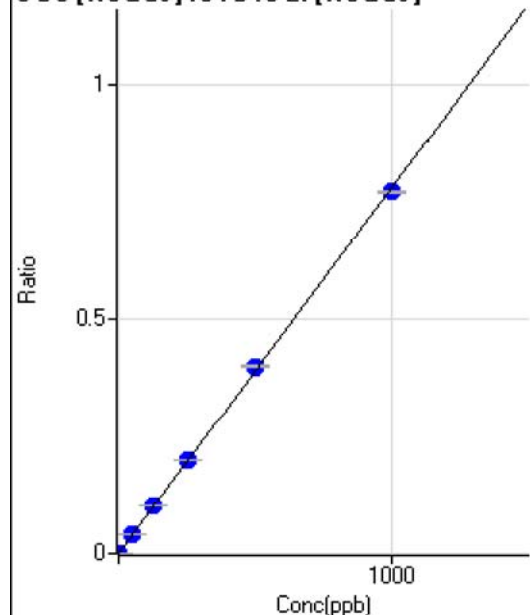


Calibration for 002CALB.d

Batch Folder: D:\ICP-MS Data\P7072818-MS.b\
 Analysis File: P7072818-MS.batch.bin
 DA Date-Time: 2018-07-28 15:06:52
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2018-07-28 13:36:57
2			
3	005CALS.d	S02	2018-07-28 13:45:16
4	006CALS.d	S03	2018-07-28 13:49:09
5	007CALS.d	S04	2018-07-28 13:53:10
6	008CALS.d	S05	2018-07-28 13:56:58
7	009CALS.d	S06	2018-07-28 14:00:44
8	010CALS.d	S07	2018-07-28 14:04:27
9	011CALS.d	S08	2018-07-28 14:08:12

9 Be [NoGas] ISTD:6 Li [NoGas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	72.23	0.0000	P	14.1
2	☐	0.100					
3	☐	1.000	1.039	2335.43	0.0008	P	4.3
4	☐	50.000	52.988	115555.41	0.0413	P	0.6
5	☐	125.000	132.644	289016.24	0.1034	P	0.8
6	☐	250.000	257.734	554619.22	0.2010	P	1.1
7	☐	500.000	511.962	1090991.15	0.3991	P	0.6
8	☐	1000.000	990.980	2050303.82	0.7726	P	0.7
9	☐			538.91	0.0002	P	14.6

$$y = 7.7959\text{E-}004 * x + 2.5574\text{E-}005$$

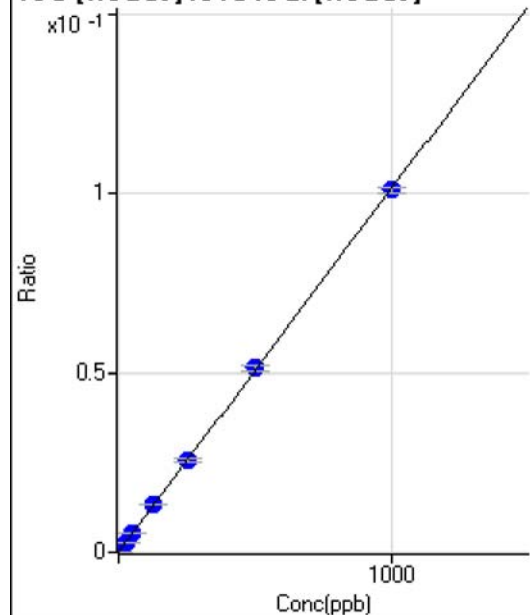
$$R = 0.9998$$

$$DL = 0.01389$$

Weight: <None>

Min Conc: 0

10 B [NoGas] ISTD:6 Li [NoGas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	194.45	0.0001	P	7.1
2	☐	2.500					
3	☐	25.000	23.944	6982.49	0.0025	P	1.9
4	☐	50.000	50.415	14485.24	0.0052	P	2.3
5	☐	125.000	130.432	37152.27	0.0133	P	0.1
6	☐	250.000	252.629	70897.62	0.0257	P	2.4
7	☐	500.000	504.708	140091.11	0.0513	P	3.0
8	☐	1000.000	996.316	268355.06	0.1011	P	1.8
9	☐			10290.03	0.0040	P	9.7

