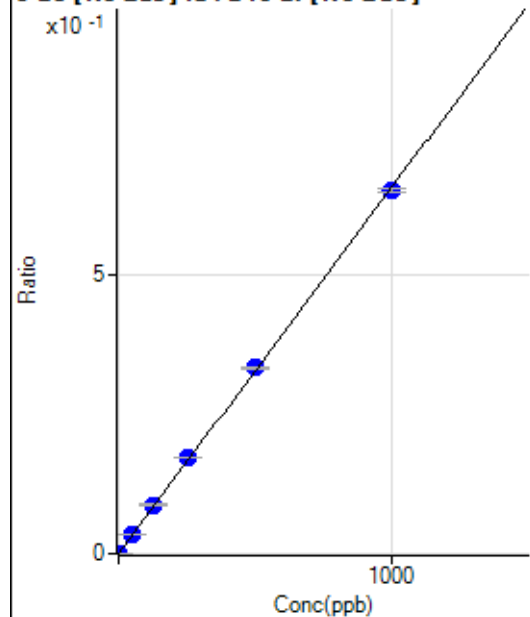


Batch Folder: D:\ICP-MS Data\P7120718 MS.b\
Analysis File: P7120718 MS.batch.bin
DA Date-Time: 2018-12-07 12:35:41
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2018-12-07 12:25:25
2			
3	006CALS.d	S02	2018-12-07 12:33:42
4	007CALS.d	S03	2018-12-07 12:37:36
5	008CALS.d	S04	2018-12-07 12:41:43
6	009CALS.d	S05	2018-12-07 12:45:31
7	010CALS.d	S06	2018-12-07 12:49:17
8	011CALS.d	S07	2018-12-07 12:53:01
9	012CALS.d	S08	2018-12-07 12:56:45

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	24.07	0.0000	P	13.6
2	☐	0.100					
3	☐	1.000	0.963	3044.83	0.0006	P	5.0
4	☐	50.000	53.326	168194.87	0.0350	P	0.6
5	☐	125.000	133.467	407460.02	0.0876	P	2.2
6	☐	250.000	262.743	767322.52	0.1724	P	0.7
7	☐	500.000	508.278	1394514.76	0.3334	P	0.8
8	☐	1000.000	991.450	2673406.89	0.6504	P	1.2
9	☐			433.35	0.0001	P	10.6

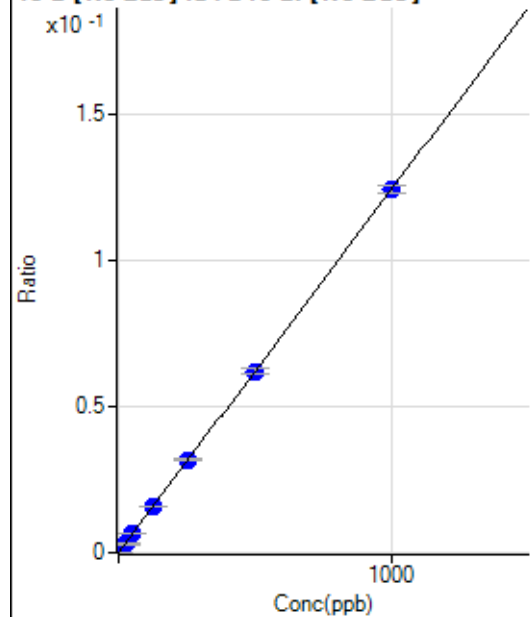
$$y = 6.5602\text{E-}004 * x + 5.0924\text{E-}006$$

$$R = 0.9998$$

$$DL = 0.003164$$

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	297.24	0.0001	P	9.9
2	☐	2.500					
3	☐	25.000	23.674	14340.64	0.0030	P	5.0
4	☐	50.000	51.710	31127.47	0.0065	P	3.3
5	☐	125.000	127.061	73612.47	0.0158	P	1.6
6	☐	250.000	255.514	141315.68	0.0317	P	1.5
7	☐	500.000	499.516	259259.77	0.0620	P	2.5
8	☐	1000.000	998.553	509197.93	0.1239	P	2.1
9	☐			9931.45	0.0023	P	11.2

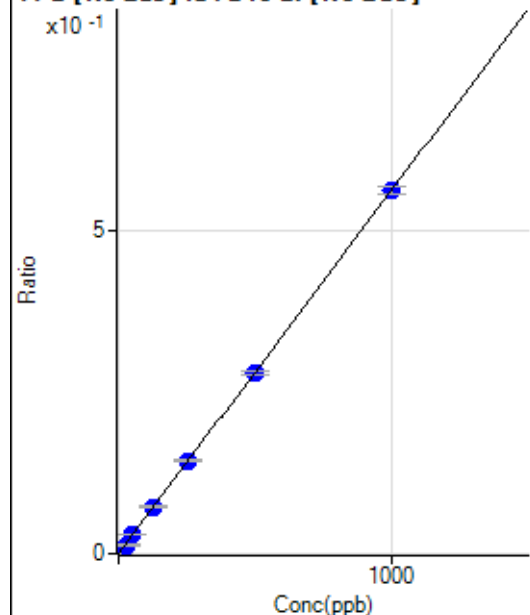
$$y = 1.2400\text{E-}004 * x + 6.2864\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.1499$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1469.58	0.0003	P	2.6
2	☐	2.500					
3	☐	25.000	23.189	63685.43	0.0133	P	2.0
4	☐	50.000	50.944	138827.80	0.0289	P	0.4
5	☐	125.000	127.857	335097.75	0.0720	P	2.1
6	☐	250.000	255.622	639458.71	0.1437	P	1.9
7	☐	500.000	499.252	1172058.22	0.2803	P	2.1
8	☐	1000.000	998.609	2303129.78	0.5603	P	2.2
9	☐			45514.19	0.0106	P	7.8

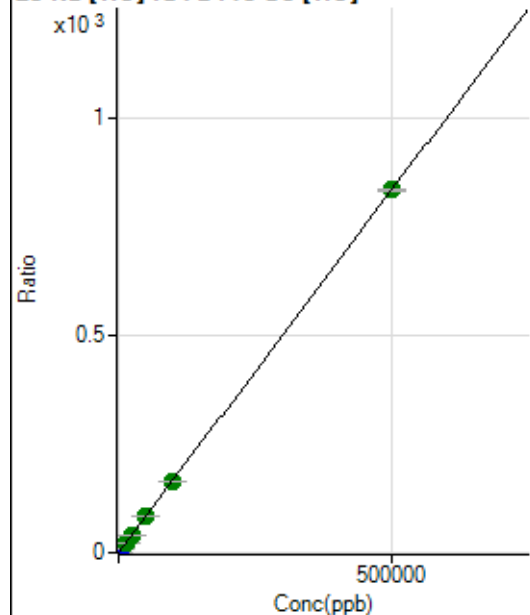
$$y = 5.6079\text{E-}004 * x + 3.1079\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.04393$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5351.18	0.0175	P	3.1
2	☐	50.000					
3	☐	500.000	463.756	239622.61	0.7901	P	0.3
4	☐	5000.000	4997.307	2452401.64	8.3424	P	3.1
5	☐	12500.000	12396.137	5849805.99	20.6679	A	0.3
6	☐	25000.000	24847.663	10894663.00	41.4105	A	0.8
7	☐	50000.000	49348.241	20696839.00	82.2252	A	0.8
8	☐	100000.00	97963.021	42515492.97	163.2111	A	0.8
9	☐	500000.00	500482.84	243312088.7	833.7562	A	0.2

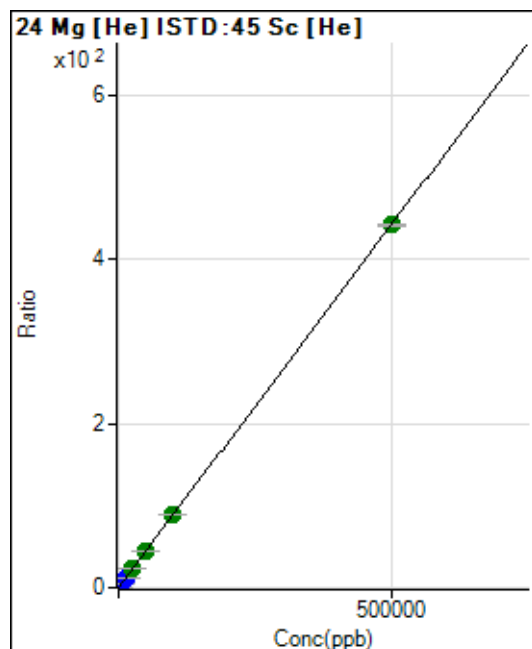
$$y = 0.0017 * x + 0.0175$$

$$R = 1.0000$$

$$DL = 0.9674$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	125.01	0.0004	P	6.7
2	☐	50.000					
3	☐	500.000	475.920	127824.87	0.4215	P	1.1
4	☐	5000.000	5233.602	1361186.57	4.6305	P	3.3
5	☐	12500.000	12946.051	3241811.25	11.4536	P	0.7
6	☐	25000.000	25843.605	6015279.82	22.8640	A	1.1
7	☐	50000.000	51190.018	11399438.10	45.2877	A	0.6
8	☐	100000.00	101077.26	23294107.29	89.4224	A	0.7
9	☐	500000.00	499609.90	128982745.9	442.0002	A	0.4

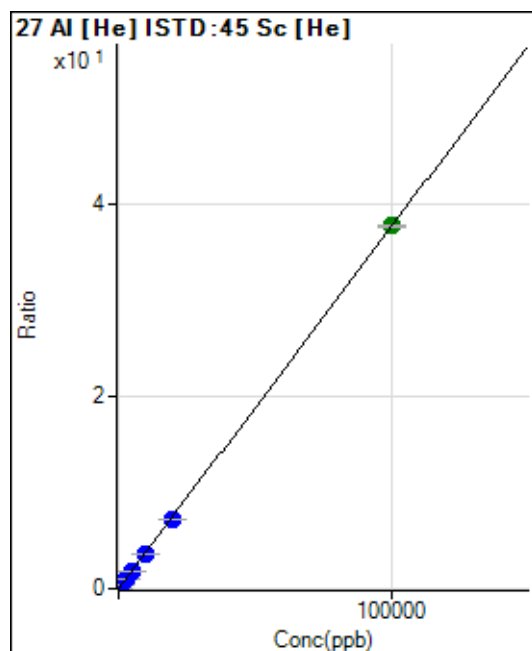
$$y = 8.8469\text{E-}004 * x + 4.0942\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.09355$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	36.11	0.0001	P	35.4
2	☐	2.000					
3	☐	20.000	18.366	2133.58	0.0070	P	6.2
4	☐	1000.000	1001.523	110937.39	0.3773	P	2.2
5	☐	2500.000	2470.876	263416.41	0.9307	P	0.7
6	☐	5000.000	4910.872	486616.73	1.8496	P	1.3
7	☐	10000.000	9746.205	923952.29	3.6707	P	1.0
8	☐	20000.000	19255.761	1889172.72	7.2521	P	0.5
9	☐	100000.00	100179.39	11010246.60	37.7291	A	0.4

$$y = 3.7661\text{E-}004 * x + 1.1830\text{E-}004$$

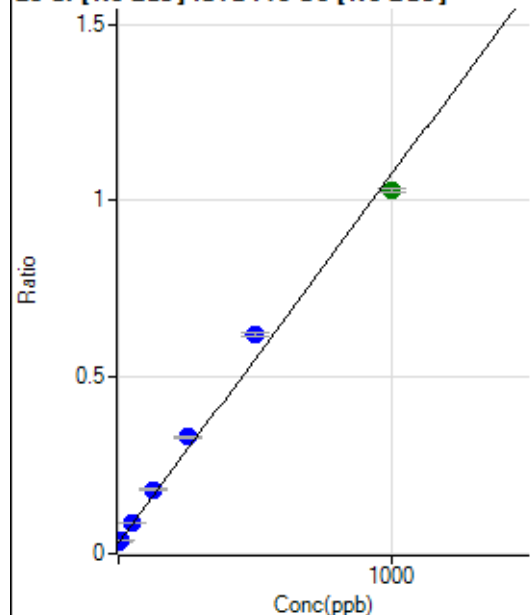
$$R = 1.0000$$

$$DL = 0.334$$

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	236304.91	0.0303	P	0.7
2	☐	1.000					
3	☐	10.000	9.450	310430.17	0.0402	P	0.3
4	☐	50.000	56.126	681719.32	0.0889	P	0.6
5	☐	125.000	144.798	1335593.29	0.1815	P	1.9
6	☐	250.000	287.035	2323337.92	0.3300	P	1.2
7	☐	500.000	564.994	4132399.66	0.6201	P	1.5
8	☐	1000.000	955.468	6802622.11	1.0277	A	1.2
9	☐			411974.28	0.0584	P	0.6

$$y = 0.0010 * x + 0.0303$$

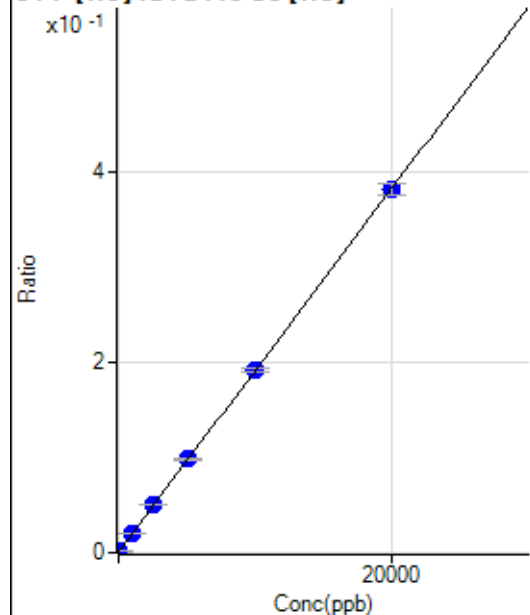
$$R = 0.9958$$

$$DL = 0.6278$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-26.523	66.67	0.0002	P	43.2
2	☐	0.000					
3	☐	0.000	26.523	372.25	0.0012	P	9.9
4	☐	1000.000	1035.855	6012.54	0.0204	P	2.6
5	☐	2500.000	2592.164	14168.41	0.0501	P	2.5
6	☐	5000.000	5125.803	25856.54	0.0983	P	2.0
7	☐	10000.000	10020.810	48187.20	0.1914	P	1.9
8	☐	20000.000	19944.831	99078.63	0.3803	P	3.1
9	☐			147.23	0.0005	P	18.7

