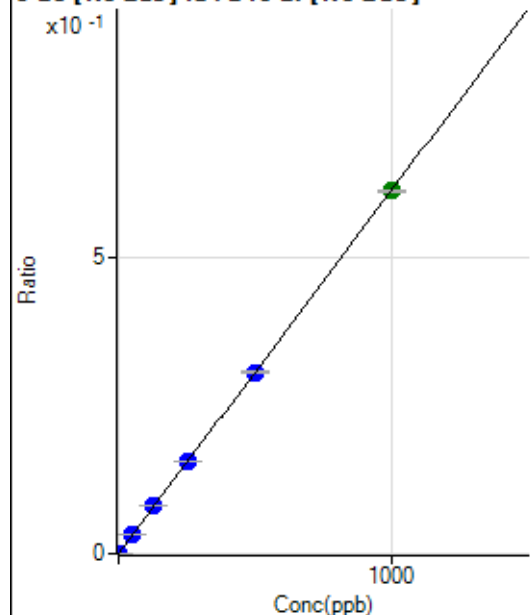


Calibration for 002CALB.d

Batch Folder: D:\ICP-MS Data\P7090518- MS.b\
 Analysis File: P7090518- MS.batch.bin
 DA Date-Time: 2018-09-05 11:22:37
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2018-09-05 11:29:04
2			
3	006CALS.d	S02	2018-09-05 11:37:15
4	007CALS.d	S03	2018-09-05 11:41:09
5	008CALS.d	S04	2018-09-05 11:45:19
6	009CALS.d	S05	2018-09-05 11:49:07
7	010CALS.d	S06	2018-09-05 11:52:52
8	011CALS.d	S07	2018-09-05 11:56:38
9	012CALS.d	S08	2018-09-05 12:00:27

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	50.00	0.0000	P	22.0
2	☐	0.100					
3	☐	1.000	1.006	3370.84	0.0006	P	2.7
4	☐	50.000	52.196	174054.49	0.0320	P	1.5
5	☐	125.000	131.313	410341.43	0.0804	P	0.7
6	☐	250.000	253.105	794893.98	0.1550	P	0.8
7	☐	500.000	499.556	1556892.70	0.3059	P	0.6
8	☐	1000.000	998.547	3115932.85	0.6115	A	0.3
9	☐			448.17	0.0001	P	6.7

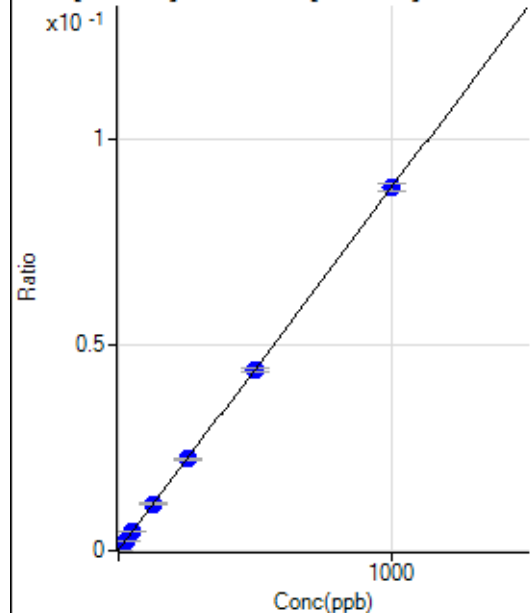
$$y = 6.1234\text{E-}004 * x + 9.0783\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.009773$$

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	472.25	0.0001	P	16.1
2	☐	2.500					
3	☐	25.000	23.880	11805.04	0.0022	P	1.2
4	☐	50.000	52.090	25438.79	0.0047	P	2.8
5	☐	125.000	127.787	57861.49	0.0113	P	2.9
6	☐	250.000	253.161	114774.73	0.0224	P	2.1
7	☐	500.000	498.569	223890.94	0.0440	P	1.9
8	☐	1000.000	999.500	448971.28	0.0881	P	2.1
9	☐			12850.38	0.0027	P	11.9

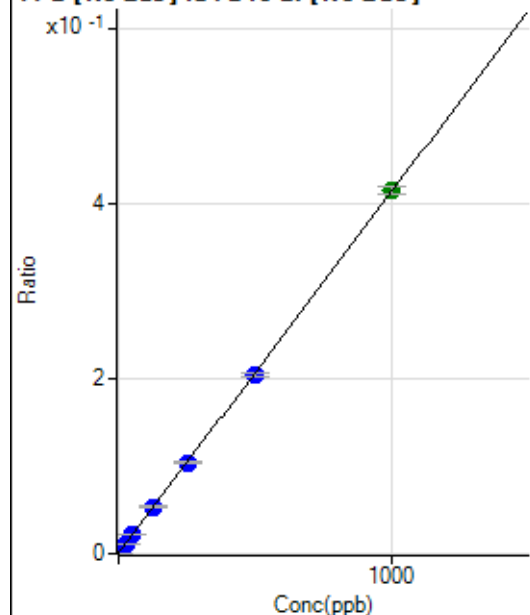
$$y = 8.8064\text{E-}005 * x + 8.5751\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.4712$$

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	2625.34	0.0005	P	3.4
2	☐	2.500					
3	☐	25.000	24.320	56738.06	0.0105	P	1.4
4	☐	50.000	50.796	116782.35	0.0215	P	2.8
5	☐	125.000	128.706	273640.98	0.0536	P	2.7
6	☐	250.000	250.399	532724.25	0.1039	P	1.5
7	☐	500.000	494.893	1042494.26	0.2048	P	2.5
8	☐	1000.000	1001.968	2110842.13	0.4142	A	2.2
9	☐			59898.05	0.0125	P	10.9

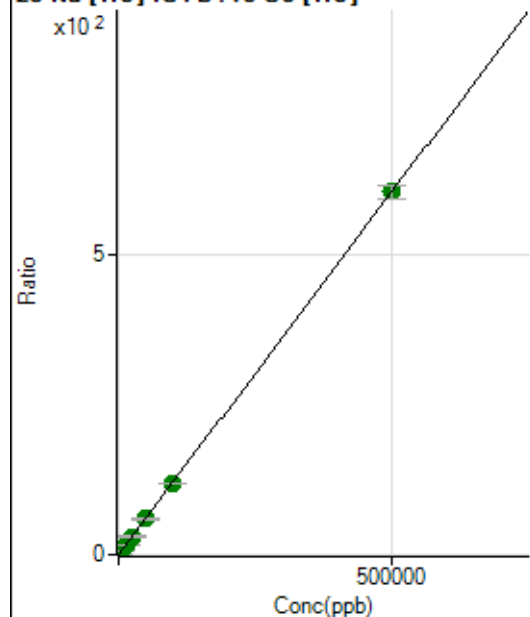
$$y = 4.1294\text{E-}004 * x + 4.7685\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.1187$$

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	14190.58	0.0263	P	1.6
2	☐	50.000					
3	☐	500.000	494.911	341584.29	0.6244	P	1.2
4	☐	5000.000	5011.998	3391954.28	6.0833	A	0.2
5	☐	12500.000	12604.291	8132964.94	15.2587	A	0.5
6	☐	25000.000	25124.978	15568745.49	30.3902	A	0.5
7	☐	50000.000	49201.250	32037869.47	59.4867	A	0.9
8	☐	100000.00	97757.296	64556713.25	118.1674	A	0.7
9	☐	500000.00	500519.44	315153004.2	604.9116	A	3.4

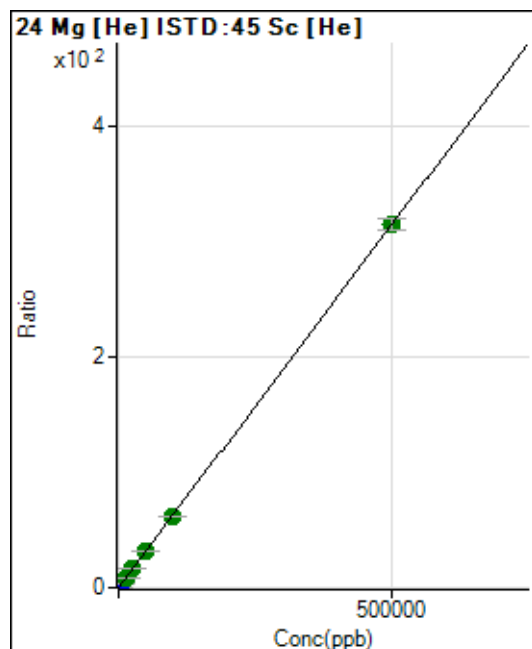
$$y = 0.0012 * x + 0.0263$$

$$R = 1.0000$$

$$DL = 1.053$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	211.12	0.0004	P	24.1
2	☐	50.000					
3	☐	500.000	498.178	171788.00	0.3140	P	0.7
4	☐	5000.000	5083.685	1784677.23	3.2008	P	0.7
5	☐	12500.000	12761.933	4282555.22	8.0345	A	0.7
6	☐	25000.000	25511.732	8228022.58	16.0610	A	0.1
7	☐	50000.000	49741.225	16864958.02	31.3143	A	1.1
8	☐	100000.00	99008.794	34052457.71	62.3301	A	0.2
9	☐	500000.00	500191.14	164062946.7	314.8893	A	3.1

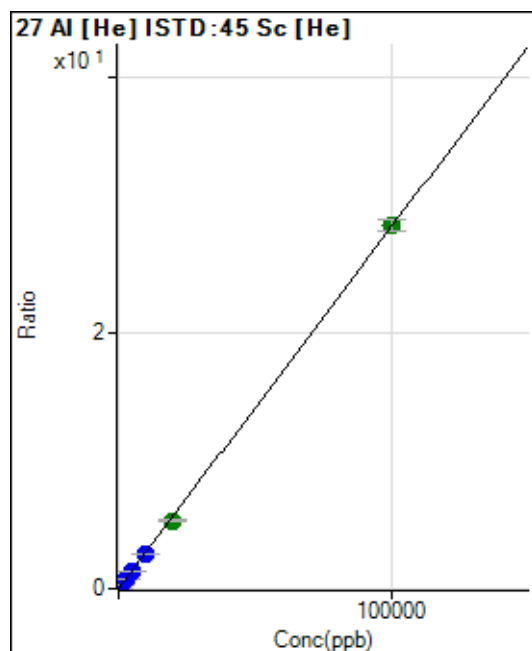
$$y = 6.2954\text{E-}004 * x + 3.8972\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.4481$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	83.34	0.0002	P	55.2
2	☐	2.000					
3	☐	20.000	19.247	3061.56	0.0056	P	10.3
4	☐	1000.000	984.936	155363.41	0.2786	P	0.4
5	☐	2500.000	2438.386	367567.11	0.6896	P	1.2
6	☐	5000.000	4840.816	701258.80	1.3689	P	0.8
7	☐	10000.000	9440.307	1437625.53	2.6693	P	1.2
8	☐	20000.000	18830.214	2908710.83	5.3242	A	0.8
9	☐	100000.00	100299.57	14775541.82	28.3591	A	3.1

$$y = 2.8274\text{E-}004 * x + 1.5431\text{E-}004$$

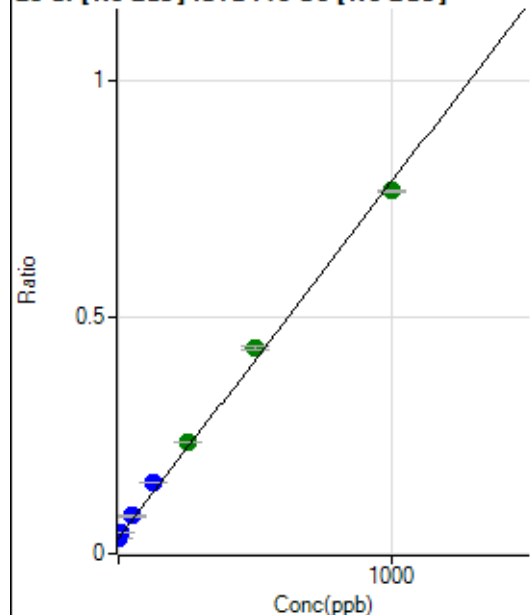
$$R = 0.9999$$

$$DL = 0.9039$$

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	388158.99	0.0331	P	0.4
2	☐	1.000					
3	☐	10.000	16.480	529940.79	0.0454	P	0.4
4	☐	50.000	61.656	937343.37	0.0794	P	0.8
5	☐	125.000	155.462	1682860.06	0.1500	P	1.0
6	☐	250.000	268.478	2611085.26	0.2350	A	0.1
7	☐	500.000	532.960	4871952.41	0.4340	A	1.6
8	☐	1000.000	974.445	8940880.15	0.7662	A	0.6
9	☐			1259770.81	0.1101	P	1.8

$$y = 7.5237\text{E-}004 * x + 0.0331$$

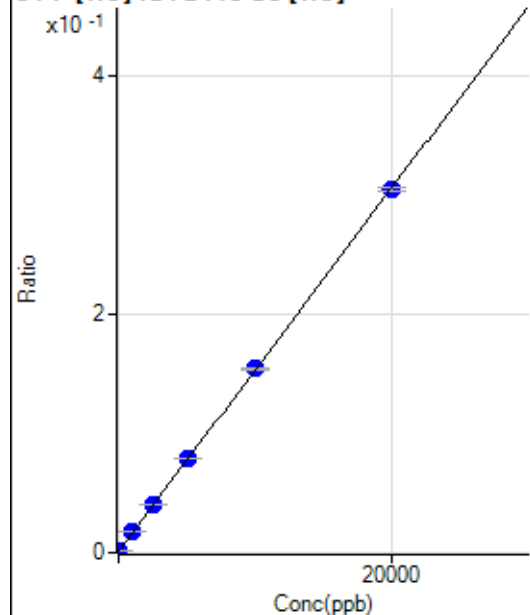
$$R = 0.9988$$

$$DL = 0.5125$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-2.909	536.15	0.0010	P	6.2
2	☐	0.000					
3	☐	0.000	2.909	591.71	0.0011	P	15.3
4	☐	1000.000	1071.400	9678.51	0.0174	P	1.6
5	☐	2500.000	2595.932	21630.18	0.0406	P	0.4
6	☐	5000.000	5113.290	40433.71	0.0789	P	1.0
7	☐	10000.000	10087.120	83313.07	0.1547	P	1.0
8	☐	20000.000	19912.556	166275.42	0.3044	P	1.0
9	☐			525.03	0.0010	P	11.2

$$y = 1.5233\text{E-}005 * x + 0.0010$$

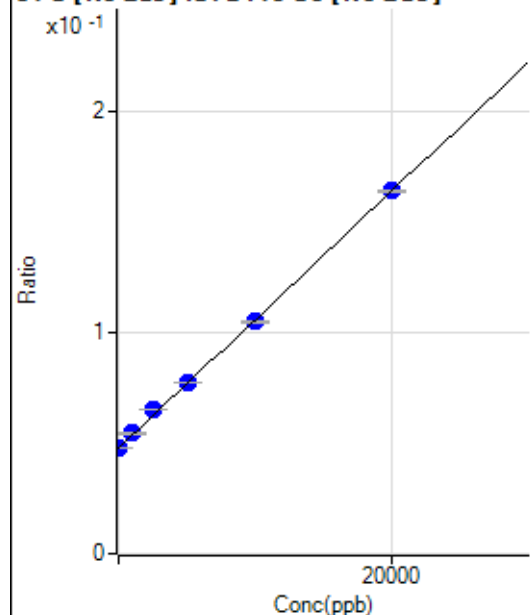
$$R = 1.0000$$

$$DL = 22.33$$

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	-26.720	559748.00	0.0477	P	0.5
2	☐	0.000					
3	☐	0.000	26.720	559359.98	0.0480	P	0.7
4	☐	1000.000	1148.923	643174.64	0.0545	P	0.4
5	☐	2500.000	2983.924	731342.56	0.0652	P	0.3
6	☐	5000.000	5086.117	860197.34	0.0774	P	0.9
7	☐	10000.000	9815.701	1178331.68	0.1050	P	1.1
8	☐	20000.000	20002.684	1917198.72	0.1643	P	0.4
9	☐			432530.78	0.0378	P	1.9

$$y = 5.8231\text{E-}006 * x + 0.0478$$

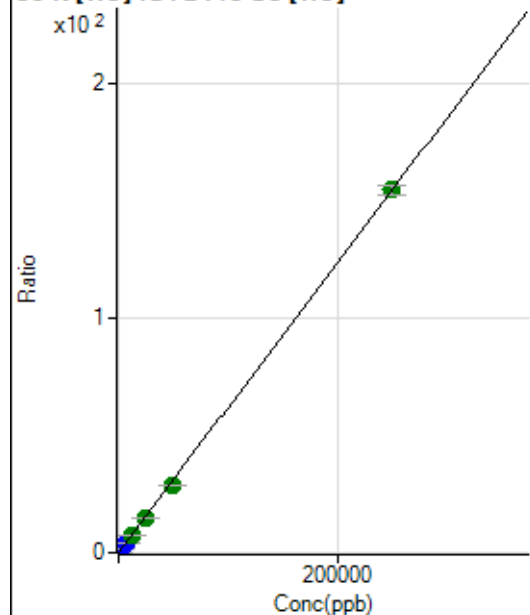
$$R = 0.9996$$

$$DL = 140.5$$

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	33199.27	0.0615	P	3.3
2	☐	50.000					
3	☐	500.000	466.180	191019.63	0.3492	P	0.2
4	☐	2500.000	2387.899	855953.62	1.5351	P	0.4
5	☐	6250.000	5957.073	1992298.03	3.7378	P	0.8
6	☐	12500.000	11902.245	3794469.14	7.4067	A	0.3
7	☐	25000.000	23323.850	7785271.87	14.4554	A	0.9
8	☐	50000.000	46885.663	15841184.73	28.9962	A	0.4
9	☐	250000.00	250828.88	80684448.33	154.8564	A	3.0

