.88	0.0008	P	1.9
4	☐	50.000	50.160	499059.83	0.0412	P	0.8
5	☐	125.000	122.536	1245102.75	0.1005	P	0.6
6	☐	250.000	246.437	2511212.41	0.2022	P	0.7
7	☐	500.000	495.609	5006707.40	0.4065	A	0.6
8	☐	1000.000	1003.386	9783131.01	0.8230	A	1.0
9	☐			54625.29	0.0055	P	1.9

$$y = 8.2018\text{E-}004 * x + 3.8911\text{E-}005$$

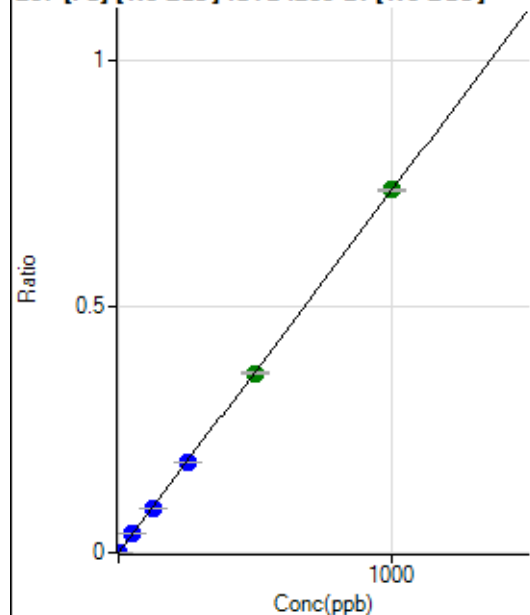
$$R = 1.0000$$

$$DL = 0.02163$$

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	462.98	0.0000	P	15.3
2	☐	0.100					
3	☐	1.000	0.933	8812.41	0.0007	P	1.8
4	☐	50.000	50.763	452208.74	0.0373	P	1.0
5	☐	125.000	124.181	1129748.48	0.0912	P	0.5
6	☐	250.000	248.513	2267281.65	0.1825	P	0.8
7	☐	500.000	496.554	4491140.44	0.3647	A	0.1
8	☐	1000.000	1002.159	8748545.04	0.7359	A	0.9
9	☐			46106.34	0.0047	P	1.1

$$y = 7.3431\text{E-}004 * x + 3.7855\text{E-}005$$

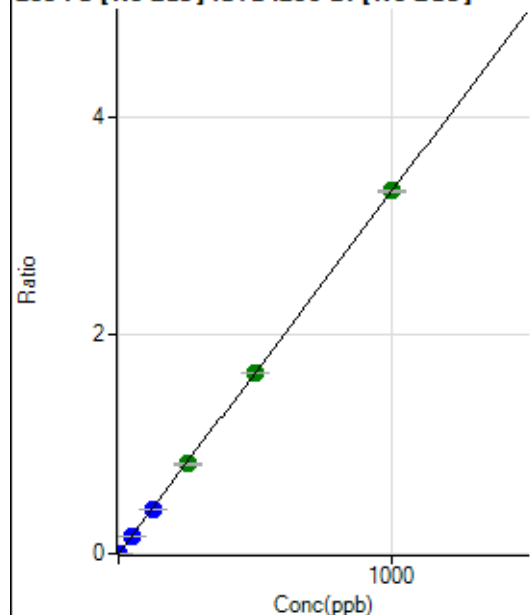
$$R = 1.0000$$

$$DL = 0.02361$$

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	2024.19	0.0002	P	5.5
2	☐	0.100					
3	☐	1.000	0.943	40126.73	0.0033	P	1.8
4	☐	50.000	50.191	2019098.41	0.1666	P	0.4
5	☐	125.000	123.290	5065213.90	0.4090	P	0.2
6	☐	250.000	247.884	10212592.34	0.8222	A	0.9
7	☐	500.000	497.429	20317159.31	1.6497	A	0.3
8	☐	1000.000	1002.019	39501634.85	3.3229	A	0.5
9	☐			214205.67	0.0217	P	0.6