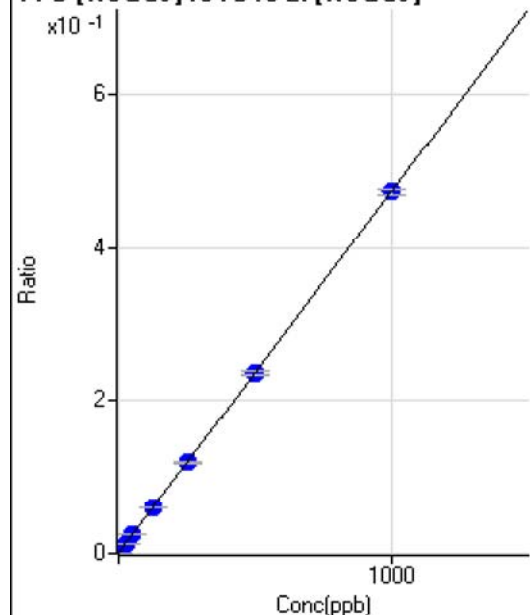
$$y = 1.0141\text{E-}004 * x + 6.8822\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.1451$$

Weight: <None>

Min Conc: 0

11 B [NoGas] ISTD: 6 Li [NoGas]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1050.08	0.0004	P	13.7
2	☐	2.500					
3	☐	25.000	24.106	32911.70	0.0118	P	2.3
4	☐	50.000	50.982	68422.23	0.0245	P	2.3
5	☐	125.000	126.201	167761.10	0.0600	P	0.8
6	☐	250.000	251.623	329370.83	0.1193	P	1.4
7	☐	500.000	498.698	645508.24	0.2362	P	2.2
8	☐	1000.000	1000.068	1255874.56	0.4732	P	1.3
9	☐			46394.60	0.0183	P	9.7

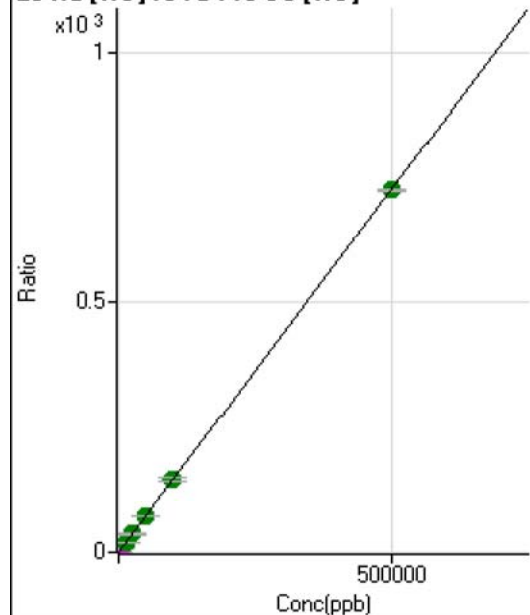
$$y = 4.7280\text{E-}004 * x + 3.7153\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.3222$$

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	9030.83	0.0251	P	1.3
2	☐	50.000					
3	☐	500.000	476.822	261312.68	0.7182	P	2.5
4	☐	5000.000	4931.865	2540840.08	7.1936	M	0.4
5	☐	12500.000	12548.677	6304759.64	18.2647	A	0.2
6	☐	25000.000	25155.012	12383582.92	36.5880	A	0.3
7	☐	50000.000	50066.060	24671731.80	72.7963	A	0.2
8	☐	100000.00	101306.25	48904329.91	147.2741	A	6.5
9	☐	500000.00	499723.88	240893263.7	726.3756	A	0.9

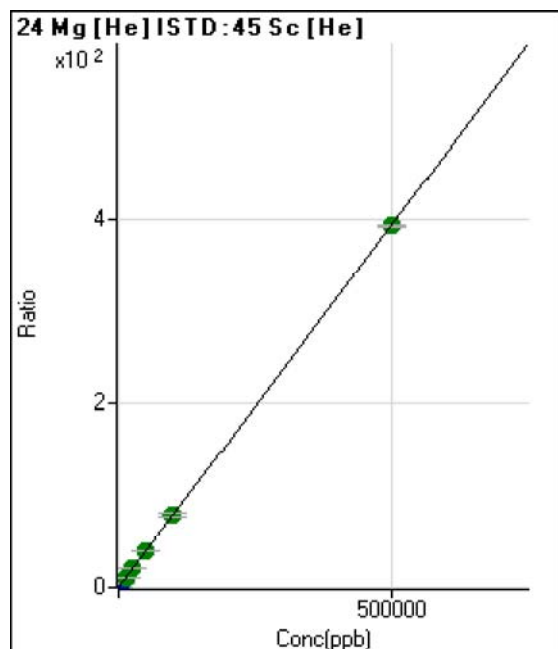
$$y = 0.0015 * x + 0.0251$$

$$R = 1.0000$$

$$DL = 0.6918$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	122.23	0.0003	P	24.3
2	☐	50.000					
3	☐	500.000	478.706	137138.58	0.3769	P	2.2
4	☐	5000.000	5016.030	1393705.52	3.9459	P	0.6
5	☐	12500.000	12717.388	3453130.41	10.0036	A	0.4
6	☐	25000.000	25468.987	6780738.78	20.0339	A	0.2
7	☐	50000.000	50585.409	13485618.70	39.7901	A	0.6
8	☐	100000.00	101014.15	26382734.27	79.4565	A	6.7
9	☐	500000.00	499709.60	130351637.6	393.0643	A	0.2