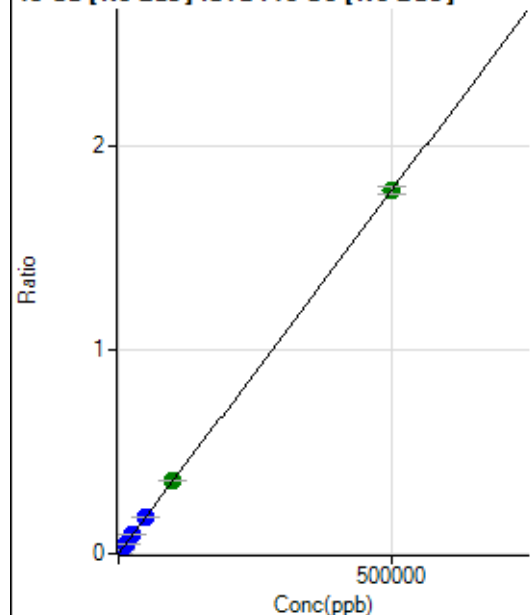
$$y = 6.1713\text{E-}004 * x + 0.0615$$

$$R = 0.9999$$

$$DL = 9.787$$

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	430.58	0.0000	P	9.2
2	☐	50.000					
3	☐	500.000	474.495	20139.40	0.0017	P	2.0
4	☐	5000.000	5134.939	216309.09	0.0183	P	0.4
5	☐	12500.000	12793.004	511725.23	0.0456	P	0.6
6	☐	25000.000	25262.069	1000267.76	0.0900	P	0.1
7	☐	50000.000	49788.505	1991620.42	0.1774	P	0.8
8	☐	100000.00	100275.51	4169482.34	0.3573	A	0.4
9	☐	500000.00	499944.29	20380128.06	1.7813	A	2.1

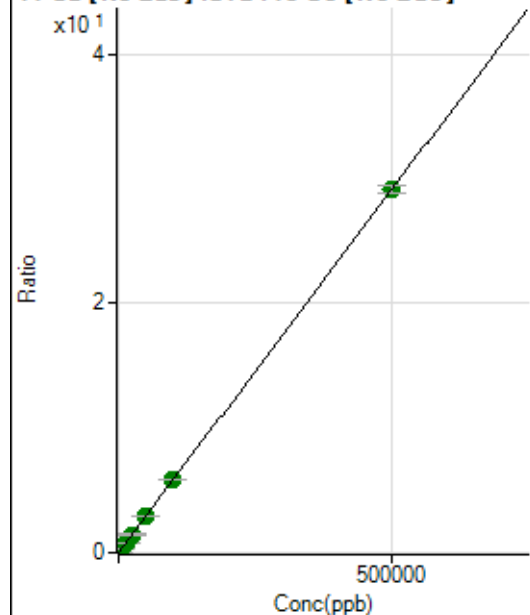
$$y = 3.5629\text{E-}006 * x + 3.6654\text{E-}005$$

$$R = 1.0000$$

$$DL = 2.831$$

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	15511.71	0.0013	P	1.9
2	☐	50.000					
3	☐	500.000	479.528	340771.75	0.0292	P	1.0
4	☐	5000.000	5061.013	3490818.70	0.2958	A	0.1
5	☐	12500.000	12658.485	8278516.16	0.7380	A	0.2
6	☐	25000.000	25139.166	16266299.32	1.4643	A	0.4
7	☐	50000.000	50086.345	32732525.03	2.9160	A	0.5
8	☐	100000.00	99676.066	67702840.40	5.8018	A	0.3
9	☐	500000.00	500044.64	332946760.2	29.1007	A	2.1

$$y = 5.8194\text{E-}005 * x + 0.0013$$

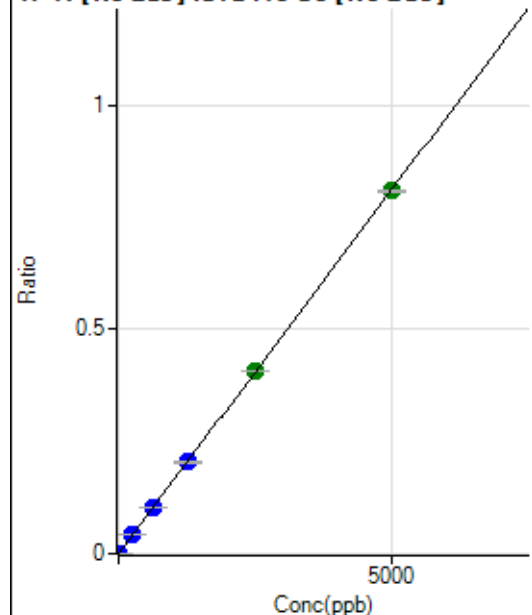
$$R = 1.0000$$

$$DL = 1.281$$

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	125.01	0.0000	P	30.1
2	☐	0.500					
3	☐	5.000	5.184	9931.48	0.0009	P	1.3
4	☐	250.000	253.974	486317.59	0.0412	P	0.6
5	☐	625.000	633.825	1153672.36	0.1028	P	0.2
6	☐	1250.000	1256.822	2265234.90	0.2039	P	0.2
7	☐	2500.000	2516.914	4583794.94	0.4083	A	0.4
8	☐	5000.000	4988.535	9444231.55	0.8093	A	0.5
9	☐			1830.73	0.0002	P	6.3

$$y = 1.6224\text{E-}004 * x + 1.0635\text{E-}005$$

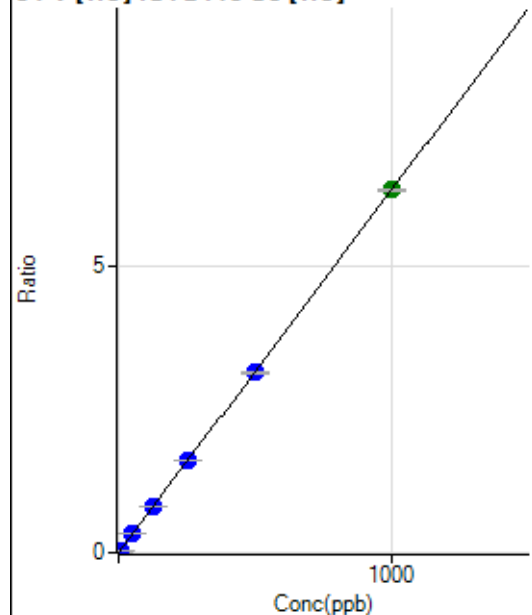
$$R = 1.0000$$

$$DL = 0.0591$$

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	4.44	0.0000	P	45.5
2	☐	0.500					
3	☐	5.000	4.846	16730.76	0.0306	P	2.1
4	☐	50.000	50.707	178387.77	0.3199	P	0.7
5	☐	125.000	126.718	426147.49	0.7995	P	0.6
6	☐	250.000	253.779	820276.75	1.6012	P	0.1
7	☐	500.000	496.767	1688036.42	3.1342	P	0.5
8	☐	1000.000	1000.422	3448358.63	6.3119	A	0.2
9	☐			1367.86	0.0026	P	5.3

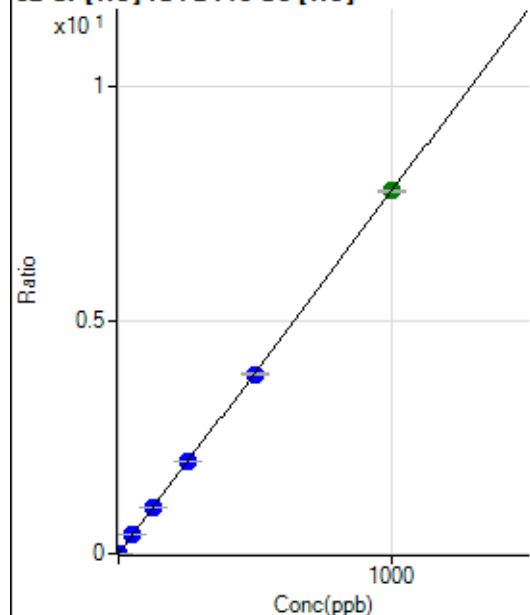
$$y = 0.0063 * x + 8.2710\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.001789$$

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	848.93	0.0016	P	7.3
2	☐	0.200					
3	☐	2.000	2.131	9923.50	0.0181	P	1.4
4	☐	50.000	51.049	222152.49	0.3984	P	0.0
5	☐	125.000	128.322	532532.37	0.9991	P	0.4
6	☐	250.000	255.077	1016647.05	1.9845	P	0.6
7	☐	500.000	495.581	2075735.80	3.8541	P	0.7
8	☐	1000.000	1000.472	4249890.32	7.7791	A	0.4
9	☐			134460.37	0.2581	P	3.5

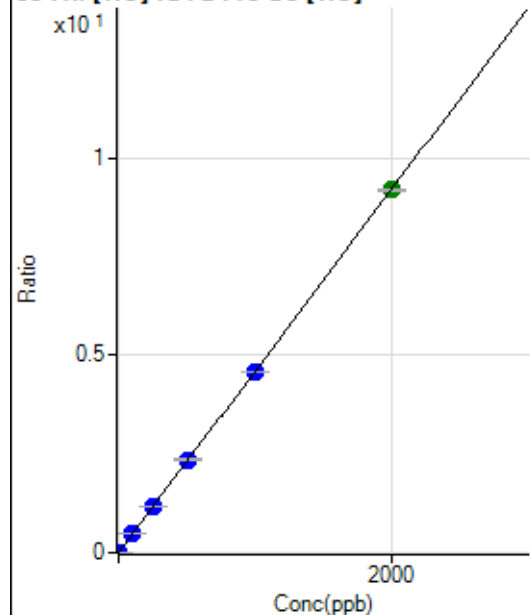
$$y = 0.0078 * x + 0.0016$$

$$R = 1.0000$$

$$DL = 0.04396$$

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	81.11	0.0002	P	28.6
2	☐	0.100					
3	☐	1.000	1.061	2751.41	0.0050	P	2.8
4	☐	100.000	102.073	261705.94	0.4694	P	0.4
5	☐	250.000	256.861	629431.42	1.1809	P	0.3
6	☐	500.000	513.364	1209019.56	2.3600	P	0.2
7	☐	1000.000	996.949	2468265.50	4.5829	P	0.3
8	☐	2000.000	1997.223	5015712.91	9.1810	A	0.8
9	☐			21894.28	0.0420	P	3.2

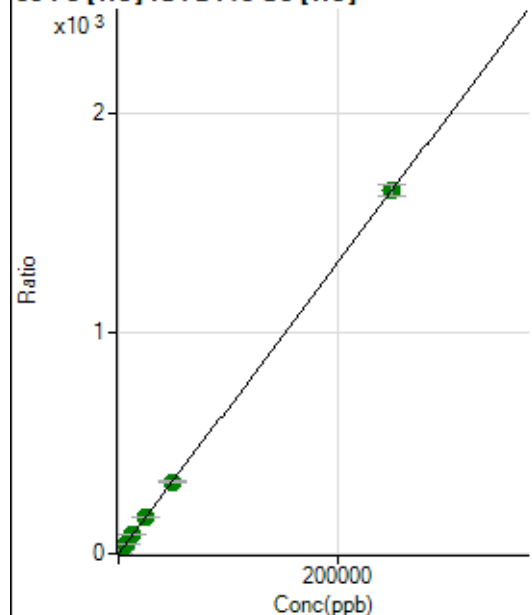
$$y = 0.0046 * x + 1.5050E-004$$

$$R = 1.0000$$

$$DL = 0.02811$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6094.02	0.0113	P	7.2
2	☐	5.000					
3	☐	50.000	50.654	188431.73	0.3444	P	1.6
4	☐	2500.000	2525.918	9269940.02	16.6253	A	0.2
5	☐	6250.000	6315.115	22145671.33	41.5484	A	0.5
6	☐	12500.000	12724.722	42882900.03	83.7071	A	0.2
7	☐	25000.000	24741.163	87650344.55	162.7442	A	0.3
8	☐	50000.000	49679.268	178519172.5	326.7726	A	1.1
9	☐	250000.00	250076.90	856968278.4	1,644.871	A	3.3

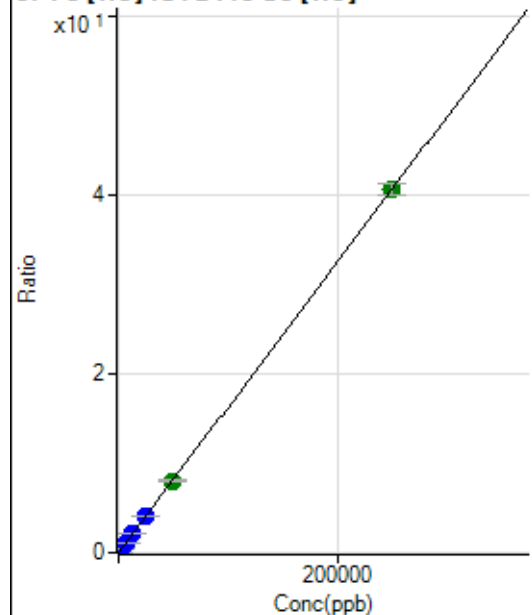
$$y = 0.0066 * x + 0.0113$$

$$R = 1.0000$$

$$DL = 0.3682$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	342.61	0.0006	P	14.3
2	☐	5.000					
3	☐	50.000	51.104	4884.27	0.0089	P	2.6
4	☐	2500.000	2553.929	231456.84	0.4151	P	0.9
5	☐	6250.000	6403.004	554235.28	1.0398	P	1.0
6	☐	12500.000	12816.267	1065860.12	2.0806	P	0.6
7	☐	25000.000	24841.842	2171631.43	4.0322	P	0.1
8	☐	50000.000	49674.801	4404554.26	8.0622	A	0.6
9	☐	250000.00	250060.67	21143412.74	40.5823	A	3.2