$$y = 0.0033 * x + 1.6550E-004$$

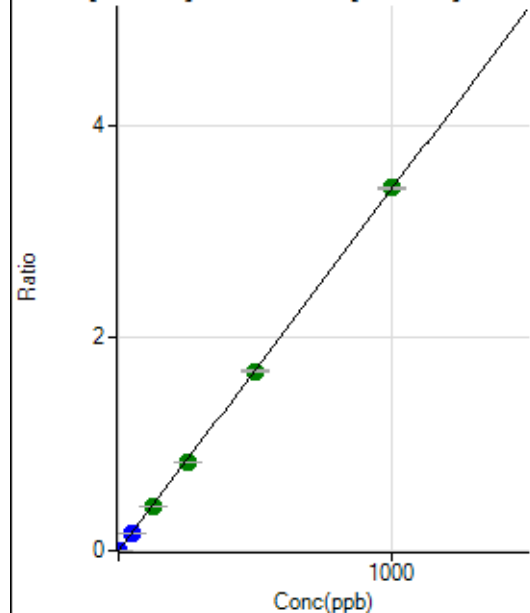
$$R = 1.0000$$

$$DL = 0.008178$$

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	225.01	0.0000	P	12.9
2	☐	0.100					
3	☐	1.000	0.882	36750.41	0.0030	P	1.4
4	☐	50.000	47.771	1965804.80	0.1622	P	0.3
5	☐	125.000	120.465	5065089.09	0.4090	A	0.5
6	☐	250.000	244.811	10324532.87	0.8312	A	0.8
7	☐	500.000	496.247	20750243.87	1.6848	A	0.7
8	☐	1000.000	1003.852	40515976.95	3.4082	A	0.2
9	☐			3069.96	0.0003	P	7.4