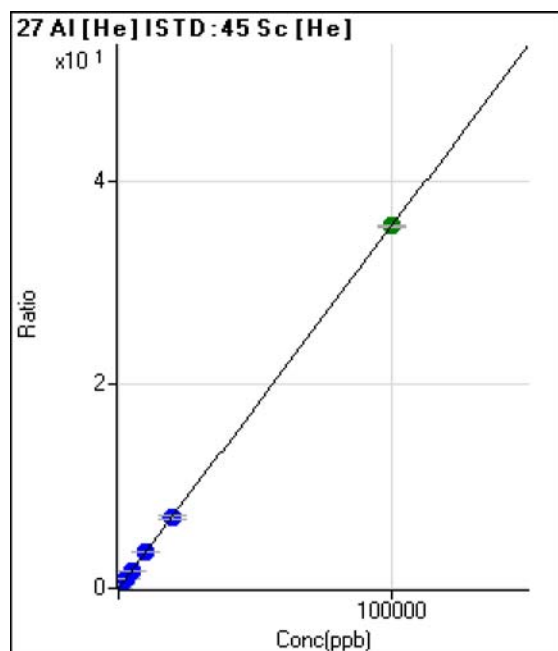
$$y = 7.8658E-004 * x + 3.4046E-004$$

$$R = 1.0000$$

$$DL = 0.3161$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	122.23	0.0003	P	25.8
2	☐	2.000					
3	☐	20.000	19.339	2622.56	0.0072	P	2.5
4	☐	1000.000	986.781	123842.68	0.3506	P	0.5
5	☐	2500.000	2500.995	306570.09	0.8881	P	0.5
6	☐	5000.000	4968.403	597045.80	1.7640	P	0.1
7	☐	10000.000	9836.250	1183467.73	3.4919	P	0.2
8	☐	20000.000	19618.181	2312481.04	6.9643	P	6.7
9	☐	100000.00	100094.42	11783565.80	35.5312	A	0.3

$$y = 3.5497E-004 * x + 3.4023E-004$$

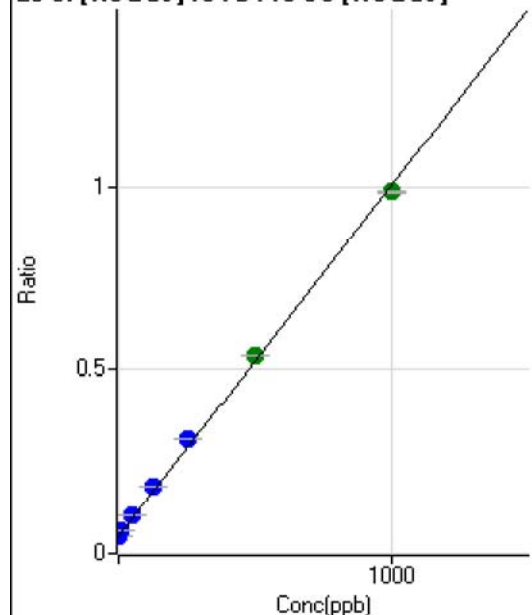
$$R = 1.0000$$

$$DL = 0.7416$$

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	319294.78	0.0465	P	1.2
2	☐	1.000					
3	☐	10.000	15.443	421100.25	0.0613	P	0.2
4	☐	50.000	58.577	689752.47	0.1025	P	0.7
5	☐	125.000	144.687	1222140.09	0.1848	P	0.2
6	☐	250.000	279.773	2043627.33	0.3140	P	0.8
7	☐	500.000	513.854	3453580.42	0.5378	A	0.7
8	☐	1000.000	982.686	6301121.45	0.9859	A	0.5
9	☐			632348.18	0.1024	P	0.9