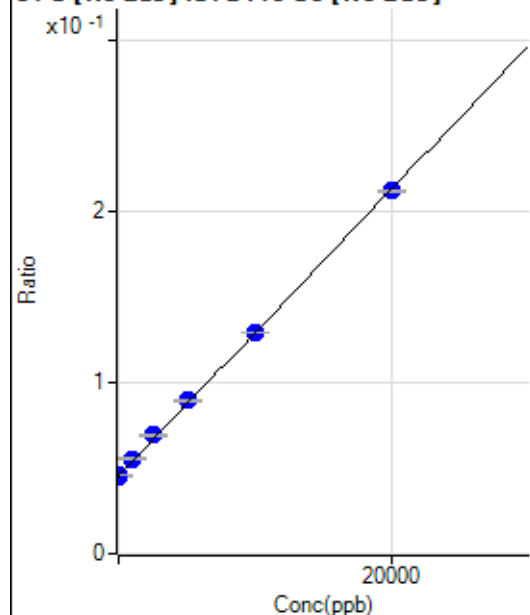
$$y = 1.9033E-005 * x + 7.2303E-004$$

$$R = 1.0000$$

$$DL = 16.96$$

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	-66.457	349648.46	0.0449	P	0.2
2	☐	0.000					
3	☐	0.000	66.457	355211.55	0.0460	P	0.9
4	☐	1000.000	1209.681	426109.60	0.0556	P	1.5
5	☐	2500.000	2862.164	511018.75	0.0694	P	1.8
6	☐	5000.000	5242.121	629410.82	0.0894	P	0.8
7	☐	10000.000	10027.478	863054.40	0.1295	P	0.2
8	☐	20000.000	19869.976	1403282.05	0.2120	P	0.8
9	☐			287770.56	0.0408	P	1.5

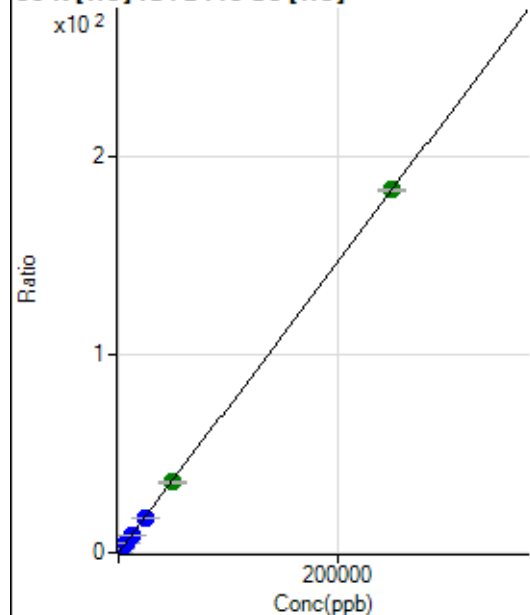
$$y = 8.3821\text{E-}006 * x + 0.0454$$

$$R = 0.9998$$

$$DL = 91.37$$

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	14460.32	0.0474	P	2.5
2	☐	50.000					
3	☐	500.000	466.852	117893.90	0.3887	P	1.5
4	☐	2500.000	2515.311	554584.92	1.8866	P	3.1
5	☐	6250.000	6188.761	1294202.16	4.5726	P	0.9
6	☐	12500.000	12244.499	2367955.18	9.0006	P	0.1
7	☐	25000.000	24154.001	4457486.60	17.7089	P	0.9
8	☐	50000.000	48466.168	9244098.04	35.4860	A	0.5
9	☐	250000.00	250405.58	53445433.84	183.1450	A	0.4

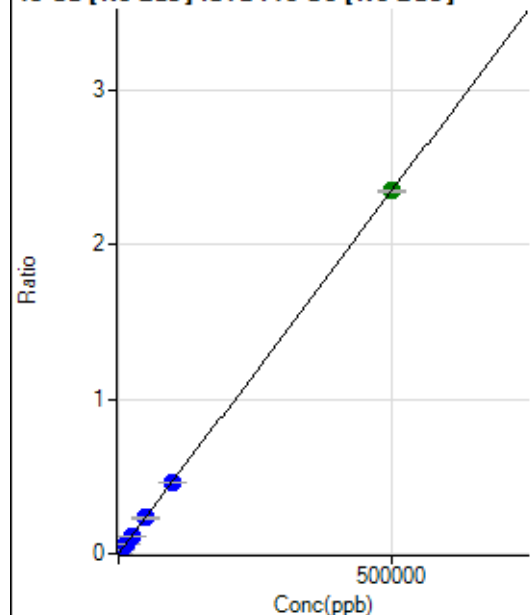
$$y = 7.3120\text{E-}004 * x + 0.0474$$

$$R = 1.0000$$

$$DL = 4.871$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	105.56	0.0000	P	18.0
2	☐	50.000					
3	☐	500.000	456.864	16657.16	0.0022	P	2.6
4	☐	5000.000	5009.847	180327.05	0.0235	P	0.2
5	☐	12500.000	12646.980	436870.15	0.0594	P	1.0
6	☐	25000.000	24974.694	825289.92	0.1172	P	0.9
7	☐	50000.000	49161.013	1537432.58	0.2307	P	0.8
8	☐	100000.00	98161.427	3048959.79	0.4606	P	1.3
9	☐	500000.00	500449.14	16556377.28	2.3483	A	0.5

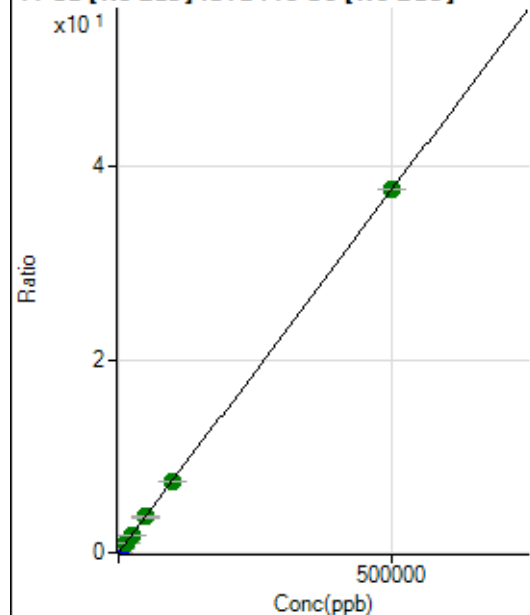
$$y = 4.6923\text{E-}006 * x + 1.3547\text{E-}005$$

$$R = 1.0000$$

$$DL = 1.559$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7480.62	0.0010	P	3.2
2	☐	50.000					
3	☐	500.000	466.852	278145.83	0.0360	P	1.0
4	☐	5000.000	4984.039	2876929.36	0.3753	P	0.1
5	☐	12500.000	12566.069	6951747.72	0.9447	A	2.2
6	☐	25000.000	24789.990	13115995.61	1.8627	A	1.0
7	☐	50000.000	49075.629	24569290.65	3.6865	A	0.4
8	☐	100000.00	98422.259	48932691.37	7.3923	A	0.9
9	☐	500000.00	500417.02	264974025.3	37.5816	A	0.2

$$y = 7.5099\text{E-}005 * x + 9.6028\text{E-}004$$

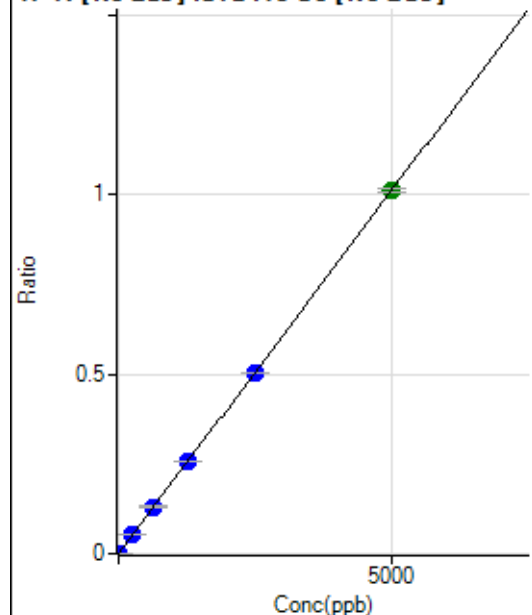
$$R = 1.0000$$

$$DL = 1.243$$

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	72.23	0.0000	P	13.0
2	☐	0.500					
3	☐	5.000	5.078	8005.23	0.0010	P	2.3
4	☐	250.000	254.841	395331.52	0.0516	P	0.6
5	☐	625.000	646.181	962148.59	0.1307	P	1.8
6	☐	1250.000	1267.391	1805643.68	0.2564	P	0.3
7	☐	2500.000	2491.466	3359273.25	0.5041	P	0.7
8	☐	5000.000	4997.029	6691832.31	1.0110	A	1.0
9	☐			3336.63	0.0005	P	4.6

$$y = 2.0231\text{E-}004 * x + 9.2697\text{E-}006$$

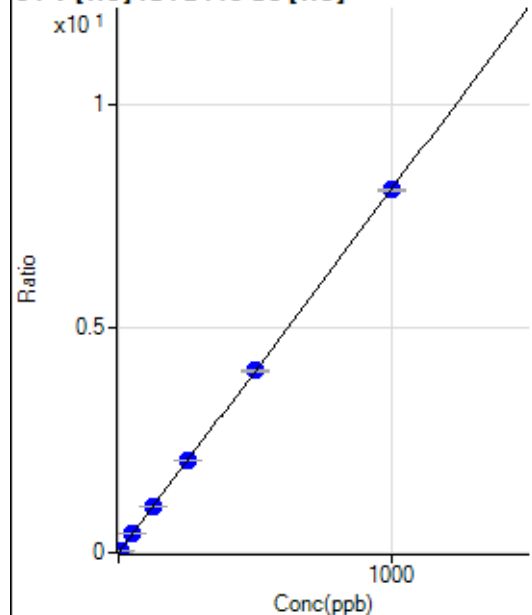
$$R = 1.0000$$

$$DL = 0.01783$$

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	7.78	0.0000	P	99.3
2	☐	0.500					
3	☐	5.000	5.104	12555.51	0.0414	P	1.3
4	☐	50.000	51.689	123186.73	0.4190	P	2.7
5	☐	125.000	127.611	292787.07	1.0344	P	0.3
6	☐	250.000	252.718	538957.92	2.0486	P	0.7
7	☐	500.000	501.523	1023300.98	4.0654	P	0.7
8	☐	1000.000	998.148	2107698.39	8.0911	P	0.2
9	☐			701.14	0.0024	P	11.2

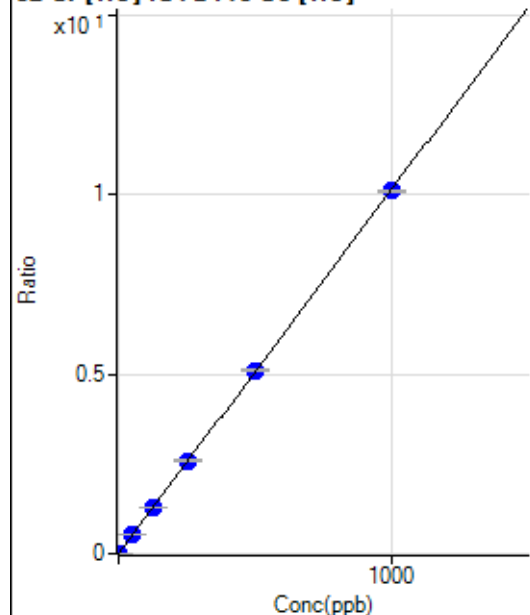
$$y = 0.0081 * x + 2.5511\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.009372$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	767.81	0.0025	P	4.0
2	☐	0.200					
3	☐	2.000	1.911	6639.37	0.0219	P	1.2
4	☐	50.000	52.292	156560.45	0.5326	P	3.4
5	☐	125.000	128.424	369188.29	1.3044	P	0.3
6	☐	250.000	255.718	682664.43	2.5948	P	0.5
7	☐	500.000	503.341	1284977.07	5.1050	P	1.1
8	☐	1000.000	996.357	2631789.37	10.1029	P	0.5
9	☐			111888.16	0.3834	P	0.6

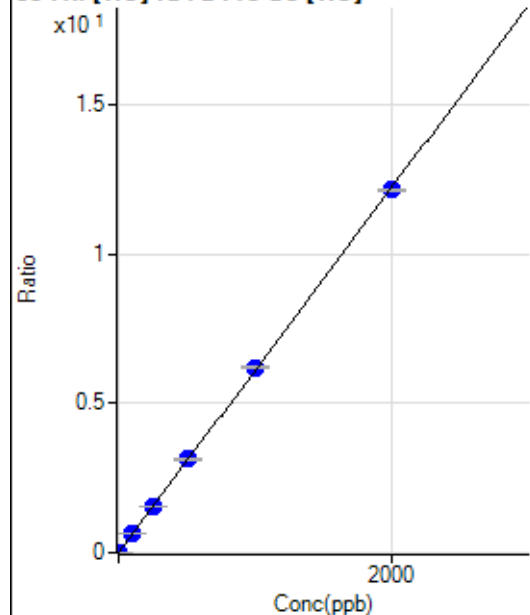
$$y = 0.0101 * x + 0.0025$$

$$R = 1.0000$$

$$DL = 0.02943$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	50.00	0.0002	P	20.4
2	☐	0.100					
3	☐	1.000	0.945	1799.03	0.0059	P	4.8
4	☐	100.000	103.554	185895.42	0.6324	P	3.2
5	☐	250.000	256.832	443835.22	1.5681	P	0.5
6	☐	500.000	511.701	821915.76	3.1241	P	0.4
7	☐	1000.000	1014.322	1558720.03	6.1926	P	1.2
8	☐	2000.000	1988.882	3163069.57	12.1423	P	0.7
9	☐			23401.04	0.0802	P	0.8

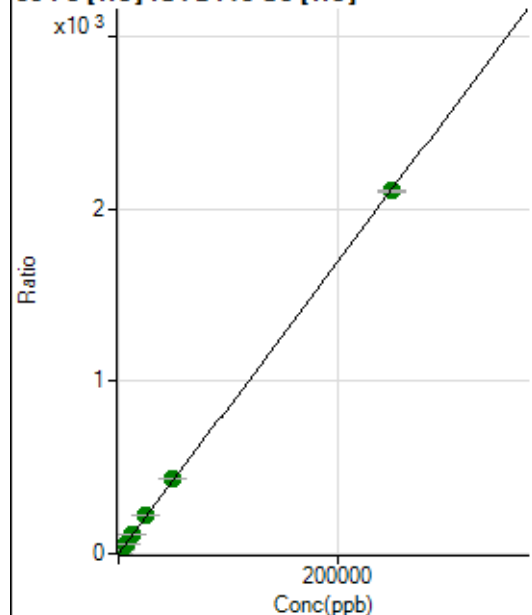
$$y = 0.0061 * x + 1.6384E-004$$

$$R = 0.9999$$

$$DL = 0.01639$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3431.99	0.0112	P	3.8
2	☐	5.000					
3	☐	50.000	52.525	137977.41	0.4550	P	1.8
4	☐	2500.000	2711.451	6736817.80	22.9167	A	3.1
5	☐	6250.000	6722.876	16077605.91	56.8039	A	0.5
6	☐	12500.000	13428.980	29848781.92	113.4549	A	0.7
7	☐	25000.000	26442.033	56227792.00	223.3849	A	0.9
8	☐	50000.000	52026.248	114491049.7	439.5119	A	0.5
9	☐	250000.00	249390.16	614789561.8	2,106.777	A	0.5