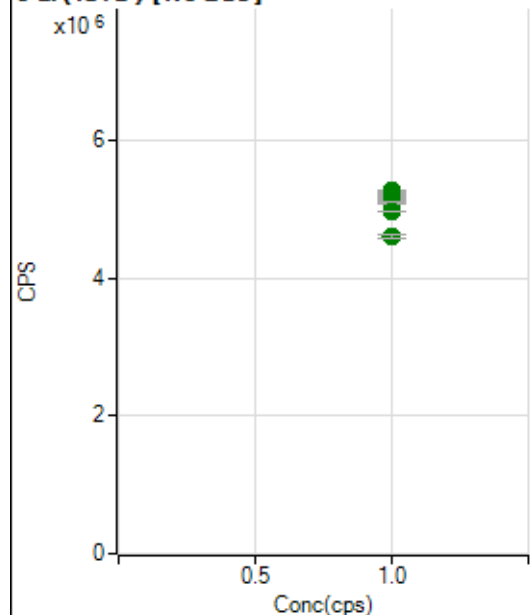
$$y = 0.0034 * x + 1.8397E-005$$

$$R = 1.0000$$

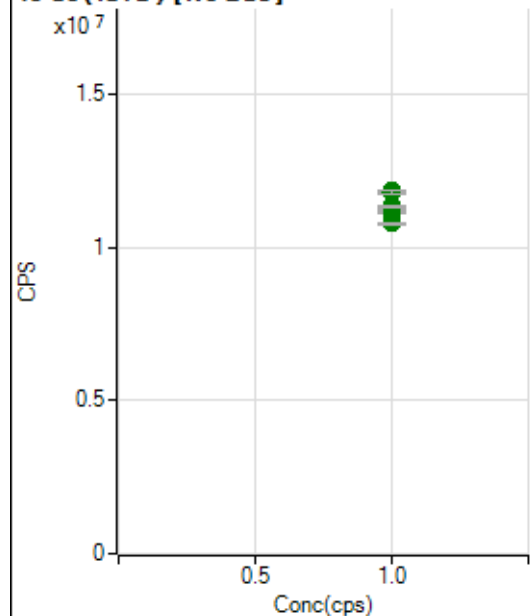
$$DL = 0.00209$$

Weight: <None>

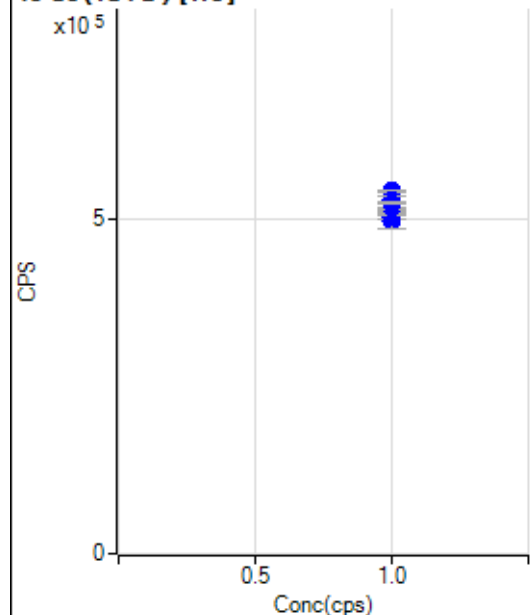
Min Conc: 0

6 Li (ISTD) [No Gas]

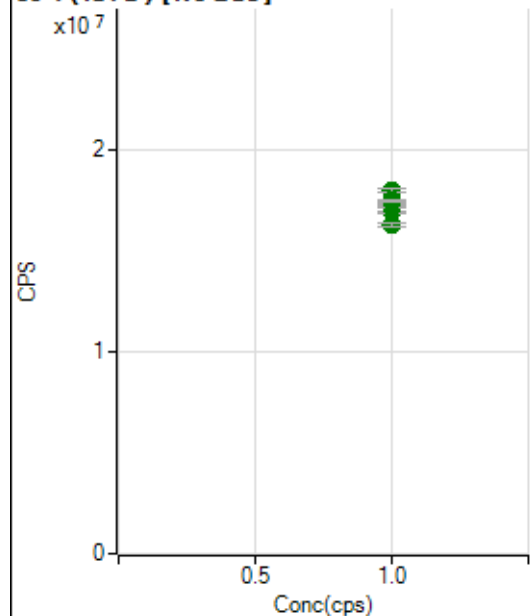
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5199996.87		A	0.2
2	☐	1.000					
3	☐	1.000		5272812.97		A	0.8
4	☐	1.000		5246156.28		A	0.2
5	☐	1.000		5219028.67		A	0.6
6	☐	1.000		5162526.38		A	0.2
7	☐	1.000		5103989.44		A	0.6
8	☐	1.000		4974462.36		A	0.5
9	☐	1.000		4618565.28		A	1.4

45 Sc (ISTD) [No Gas]

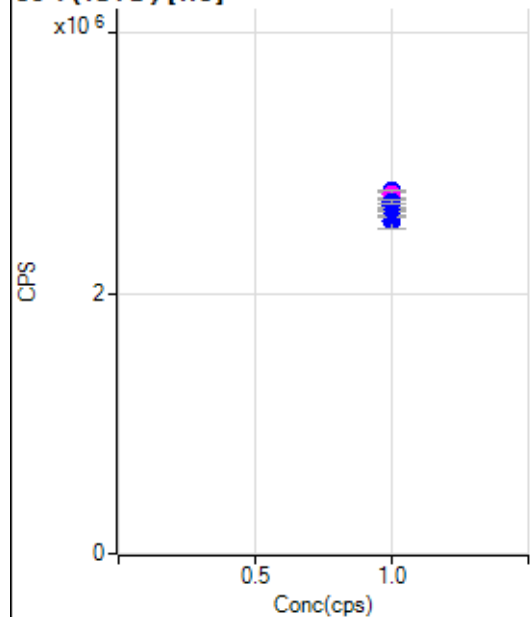
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11863285.68		A	0.4
2	☐	1.000					
3	☐	1.000		11799909.90		A	0.9
4	☐	1.000		11348997.04		A	0.4
5	☐	1.000		11139208.15		A	0.6
6	☐	1.000		11147900.51		A	0.3
7	☐	1.000		11283680.63		A	0.7
8	☐	1.000		11363582.11		A	0.6
9	☐	1.000		10812159.18		A	0.6