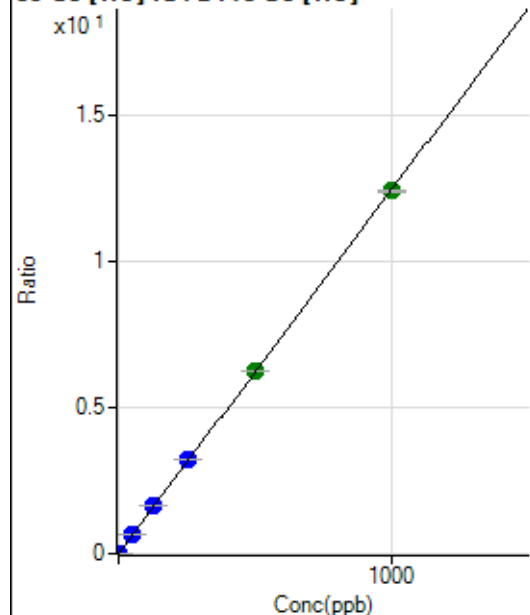
$$y = 1.6229E-004 * x + 6.3466E-004$$

$$R = 1.0000$$

$$DL = 1.672$$

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	114.45	0.0002	P	21.0
2	☐	0.100					
3	☐	1.000	1.014	7025.12	0.0128	P	1.3
4	☐	50.000	52.090	361700.41	0.6487	P	1.0
5	☐	125.000	130.130	863619.80	1.6202	P	0.8
6	☐	250.000	258.370	1647936.68	3.2167	P	0.2
7	☐	500.000	500.184	3353812.10	6.2271	A	0.0
8	☐	1000.000	997.070	6781427.47	12.4130	A	0.8
9	☐			80134.05	0.1538	P	3.7

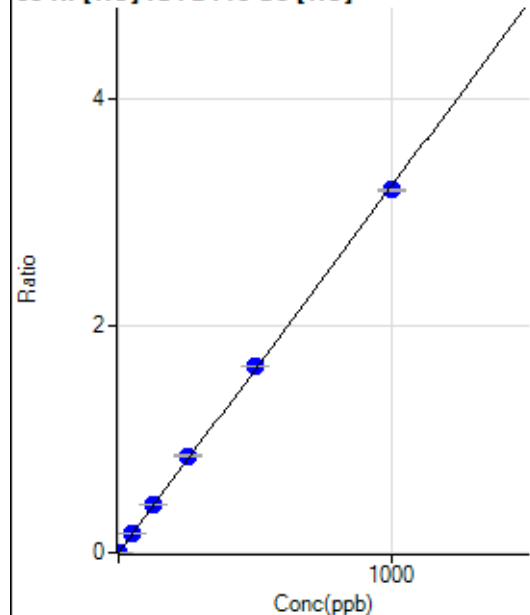
$$y = 0.0124 * x + 2.1160E-004$$

$$R = 1.0000$$

$$DL = 0.0107$$

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	84.45	0.0002	P	19.3
2	☐	0.100					
3	☐	1.000	1.119	2063.51	0.0038	P	4.5
4	☐	50.000	53.384	96277.89	0.1727	P	0.4
5	☐	125.000	133.522	230060.26	0.4316	P	0.3
6	☐	250.000	264.871	438574.69	0.8561	P	0.4
7	☐	500.000	509.875	887492.61	1.6478	P	0.3
8	☐	1000.000	990.110	1748069.47	3.1997	P	0.7
9	☐			47622.79	0.0914	P	3.5

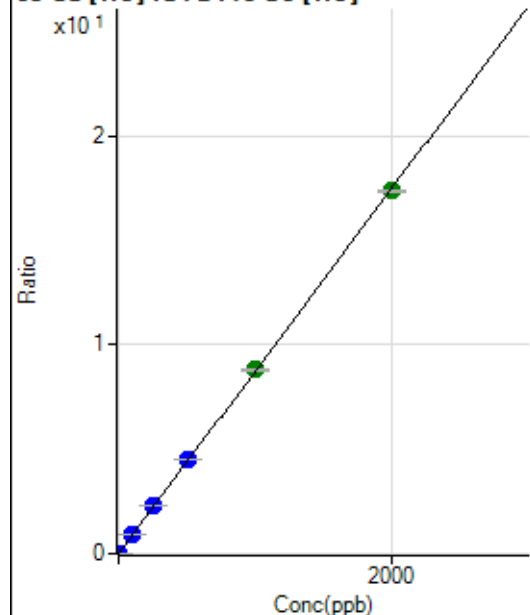
$$y = 0.0032 * x + 1.5657E-004$$

$$R = 0.9998$$

$$DL = 0.02807$$

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	721.14	0.0013	P	6.4
2	☐	0.200					
3	☐	2.000	2.133	10913.10	0.0199	P	1.4
4	☐	100.000	105.802	515655.71	0.9248	P	0.2
5	☐	250.000	264.011	1228978.98	2.3057	P	0.6
6	☐	500.000	519.607	2324097.35	4.5366	P	0.7
7	☐	1000.000	1008.798	4742928.64	8.8065	A	0.5
8	☐	2000.000	1988.658	9483543.61	17.3590	A	0.6
9	☐			20580.21	0.0395	P	3.3

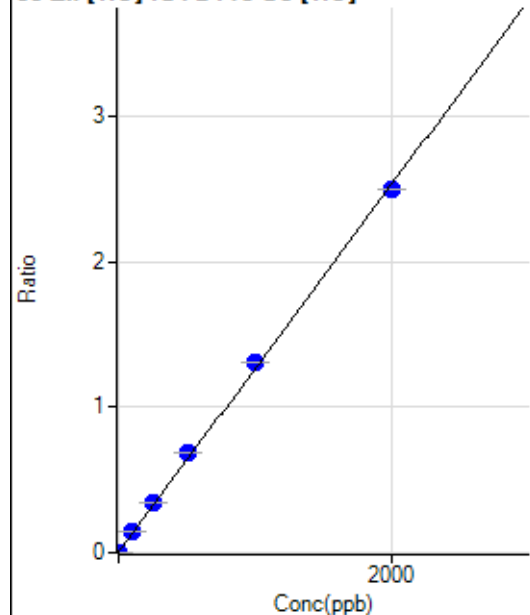
$$y = 0.0087 * x + 0.0013$$

$$R = 0.9999$$

$$DL = 0.02956$$

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	1467.88	0.0027	P	5.2
2	☐	0.200					
3	☐	2.000	2.498	3211.51	0.0059	P	1.8
4	☐	100.000	108.984	78263.01	0.1404	P	0.5
5	☐	250.000	271.112	183949.17	0.3451	P	1.0
6	☐	500.000	539.927	350735.53	0.6846	P	0.4
7	☐	1000.000	1031.340	702995.99	1.3053	P	0.5
8	☐	2000.000	1971.259	1361650.14	2.4924	P	0.1
9	☐			6890.61	0.0132	P	5.4

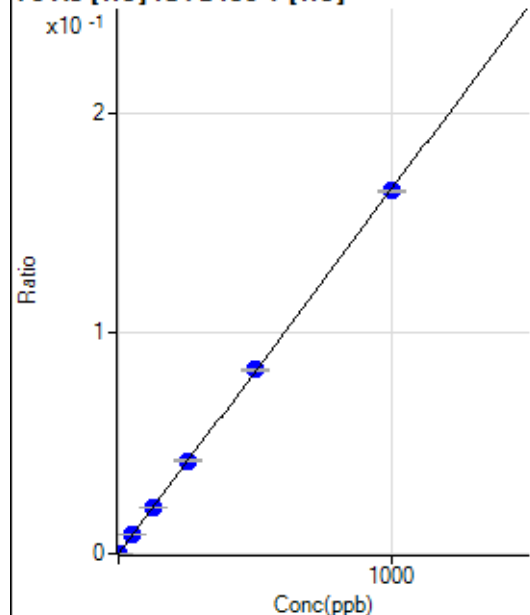
$$y = 0.0013 * x + 0.0027$$

$$R = 0.9996$$

$$DL = 0.3325$$

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	11.11	0.0000	P	26.2
2	☐	0.100					
3	☐	1.000	1.040	479.64	0.0002	P	3.2
4	☐	50.000	52.011	23640.87	0.0086	P	0.2
5	☐	125.000	128.727	57285.70	0.0213	P	0.4
6	☐	250.000	255.829	109942.38	0.0423	P	0.2
7	☐	500.000	505.021	225973.76	0.0836	P	0.7
8	☐	1000.000	995.466	453253.57	0.1648	P	0.7
9	☐			665.45	0.0003	P	4.6

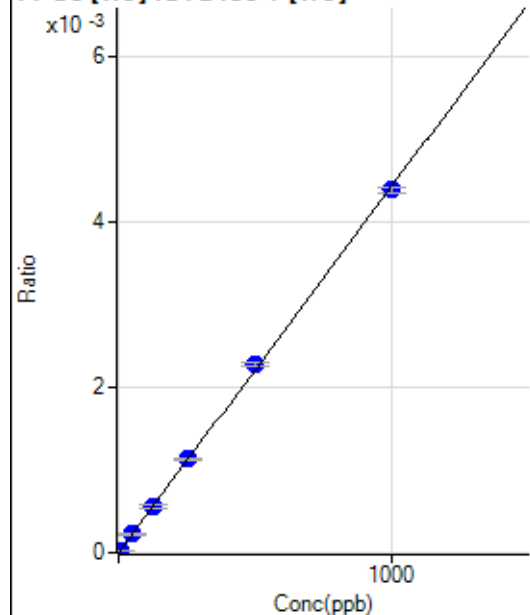
$$y = 1.6552\text{E-}004 * x + 4.0808\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.01937$$

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	6.364	76.67	0.0000	P	12.8
4	☐	50.000	50.308	611.13	0.0002	P	6.4
5	☐	125.000	125.916	1497.88	0.0006	P	7.6
6	☐	250.000	257.007	2952.57	0.0011	P	2.0
7	☐	500.000	514.024	6149.18	0.0023	P	1.9
8	☐	1000.000	991.099	12064.08	0.0044	P	1.4
9	☐			2.22	0.0000	P	86.7

$$y = 4.4250\text{E-}006 * x + 0.0000\text{E+}000$$

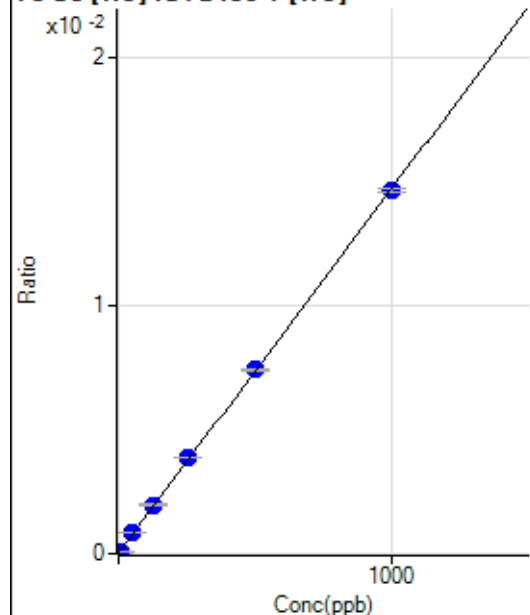
$$R = 0.9998$$

$$DL = 0$$

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	87.66	0.0000	P	7.0
2	☐	0.500					
3	☐	5.000	5.263	298.15	0.0001	P	5.6
4	☐	50.000	54.140	2267.48	0.0008	P	2.5
5	☐	125.000	132.304	5301.01	0.0020	P	0.7
6	☐	250.000	260.795	10010.31	0.0039	P	0.7
7	☐	500.000	503.138	20027.47	0.0074	P	1.0
8	☐	1000.000	994.611	40201.23	0.0146	P	1.0
9	☐			98.77	0.0000	P	8.2

$$y = 1.4661\text{E-}005 * x + 3.2365\text{E-}005$$

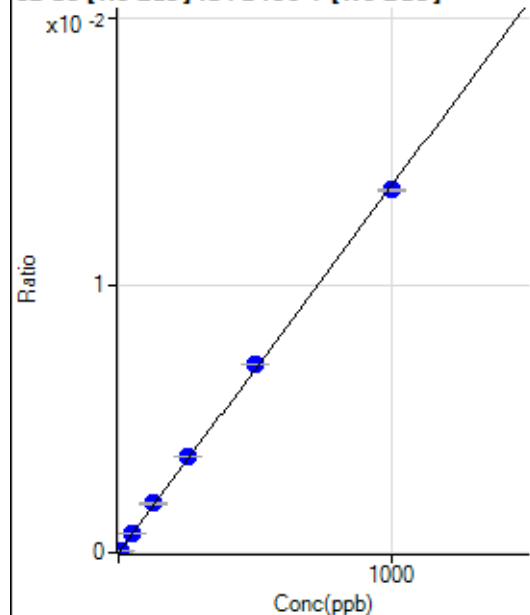
$$R = 0.9999$$

$$DL = 0.463$$

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	46.54	0.0000	P	192.
2	☐	0.500					
3	☐	5.000	5.191	1334.11	0.0001	P	2.3
4	☐	50.000	53.015	13417.24	0.0007	P	2.3
5	☐	125.000	133.900	32186.90	0.0018	P	1.7
6	☐	250.000	262.095	63090.89	0.0036	P	0.1
7	☐	500.000	513.336	125765.60	0.0070	P	0.5
8	☐	1000.000	989.044	250588.33	0.0136	P	0.7
9	☐			182.10	0.0000	P	17.2

$$y = 1.3727\text{E-}005 * x + 2.5584\text{E-}006$$

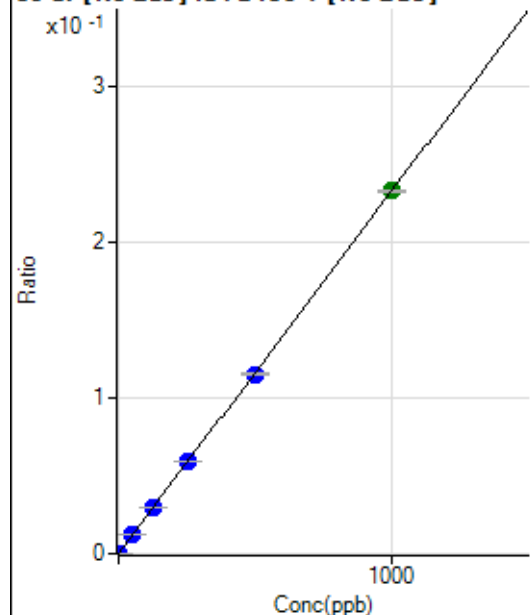
$$R = 0.9998$$

$$DL = 1.074$$

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	836.17	0.0000	P	8.1
2	☐	0.100					
3	☐	1.000	1.051	5242.81	0.0003	P	2.5
4	☐	50.000	50.560	216603.30	0.0118	P	0.1
5	☐	125.000	127.486	518600.18	0.0297	P	0.2
6	☐	250.000	253.458	1032389.18	0.0589	P	0.5
7	☐	500.000	495.100	2052405.32	0.1150	P	0.8
8	☐	1000.000	1001.247	4292306.60	0.2326	A	0.5
9	☐			20206.54	0.0011	P	2.4