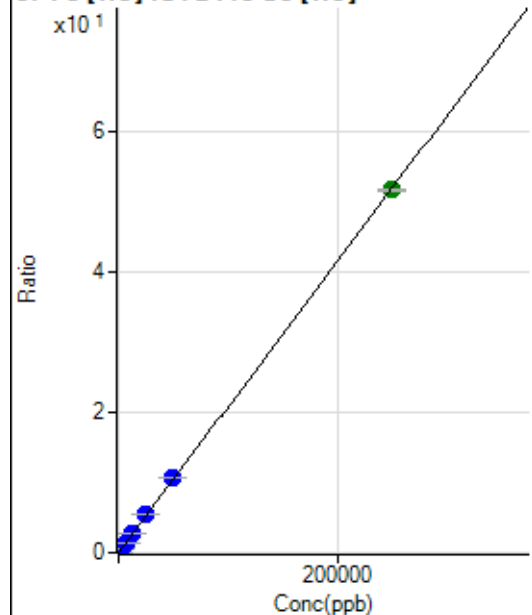
$$y = 0.0084 * x + 0.0112$$

$$R = 1.0000$$

$$DL = 0.1508$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	101.86	0.0003	P	17.8
2	☐	5.000					
3	☐	50.000	52.112	3372.70	0.0111	P	3.3
4	☐	2500.000	2729.098	166147.85	0.5652	P	3.0
5	☐	6250.000	6726.213	394120.10	1.3925	P	0.3
6	☐	12500.000	13404.316	729980.34	2.7747	P	0.2
7	☐	25000.000	26518.254	1381589.66	5.4889	P	1.1
8	☐	50000.000	51763.218	2790969.07	10.7139	P	0.6
9	☐	250000.00	249436.11	15065356.70	51.6267	A	0.7

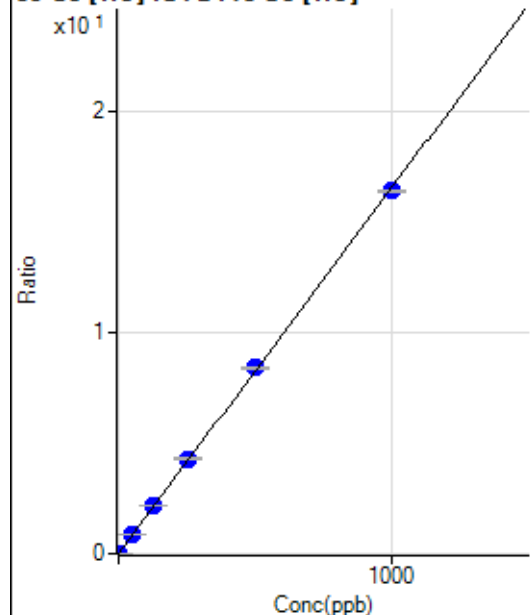
$$y = 2.0697E-004 * x + 3.3368E-004$$

$$R = 1.0000$$

$$DL = 0.8597$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	30.00	0.0001	P	44.7
2	☐	0.100					
3	☐	1.000	0.986	4978.71	0.0164	P	2.8
4	☐	50.000	53.835	262040.03	0.8914	P	3.4
5	☐	125.000	131.798	617664.27	2.1823	P	0.2
6	☐	250.000	260.038	1132743.14	4.3056	P	0.7
7	☐	500.000	508.427	2118899.69	8.4181	P	1.2
8	☐	1000.000	992.236	4279645.84	16.4285	P	0.7
9	☐			57470.92	0.1969	P	1.0

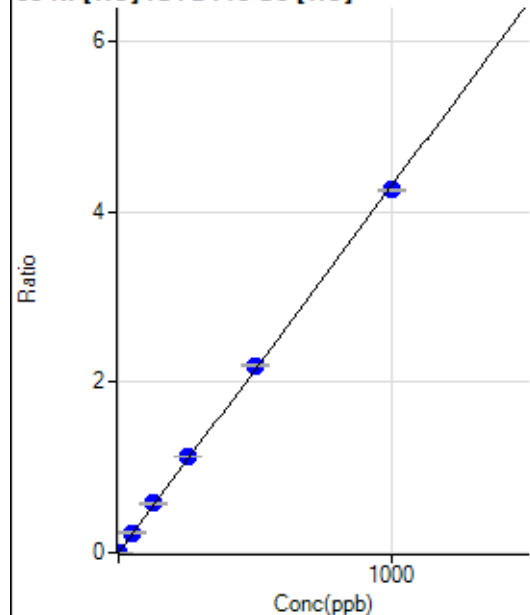
$$y = 0.0166 * x + 9.8366E-005$$

$$R = 0.9999$$

$$DL = 0.007971$$

Weight: <None>

Min Conc: 0

60 Ni [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	63.33	0.0002	P	23.2
2	☐	0.100					
3	☐	1.000	1.045	1426.76	0.0047	P	4.9
4	☐	50.000	54.802	69364.25	0.2360	P	3.1
5	☐	125.000	133.726	162881.78	0.5755	P	0.2
6	☐	250.000	263.591	298380.53	1.1341	P	0.6
7	☐	500.000	511.345	553746.53	2.2000	P	0.9
8	☐	1000.000	989.599	1109031.92	4.2573	P	0.3
9	☐			40184.02	0.1377	P	1.3

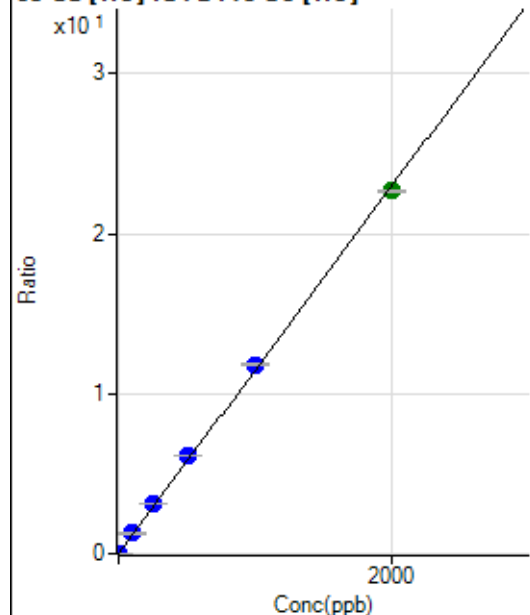
$$y = 0.0043 * x + 2.0751E-004$$

$$R = 0.9998$$

$$DL = 0.03363$$

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	300.01	0.0010	P	22.9
2	☐	0.200					
3	☐	2.000	2.002	7270.81	0.0240	P	1.9
4	☐	100.000	110.630	373708.49	1.2713	P	3.2
5	☐	250.000	270.203	878425.26	3.1036	P	0.4
6	☐	500.000	529.937	1601145.50	6.0859	P	0.2
7	☐	1000.000	1027.844	2970949.16	11.8031	P	1.0
8	☐	2000.000	1975.537	5909384.01	22.6850	A	0.4
9	☐			13308.44	0.0456	P	2.4

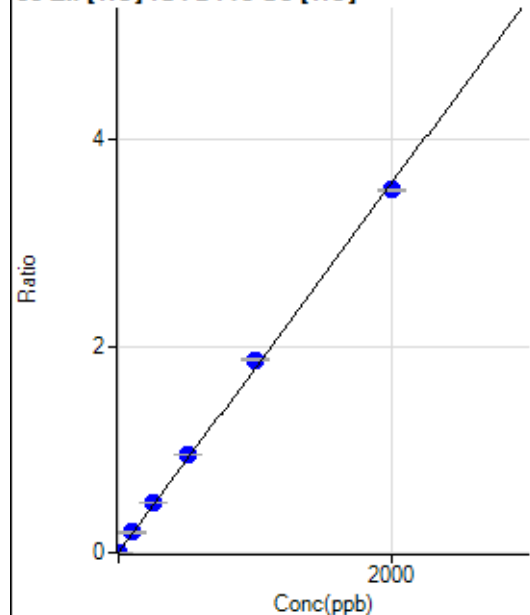
$$y = 0.0115 * x + 9.8260E-004$$

$$R = 0.9997$$

$$DL = 0.05874$$

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	271.12	0.0009	P	5.9
2	☐	0.200					
3	☐	2.000	2.133	1425.65	0.0047	P	0.6
4	☐	100.000	110.176	58165.33	0.1979	P	3.0
5	☐	250.000	271.025	137392.31	0.4854	P	0.5
6	☐	500.000	535.824	252258.51	0.9588	P	0.1
7	☐	1000.000	1044.838	470405.77	1.8688	P	1.0
8	☐	2000.000	1965.488	915599.82	3.5148	P	0.8
9	☐			8632.67	0.0296	P	3.9

$$y = 0.0018 * x + 8.8806E-004$$

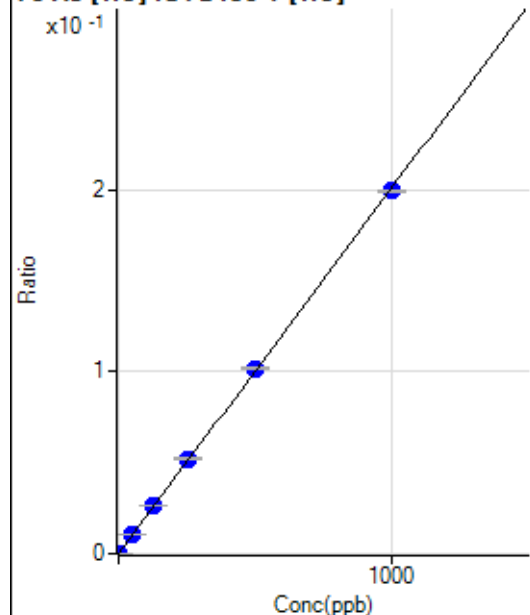
$$R = 0.9994$$

$$DL = 0.0882$$

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	1.85	0.0000	P	99.9
2	☐	0.100					
3	☐	1.000	0.977	318.53	0.0002	P	7.6
4	☐	50.000	53.405	16961.19	0.0107	P	3.7
5	☐	125.000	131.719	40551.36	0.0265	P	1.0
6	☐	250.000	259.727	74693.95	0.0522	P	1.3
7	☐	500.000	507.222	140345.69	0.1019	P	0.3
8	☐	1000.000	992.947	280841.22	0.1996	P	0.6
9	☐			434.58	0.0003	P	4.2

$$y = 2.0099\text{E-}004 * x + 1.1386\text{E-}006$$

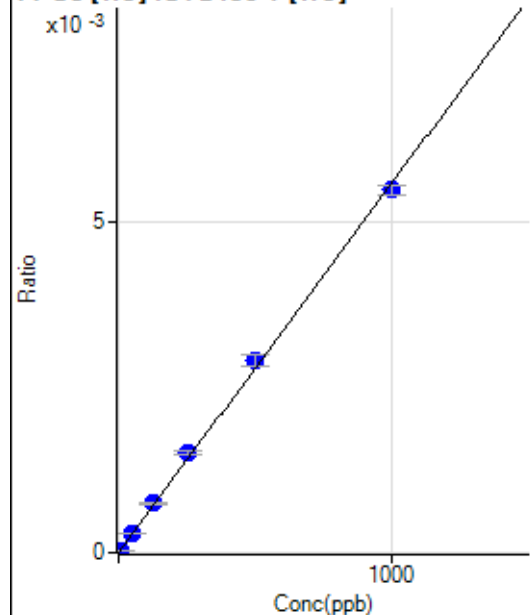
$$R = 0.9999$$

$$DL = 0.01698$$

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	5.550	50.00	0.0000	P	36.3
4	☐	50.000	52.910	466.68	0.0003	P	3.5
5	☐	125.000	133.259	1137.84	0.0007	P	4.7
6	☐	250.000	272.187	2171.31	0.0015	P	3.9
7	☐	500.000	520.531	3996.17	0.0029	P	6.1
8	☐	1000.000	983.007	7712.17	0.0055	P	2.8
9	☐			7.78	0.0000	P	65.5

$$y = 5.5748\text{E-}006 * x + 0.0000\text{E+}000$$

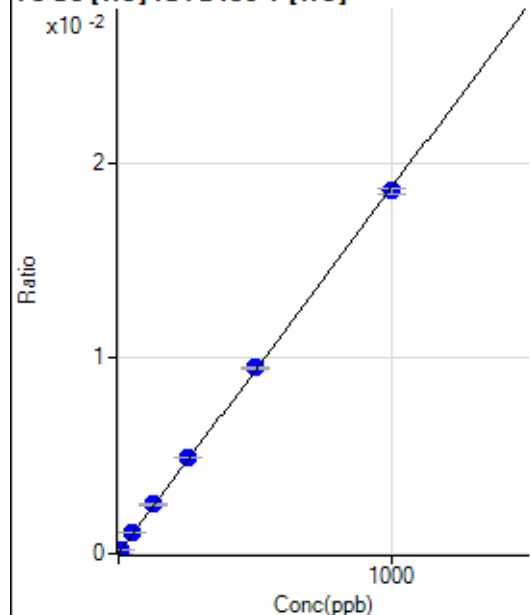
$$R = 0.9994$$

$$DL = 0$$

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	53.09	0.0000	P	5.0
2	☐	0.500					
3	☐	5.000	6.745	256.18	0.0002	P	3.8
4	☐	50.000	54.155	1651.96	0.0010	P	2.0
5	☐	125.000	132.714	3849.93	0.0025	P	1.8
6	☐	250.000	262.900	7078.33	0.0049	P	0.4
7	☐	500.000	508.051	13118.96	0.0095	P	0.9
8	☐	1000.000	991.569	26126.66	0.0186	P	1.4
9	☐			52.47	0.0000	P	16.6