45 Sc (ISTD) [He]

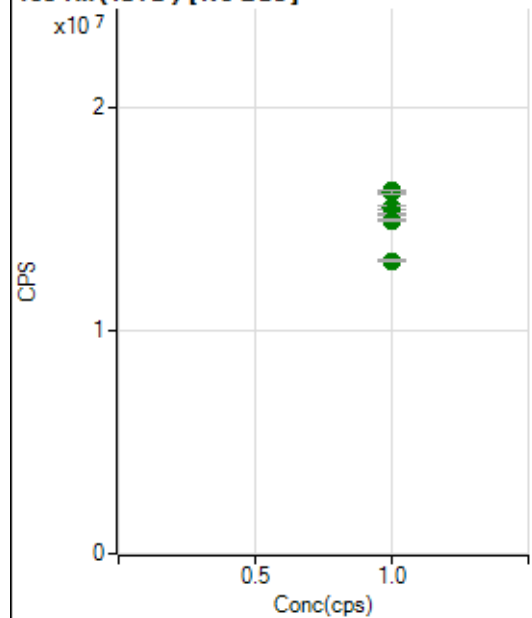
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		525505.93		P	5.9
2	☐	1.000					
3	☐	1.000		541927.29		P	0.3
4	☐	1.000		496907.42		P	4.9
5	☐	1.000		502411.75		P	0.7
6	☐	1.000		506587.46		P	0.5
7	☐	1.000		515657.69		P	1.0
8	☐	1.000		528221.45		P	1.8
9	☐	1.000		524206.12		P	0.8

89 Y (ISTD) [No Gas]

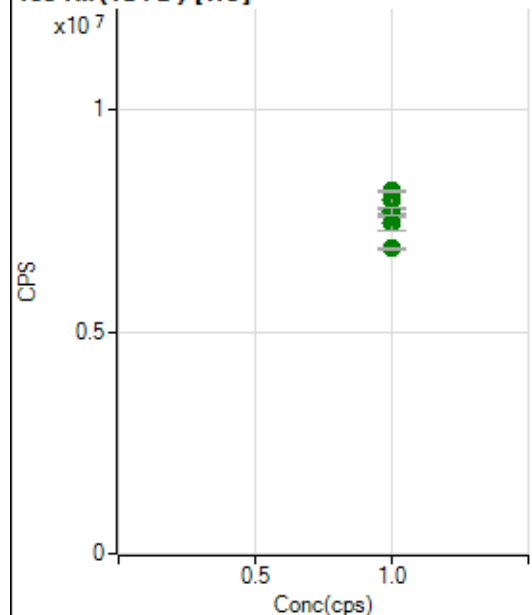
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		17913369.04		A	0.3
2	☐	1.000					
3	☐	1.000		17990817.93		A	1.0
4	☐	1.000		17276765.43		A	0.5
5	☐	1.000		16954111.00		A	0.5
6	☐	1.000		17198914.74		A	0.5
7	☐	1.000		17419086.96		A	0.2
8	☐	1.000		17499192.93		A	0.6
9	☐	1.000		16332805.03		A	1.0

89 Y (ISTD) [He]

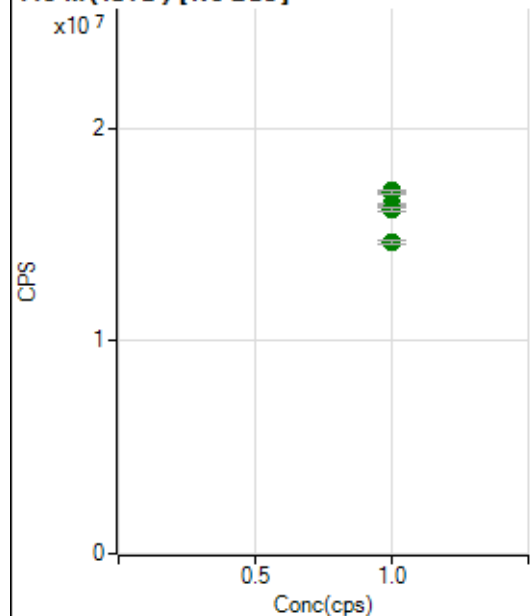
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2722214.75		P	4.8
2	☐	1.000					
3	☐	1.000		2789377.81		P	0.3
4	☐	1.000		2562051.14		P	5.0
5	☐	1.000		2598177.29		P	0.6
6	☐	1.000		2640977.34		P	0.2
7	☐	1.000		2680396.73		P	1.0
8	☐	1.000		2768477.32		M	2.1
9	☐	1.000		2701797.84		P	0.9