$$y = 2.3227\text{E-}004 * x + 4.5940\text{E-}005$$

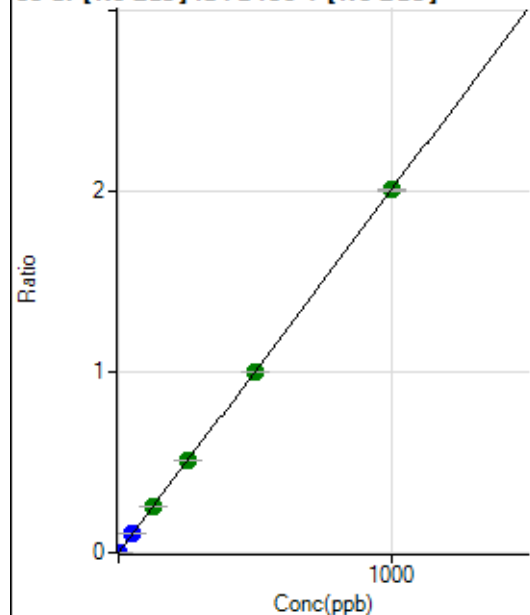
$$R = 1.0000$$

$$DL = 0.04835$$

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	225.01	0.0000	P	22.8
2	☐	0.100					
3	☐	1.000	1.000	36547.68	0.0020	P	0.8
4	☐	50.000	50.742	1873692.12	0.1020	P	0.4
5	☐	125.000	126.146	4433054.79	0.2535	A	0.3
6	☐	250.000	252.204	8881263.91	0.5068	A	0.3
7	☐	500.000	499.003	17890361.34	1.0028	A	0.5
8	☐	1000.000	999.767	37075488.67	2.0091	A	0.3
9	☐			170597.48	0.0095	P	1.5

$$y = 0.0020 * x + 1.2357\text{E-}005$$

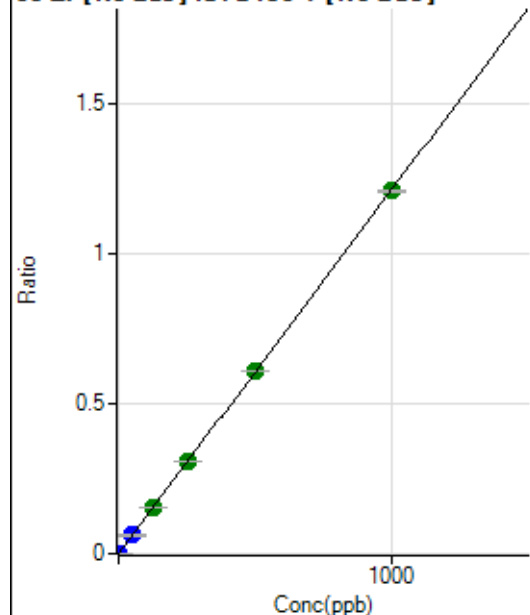
$$R = 1.0000$$

$$DL = 0.004211$$

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	1486.26	0.0001	P	7.0
2	☐	0.100					
3	☐	1.000	1.006	23494.92	0.0013	P	2.1
4	☐	50.000	50.270	1119712.94	0.0609	P	0.7
5	☐	125.000	126.142	2672065.79	0.1528	A	0.4
6	☐	250.000	252.566	5359855.11	0.3059	A	0.4
7	☐	500.000	503.370	10874404.24	0.6095	A	0.1
8	☐	1000.000	997.517	22288293.03	1.2078	A	0.3
9	☐			5142.82	0.0003	P	0.7

$$y = 0.0012 * x + 8.1652E-005$$

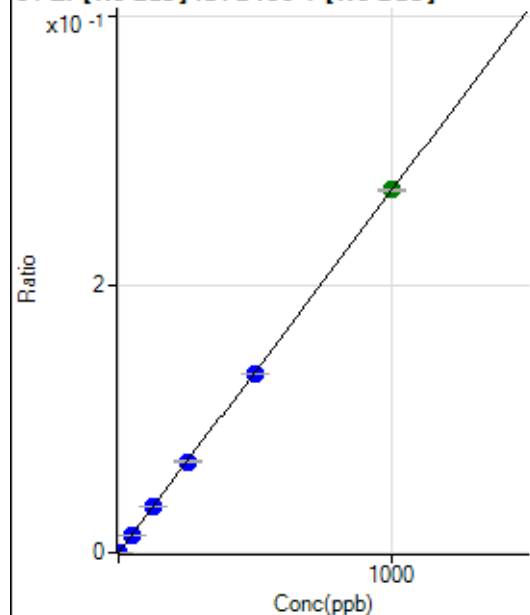
$$R = 1.0000$$

$$DL = 0.01412$$

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	316.68	0.0000	P	7.6
2	☐	0.100					
3	☐	1.000	0.997	5181.70	0.0003	P	1.4
4	☐	50.000	50.165	249215.41	0.0136	P	0.5
5	☐	125.000	125.666	593727.20	0.0340	P	0.7
6	☐	250.000	251.285	1189408.23	0.0679	P	0.9
7	☐	500.000	495.190	2386078.24	0.1337	P	0.5
8	☐	1000.000	1001.992	4993532.75	0.2706	A	0.6
9	☐			1041.75	0.0001	P	15.4

$$y = 2.7005E-004 * x + 1.7398E-005$$

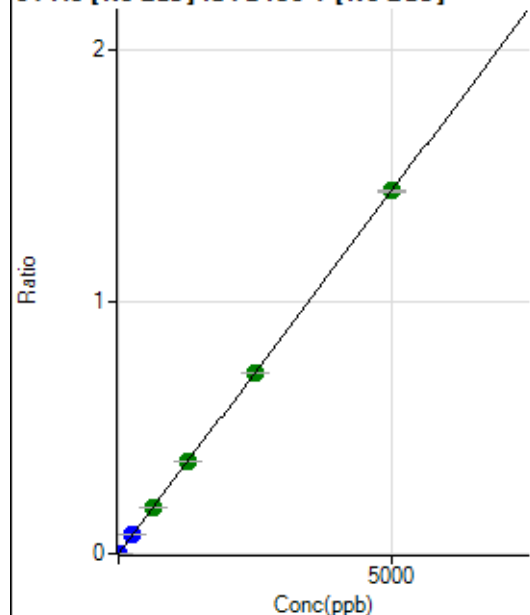
$$R = 1.0000$$

$$DL = 0.01466$$

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	533.37	0.0000	P	21.9
2	☐	0.500					
3	☐	5.000	4.993	26494.82	0.0015	P	0.2
4	☐	250.000	253.080	1338440.76	0.0728	P	0.3
5	☐	625.000	628.149	3161050.57	0.1808	A	0.5
6	☐	1250.000	1260.840	6357698.54	0.3628	A	0.2
7	☐	2500.000	2493.210	12799165.74	0.7174	A	0.7
8	☐	5000.000	5000.137	26549382.71	1.4387	A	0.8
9	☐			28966.32	0.0016	P	5.3

$$y = 2.8774\text{E-}004 * x + 2.9316\text{E-}005$$

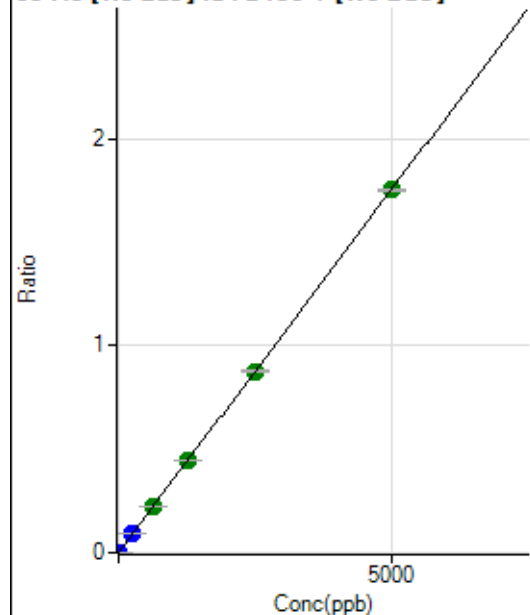
$$R = 1.0000$$

$$DL = 0.06693$$

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	72.23	0.0000	P	23.8
2	☐	0.500					
3	☐	5.000	4.945	31432.75	0.0017	P	2.2
4	☐	250.000	253.572	1634603.92	0.0890	P	0.6
5	☐	625.000	632.497	3880539.67	0.2219	A	0.7
6	☐	1250.000	1259.343	7742460.59	0.4418	A	0.1
7	☐	2500.000	2499.614	15646030.04	0.8770	A	0.3
8	☐	5000.000	4996.742	32350489.96	1.7531	A	0.8
9	☐			47195.49	0.0026	P	2.9

$$y = 3.5085\text{E-}004 * x + 3.9670\text{E-}006$$

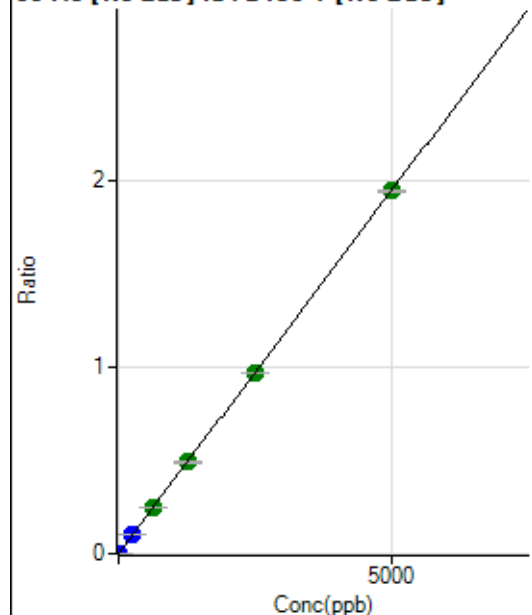
$$R = 1.0000$$

$$DL = 0.008061$$

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	188.90	0.0000	P	14.4
2	☐	0.500					
3	☐	5.000	4.921	34804.35	0.0019	P	0.4
4	☐	250.000	253.390	1812136.67	0.0986	P	1.0
5	☐	625.000	632.497	4305011.86	0.2462	A	0.2
6	☐	1250.000	1258.560	8583883.09	0.4899	A	0.5
7	☐	2500.000	2500.451	17362983.03	0.9732	A	0.1
8	☐	5000.000	4996.528	35886511.22	1.9447	A	0.8
9	☐			60746.52	0.0034	P	3.6

$$y = 3.8922\text{E-}004 * x + 1.0382\text{E-}005$$

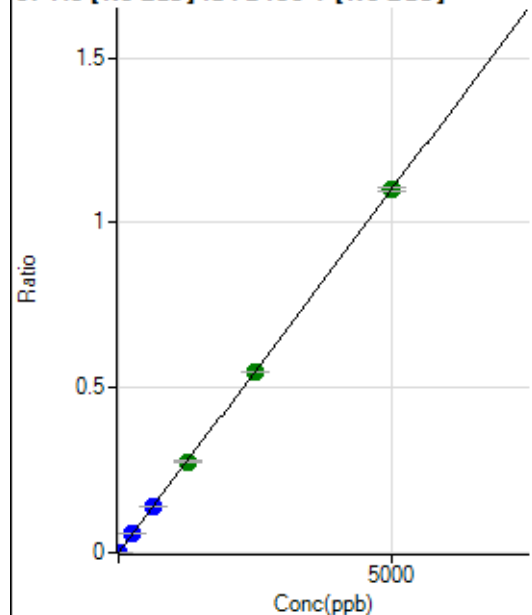
$$R = 1.0000$$

$$DL = 0.01153$$

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	52.78	0.0000	P	18.4
2	☐	0.500					
3	☐	5.000	4.875	19436.17	0.0011	P	3.8
4	☐	250.000	253.904	1026218.01	0.0559	P	1.0
5	☐	625.000	631.578	2429538.79	0.1389	P	0.2
6	☐	1250.000	1255.239	4838632.66	0.2761	A	0.9
7	☐	2500.000	2498.720	9806437.72	0.5497	A	0.0
8	☐	5000.000	4998.313	20289515.04	1.0995	A	1.1
9	☐			29581.43	0.0017	P	4.2

$$y = 2.1998\text{E-}004 * x + 2.9009\text{E-}006$$

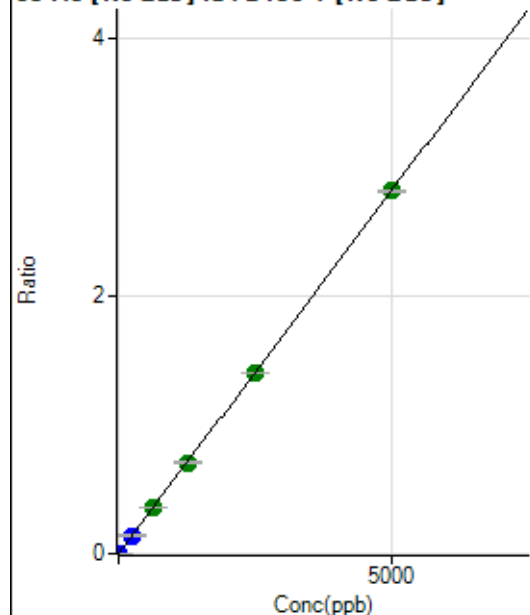
$$R = 1.0000$$

$$DL = 0.007277$$

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	94.45	0.0000	P	21.9
2	☐	0.500					
3	☐	5.000	5.019	51215.42	0.0028	P	1.5
4	☐	250.000	251.480	2603803.66	0.1417	P	0.7
5	☐	625.000	629.795	6206311.55	0.3549	A	0.5
6	☐	1250.000	1257.668	12419348.46	0.7087	A	0.6
7	☐	2500.000	2497.335	25107839.80	1.4073	A	0.2
8	☐	5000.000	4998.742	51981928.59	2.8170	A	0.8
9	☐			73180.47	0.0041	P	6.1

$$y = 5.6354\text{E-}004 * x + 5.1873\text{E-}006$$

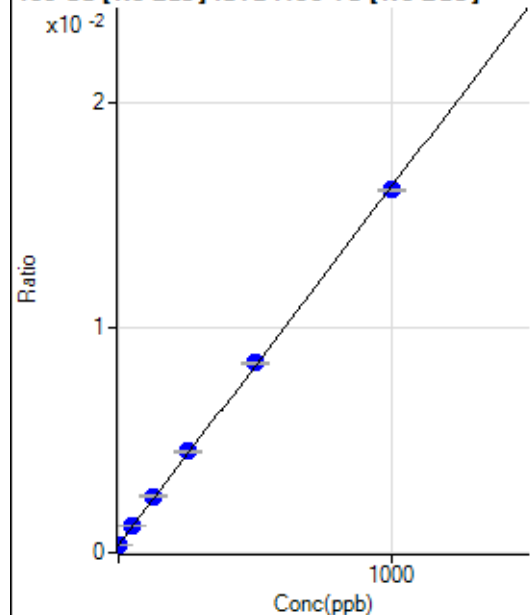
$$R = 1.0000$$

$$DL = 0.006056$$

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	7827.50	0.0003	P	2.5
2	☐	0.100					
3	☐	1.000	1.727	8294.45	0.0004	P	4.5
4	☐	50.000	53.344	27424.64	0.0012	P	2.1
5	☐	125.000	136.417	55557.05	0.0025	P	1.2
6	☐	250.000	262.069	101482.11	0.0045	P	2.0
7	☐	500.000	508.783	193891.77	0.0084	P	0.6
8	☐	1000.000	990.996	382446.41	0.0161	P	0.8
9	☐			8080.38	0.0004	P	4.9