$$y = 9.5596E-004 * x + 0.0465$$

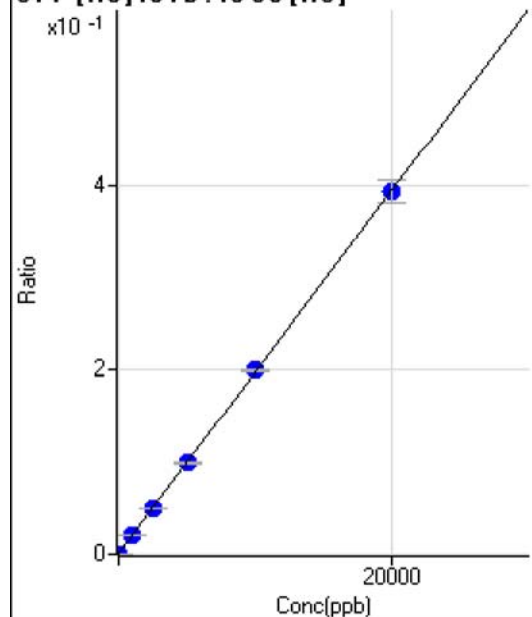
$$R = 0.9993$$

$$DL = 1.727$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-2.427	280.57	0.0008	P	15.6
2	☐	0.000					
3	☐	0.000	2.427	319.46	0.0009	P	25.9
4	☐	1000.000	982.435	7129.76	0.0202	P	2.2
5	☐	2500.000	2500.077	17288.38	0.0501	P	1.2
6	☐	5000.000	5040.283	33892.38	0.1001	P	2.1
7	☐	10000.000	10087.530	67637.02	0.1996	P	0.2
8	☐	20000.000	19947.033	130781.06	0.3938	P	6.4
9	☐			347.24	0.0010	P	8.3

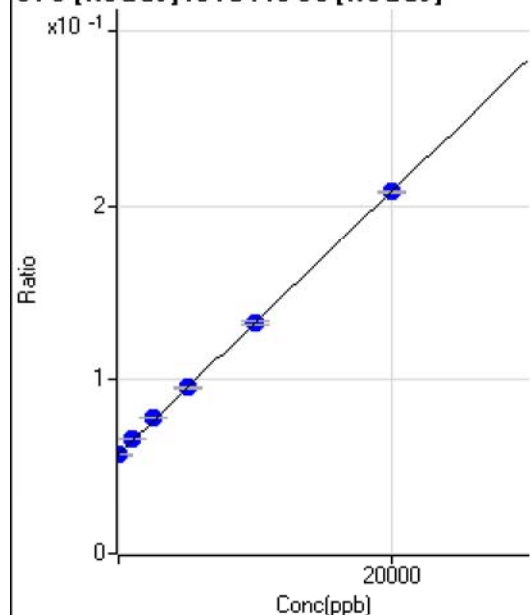
$$y = 1.9702E-005 * x + 8.2913E-004$$

$$R = 1.0000$$

$$DL = 26.57$$

Weight: <None>

Min Conc: 0

34 S [NoGas] ISTD:45 Sc [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-3.350	391843.46	0.0571	P	1.7
2	☐	0.000					
3	☐	0.000	3.350	392668.77	0.0572	P	0.4
4	☐	1000.000	1208.542	445798.17	0.0663	P	0.5
5	☐	2500.000	2737.157	514518.83	0.0778	P	0.2
6	☐	5000.000	5086.139	622083.62	0.0956	P	0.4
7	☐	10000.000	9945.075	849656.55	0.1323	P	1.1
8	☐	20000.000	19965.856	1329626.65	0.2080	P	0.6
9	☐			329025.96	0.0533	P	2.0

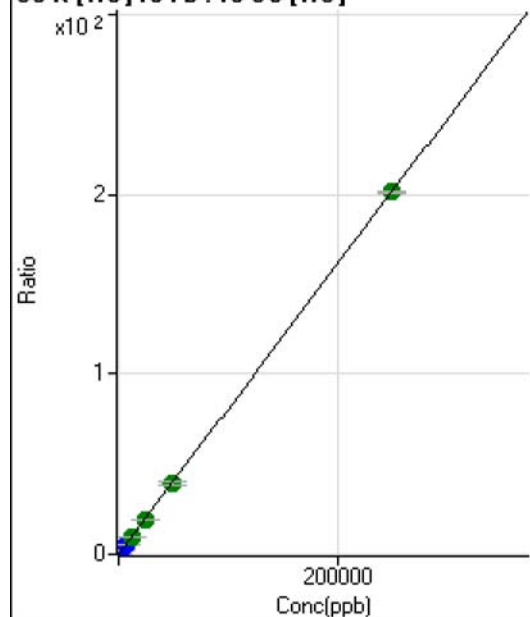
$$y = 7.5589E-006 * x + 0.0571$$

$$R = 0.9999$$

$$DL = 242.7$$

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	32441.99	0.0903	P	1.6
2	☐	50.000					
3	☐	500.000	477.281	172448.09	0.4740	P	2.4
4	☐	2500.000	2444.867	726028.42	2.0555	P	0.4
5	☐	6250.000	6149.893	1737589.30	5.0337	P	0.4
6	☐	12500.000	12123.666	3328962.34	9.8355	A	0.2
7	☐	25000.000	24300.741	6650744.42	19.6237	A	0.2
8	☐	50000.000	49081.882	13129832.50	39.5432	A	6.8
9	☐	250000.00	250275.46	66748325.10	201.2661	A	0.4