103 Rh (ISTD) [No Gas]

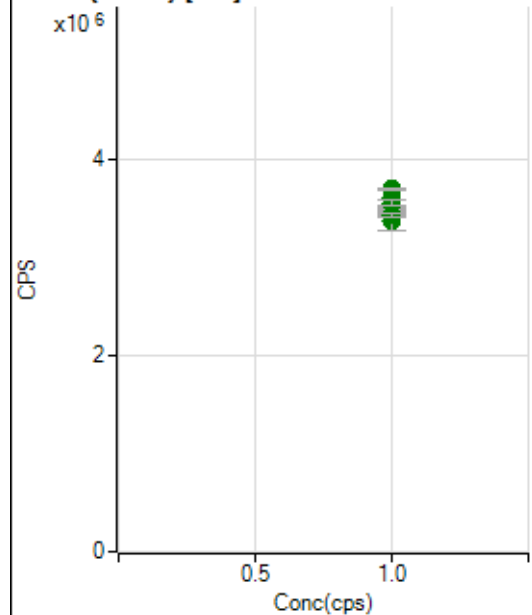
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16271626.75		A	0.2
2	☐	1.000					
3	☐	1.000		16240126.23		A	1.0
4	☐	1.000		15523698.26		A	0.7
5	☐	1.000		15214789.23		A	0.5
6	☐	1.000		15249626.73		A	0.2
7	☐	1.000		15204861.10		A	0.3
8	☐	1.000		14958925.85		A	0.5
9	☐	1.000		13141632.85		A	0.6

103 Rh (ISTD) [He]

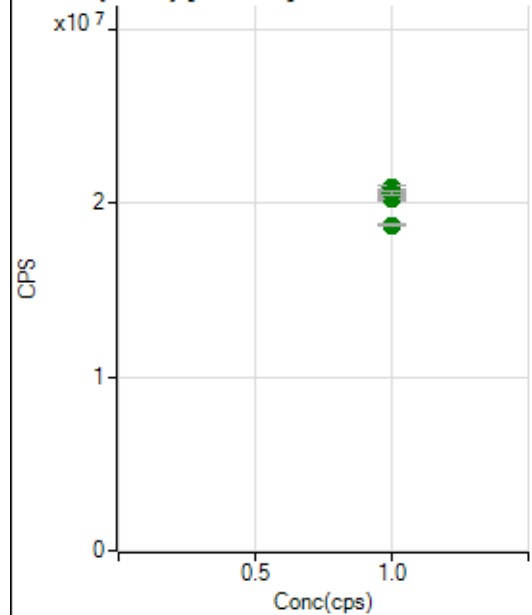
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7975780.51		A	5.5
2	☐	1.000					
3	☐	1.000		8180682.59		A	0.5
4	☐	1.000		7466893.78		A	5.1
5	☐	1.000		7591691.14		A	0.5
6	☐	1.000		7630008.85		A	0.4
7	☐	1.000		7620670.93		A	0.6
8	☐	1.000		7714312.45		A	1.8
9	☐	1.000		6887433.72		A	0.6