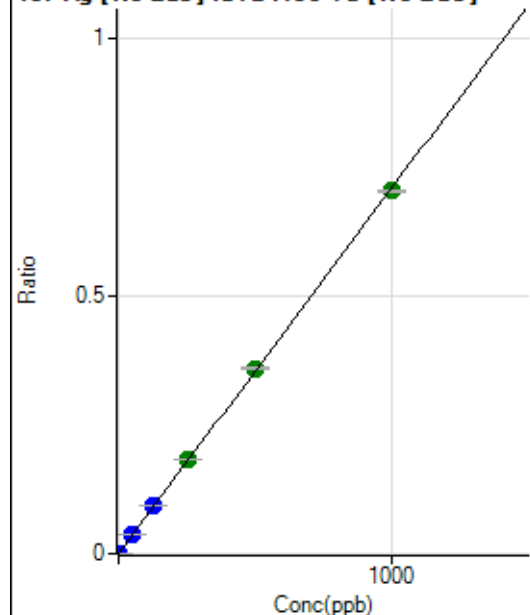
$$y = 1.5917\text{E-}005 * x + 3.4075\text{E-}004$$

$$R = 0.9998$$

$$DL = 1.624$$

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	127.78	0.0000	P	13.3
2	☐	0.100					
3	☐	1.000	1.047	16866.28	0.0007	P	0.8
4	☐	50.000	54.228	887097.24	0.0385	P	0.3
5	☐	125.000	133.017	2087730.04	0.0944	P	0.6
6	☐	250.000	259.022	4134068.41	0.1838	A	0.3
7	☐	500.000	506.781	8262660.26	0.3596	A	0.6
8	☐	1000.000	993.141	16726140.13	0.7048	A	0.6
9	☐			1589.05	0.0001	P	1.8

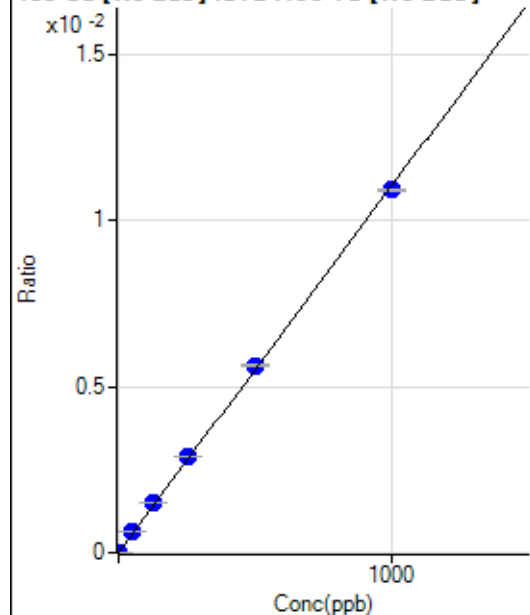
$$y = 7.0962\text{E-}004 * x + 5.5612\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.003138$$

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	13.89	0.0000	P	45.9
2	☐	0.100					
3	☐	1.000	1.241	322.23	0.0000	P	12.2
4	☐	50.000	55.740	14196.25	0.0006	P	0.2
5	☐	125.000	136.504	33339.50	0.0015	P	0.3
6	☐	250.000	261.260	64877.04	0.0029	P	0.4
7	☐	500.000	511.200	129666.48	0.0056	P	0.6
8	☐	1000.000	989.860	259343.11	0.0109	P	0.3
9	☐			97.23	0.0000	P	20.2

$$y = 1.1039\text{E-}005 * x + 6.0477\text{E-}007$$

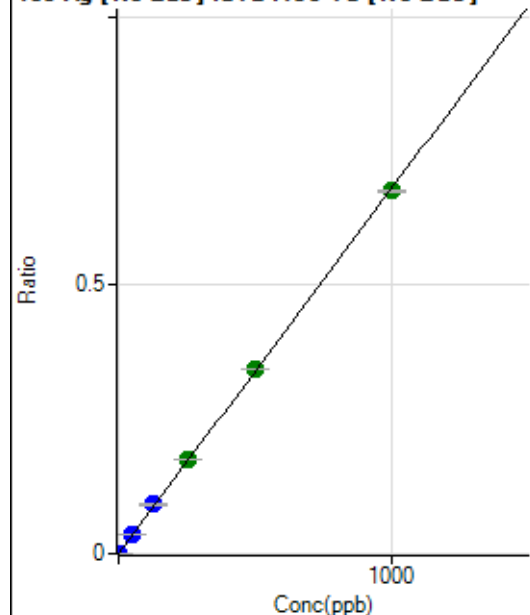
$$R = 0.9998$$

$$DL = 0.07549$$

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	38.89	0.0000	P	69.0
2	☐	0.100					
3	☐	1.000	1.030	15809.46	0.0007	P	1.1
4	☐	50.000	54.615	855525.78	0.0371	P	0.6
5	☐	125.000	134.386	2019903.21	0.0913	P	0.2
6	☐	250.000	259.108	3960336.76	0.1761	A	0.6
7	☐	500.000	504.973	7884648.01	0.3432	A	0.2
8	☐	1000.000	993.832	16028860.77	0.6754	A	0.7
9	☐			1405.68	0.0001	P	8.3

$$y = 6.7959E-004 * x + 1.6949E-006$$

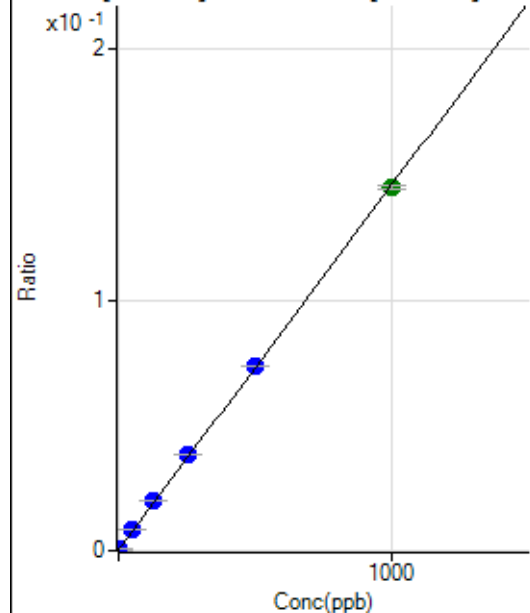
$$R = 0.9999$$

$$DL = 0.005159$$

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	5473.70	0.0002	P	2.5
2	☐	0.100					
3	☐	1.000	1.110	9007.43	0.0004	P	2.7
4	☐	50.000	54.301	187650.07	0.0081	P	0.2
5	☐	125.000	135.217	440518.24	0.0199	P	0.6
6	☐	250.000	261.599	861653.79	0.0383	P	0.3
7	☐	500.000	505.977	1697398.23	0.0739	P	0.3
8	☐	1000.000	992.620	3434127.26	0.1447	A	1.0
9	☐			6120.17	0.0003	P	4.4

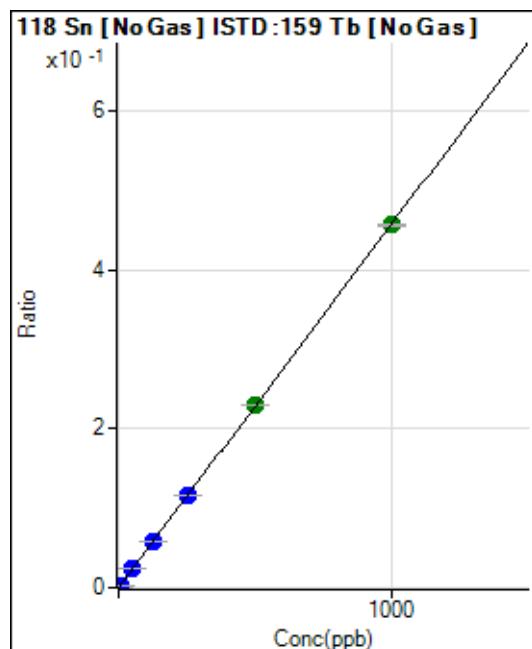
$$y = 1.4554E-004 * x + 2.3828E-004$$

$$R = 0.9999$$

$$DL = 0.1228$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1727.96	0.0001	P	8.0
2	☐	0.500					
3	☐	5.000	5.058	53759.38	0.0024	P	1.7
4	☐	50.000	52.020	549690.52	0.0238	P	0.1
5	☐	125.000	128.040	1295788.62	0.0586	P	0.8
6	☐	250.000	251.627	2587984.39	0.1151	P	0.2
7	☐	500.000	502.012	5272827.33	0.2295	A	0.5
8	☐	1000.000	998.106	10827008.23	0.4562	A	0.6
9	☐			9926.17	0.0004	P	2.5

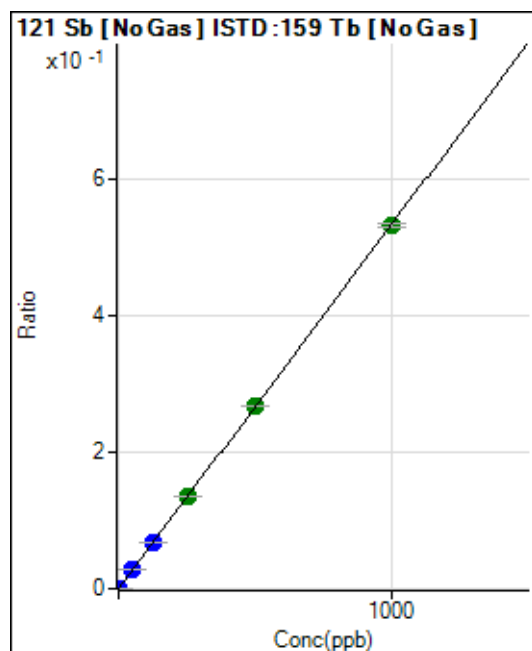
$$y = 4.5700E-004 * x + 7.5219E-005$$

$$R = 1.0000$$

$$DL = 0.03931$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	72.23	0.0000	P	33.0
2	☐	0.200					
3	☐	2.000	2.003	24085.26	0.0011	P	2.1
4	☐	50.000	51.986	637974.95	0.0277	P	0.3
5	☐	125.000	128.749	1515962.48	0.0685	P	0.6
6	☐	250.000	254.654	3049126.52	0.1356	A	0.1
7	☐	500.000	503.689	6160884.38	0.2681	A	0.2
8	☐	1000.000	996.424	12588971.11	0.5305	A	1.1
9	☐			18370.93	0.0008	P	4.0

$$y = 5.3236E-004 * x + 3.1422E-006$$

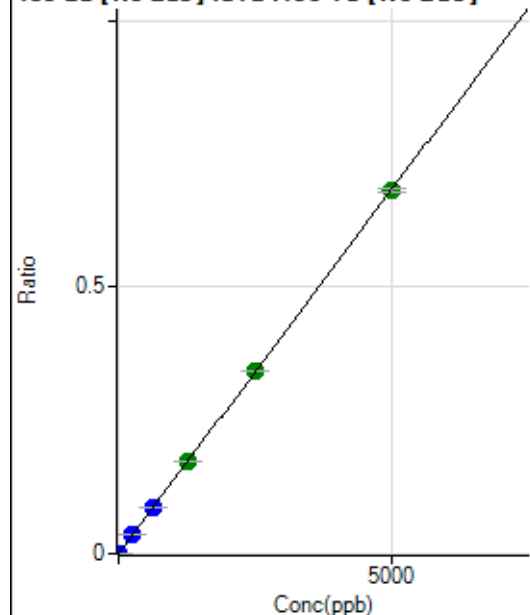
$$R = 1.0000$$

$$DL = 0.005844$$

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	63.89	0.0000	P	30.1
2	☐	1.000					
3	☐	10.000	10.077	31021.54	0.0014	P	0.4
4	☐	250.000	258.897	813989.71	0.0353	P	0.3
5	☐	625.000	641.976	1936650.50	0.0876	P	0.4
6	☐	1250.000	1263.184	3875085.07	0.1723	A	0.5
7	☐	2500.000	2517.222	7888471.10	0.3433	A	0.2
8	☐	5000.000	4985.526	16138021.72	0.6800	A	1.1
9	☐			2216.95	0.0001	P	6.5

$$y = 1.3640\text{E-}004 * x + 2.7808\text{E-}006$$

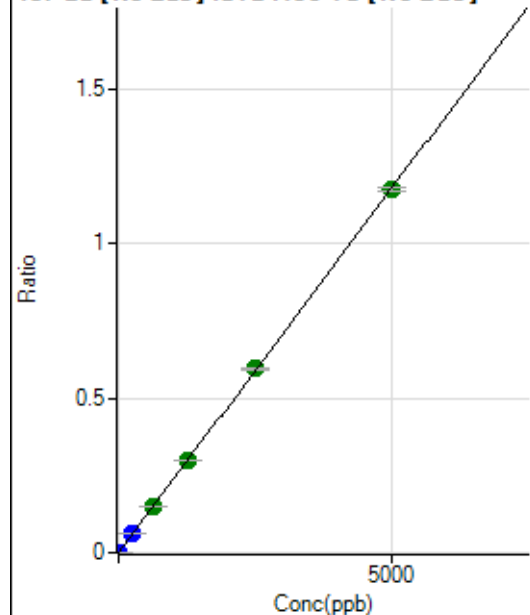
$$R = 1.0000$$

$$DL = 0.01839$$

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	80.56	0.0000	P	26.3
2	☐	1.000					
3	☐	10.000	10.022	53316.92	0.0024	P	1.3
4	☐	250.000	261.907	1423848.73	0.0618	P	1.1
5	☐	625.000	641.078	3344135.36	0.1512	A	0.7
6	☐	1250.000	1269.129	6732269.77	0.2993	A	0.2
7	☐	2500.000	2524.831	13681947.88	0.5955	A	0.3
8	☐	5000.000	4980.197	27876056.18	1.1746	A	1.0
9	☐			3875.71	0.0002	P	0.3