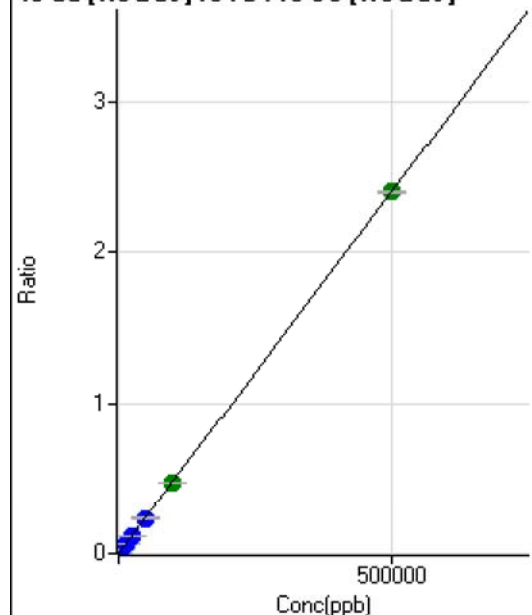
$$y = 8.0382E-004 * x + 0.0903$$

$$R = 1.0000$$

$$DL = 5.428$$

Weight: <None>

Min Conc: 0

43 Ca [NoGas] ISTD:45 Sc [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	283.35	0.0000	P	8.3
2	☐	50.000					
3	☐	500.000	464.100	15611.60	0.0023	P	3.2
4	☐	5000.000	4999.591	161944.35	0.0241	P	0.9
5	☐	12500.000	12430.765	395311.51	0.0598	P	0.2
6	☐	25000.000	24433.370	764658.75	0.1175	P	0.7
7	☐	50000.000	49012.435	1513183.42	0.2356	P	0.8
8	☐	100000.00	97777.992	3003835.20	0.4700	A	0.4
9	☐	500000.00	500573.26	14858306.41	2.4060	A	0.7

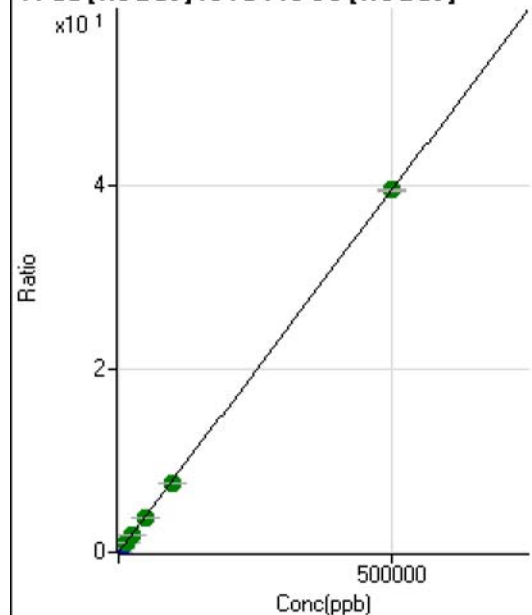
$$y = 4.8065E-006 * x + 4.1278E-005$$

$$R = 1.0000$$

$$DL = 2.132$$

Weight: <None>

Min Conc: 0

44 Ca [NoGas] ISTD:45 Sc [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8247.24	0.0012	P	2.9
2	☐	50.000					
3	☐	500.000	459.927	257580.38	0.0375	P	1.3
4	☐	5000.000	4870.323	2593291.70	0.3855	P	0.9
5	☐	12500.000	12190.489	6367369.85	0.9630	A	0.2
6	☐	25000.000	24097.191	12383050.88	1.9025	A	0.4
7	☐	50000.000	48771.458	24720906.98	3.8493	A	0.8
8	☐	100000.00	96518.250	48677724.70	7.6165	A	0.4
9	☐	500000.00	500873.41	244053611.0	39.5202	A	0.3