115 In (ISTD) [No Gas]

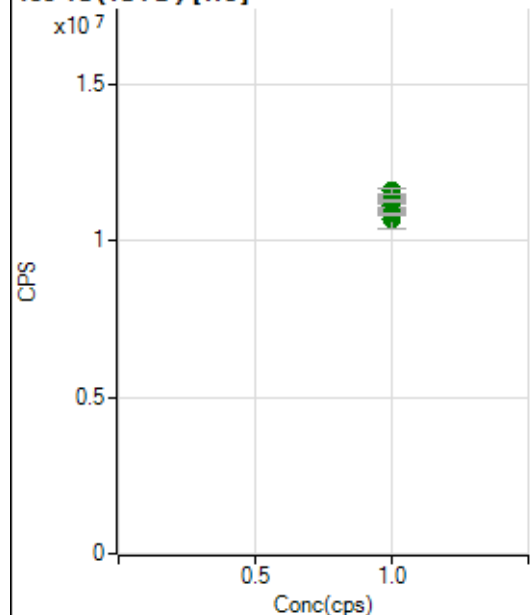
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		17062625.61		A	0.2
2	☐	1.000					
3	☐	1.000		17003897.59		A	0.8
4	☐	1.000		16420474.61		A	0.5
5	☐	1.000		16261870.84		A	0.2
6	☐	1.000		16360053.44		A	0.6
7	☐	1.000		16464730.57		A	0.3
8	☐	1.000		16180770.57		A	0.8
9	☐	1.000		14653862.13		A	0.9

115 In (ISTD) [He]

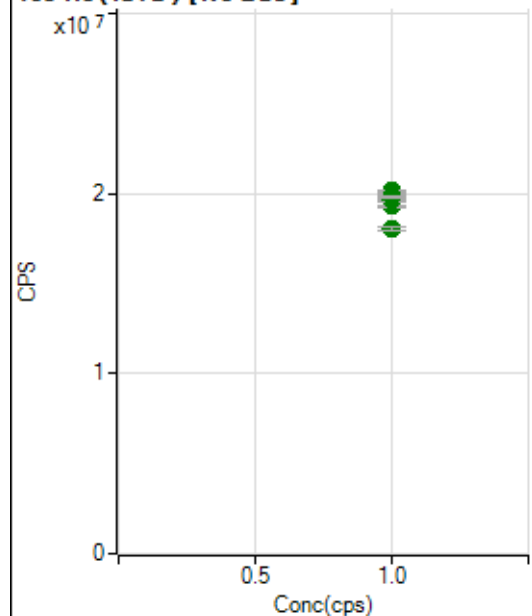
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3604781.94		A	5.6
2	☐	1.000					
3	☐	1.000		3701721.74		A	0.4
4	☐	1.000		3375907.53		A	5.4
5	☐	1.000		3438787.39		A	0.1
6	☐	1.000		3465482.14		A	0.2
7	☐	1.000		3481285.95		A	0.4
8	☐	1.000		3557458.25		A	1.5
9	☐	1.000		3431526.95		A	0.9

159 Tb (ISTD) [No Gas]

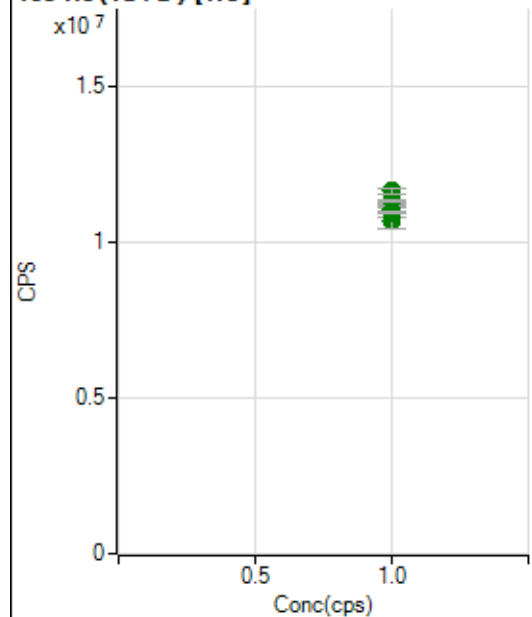
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		20524316.64		A	0.3
2	☐	1.000					
3	☐	1.000		20446298.03		A	1.2
4	☐	1.000		20216775.81		A	0.3
5	☐	1.000		20310909.70		A	0.3
6	☐	1.000		20712651.64		A	0.1
7	☐	1.000		20892190.38		A	1.1
8	☐	1.000		20594892.47		A	0.8
9	☐	1.000		18737469.17		A	0.7