$$y = 1.8692\text{E-}005 * x + 3.2771\text{E-}005$$

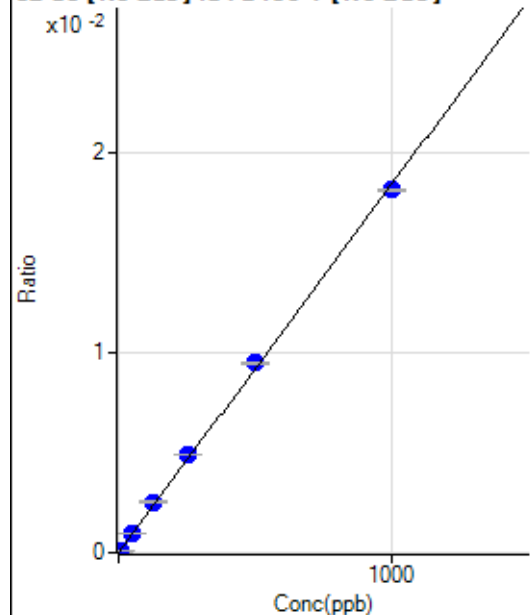
$$R = 0.9999$$

$$DL = 0.2613$$

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	5.42	0.0000	P	884.
2	☐	0.500					
3	☐	5.000	5.355	1213.36	0.0001	P	8.1
4	☐	50.000	53.986	12123.10	0.0010	P	0.6
5	☐	125.000	137.575	29753.89	0.0025	P	2.1
6	☐	250.000	267.857	56002.31	0.0049	P	0.3
7	☐	500.000	516.464	103764.23	0.0095	P	1.0
8	☐	1000.000	985.531	198425.96	0.0181	P	0.3
9	☐			140.83	0.0000	P	81.9

$$y = 1.8380\text{E-}005 * x + 4.3545\text{E-}007$$

$$R = 0.9996$$

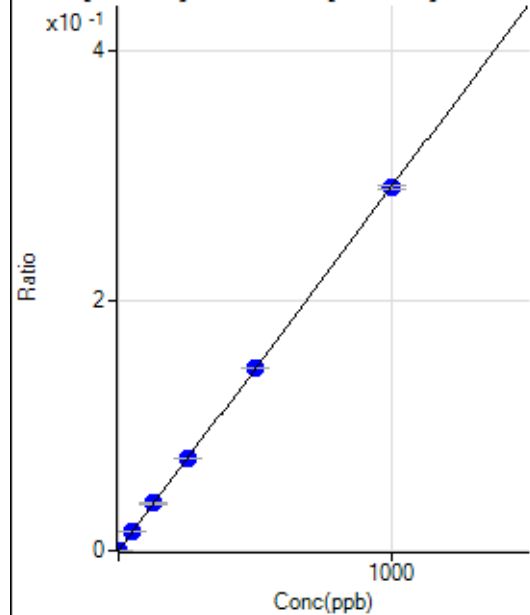
$$DL = 0.6287$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			671.14		P	10.0
2	☐						
3	☐			593.35		P	12.7
4	☐			605.58		P	4.1
5	☐			614.47		P	10.3
6	☐			576.69		P	6.7
7	☐			566.69		P	5.6
8	☐			572.25		P	1.7
9	☐			615.58		P	13.8

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1063.97	0.0001	P	1.2
2	☐	0.100					
3	☐	1.000	0.927	4356.40	0.0004	P	2.8
4	☐	50.000	51.573	184053.77	0.0151	P	1.0
5	☐	125.000	129.867	444957.53	0.0378	P	2.0
6	☐	250.000	254.543	842203.64	0.0740	P	0.4
7	☐	500.000	502.041	1595464.00	0.1460	P	0.9
8	☐	1000.000	997.157	3174762.12	0.2898	P	1.1
9	☐			15328.16	0.0014	P	3.3

$$y = 2.9056\text{E-}004 * x + 8.5664\text{E-}005$$

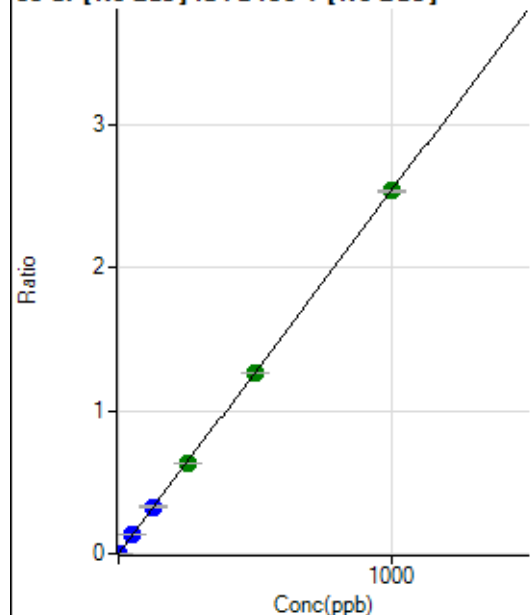
$$R = 1.0000$$

$$DL = 0.011$$

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	100.00	0.0000	P	8.3
2	☐	0.100					
3	☐	1.000	0.927	29021.89	0.0024	P	2.8
4	☐	50.000	50.690	1573727.65	0.1289	P	0.5
5	☐	125.000	129.625	3876798.26	0.3295	P	1.9
6	☐	250.000	251.036	7258345.65	0.6381	A	0.3
7	☐	500.000	499.306	13873976.87	1.2692	A	0.5
8	☐	1000.000	999.475	27830142.98	2.5406	A	0.7
9	☐			129372.89	0.0115	P	0.8

$$y = 0.0025 * x + 8.0516E-006$$

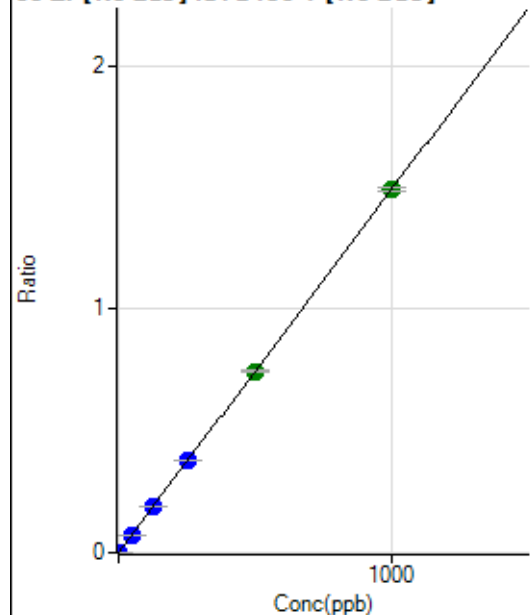
$$R = 1.0000$$

$$DL = 0.0007934$$

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	1038.98	0.0001	P	6.5
2	☐	0.100					
3	☐	1.000	0.912	17694.96	0.0014	P	0.5
4	☐	50.000	50.176	913690.33	0.0748	P	0.1
5	☐	125.000	128.531	2253251.55	0.1915	P	1.8
6	☐	250.000	252.698	4281619.28	0.3764	P	0.6
7	☐	500.000	498.958	8123944.97	0.7432	A	0.9
8	☐	1000.000	999.396	16305746.20	1.4885	A	1.0
9	☐			7874.69	0.0007	P	1.4

$$y = 0.0015 * x + 8.3650E-005$$

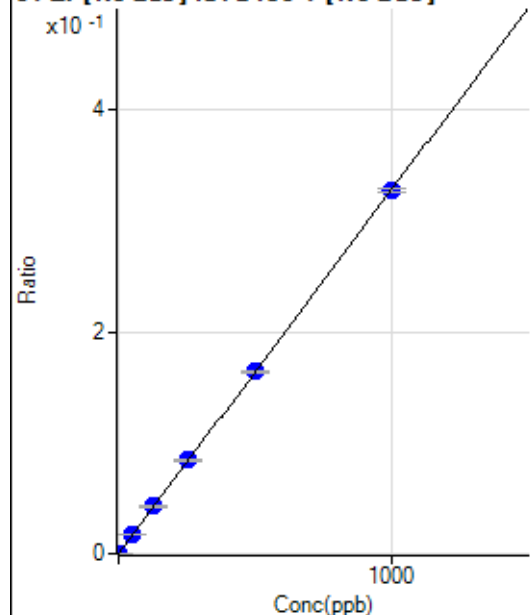
$$R = 1.0000$$

$$DL = 0.01093$$

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	175.01	0.0000	P	20.7
2	☐	0.100					
3	☐	1.000	0.917	3867.35	0.0003	P	0.5
4	☐	50.000	50.682	203319.68	0.0166	P	0.7
5	☐	125.000	129.929	501901.41	0.0427	P	1.6
6	☐	250.000	256.695	958415.03	0.0843	P	0.3
7	☐	500.000	501.030	1797568.44	0.1645	P	1.4
8	☐	1000.000	997.161	3585227.77	0.3273	P	1.0
9	☐			1772.41	0.0002	P	12.2

$$y = 3.2821\text{E-}004 * x + 1.4090\text{E-}005$$

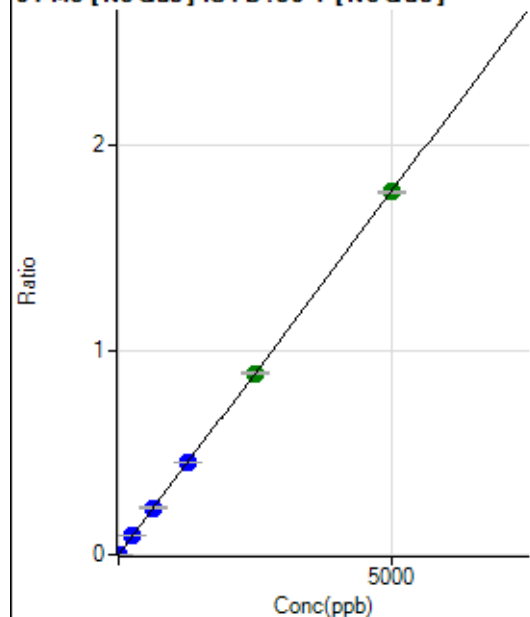
$$R = 1.0000$$

$$DL = 0.02669$$

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	325.02	0.0000	P	11.2
2	☐	0.500					
3	☐	5.000	4.845	21438.93	0.0017	P	1.5
4	☐	250.000	253.429	1099301.67	0.0900	P	0.4
5	☐	625.000	646.186	2699783.76	0.2295	P	1.9
6	☐	1250.000	1276.547	5155780.71	0.4533	P	0.3
7	☐	2500.000	2494.656	9682810.72	0.8858	A	0.8
8	☐	5000.000	4993.216	19421217.97	1.7730	A	0.8
9	☐			22980.28	0.0020	P	2.9

$$y = 3.5507\text{E-}004 * x + 2.6169\text{E-}005$$

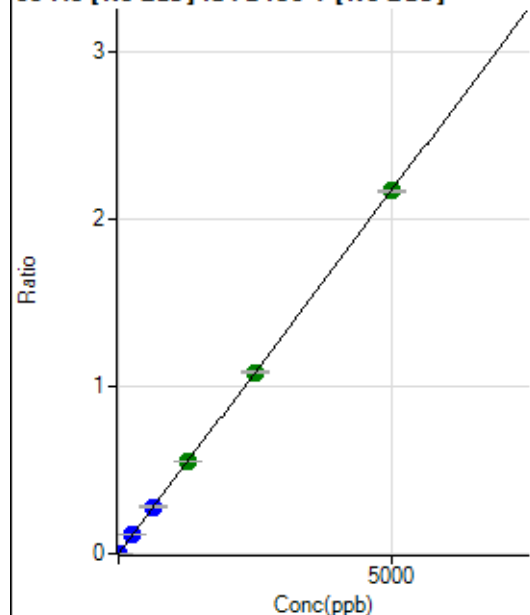
$$R = 1.0000$$

$$DL = 0.02481$$

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	38.89	0.0000	P	53.9
2	☐	0.500					
3	☐	5.000	4.970	26570.12	0.0022	P	0.6
4	☐	250.000	252.994	1343681.42	0.1100	P	0.2
5	☐	625.000	645.462	3302440.20	0.2807	P	2.1
6	☐	1250.000	1259.794	6231466.07	0.5478	A	0.3
7	☐	2500.000	2499.004	11879314.07	1.0867	A	0.6
8	☐	5000.000	4995.342	23795954.70	2.1723	A	0.6
9	☐			34682.01	0.0031	P	2.3

$$y = 4.3487E-004 * x + 3.1315E-006$$

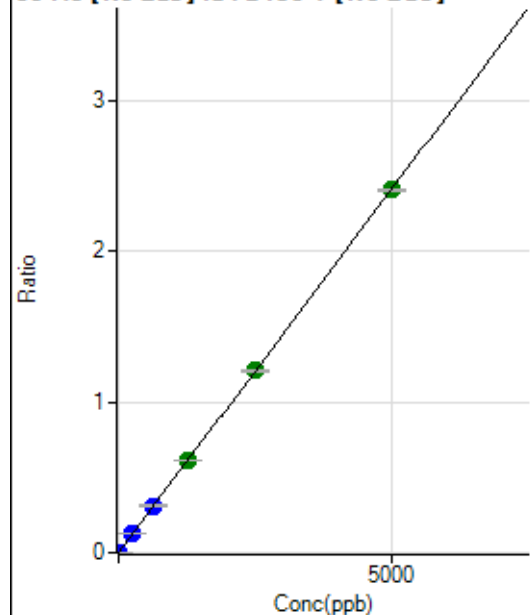
$$R = 1.0000$$

$$DL = 0.01165$$

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	125.01	0.0000	P	26.6
2	☐	0.500					
3	☐	5.000	4.977	29542.50	0.0024	P	2.2
4	☐	250.000	254.290	1495684.73	0.1225	P	0.2
5	☐	625.000	646.735	3664328.68	0.3115	P	2.1
6	☐	1250.000	1262.178	6913732.71	0.6078	A	0.1
7	☐	2500.000	2501.780	13169637.28	1.2048	A	0.6
8	☐	5000.000	4993.134	26339837.40	2.4045	A	0.4
9	☐			45420.47	0.0040	P	1.3

$$y = 4.8157E-004 * x + 1.0064E-005$$

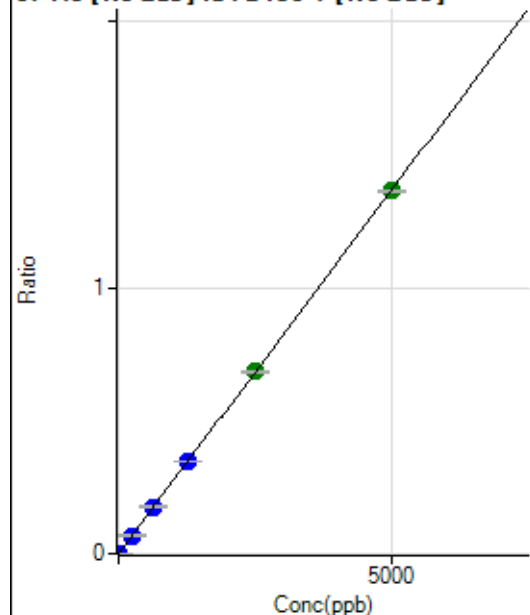
$$R = 1.0000$$

$$DL = 0.01669$$

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	16.67	0.0000	P	50.0
2	☐	0.500					
3	☐	5.000	4.921	16512.87	0.0013	P	2.2
4	☐	250.000	251.053	837309.23	0.0686	P	0.6
5	☐	625.000	643.113	2066292.41	0.1756	P	2.1
6	☐	1250.000	1263.402	3924322.35	0.3450	P	0.4
7	☐	2500.000	2505.654	7479688.45	0.6843	A	0.8
8	☐	5000.000	4991.506	14931777.59	1.3631	A	0.2
9	☐			21514.22	0.0019	P	3.9