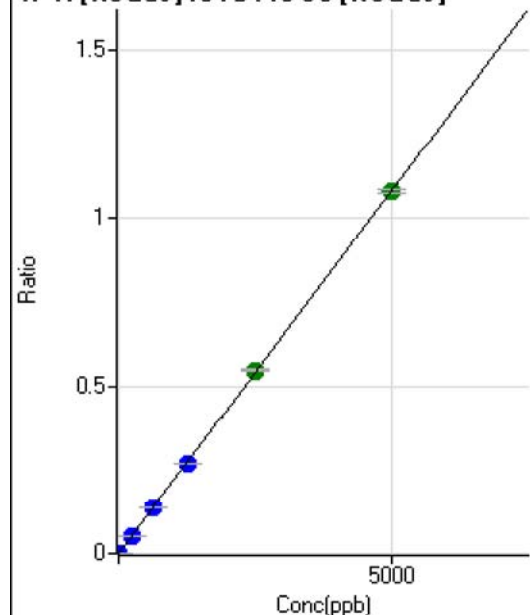
$$y = 7.8900E-005 * x + 0.0012$$

$$R = 1.0000$$

$$DL = 1.313$$

Weight: <None>

Min Conc: 0

47 Ti [NoGas] ISTD : 45 Sc [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	130.56	0.0000	P	15.8
2	☐	0.500					
3	☐	5.000	4.767	7204.83	0.0010	P	3.9
4	☐	250.000	250.135	363665.08	0.0541	P	0.1
5	☐	625.000	625.875	894090.73	0.1352	P	0.3
6	☐	1250.000	1240.023	1743707.63	0.2679	P	0.7
7	☐	2500.000	2518.909	3494655.29	0.5442	A	1.3
8	☐	5000.000	4992.924	6893371.94	1.0786	A	0.9
9	☐			3831.20	0.0006	P	6.8

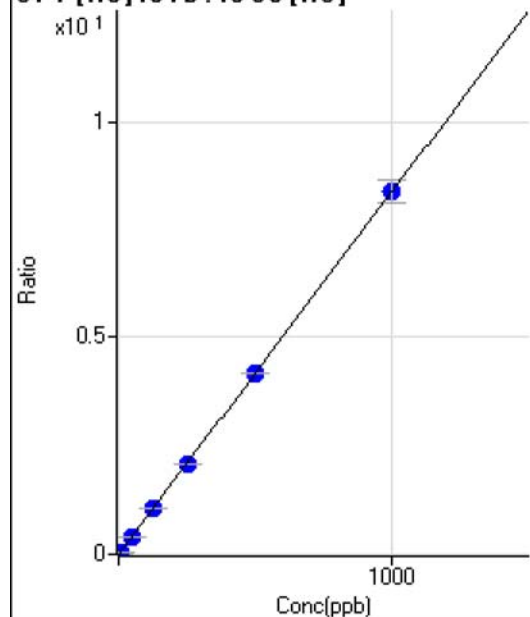
$$y = 2.1603\text{E-}004 * x + 1.9047\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.04167$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	25.56	0.0001	P	19.7
2	☐	0.500					
3	☐	5.000	4.770	14549.56	0.0400	P	5.0
4	☐	50.000	50.127	148228.42	0.4197	P	0.7
5	☐	125.000	125.335	362176.16	1.0492	P	0.6
6	☐	250.000	249.363	706503.75	2.0874	P	0.3
7	☐	500.000	498.330	1413723.12	4.1714	P	0.8
8	☐	1000.000	1000.947	2782390.06	8.3787	P	6.4
9	☐			1054.50	0.0032	P	5.2

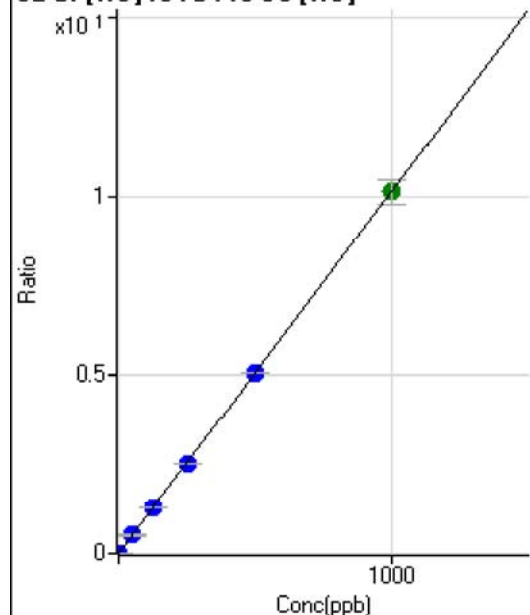
$$y = 0.0084 * x + 7.1109\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.005011$$