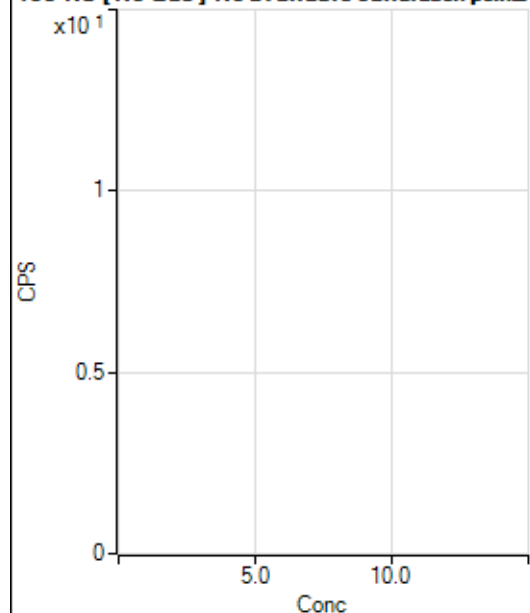
$$y = 2.3586\text{E-}004 * x + 3.5086\text{E-}006$$

$$R = 1.0000$$

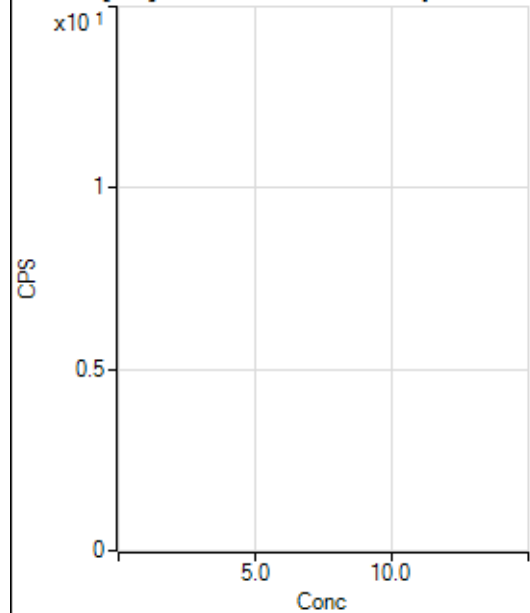
$$DL = 0.01173$$

Weight: <None>

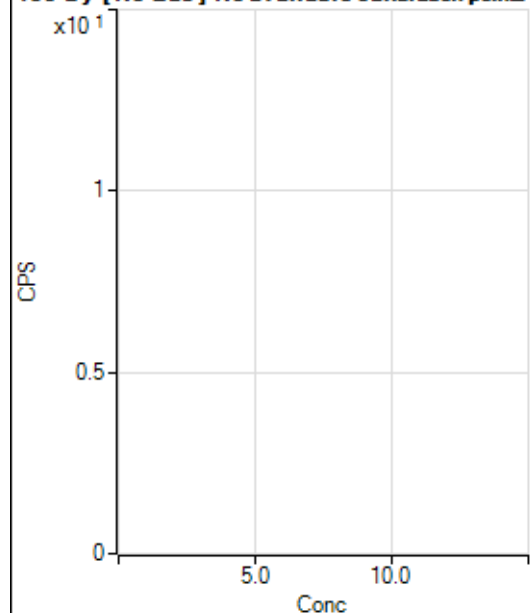
Min Conc: 0

150 Nd [No Gas] No available calibration points

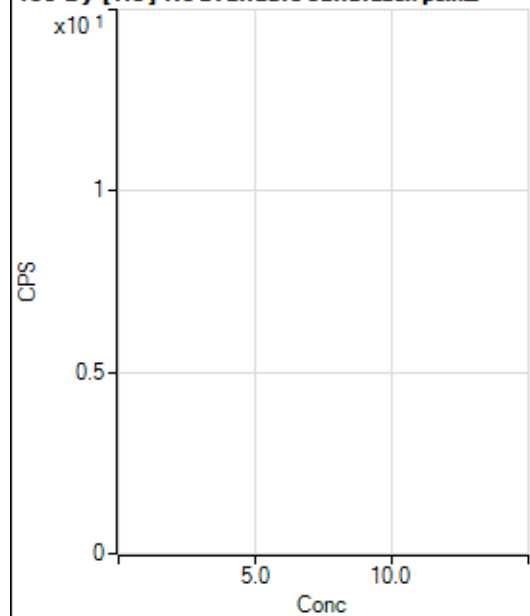
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.45		P	86.6
2	☐						
3	☐			8.89		P	114.
4	☐			77.78		P	21.6
5	☐			146.67		P	29.8
6	☐			295.57		P	6.9
7	☐			544.48		P	3.7
8	☐			1120.08		P	3.9
9	☐			151.12		P	12.7

150 Nd [He] No available calibration points

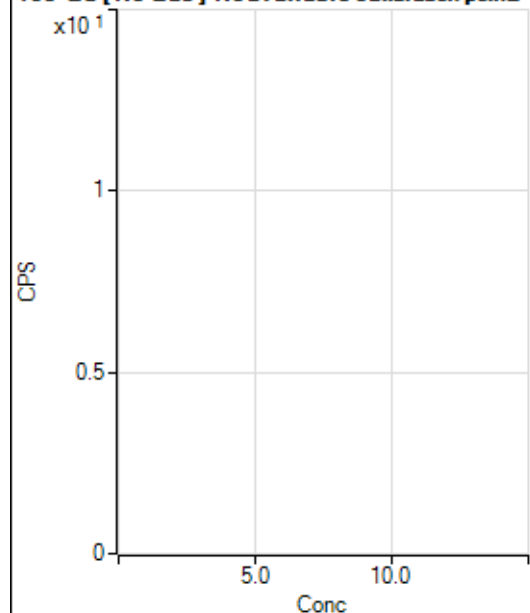
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			1.11		P	173.
4	☐			7.78		P	24.7
5	☐			17.78		P	47.2
6	☐			28.89		P	17.6
7	☐			71.11		P	51.6
8	☐			112.22		P	14.0
9	☐			57.78		P	16.6

156 Dy [No Gas] No available calibration points

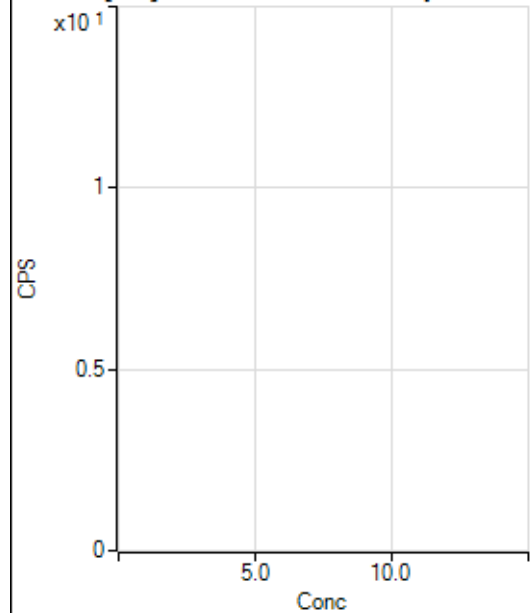
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			16.66		P	86.6
2	☐						
3	☐			25.00		P	33.3
4	☐			41.67		P	34.7
5	☐			44.45		P	10.8
6	☐			63.89		P	7.5
7	☐			191.68		P	37.9
8	☐			238.90		P	17.2
9	☐			147.23		P	35.9

156 Dy [He] No available calibration points

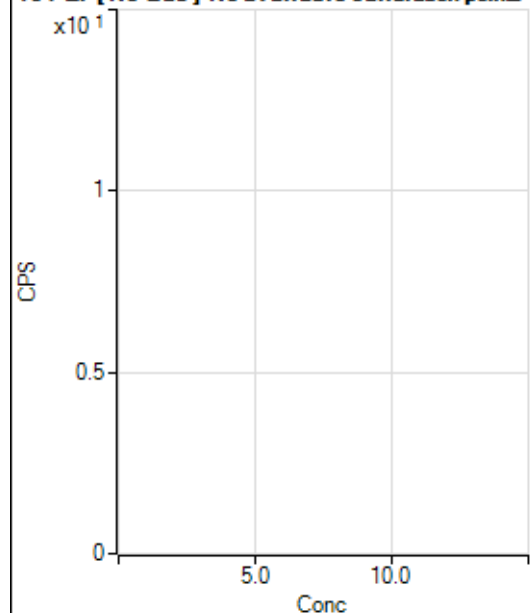
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.56		P	91.6
2	☐						
3	☐			4.44		P	114.
4	☐			22.22		P	22.9
5	☐			36.67		P	32.8
6	☐			53.33		P	18.8
7	☐			105.56		P	9.1
8	☐			253.34		P	12.6
9	☐			54.45		P	7.1

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

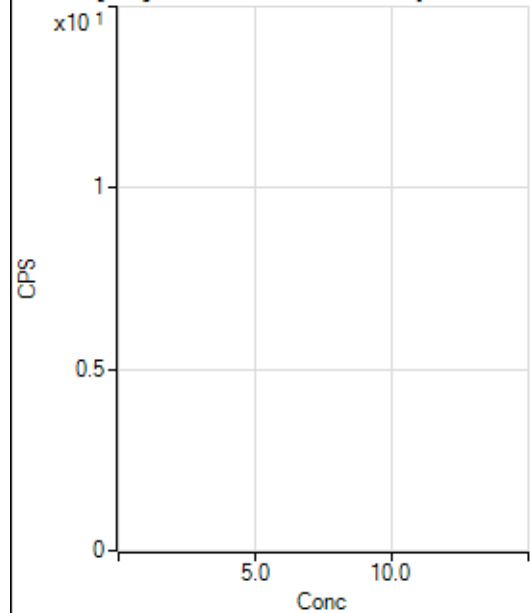
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			161.12		P	7.9
2	☐						
3	☐			152.79		P	26.9
4	☐			183.34		P	31.8
5	☐			166.68		P	22.9
6	☐			194.45		P	38.7
7	☐			222.23		P	16.9
8	☐			250.01		P	8.8
9	☐			269.46		P	36.6

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			344.46		P	5.7
2	☐						
3	☐			328.90		P	3.6
4	☐			345.57		P	3.9
5	☐			297.79		P	2.3
6	☐			311.12		P	10.0
7	☐			321.12		P	3.9
8	☐			395.57		P	7.6
9	☐			381.12		P	2.8

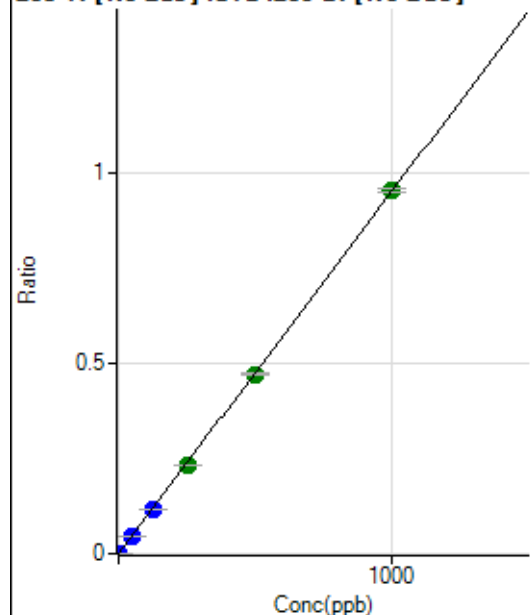
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			55.56		P	8.7
2	☐						
3	☐			113.89		P	36.8
4	☐			72.23		P	54.5
5	☐			69.45		P	48.5
6	☐			83.34		P	26.5
7	☐			72.22		P	6.7
8	☐			138.90		P	6.9
9	☐			91.67		P	32.8

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			37.78		P	20.4
2	☐						
3	☐			36.66		P	15.7
4	☐			28.89		P	43.7
5	☐			28.89		P	29.0
6	☐			33.33		P	45.8
7	☐			42.22		P	12.1
8	☐			57.78		P	32.8
9	☐			42.22		P	27.7

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	233.35	0.0000	P	16.2
2	☐	0.100					
3	☐	1.000	0.972	13373.93	0.0009	P	0.7
4	☐	50.000	49.020	673548.95	0.0467	P	0.7
5	☐	125.000	123.493	1607695.62	0.1176	P	0.2
6	☐	250.000	245.337	3257874.98	0.2336	A	0.3
7	☐	500.000	496.594	6579155.96	0.4728	A	1.1
8	☐	1000.000	1003.106	13354254.12	0.9549	A	1.0
9	☐			5237.39	0.0004	P	6.8

$$y = 9.5195\text{E-}004 * x + 1.6118\text{E-}005$$

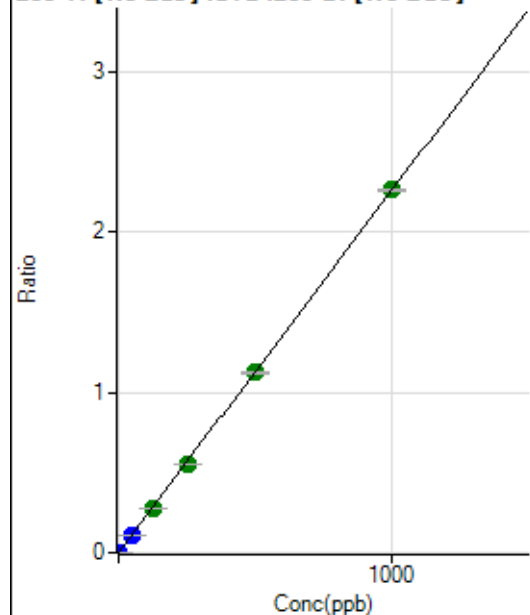
$$R = 1.0000$$

$$DL = 0.008246$$

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	686.16	0.0000	P	11.6
2	☐	0.100					
3	☐	1.000	0.972	31811.16	0.0022	P	0.6
4	☐	50.000	49.177	1600638.64	0.1109	P	0.8
5	☐	125.000	123.149	3797686.59	0.2777	A	0.3
6	☐	250.000	245.152	7711309.55	0.5528	A	0.5
7	☐	500.000	497.784	15621616.15	1.1225	A	1.0
8	☐	1000.000	1002.592	31617155.22	2.2608	A	0.3
9	☐			11455.47	0.0009	P	5.5

$$y = 0.0023 * x + 4.7396\text{E-}005$$

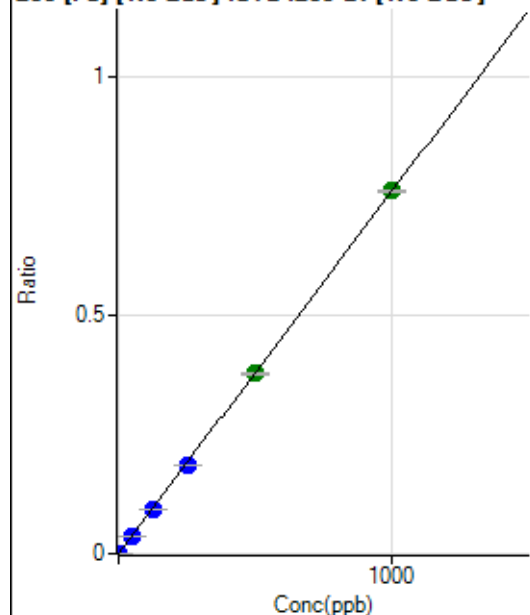
$$R = 1.0000$$

$$DL = 0.007289$$

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	14.1
2	☐	0.100					
3	☐	1.000	0.993	11028.93	0.0008	P	3.2
4	☐	50.000	49.725	545632.89	0.0378	P	1.1
5	☐	125.000	124.423	1293424.23	0.0946	P	0.6
6	☐	250.000	242.789	2574326.56	0.1846	P	0.4
7	☐	500.000	498.520	5273503.71	0.3789	A	1.4
8	☐	1000.000	1002.629	10657822.81	0.7621	A	0.4
9	☐			16011.85	0.0013	P	1.6

$$y = 7.6008\text{E-}004 * x + 2.1872\text{E-}005$$

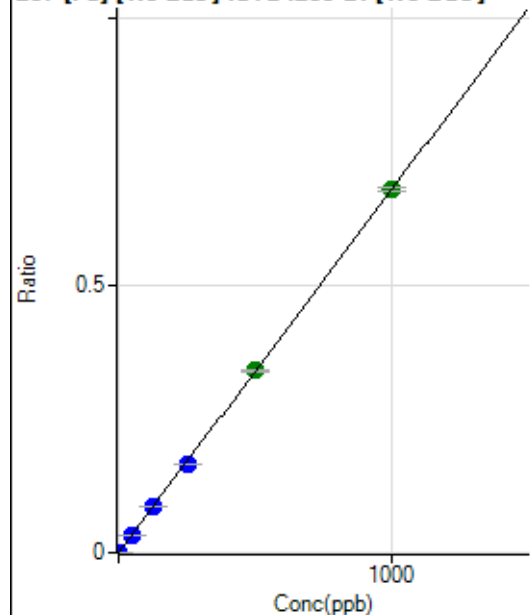
$$R = 1.0000$$

$$DL = 0.01214$$

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	270.38	0.0000	P	13.5
2	☐	0.100					
3	☐	1.000	1.001	9903.92	0.0007	P	4.4
4	☐	50.000	49.824	487526.71	0.0338	P	0.5
5	☐	125.000	124.991	1158660.40	0.0847	P	0.6
6	☐	250.000	245.234	2318740.65	0.1662	P	0.5
7	☐	500.000	502.407	4739326.55	0.3405	A	1.3
8	☐	1000.000	999.998	9478856.12	0.6778	A	0.9
9	☐			13464.50	0.0011	P	2.0