$$y = 2.7308\text{E-}004 * x + 1.3419\text{E-}006$$

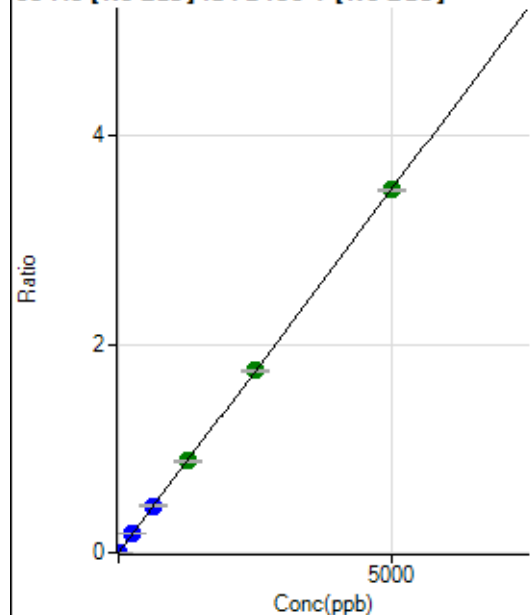
$$R = 1.0000$$

$$DL = 0.007376$$

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	52.78	0.0000	P	59.8
2	☐	0.500					
3	☐	5.000	4.905	42068.83	0.0034	P	2.3
4	☐	250.000	253.628	2161493.32	0.1770	P	0.8
5	☐	625.000	647.466	5315693.52	0.4518	P	1.9
6	☐	1250.000	1258.995	9992624.18	0.8785	A	0.3
7	☐	2500.000	2501.573	19081427.16	1.7456	A	1.1
8	☐	5000.000	4993.975	38173653.63	3.4848	A	0.2
9	☐			55112.80	0.0049	P	2.8

$$y = 6.9781\text{E-}004 * x + 4.2492\text{E-}006$$

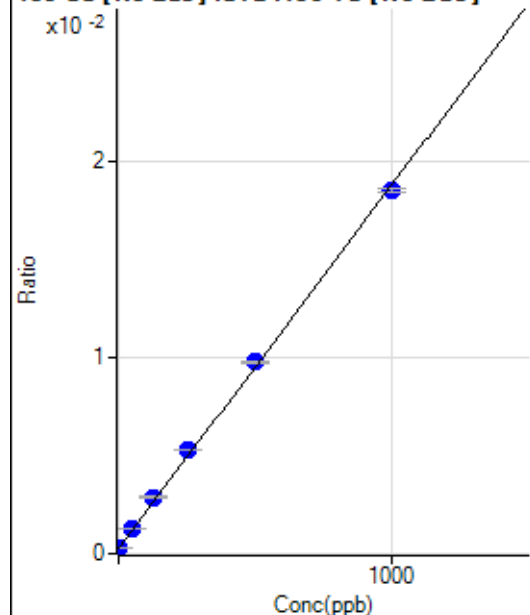
$$R = 1.0000$$

$$DL = 0.01092$$

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	4439.78	0.0003	P	3.6
2	☐	0.100					
3	☐	1.000	1.748	4934.42	0.0003	P	2.6
4	☐	50.000	55.588	21642.22	0.0013	P	1.3
5	☐	125.000	141.915	47352.27	0.0029	P	2.0
6	☐	250.000	272.050	85884.63	0.0053	P	0.5
7	☐	500.000	514.478	156421.17	0.0098	P	1.0
8	☐	1000.000	984.854	297464.25	0.0185	P	0.9
9	☐			4020.20	0.0002	P	6.0

$$y = 1.8535E-005 * x + 2.6410E-004$$

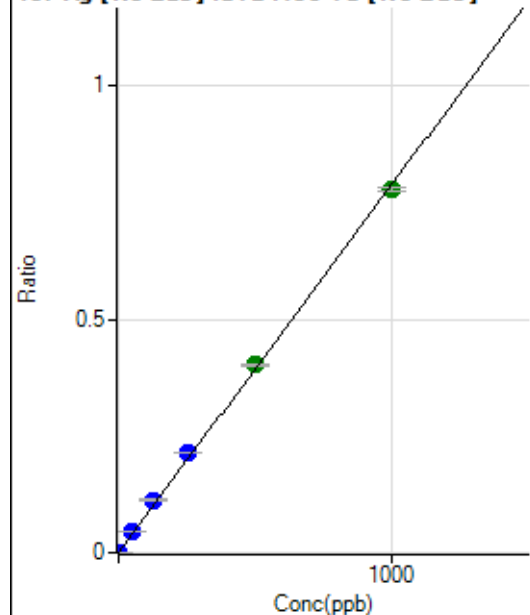
$$R = 0.9995$$

$$DL = 1.542$$

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	80.56	0.0000	P	15.8
2	☐	0.100					
3	☐	1.000	1.004	13234.55	0.0008	P	3.3
4	☐	50.000	57.138	751873.77	0.0450	P	0.4
5	☐	125.000	142.795	1838299.32	0.1124	P	2.4
6	☐	250.000	270.994	3451733.45	0.2133	P	0.3
7	☐	500.000	510.997	6418925.32	0.4022	A	0.8
8	☐	1000.000	986.672	12472979.97	0.7765	A	0.9
9	☐			1086.20	0.0001	P	12.2

$$y = 7.8699E-004 * x + 4.7921E-006$$

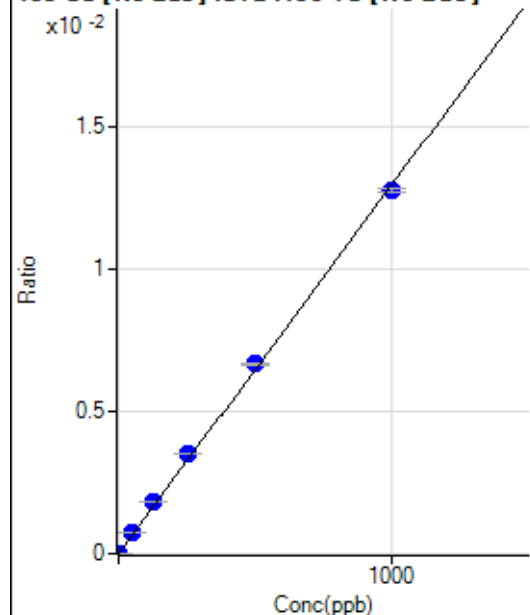
$$R = 0.9996$$

$$DL = 0.002879$$

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	56.8
2	☐	0.100					
3	☐	1.000	1.121	256.95	0.0000	P	14.8
4	☐	50.000	56.447	12248.56	0.0007	P	3.3
5	☐	125.000	141.514	30023.70	0.0018	P	2.8
6	☐	250.000	271.918	57071.58	0.0035	P	1.3
7	☐	500.000	514.738	106525.61	0.0067	P	1.0
8	☐	1000.000	984.765	205087.63	0.0128	P	1.0
9	☐			56.94	0.0000	P	10.6

$$y = 1.2964\text{E-}005 * x + 9.0881\text{E-}007$$

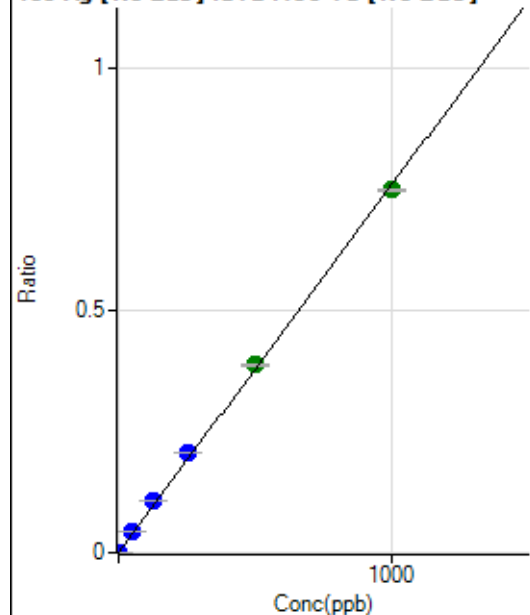
$$R = 0.9995$$

$$DL = 0.1194$$

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	36.11	0.0000	P	13.2
2	☐	0.100					
3	☐	1.000	1.014	12848.02	0.0008	P	2.8
4	☐	50.000	57.077	724560.27	0.0433	P	1.5
5	☐	125.000	141.860	1762071.46	0.1077	P	1.7
6	☐	250.000	271.627	3338057.54	0.2062	P	0.7
7	☐	500.000	510.374	6185392.54	0.3875	A	0.6
8	☐	1000.000	986.945	12037031.69	0.7494	A	0.8
9	☐			1122.31	0.0001	P	1.7

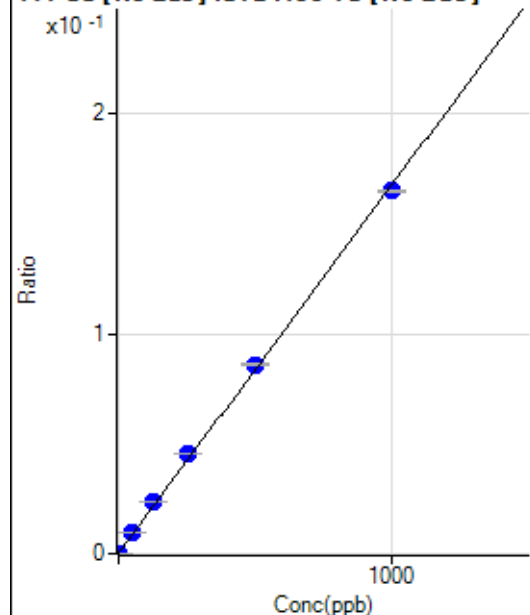
$$y = 7.5929\text{E-}004 * x + 2.1478\text{E-}006$$

$$R = 0.9996$$

$$DL = 0.00112$$

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	2211.98	0.0001	P	3.4
2	☐	0.100					
3	☐	1.000	1.063	5151.58	0.0003	P	1.3
4	☐	50.000	56.621	160673.35	0.0096	P	0.4
5	☐	125.000	141.394	389347.67	0.0238	P	2.1
6	☐	250.000	272.356	740052.26	0.0457	P	0.3
7	☐	500.000	513.684	1374637.18	0.0861	P	0.9
8	☐	1000.000	985.189	2651361.38	0.1651	P	0.3
9	☐			2410.53	0.0001	P	6.3

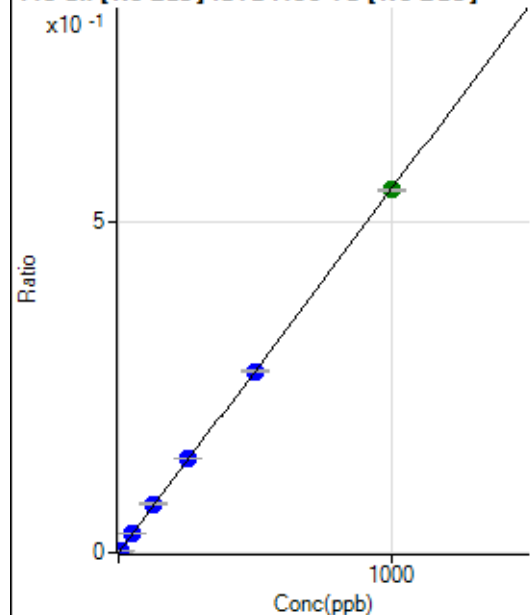
$$y = 1.6741\text{E-}004 * x + 1.3158\text{E-}004$$

$$R = 0.9995$$

$$DL = 0.08109$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	575.04	0.0000	P	16.0
2	☐	0.500					
3	☐	5.000	5.087	47043.65	0.0028	P	2.4
4	☐	50.000	52.997	487025.08	0.0291	P	0.4
5	☐	125.000	133.555	1199965.86	0.0734	P	2.3
6	☐	250.000	259.787	2308885.49	0.1427	P	0.7
7	☐	500.000	497.222	4357592.81	0.2730	P	1.0
8	☐	1000.000	997.723	8799335.01	0.5478	A	0.5
9	☐			11065.89	0.0007	P	1.9

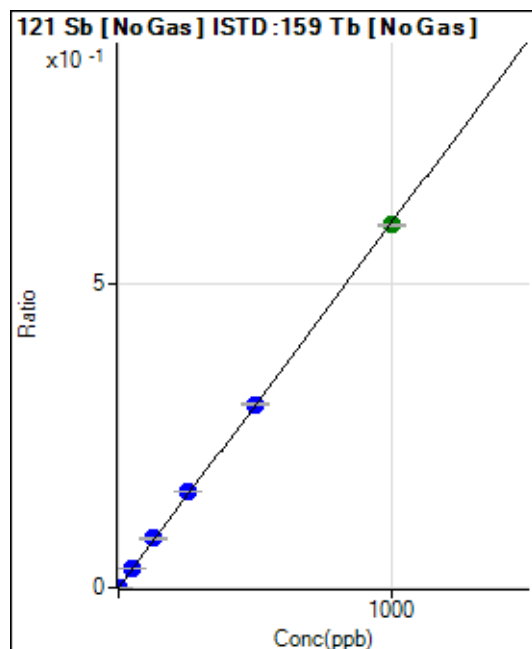
$$y = 5.4902\text{E-}004 * x + 3.4201\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.02986$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	30.56	0.0000	P	31.4
2	☐	0.200					
3	☐	2.000	1.917	19166.55	0.0012	P	0.7
4	☐	50.000	53.197	533597.64	0.0319	P	0.6
5	☐	125.000	135.440	1329263.66	0.0813	P	1.7
6	☐	250.000	262.095	2544862.14	0.1572	P	0.7
7	☐	500.000	502.372	4810488.91	0.3014	P	0.9
8	☐	1000.000	994.326	9582070.36	0.5965	A	0.7
9	☐			13112.20	0.0008	P	3.0