159 Tb (ISTD) [He]

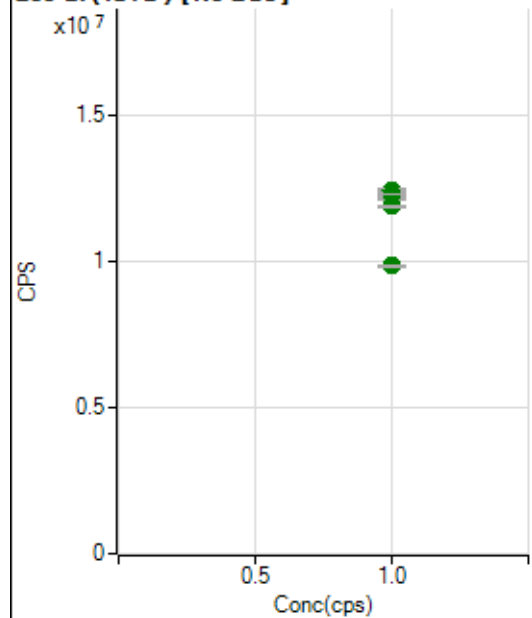
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11115990.46		A	5.8
2	☐	1.000					
3	☐	1.000		11323199.69		A	0.1
4	☐	1.000		10649917.90		A	5.4
5	☐	1.000		11000502.75		A	0.7
6	☐	1.000		11213324.42		A	0.5
7	☐	1.000		11268026.91		A	0.6
8	☐	1.000		11574649.13		A	1.6
9	☐	1.000		10845884.42		A	0.4

165 Ho (ISTD) [No Gas]

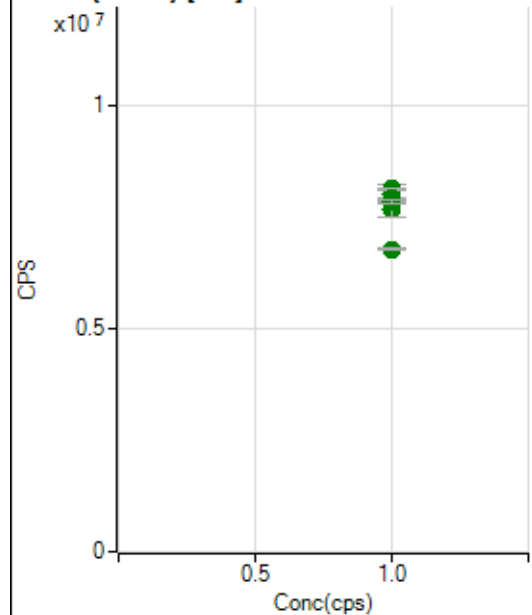
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		19831551.66		A	0.3
2	☐	1.000					
3	☐	1.000		19750360.69		A	0.5
4	☐	1.000		19319027.52		A	0.7
5	☐	1.000		19645995.06		A	0.7
6	☐	1.000		19923978.92		A	0.5
7	☐	1.000		20153290.38		A	0.4
8	☐	1.000		19851055.83		A	0.5
9	☐	1.000		18044979.74		A	0.9

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11038591.99		A	5.1
2	☐	1.000					
3	☐	1.000		11260083.17		A	0.1
4	☐	1.000		10661235.74		A	4.9
5	☐	1.000		11019904.42		A	1.0
6	☐	1.000		11210615.95		A	0.5
7	☐	1.000		11320762.33		A	0.4
8	☐	1.000		11628409.96		A	1.8
9	☐	1.000		10932664.01		A	0.8

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12231221.21		A	0.1
2	☐	1.000					
3	☐	1.000		12193330.10		A	1.2
4	☐	1.000		12119383.29		A	0.5
5	☐	1.000		12384148.01		A	0.9
6	☐	1.000		12422379.95		A	1.2
7	☐	1.000		12315847.73		A	0.2
8	☐	1.000		11887828.99		A	0.9
9	☐	1.000		9861508.74		A	0.7