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	625.58	0.0017	P	3.0
2	☐	0.200					
3	☐	2.000	1.995	7986.72	0.0219	P	1.4
4	☐	50.000	50.303	180574.81	0.5112	P	0.7
5	☐	125.000	126.203	441841.57	1.2800	P	0.6
6	☐	250.000	250.623	859758.96	2.5402	P	0.7
7	☐	500.000	498.670	1712351.59	5.0526	P	0.7
8	☐	1000.000	1000.344	3364773.42	10.1338	A	6.7
9	☐			119534.91	0.3605	P	0.6

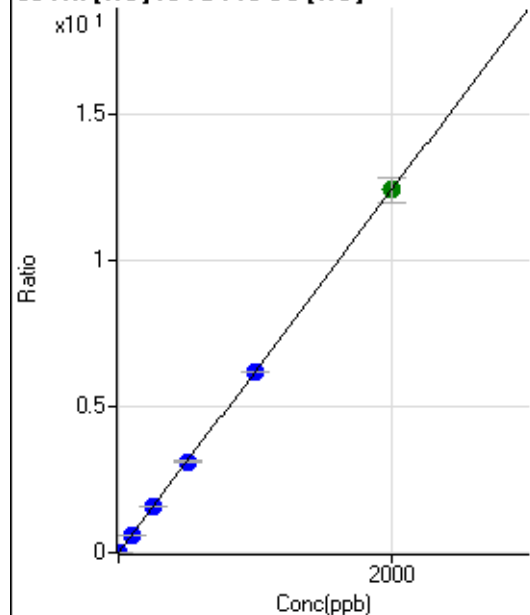
$$y = 0.0101 * x + 0.0017$$

$$R = 1.0000$$

$$DL = 0.01544$$

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	9.9
2	☐	0.100					
3	☐	1.000	1.057	2464.69	0.0068	P	7.5
4	☐	100.000	100.192	219472.83	0.6214	P	0.5
5	☐	250.000	252.998	541495.67	1.5687	P	0.8
6	☐	500.000	502.513	1054502.97	3.1156	P	0.8
7	☐	1000.000	995.315	2091324.55	6.1707	P	0.5
8	☐	2000.000	2001.330	4119779.90	12.4076	A	6.7
9	☐			20372.08	0.0614	P	2.3

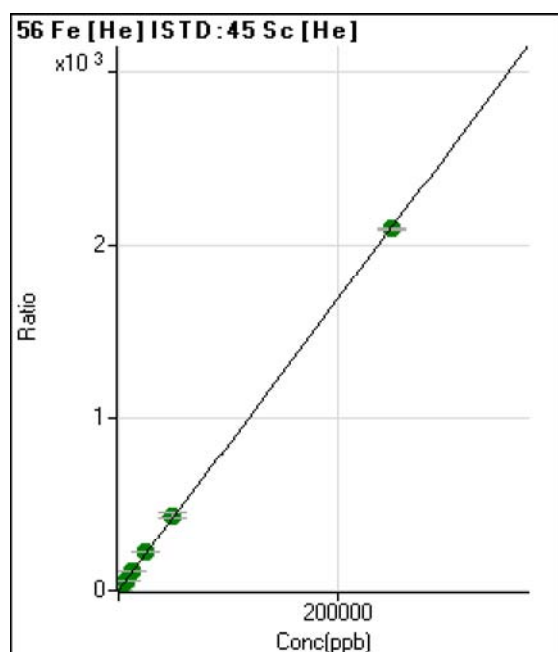
$$y = 0.0062 * x + 2.2584E-004$$

$$R = 1.0000$$

$$DL = 0.01082$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5595.67	0.0156	P	1.1
2	☐	5.000					
3	☐	50.000	50.849	161396.83	0.4435	P	1.6
4	☐	2500.000	2580.488	7676472.91	21.7336	A	0.2
5	☐	6250.000	6546.170	19023395.80	55.1097	A	0.7
6	☐	12500.000	12996.431	37026460.08	109.3967	A	0.3
7	☐	25000.000	25976.249	74099537.77	218.6379	A	0.1
8	☐	50000.000	52119.961	145654190.3	438.6697	A	6.7
9	☐	250000.00	249445.35	696227030.3	2,099.407	A	0.3