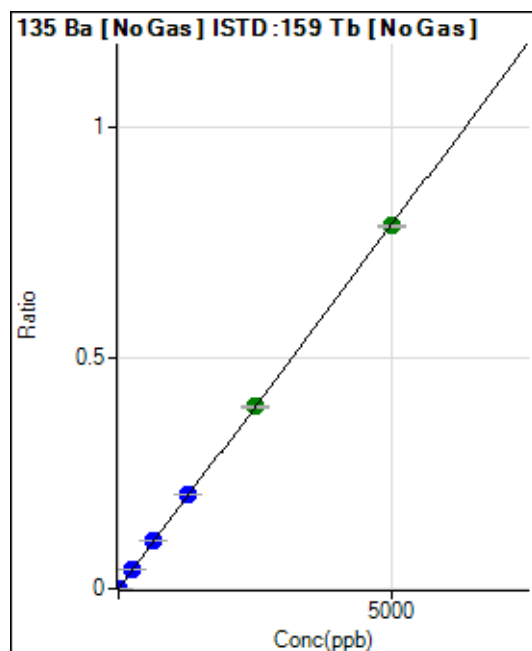
$$y = 5.9994\text{E-}004 * x + 1.8172\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.002849$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	47.23	0.0000	P	20.5
2	☐	1.000					
3	☐	10.000	10.179	26751.55	0.0016	P	4.6
4	☐	250.000	264.065	696020.88	0.0416	P	0.7
5	☐	625.000	663.532	1711180.29	0.1046	P	1.9
6	☐	1250.000	1296.284	3307465.07	0.2044	P	0.9
7	☐	2500.000	2496.983	6283056.30	0.3936	A	0.4
8	☐	5000.000	4984.417	12621919.29	0.7858	A	0.8
9	☐			2039.12	0.0001	P	4.9

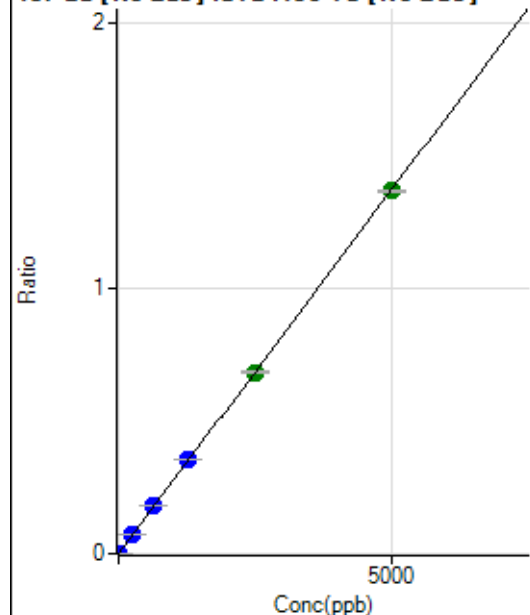
$$y = 1.5765\text{E-}004 * x + 2.8100\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.01099$$

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	44.45	0.0000	P	39.0
2	☐	1.000					
3	☐	10.000	10.013	45793.15	0.0028	P	2.7
4	☐	250.000	264.527	1214195.42	0.0726	P	1.0
5	☐	625.000	666.449	2993055.82	0.1830	P	2.1
6	☐	1250.000	1300.895	5780322.70	0.3572	P	0.8
7	☐	2500.000	2489.325	10908401.20	0.6834	A	0.7
8	☐	5000.000	4986.706	21990995.63	1.3691	A	0.9
9	☐			3428.34	0.0002	P	0.5

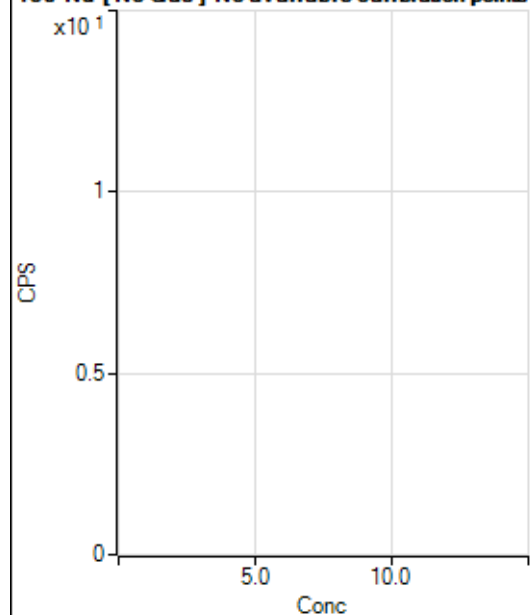
$$y = 2.7454E-004 * x + 2.6431E-006$$

$$R = 0.9999$$

$$DL = 0.01125$$

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	☐						
3	☐			6.67		P	0.0
4	☐			62.23		P	16.4
5	☐			128.89		P	3.0
6	☐			220.01		P	27.3
7	☐			551.14		P	7.8
8	☐			884.51		P	12.8
9	☐			220.01		P	6.1

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.
2	☐						
3	☐			0.00		P	
4	☐			3.33		P	100.
5	☐			11.11		P	96.4
6	☐			18.89		P	10.2
7	☐			45.56		P	30.5
8	☐			70.00		P	17.2
9	☐			82.23		P	28.8

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.33		P	100.
2	☐						
3	☐			13.89		P	91.6
4	☐			25.00		P	57.7
5	☐			30.56		P	31.5
6	☐			88.89		P	19.5
7	☐			100.00		P	50.7
8	☐			197.23		P	9.8
9	☐			130.56		P	16.1

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.55		P	124.
2	☐						
3	☐			4.44		P	114.
4	☐			15.56		P	12.4
5	☐			31.11		P	37.6
6	☐			53.33		P	25.0
7	☐			78.89		P	12.2
8	☐			151.11		P	19.0
9	☐			62.22		P	21.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			61.11		P	15.7
2	☐						
3	☐			50.00		P	28.9
4	☐			77.78		P	27.0
5	☐			88.89		P	47.2
6	☐			83.34		P	30.0
7	☐			83.34		P	62.4
8	☐			113.90		P	15.2
9	☐			130.56		P	18.4

160 Gd [He] No available calibration points

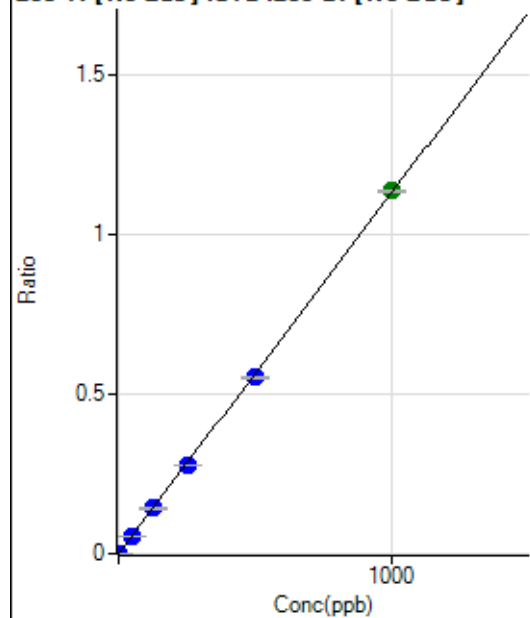
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			173.34		P	15.0
2	☐						
3	☐			185.56		P	27.2
4	☐			171.11		P	21.4
5	☐			148.89		P	18.8
6	☐			172.23		P	20.3
7	☐			163.34		P	14.3
8	☐			180.00		P	1.9
9	☐			195.56		P	8.7

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			47.22		P	62.0
2	☐						
3	☐			44.45		P	28.7
4	☐			58.34		P	28.6
5	☐			50.00		P	28.9
6	☐			44.45		P	10.8
7	☐			69.45		P	30.2
8	☐			69.45		P	48.5
9	☐			80.56		P	6.0

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			25.56		P	30.1
2	☐						
3	☐			30.00		P	80.1
4	☐			21.11		P	39.7
5	☐			23.33		P	57.2
6	☐			25.55		P	27.1
7	☐			24.44		P	77.6
8	☐			27.78		P	50.0
9	☐			37.78		P	39.8

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	122.23	0.0000	P	20.9
2	☐	0.100					
3	☐	1.000	0.921	12320.07	0.0011	P	2.9
4	☐	50.000	49.006	647996.87	0.0554	P	0.4
5	☐	125.000	125.670	1620273.01	0.1420	P	2.3
6	☐	250.000	247.201	3164466.69	0.2793	P	0.4
7	☐	500.000	489.822	6077558.08	0.5534	P	1.0
8	☐	1000.000	1005.755	12298892.03	1.1363	A	0.5
9	☐			3606.22	0.0004	P	6.8

$$y = 0.0011 * x + 1.0197E-005$$

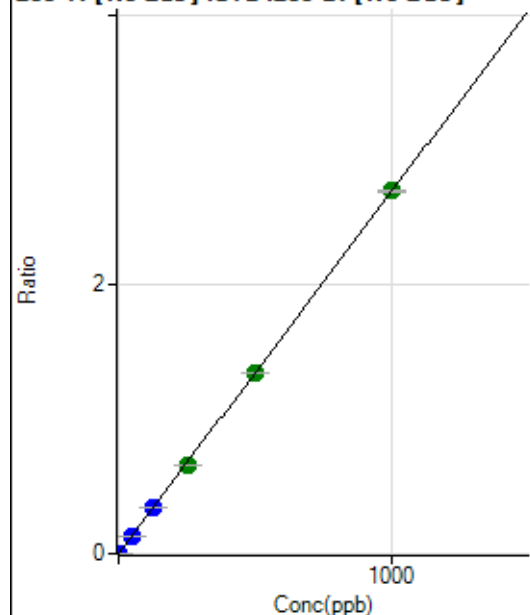
$$R = 0.9999$$

$$DL = 0.005658$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	283.35	0.0000	P	12.8
2	☐	0.100					
3	☐	1.000	0.915	29115.97	0.0025	P	1.6
4	☐	50.000	50.040	1573699.82	0.1345	P	0.3
5	☐	125.000	127.979	3924590.58	0.3439	P	2.2
6	☐	250.000	245.624	7478489.93	0.6600	A	0.2
7	☐	500.000	497.603	14685115.60	1.3371	A	0.3
8	☐	1000.000	1001.918	29140366.28	2.6922	A	0.2
9	☐			8517.01	0.0009	P	3.8

$$y = 0.0027 * x + 2.3637E-005$$

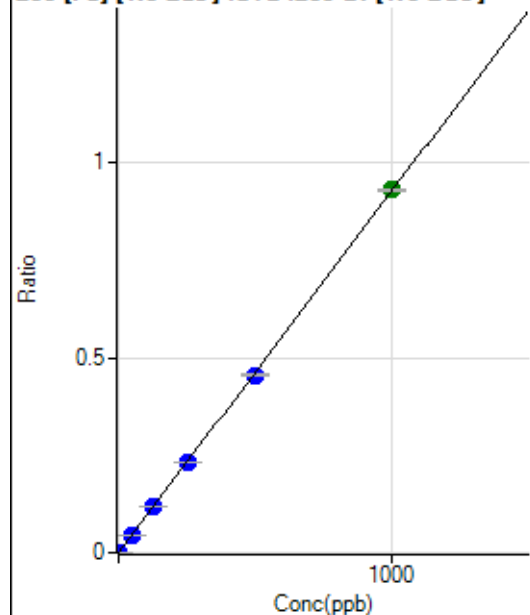
$$R = 1.0000$$

$$DL = 0.003379$$

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	316.68	0.0000	P	18.5
2	☐	0.100					
3	☐	1.000	0.893	10007.73	0.0009	P	3.5
4	☐	50.000	49.617	538024.44	0.0460	P	0.7
5	☐	125.000	126.839	1340877.87	0.1175	P	2.2
6	☐	250.000	247.630	2598955.03	0.2294	P	0.1
7	☐	500.000	492.291	5007653.70	0.4560	P	0.9
8	☐	1000.000	1004.236	10067483.21	0.9301	A	0.6
9	☐			13866.84	0.0014	P	2.8

$$y = 9.2616E-004 * x + 2.6418E-005$$

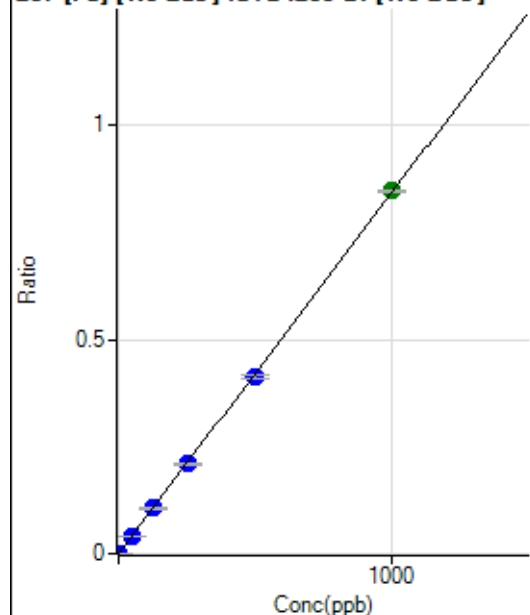
$$R = 0.9999$$

$$DL = 0.01582$$

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	261.12	0.0000	P	15.3
2	☐	0.100					
3	☐	1.000	0.889	9053.33	0.0008	P	0.5
4	☐	50.000	49.315	486838.38	0.0416	P	0.8
5	☐	125.000	125.342	1206353.98	0.1057	P	2.3
6	☐	250.000	247.932	2369098.95	0.2091	P	1.1
7	☐	500.000	490.364	4541284.30	0.4135	P	1.2
8	☐	1000.000	1005.327	9175880.88	0.8477	A	0.7
9	☐			12018.70	0.0012	P	0.3

$$y = 8.4322\text{E-}004 * x + 2.1783\text{E-}005$$

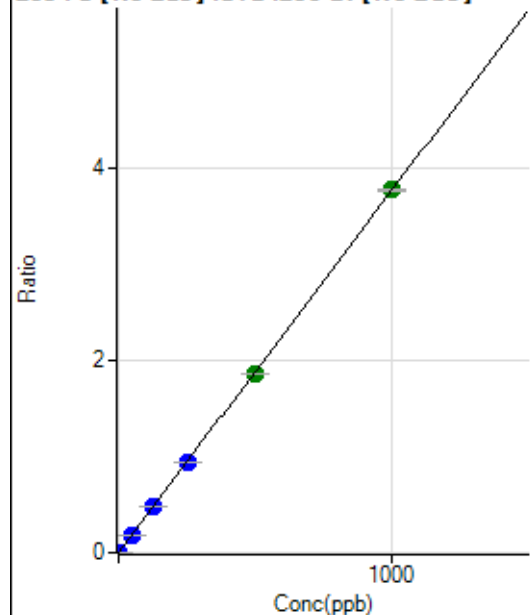
$$R = 0.9999$$

$$DL = 0.01189$$

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	1214.87	0.0001	P	2.5
2	☐	0.100					
3	☐	1.000	0.889	40352.64	0.0034	P	1.7
4	☐	50.000	49.652	2184396.58	0.1867	P	0.5
5	☐	125.000	126.826	5439592.33	0.4767	P	2.2
6	☐	250.000	249.463	10622474.14	0.9375	P	0.5
7	☐	500.000	493.764	20377942.64	1.8555	A	0.7
8	☐	1000.000	1003.041	40797279.16	3.7692	A	0.4
9	☐			55244.35	0.0056	P	0.5