$$y = 6.7780\text{E-}004 * x + 1.8676\text{E-}005$$

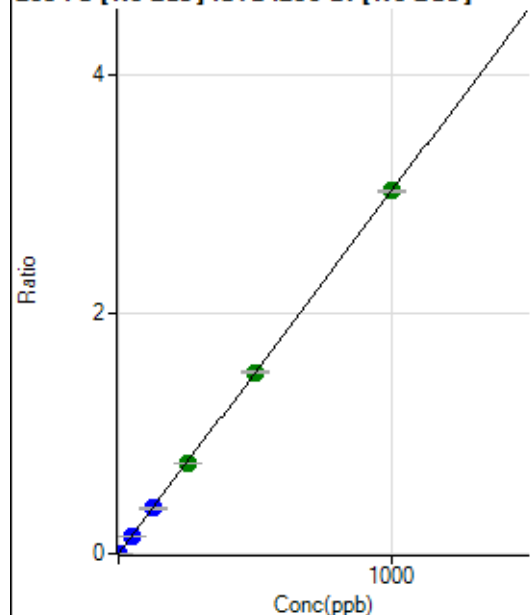
$$R = 1.0000$$

$$DL = 0.01112$$

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	1194.50	0.0001	P	9.4
2	☐	0.100					
3	☐	1.000	1.008	44526.57	0.0031	P	1.8
4	☐	50.000	50.085	2190217.17	0.1518	P	0.9
5	☐	125.000	124.795	5170155.21	0.3781	P	0.5
6	☐	250.000	246.883	10432498.11	0.7479	A	0.2
7	☐	500.000	500.981	21120949.84	1.5176	A	0.8
8	☐	1000.000	1000.310	42376526.18	3.0302	A	0.6
9	☐			61877.63	0.0050	P	0.7

$$y = 0.0030 * x + 8.2518E-005$$

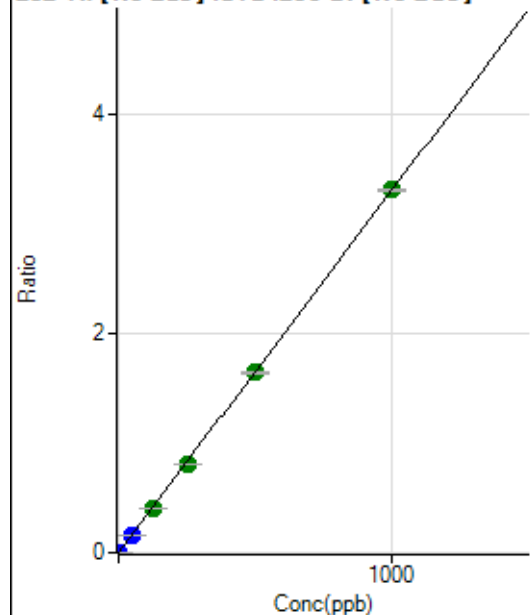
$$R = 1.0000$$

$$DL = 0.007712$$

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	137.04	0.0000	P	29.0
2	☐	0.100					
3	☐	1.000	0.936	44028.60	0.0031	P	1.0
4	☐	50.000	47.423	2259759.41	0.1566	P	1.4
5	☐	125.000	120.759	5453135.31	0.3988	A	1.1
6	☐	250.000	244.526	11263814.14	0.8075	A	0.3
7	☐	500.000	498.786	22923946.35	1.6472	A	0.8
8	☐	1000.000	1002.635	46304508.44	3.3111	A	0.8
9	☐			11125.42	0.0009	P	9.3

$$y = 0.0033 * x + 9.4628E-006$$

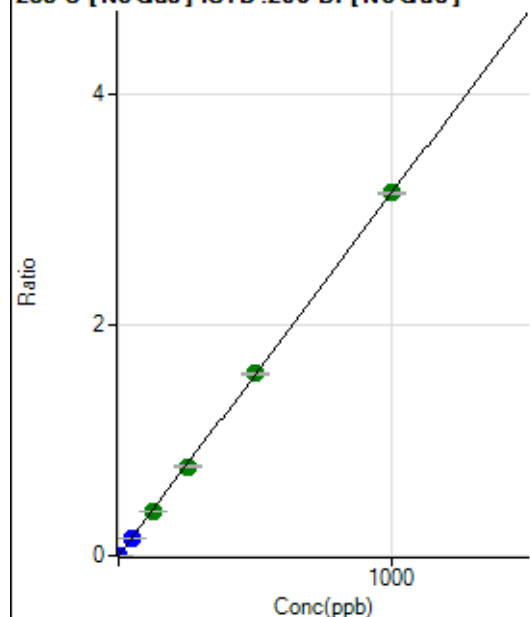
$$R = 1.0000$$

$$DL = 0.002496$$

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	30.56	0.0000	P	129.
2	☐	0.100					
3	☐	1.000	0.966	43198.17	0.0030	P	2.7
4	☐	50.000	48.143	2185652.89	0.1515	P	1.2
5	☐	125.000	121.954	5246985.10	0.3837	A	0.9
6	☐	250.000	246.570	10821574.90	0.7758	A	0.3
7	☐	500.000	501.346	21953561.25	1.5775	A	0.9
8	☐	1000.000	1000.658	44030783.97	3.1485	A	0.9
9	☐			6390.74	0.0005	P	2.1

$$y = 0.0031 * x + 2.1145E-006$$

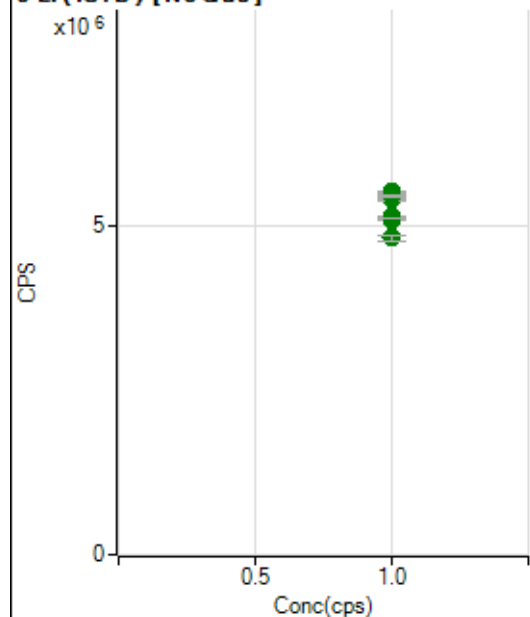
$$R = 1.0000$$

$$DL = 0.002602$$

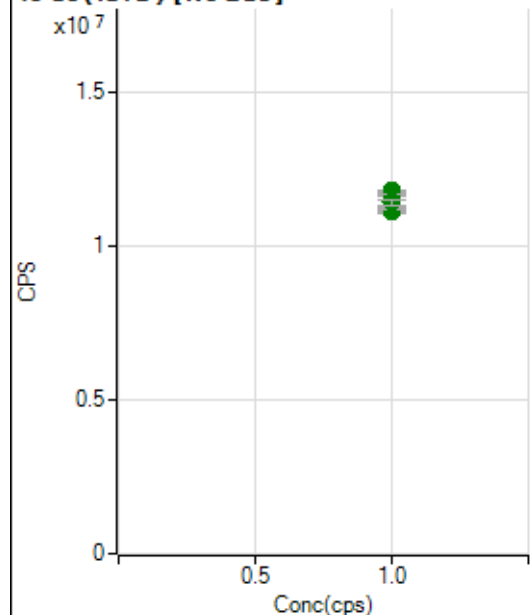
Weight: <None>

Min Conc: 0

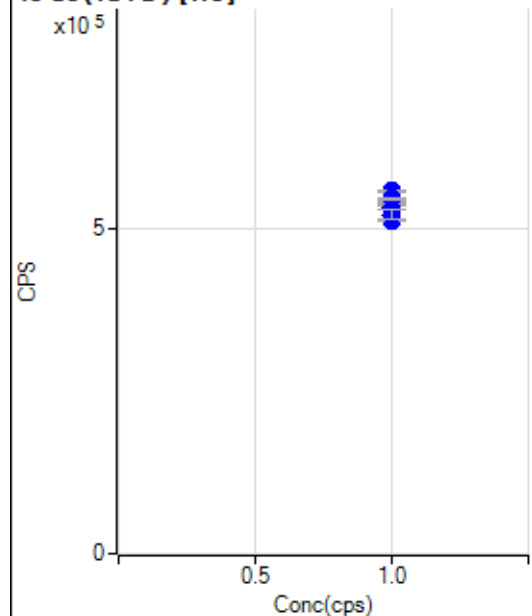
6 Li (ISTD) [No Gas]



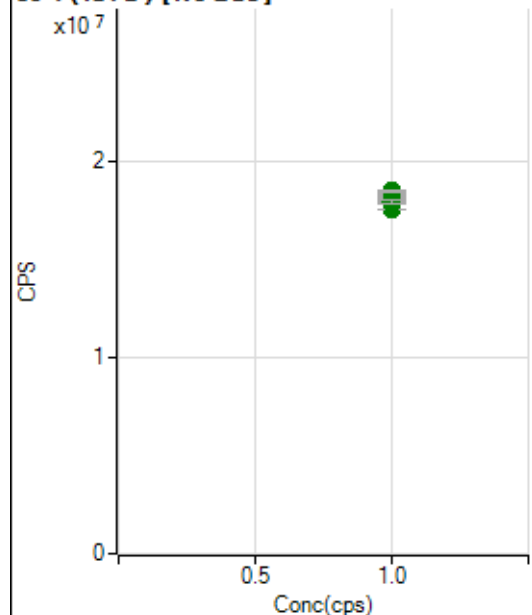
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5505431.72		A	0.3
2	☐	1.000					
3	☐	1.000		5393681.10		A	0.4
4	☐	1.000		5444552.07		A	0.9
5	☐	1.000		5102691.66		A	0.2
6	☐	1.000		5128610.48		A	0.4
7	☐	1.000		5089485.38		A	0.3
8	☐	1.000		5095902.60		A	0.1
9	☐	1.000		4800996.73		A	1.4

45 Sc (ISTD) [No Gas]

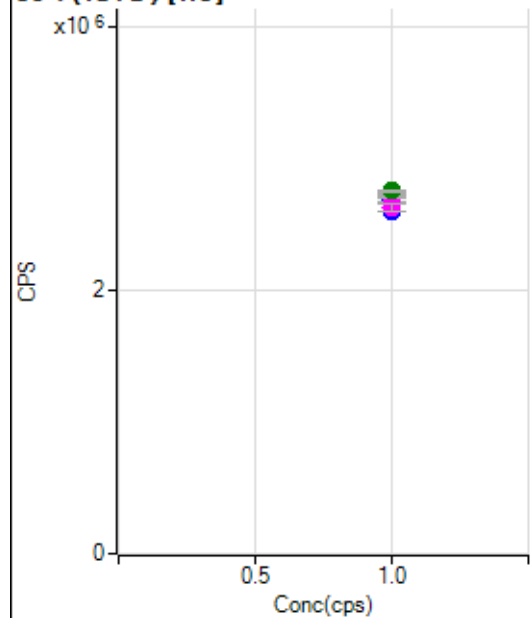
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11744206.51		A	0.5
2	☐	1.000					
3	☐	1.000		11659956.42		A	0.3
4	☐	1.000		11799728.21		A	0.2
5	☐	1.000		11218109.63		A	0.4
6	☐	1.000		11108842.52		A	0.3
7	☐	1.000		11225264.23		A	0.6
8	☐	1.000		11669235.76		A	0.1
9	☐	1.000		11443802.77		A	1.6

45 Sc (ISTD) [He]

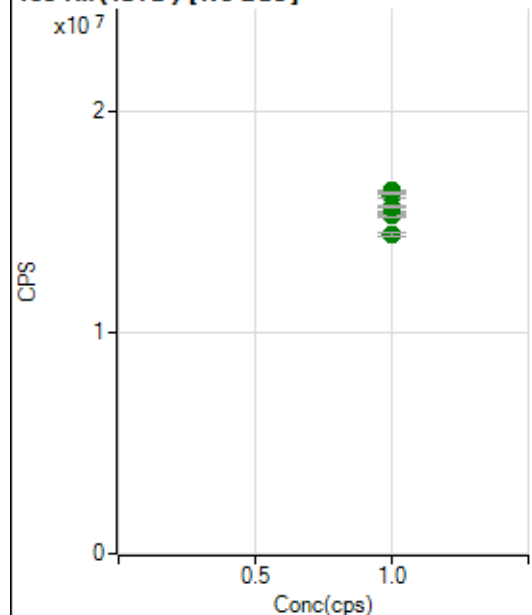
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		540252.25		P	1.9
2	☐	1.000					
3	☐	1.000		547081.10		P	0.3
4	☐	1.000		557581.73		P	0.2
5	☐	1.000		533005.14		P	1.1
6	☐	1.000		512298.94		P	0.3
7	☐	1.000		538579.28		P	0.3
8	☐	1.000		546325.77		P	0.4
9	☐	1.000		521294.04		P	2.6

89 Y (ISTD) [No Gas]

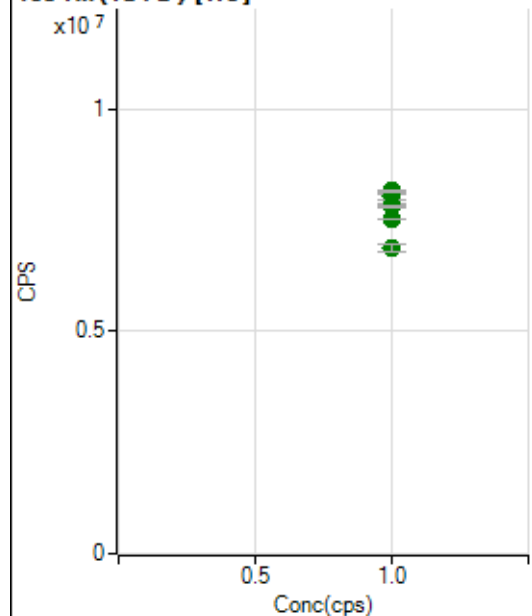
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		18199528.89		A	0.4
2	☐	1.000					
3	☐	1.000		18074106.67		A	0.2
4	☐	1.000		18372770.98		A	0.4
5	☐	1.000		17486629.05		A	0.2
6	☐	1.000		17523036.68		A	0.2
7	☐	1.000		17840577.23		A	0.2
8	☐	1.000		18453684.45		A	0.7
9	☐	1.000		17928030.85		A	1.0

89 Y (ISTD) [He]

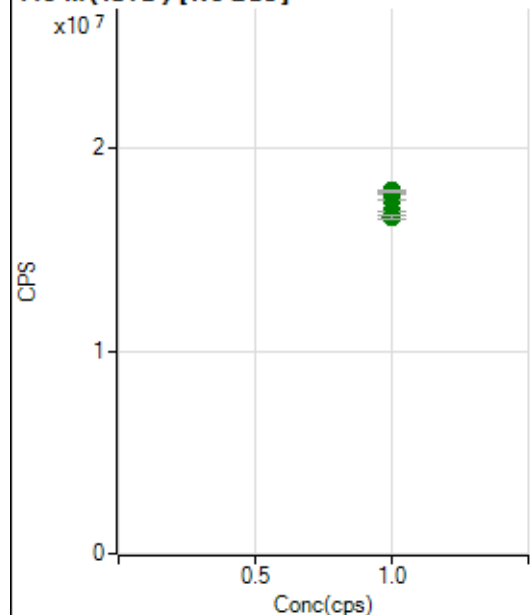
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2706829.37		M	3.3
2	☐	1.000					
3	☐	1.000		2722235.45		A	0.3
4	☐	1.000		2744860.93		A	0.3
5	☐	1.000		2688126.09		P	1.5
6	☐	1.000		2596155.13		P	0.2
7	☐	1.000		2703289.58		M	0.5
8	☐	1.000		2750843.88		A	0.3
9	☐	1.000		2624818.21		M	2.4