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8020192.87		A	5.2
2	☐	1.000					
3	☐	1.000		8147269.53		A	0.5
4	☐	1.000		7684303.01		A	5.0
5	☐	1.000		7913754.67		A	0.9
6	☐	1.000		7952074.95		A	0.1
7	☐	1.000		7855992.24		A	0.3
8	☐	1.000		7866360.93		A	1.0
9	☐	1.000		6798690.80		A	0.3

US EPA Tune Check Sample Report

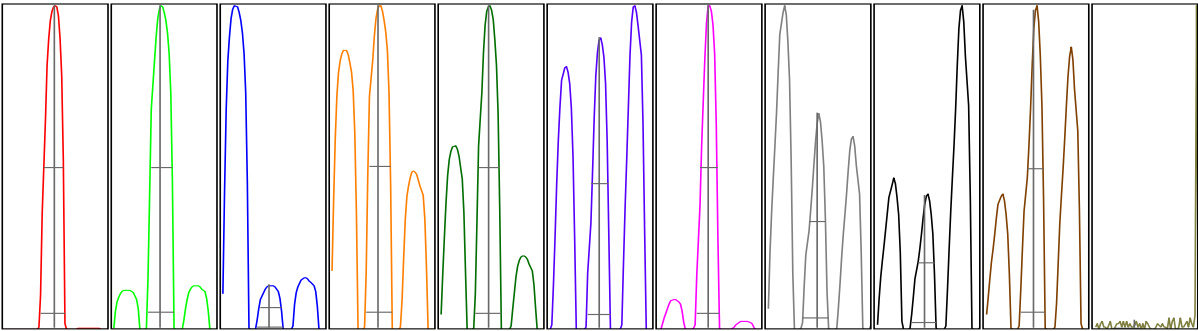
Batch Folder D:\ICP-MS Data\P7081018 -MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	17300	0.76	5.00	
24	768071	0.62	5.00	
25	105687	0.67	5.00	
26	122580	0.62	5.00	
59	137531	0.62	5.00	
113	15712	1.38	5.00	
115	188459	2.04	5.00	
206	39478	0.83	5.00	
207	35831	0.71	5.00	
208	84651	0.83	5.00	
220	0	54.77		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	17201	17126	17357	17375	17440
24	767722	760321	769817	773076	769420
25	105714	104466	106049	106262	105944
26	122212	121434	123307	122845	123100
59	137654	136039	138177	137907	137878
113	16039	15631	15820	15502	15570
115	193938	188899	189194	186924	183340
206	39451	38960	39637	39844	39499
207	35613	35505	36051	36029	35957
208	84326	83604	84826	85122	85376
220	0	0	0	0	0

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	31158	9.00	8.9 - 9.1		0.724	0.900	
24	1281286	23.90	23.9 - 24.1		0.779	0.900	
25	174763	24.90	24.9 - 25.1		0.782	0.900	
26	202486	25.90	25.9 - 26.1		0.781	0.900	
59	243125	58.95	58.9 - 59.1		0.770	0.900	
113	33120	113.00	112.9 - 113.1		0.681	0.900	
115	401194	115.00	114.9 - 115.1		0.680	0.900	
206	85807	206.00	205.9 - 206.1		0.729	0.900	
207	75839	206.95	206.9 - 207.1		0.723	0.900	
208	181187	207.95	207.9 - 208.1		0.724	0.900	
220	1	219.70	-		0.753		

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	7.3	V	Deflect	12.8	V
Extract 2	-125.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-65	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination	5.0	V
He Flow	0.0	mL/min	OctP RF	200	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	35058	1.32	
89	57836	1.43	
205	39115	0.65	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	35159	34455	35699	35155	34821
89	58498	57106	58789	57876	56913
205	39328	38972	39152	39368	38758

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	7.3	V	Deflect	2.0	V
Extract 2	-120.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-60	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			