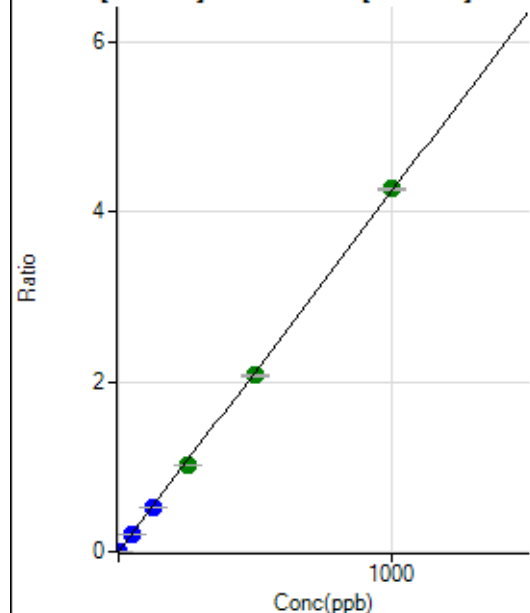
$$y = 0.0038 * x + 1.0134\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.002001$$

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	109.26	0.0000	P	23.0
2	☐	0.100					
3	☐	1.000	0.840	41898.97	0.0036	P	0.6
4	☐	50.000	46.797	2322862.61	0.1985	P	0.6
5	☐	125.000	121.776	5894693.02	0.5165	P	2.2
6	☐	250.000	239.098	11491561.72	1.0142	A	0.5
7	☐	500.000	490.598	22854998.20	2.0810	A	0.7
8	☐	1000.000	1007.990	46278679.74	4.2756	A	0.8
9	☐			7113.23	0.0007	P	6.6

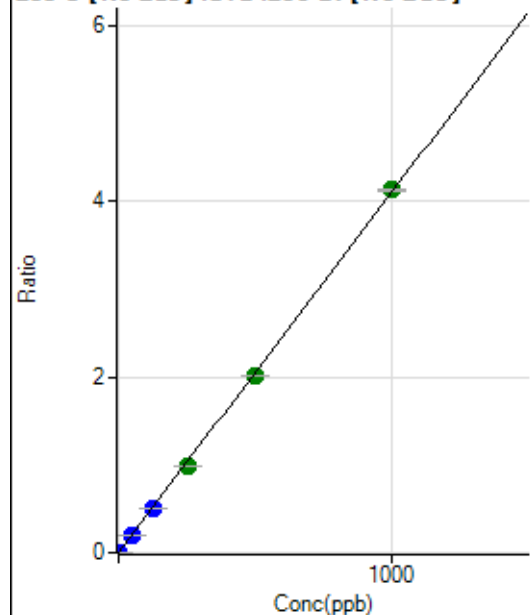
$$y = 0.0042 * x + 9.1154E-006$$

$$R = 0.9999$$

$$DL = 0.001481$$

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	30.55	0.0000	P	15.7
2	☐	0.100					
3	☐	1.000	0.854	41138.22	0.0035	P	3.1
4	☐	50.000	47.705	2290647.36	0.1958	P	0.5
5	☐	125.000	123.201	5768811.41	0.5055	P	2.6
6	☐	250.000	239.554	11137899.29	0.9830	A	0.1
7	☐	500.000	491.596	22154479.49	2.0172	A	0.6
8	☐	1000.000	1007.153	44732352.04	4.1327	A	0.4
9	☐			6843.75	0.0007	P	5.1

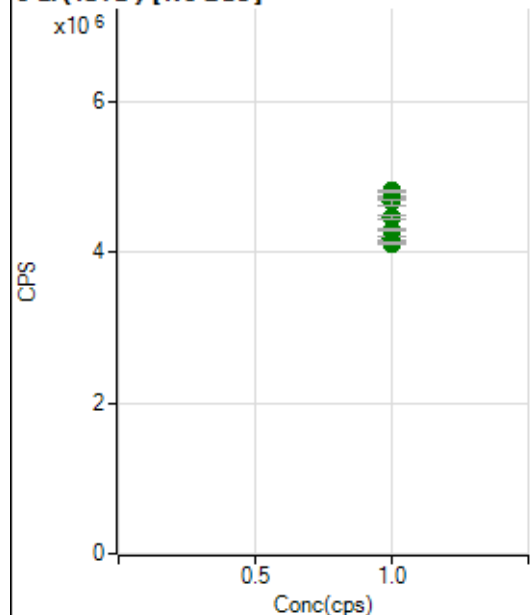
$$y = 0.0041 * x + 2.5486E-006$$

$$R = 0.9999$$

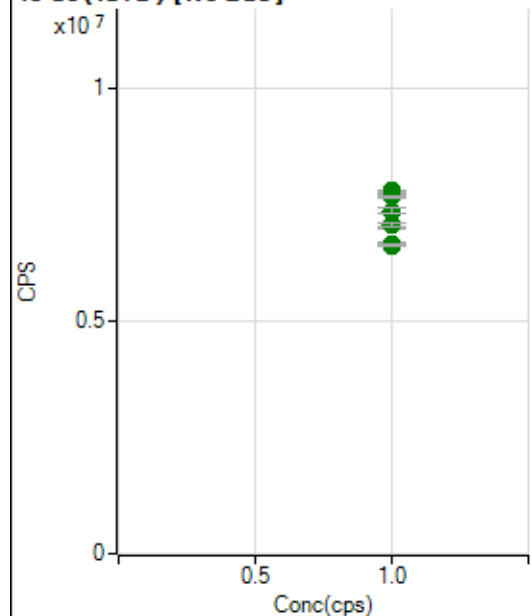
$$DL = 0.0002923$$

Weight: <None>

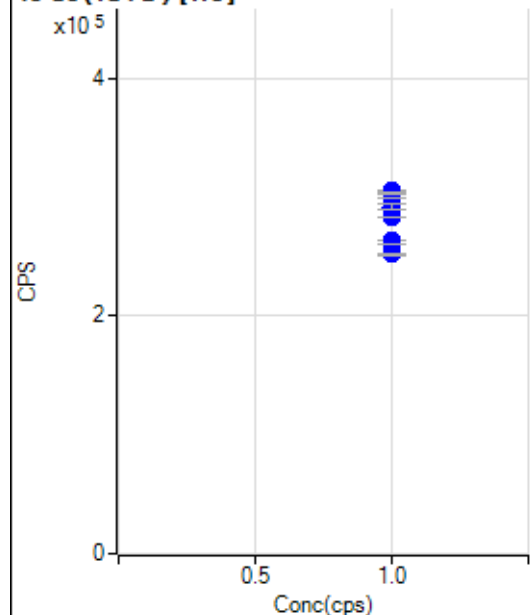
Min Conc: 0

6 Li (ISTD) [No Gas]

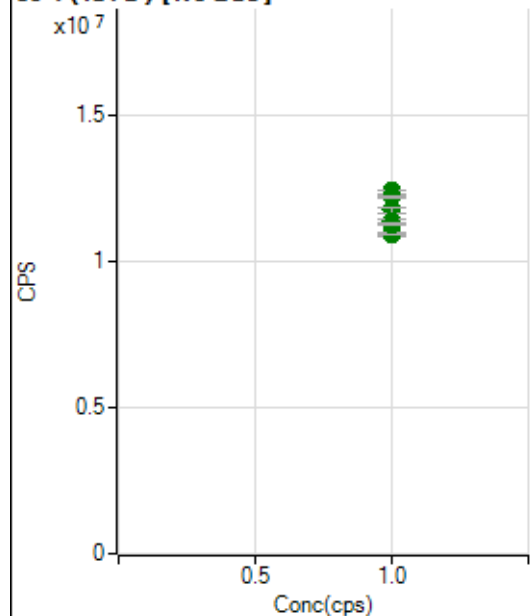
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4728321.36		A	0.2
2	☐	1.000					
3	☐	1.000		4782931.98		A	0.2
4	☐	1.000		4807129.62		A	0.4
5	☐	1.000		4654459.24		A	1.6
6	☐	1.000		4451588.72		A	0.9
7	☐	1.000		4182419.70		A	1.3
8	☐	1.000		4110462.51		A	0.6
9	☐	1.000		4282324.00		A	0.6

45 Sc (ISTD) [No Gas]

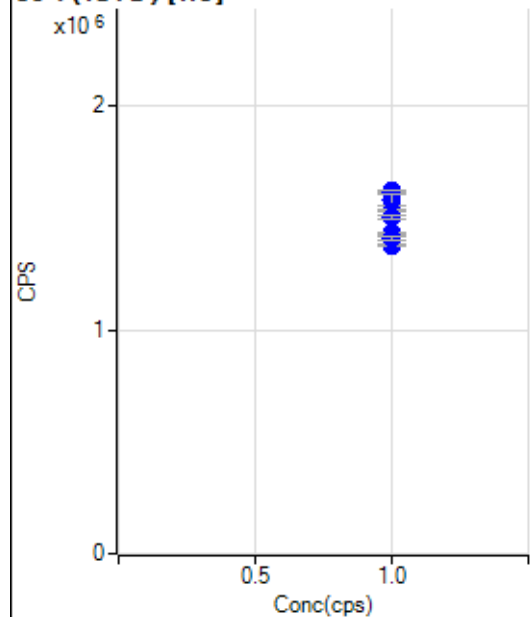
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7789479.86		A	0.4
2	☐	1.000					
3	☐	1.000		7721892.62		A	0.4
4	☐	1.000		7666659.64		A	0.9
5	☐	1.000		7361020.31		A	1.9
6	☐	1.000		7041993.12		A	1.4
7	☐	1.000		6664837.87		A	1.1
8	☐	1.000		6619539.91		A	0.5
9	☐	1.000		7050709.27		A	1.1

45 Sc (ISTD) [He]

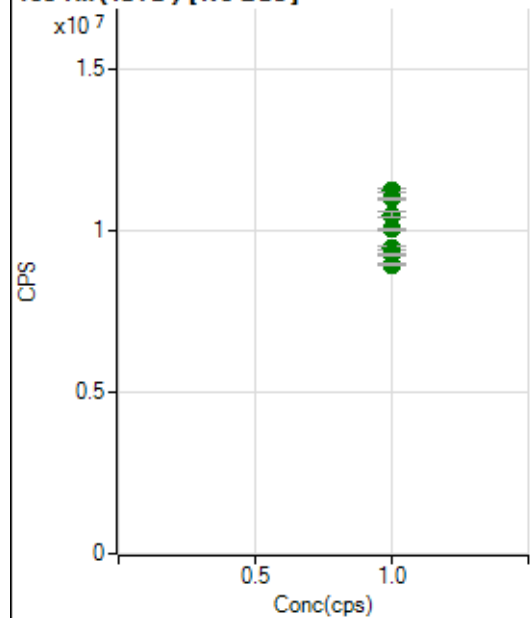
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		305338.55		P	0.4
2	☐	1.000					
3	☐	1.000		303285.14		P	0.6
4	☐	1.000		294160.24		P	3.2
5	☐	1.000		283037.11		P	0.3
6	☐	1.000		263088.82		P	0.1
7	☐	1.000		251714.83		P	0.4
8	☐	1.000		260497.71		P	0.3
9	☐	1.000		291829.62		P	1.7

89 Y (ISTD) [No Gas]

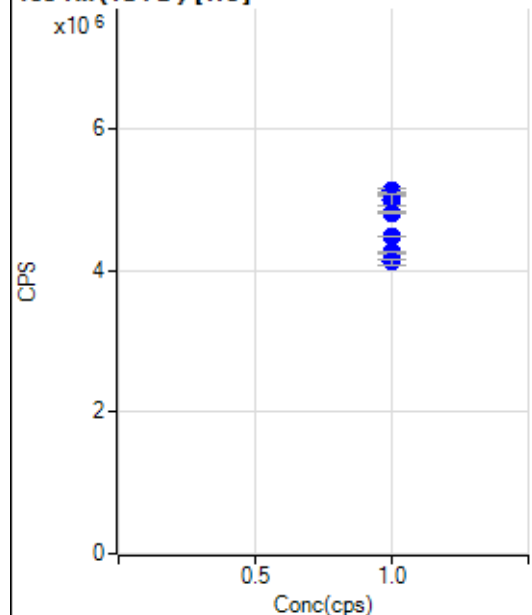
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12420319.54		A	0.0
2	☐	1.000					
3	☐	1.000		12274883.15		A	0.3
4	☐	1.000		12212916.90		A	0.5
5	☐	1.000		11768149.27		A	1.8
6	☐	1.000		11374327.33		A	0.8
7	☐	1.000		10931561.92		A	1.0
8	☐	1.000		10954303.59		A	0.8
9	☐	1.000		11270218.16		A	0.8

89 Y (ISTD) [He]

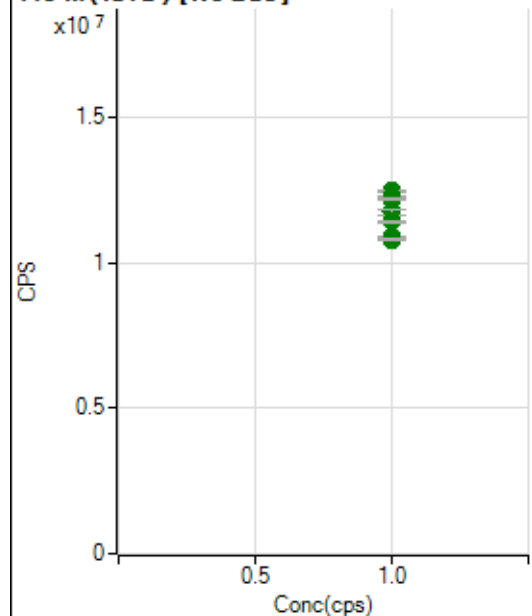
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1619753.81		P	0.5
2	☐	1.000					
3	☐	1.000		1612414.74		P	1.0
4	☐	1.000		1581150.90		P	3.0
5	☐	1.000		1531710.07		P	0.2
6	☐	1.000		1430879.82		P	0.3
7	☐	1.000		1376656.26		P	0.8
8	☐	1.000		1407285.05		P	1.1
9	☐	1.000		1502110.81		P	1.6