103 Rh (ISTD) [No Gas]

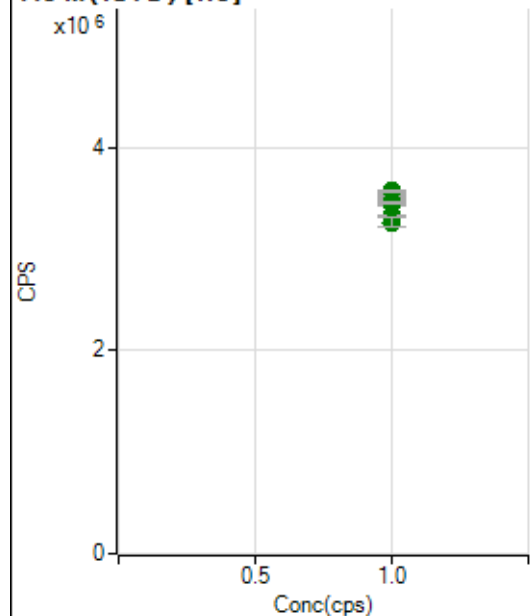
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16407416.86		A	0.2
2	☐	1.000					
3	☐	1.000		16168867.72		A	0.7
4	☐	1.000		16310552.80		A	0.4
5	☐	1.000		15465180.38		A	0.5
6	☐	1.000		15267748.95		A	0.1
7	☐	1.000		15289071.18		A	0.6
8	☐	1.000		15681806.77		A	0.5
9	☐	1.000		14437288.86		A	0.7

103 Rh (ISTD) [He]

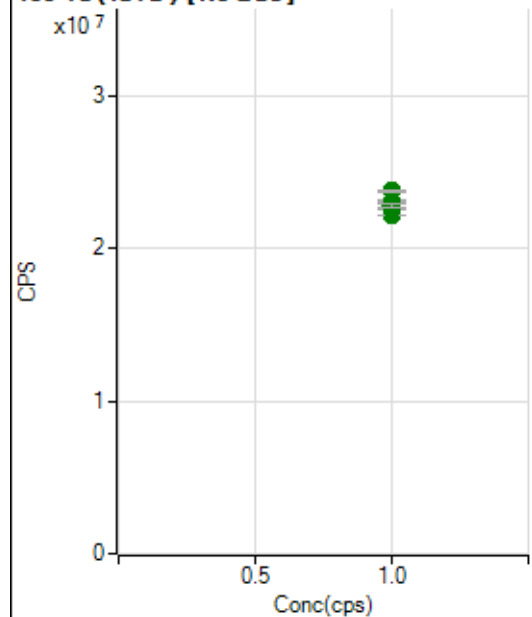
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8026942.31		A	2.5
2	☐	1.000					
3	☐	1.000		8077325.09		A	0.4
4	☐	1.000		8149821.96		A	0.3
5	☐	1.000		7816323.63		A	1.1
6	☐	1.000		7518076.48		A	0.3
7	☐	1.000		7815803.98		A	0.5
8	☐	1.000		7801671.55		A	0.2
9	☐	1.000		6867160.11		A	2.2

115 In (ISTD) [No Gas]

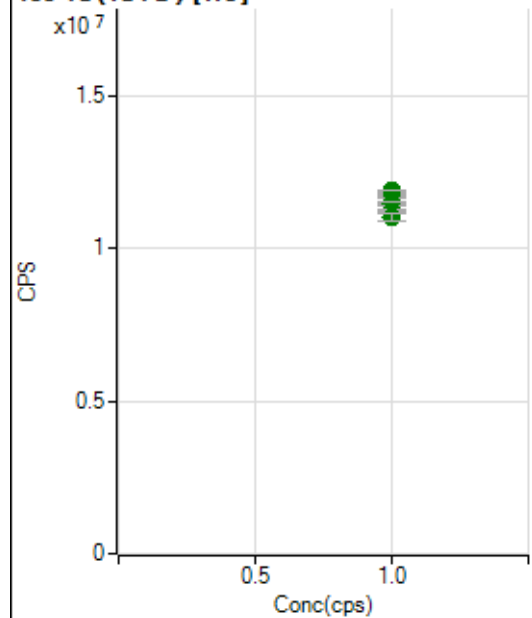
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		17761671.82		A	0.2
2	☐	1.000					
3	☐	1.000		17469994.56		A	0.1
4	☐	1.000		17748855.25		A	0.7
5	☐	1.000		16863087.38		A	0.2
6	☐	1.000		16882879.52		A	0.2
7	☐	1.000		16907645.42		A	0.2
8	☐	1.000		17885731.03		A	0.5
9	☐	1.000		16599865.18		A	1.0

115 In (ISTD) [He]

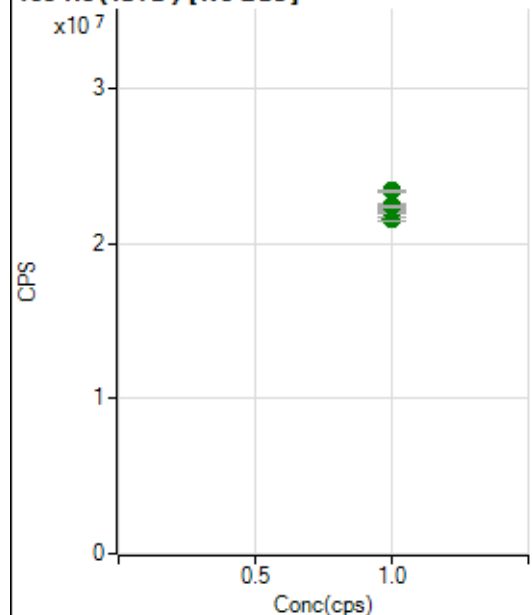
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3536438.03		A	2.1
2	☐	1.000					
3	☐	1.000		3534750.86		A	0.4
4	☐	1.000		3573956.29		A	0.4
5	☐	1.000		3453140.76		A	1.3
6	☐	1.000		3329986.52		A	0.3
7	☐	1.000		3461962.11		A	0.7
8	☐	1.000		3571834.65		A	0.2
9	☐	1.000		3263916.14		A	2.7

159 Tb (ISTD) [No Gas]

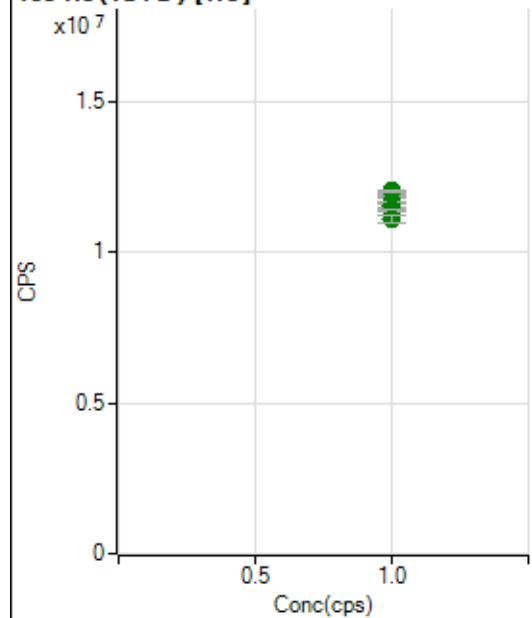
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		22972647.99		A	0.3
2	☐	1.000					
3	☐	1.000		22524338.28		A	0.5
4	☐	1.000		23049444.38		A	0.5
5	☐	1.000		22116652.17		A	0.3
6	☐	1.000		22490796.89		A	0.2
7	☐	1.000		22975646.60		A	0.3
8	☐	1.000		23733271.87		A	0.8
9	☐	1.000		22803445.49		A	1.1

159 Tb (ISTD) [He]

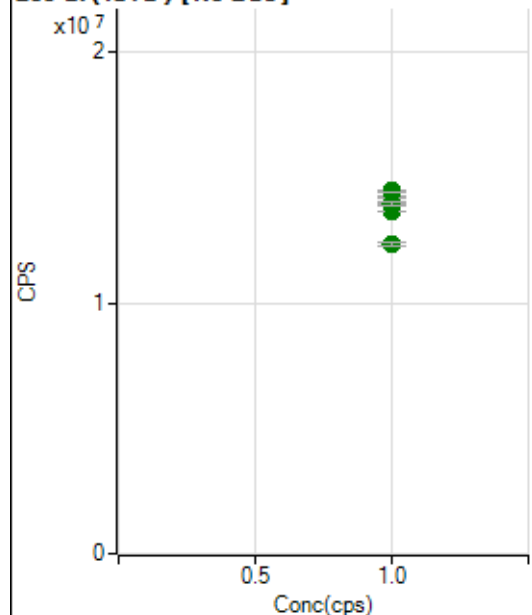
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11419166.08		A	2.4
2	☐	1.000					
3	☐	1.000		11501304.14		A	0.6
4	☐	1.000		11690987.46		A	0.5
5	☐	1.000		11444943.72		A	1.1
6	☐	1.000		11241969.69		A	0.5
7	☐	1.000		11836156.35		A	0.5
8	☐	1.000		11882482.46		A	0.1
9	☐	1.000		11016314.42		A	2.4

165 Ho (ISTD) [No Gas]

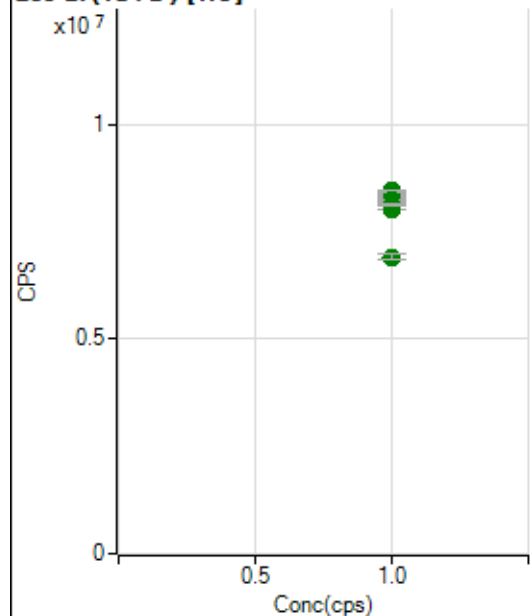
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		22383736.61		A	0.7
2	☐	1.000					
3	☐	1.000		22155754.83		A	0.5
4	☐	1.000		22442668.73		A	0.5
5	☐	1.000		21585797.18		A	0.9
6	☐	1.000		22006389.90		A	0.4
7	☐	1.000		22428949.81		A	0.1
8	☐	1.000		23383127.95		A	0.7
9	☐	1.000		22371353.97		A	0.2

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11503478.58		A	2.4
2	☐	1.000					
3	☐	1.000		11595253.44		A	0.1
4	☐	1.000		11789180.66		A	0.2
5	☐	1.000		11551713.99		A	1.5
6	☐	1.000		11385785.94		A	0.6
7	☐	1.000		11890281.77		A	0.8
8	☐	1.000		12022401.49		A	0.2
9	☐	1.000		11108503.86		A	2.1

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14474615.06		A	0.3
2	☐	1.000					
3	☐	1.000		14202092.70		A	0.6
4	☐	1.000		14428674.37		A	0.3
5	☐	1.000		13673749.24		A	0.3
6	☐	1.000		13948416.04		A	0.2
7	☐	1.000		13917146.88		A	0.4
8	☐	1.000		13985211.32		A	0.9
9	☐	1.000		12360978.98		A	0.8

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8389048.90		A	1.7
2	☐	1.000					
3	☐	1.000		8375746.19		A	0.2
4	☐	1.000		8456908.07		A	0.5
5	☐	1.000		8246259.53		A	1.3
6	☐	1.000		8016198.63		A	0.1
7	☐	1.000		8224027.24		A	0.9
8	☐	1.000		8121101.62		A	0.5
9	☐	1.000		6911555.52		A	1.9

US EPA Tune Check Sample Report

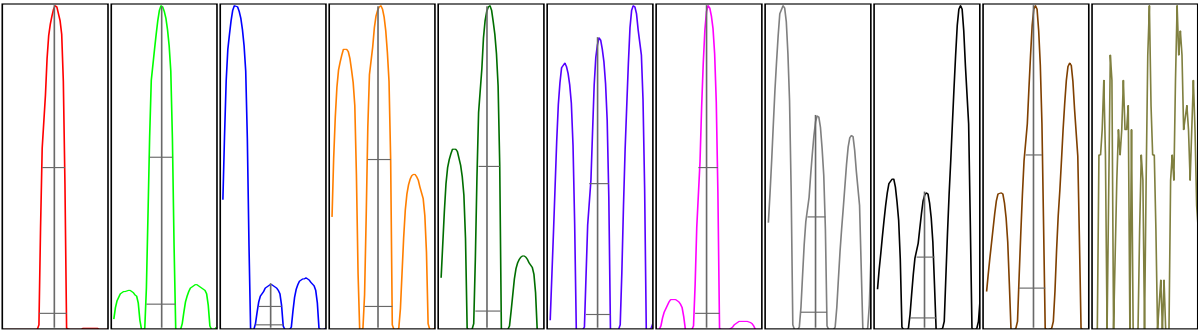
Batch Folder D:\ICP-MS Data\P7090518- MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	20809	1.34	5.00	
24	880033	1.30	5.00	
25	120218	1.16	5.00	
26	137421	1.03	5.00	
59	154038	0.95	5.00	
113	18881	0.98	5.00	
115	223827	1.00	5.00	
206	54484	1.25	5.00	
207	50120	0.92	5.00	
208	115370	1.20	5.00	
220	0	31.60		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	20584	20833	20582	20784	21264
24	872736	881942	865597	884424	895465
25	119132	120462	118729	120484	122282
26	136648	138005	135661	137397	139395
59	153345	154046	152313	154180	156305
113	18811	19006	18653	18808	19126
115	223485	224527	220289	224481	226352
206	53735	54637	53842	54875	55331
207	49765	50388	49507	50330	50611
208	114081	115996	113766	116037	116971
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	33280	9.00	8.9 - 9.1		0.788	0.900	
24	1350991	23.95	23.9 - 24.1		0.856	0.900	
25	185944	24.95	24.9 - 25.1		0.802	0.900	
26	213889	25.90	25.9 - 26.1		0.811	0.900	
59	252519	58.90	58.9 - 59.1		0.784	0.900	
113	35736	112.95	112.9 - 113.1		0.733	0.900	
115	429653	114.95	114.9 - 115.1		0.729	0.900	
206	104183	205.95	205.9 - 206.1		0.754	0.900	
207	94555	206.95	206.9 - 207.1		0.749	0.900	
208	224018	207.95	207.9 - 208.1		0.744	0.900	
220			-				

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

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.6	V	Deflect	14.4	V
Extract 2	-130.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-60	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	41660	0.87	
89	70844	1.07	
205	48856	0.79	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	41104	41538	42062	41771	41824
89	69788	70344	71630	71328	71129
205	48393	48586	49385	49023	48893

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	8.1	V	Deflect	2.0	V
Extract 2	-125.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-65	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			