103 Rh (ISTD) [No Gas]

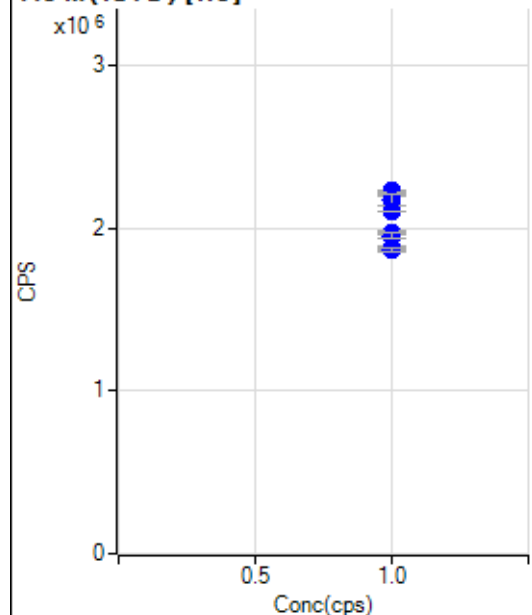
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11241110.84		A	0.9
2	☐	1.000					
3	☐	1.000		11193695.47		A	0.3
4	☐	1.000		11018505.37		A	0.5
5	☐	1.000		10513702.23		A	2.1
6	☐	1.000		10064867.67		A	0.6
7	☐	1.000		9476886.84		A	0.8
8	☐	1.000		9265488.31		A	0.6
9	☐	1.000		8952021.12		A	0.6

103 Rh (ISTD) [He]

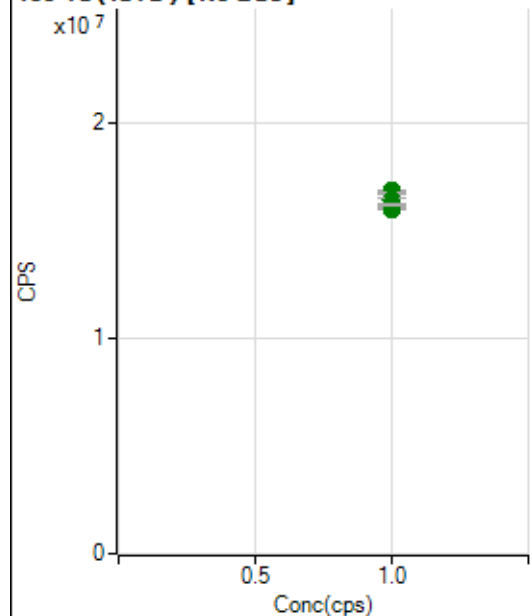
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5132042.77		P	0.9
2	☐	1.000					
3	☐	1.000		5096425.27		P	0.9
4	☐	1.000		4993174.20		P	3.2
5	☐	1.000		4818075.14		P	0.5
6	☐	1.000		4493939.52		P	0.3
7	☐	1.000		4268492.99		P	0.6
8	☐	1.000		4256954.83		P	1.1
9	☐	1.000		4123277.13		P	1.7

115 In (ISTD) [No Gas]

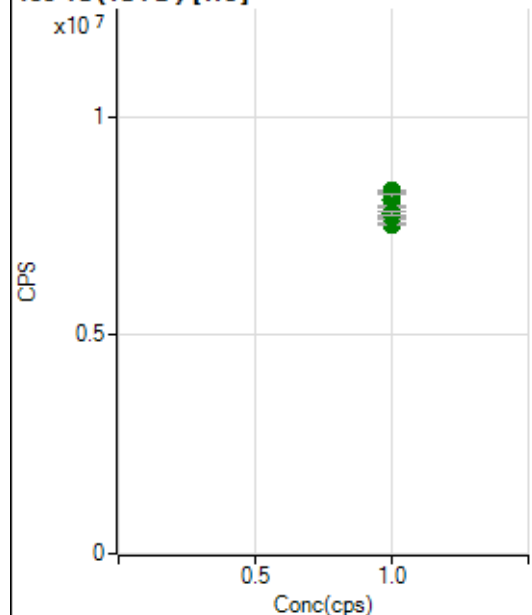
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12493330.26		A	0.2
2	☐	1.000					
3	☐	1.000		12329983.11		A	0.0
4	☐	1.000		12205227.07		A	0.6
5	☐	1.000		11759554.73		A	1.8
6	☐	1.000		11429425.64		A	1.0
7	☐	1.000		10894591.40		A	0.9
8	☐	1.000		10773370.50		A	0.1
9	☐	1.000		10841085.26		A	0.7

115 In (ISTD) [He]

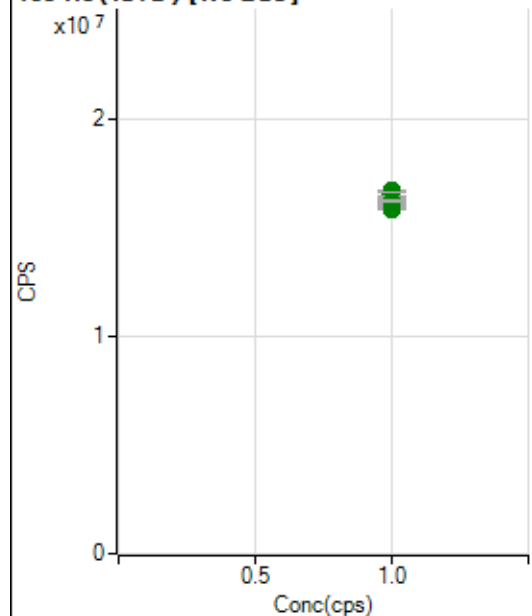
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2231753.05		P	0.8
2	☐	1.000					
3	☐	1.000		2213714.24		P	1.0
4	☐	1.000		2174305.92		P	3.2
5	☐	1.000		2104162.85		P	0.3
6	☐	1.000		1974324.75		P	0.8
7	☐	1.000		1880243.48		P	1.1
8	☐	1.000		1870437.09		P	1.0
9	☐	1.000		1953167.58		P	1.8

159 Tb (ISTD) [No Gas]

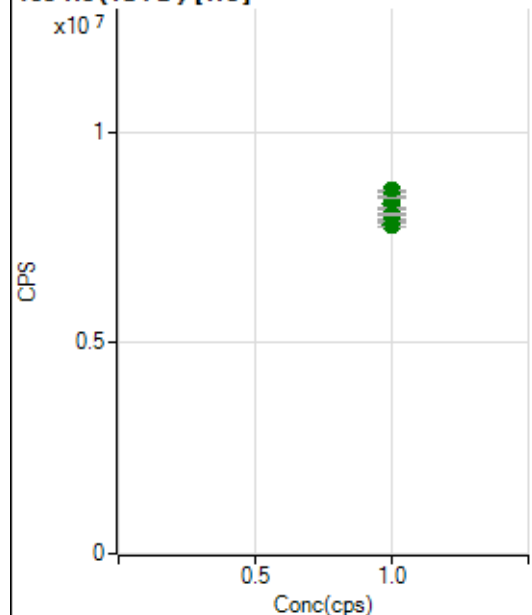
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16810446.83		A	0.2
2	☐	1.000					
3	☐	1.000		16642109.89		A	0.1
4	☐	1.000		16718861.83		A	0.6
5	☐	1.000		16361886.56		A	1.7
6	☐	1.000		16184564.21		A	0.6
7	☐	1.000		15961438.09		A	0.6
8	☐	1.000		16063259.35		A	0.7
9	☐	1.000		16209007.81		A	0.6

159 Tb (ISTD) [He]

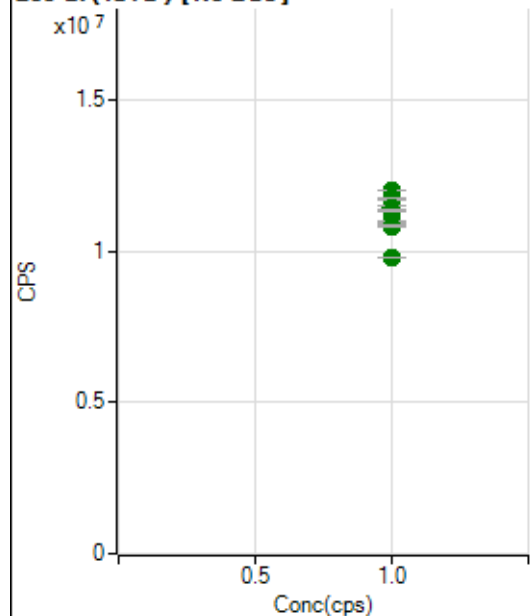
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8295291.61		A	0.8
2	☐	1.000					
3	☐	1.000		8231777.38		A	0.2
4	☐	1.000		8080409.60		A	3.3
5	☐	1.000		7943118.42		A	0.5
6	☐	1.000		7688828.15		A	0.3
7	☐	1.000		7532631.41		A	0.6
8	☐	1.000		7677725.10		A	0.5
9	☐	1.000		7784806.76		A	0.9

165 Ho (ISTD) [No Gas]

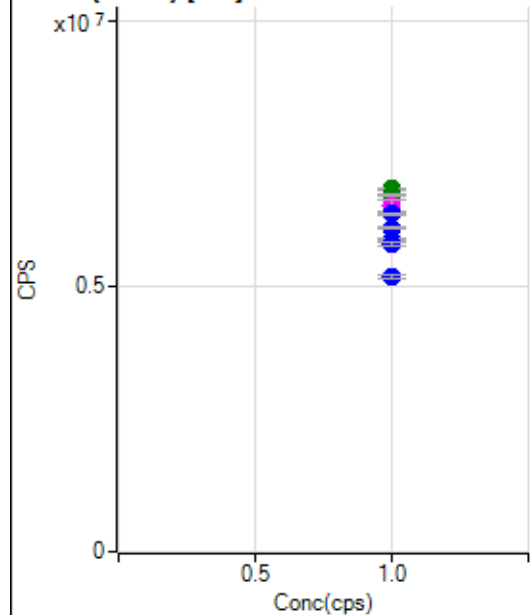
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16730072.42		A	0.1
2	☐	1.000					
3	☐	1.000		16462848.98		A	0.1
4	☐	1.000		16589301.24		A	1.0
5	☐	1.000		16250394.11		A	1.7
6	☐	1.000		16145347.24		A	0.4
7	☐	1.000		15895327.96		A	0.7
8	☐	1.000		16078577.44		A	0.6
9	☐	1.000		16271037.00		A	0.3

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8600123.00		A	0.7
2	☐	1.000					
3	☐	1.000		8460719.53		A	0.3
4	☐	1.000		8283809.60		A	3.4
5	☐	1.000		8190143.07		A	0.7
6	☐	1.000		7886775.51		A	0.8
7	☐	1.000		7797074.68		A	0.7
8	☐	1.000		7898138.01		A	0.7
9	☐	1.000		8032179.81		A	0.5

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11987424.68		A	0.1
2	☐	1.000					
3	☐	1.000		11729556.07		A	0.6
4	☐	1.000		11701703.44		A	0.6
5	☐	1.000		11414784.28		A	1.9
6	☐	1.000		11330718.86		A	0.5
7	☐	1.000		10982770.81		A	0.5
8	☐	1.000		10824014.28		A	0.4
9	☐	1.000		9785704.16		A	0.5

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6834343.03		A	0.7
2	☐	1.000					
3	☐	1.000		6726992.82		A	0.3
4	☐	1.000		6515860.18		M	3.7
5	☐	1.000		6361124.21		P	0.4
6	☐	1.000		6098461.99		P	0.4
7	☐	1.000		5883319.50		P	0.8
8	☐	1.000		5806010.40		P	1.4
9	☐	1.000		5189790.72		P	1.1

US EPA Tune Check Sample Report

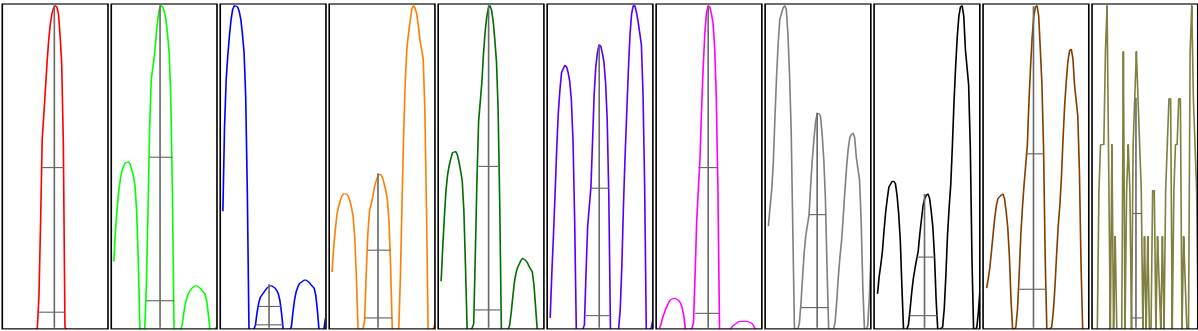
Batch Folder D:\ICP-MS Data\P7120718 MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	13559	0.51	5.00	
24	112389	0.54	5.00	
25	14869	0.65	5.00	
26	17315	0.71	5.00	
59	88325	0.81	5.00	
113	12066	1.18	5.00	
115	143893	1.46	5.00	
206	39306	0.79	5.00	
207	37098	0.87	5.00	
208	86017	0.64	5.00	
220	0	79.76		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	13604	13628	13535	13575	13451
24	112466	112835	113059	112011	111577
25	14862	14977	14920	14872	14716
26	17364	17441	17377	17266	17126
59	88412	88945	88937	88108	87221
113	12159	12147	12196	11944	11881
115	145688	146019	144221	142434	141102
206	39314	39555	39579	39275	38805
207	37067	37429	37361	37009	36622
208	86112	86442	86245	86226	85057
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	22849	9.00	8.9 - 9.1		0.772	0.900	
24	179873	23.90	23.9 - 24.1		0.806	0.900	
25	23985	24.90	24.9 - 25.1		0.788	0.900	
26	27401	25.90	25.9 - 26.1		0.787	0.900	
59	150878	58.95	58.9 - 59.1		0.783	0.900	
113	22579	113.00	112.9 - 113.1		0.735	0.900	
115	270979	115.00	114.9 - 115.1		0.735	0.900	
206	73853	206.00	205.9 - 206.1		0.792	0.900	
207	66802	206.95	206.9 - 207.1		0.794	0.900	
208	160792	207.95	207.9 - 208.1		0.793	0.900	
220	0	219.75	-		0.293		

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	5.8	V	Deflect	13.8	V
Extract 2	-100.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-55	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	20457	0.25	
89	26041	0.26	
205	33584	0.44	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	20464	20516	20445	20379	20482
89	26021	25988	26126	25972	26095
205	33683	33631	33664	33617	33325

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	6.4	V	Deflect	2.0	V
Extract 2	-110.0	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			