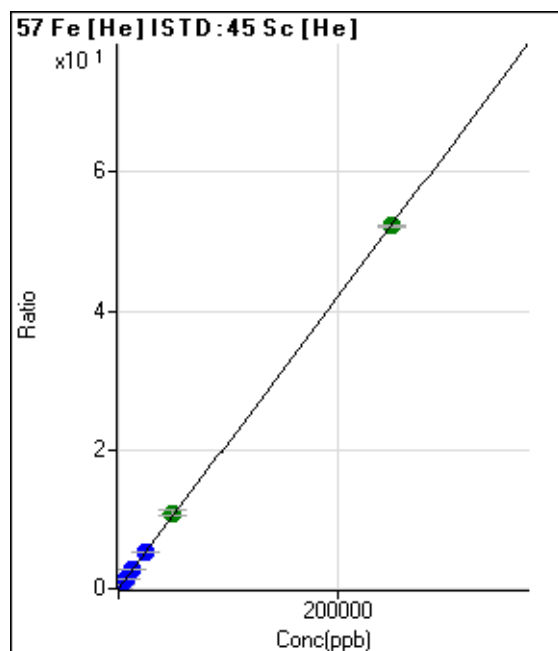
$$y = 0.0084 * x + 0.0156$$

$$R = 1.0000$$

$$DL = 0.06059$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	364.83	0.0010	P	17.1
2	☐	5.000					
3	☐	50.000	52.627	4374.85	0.0120	P	8.8
4	☐	2500.000	2612.404	193550.32	0.5480	P	0.5
5	☐	6250.000	6546.833	473502.76	1.3717	P	0.4
6	☐	12500.000	12921.721	916012.49	2.7064	P	0.4
7	☐	25000.000	25672.019	1821975.89	5.3759	P	0.3
8	☐	50000.000	51898.432	3608285.99	10.8669	A	6.7
9	☐	250000.00	249523.48	17325911.27	52.2435	A	0.2

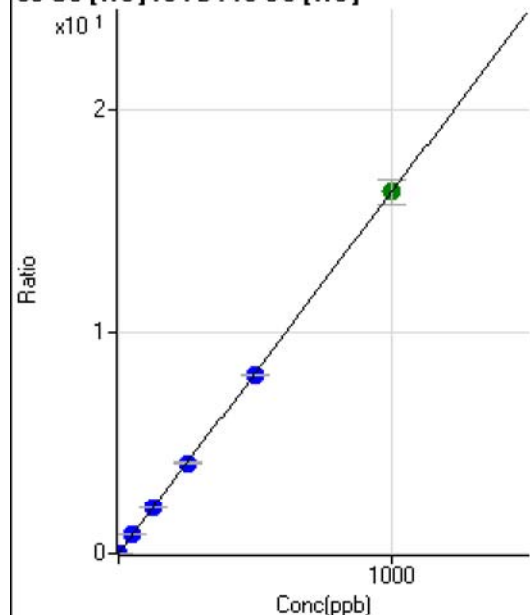
$$y = 2.0937E-004 * x + 0.0010$$

$$R = 1.0000$$

$$DL = 2.488$$

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	171.12	0.0005	P	16.0
2	☐	0.100					
3	☐	1.000	0.979	5987.97	0.0165	P	4.6
4	☐	50.000	50.967	294152.72	0.8328	P	0.4
5	☐	125.000	126.800	714956.94	2.0712	P	0.1
6	☐	250.000	251.317	1389241.75	4.1046	P	0.7
7	☐	500.000	495.201	2740938.05	8.0874	P	0.2
8	☐	1000.000	1001.797	5432685.06	16.3605	A	6.6
9	☐			63584.87	0.1917	P	1.0

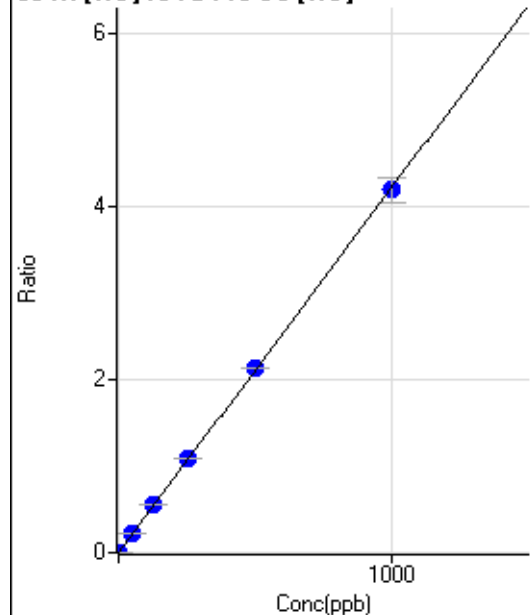
$$y = 0.0163 * x + 4.7652E-004$$

$$R = 1.0000$$

$$DL = 0.01404$$

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	73.34	0.0002	P	27.3
2	☐	0.100					
3	☐	1.000	1.049	1681.24	0.0046	P	3.8
4	☐	50.000	51.743	77029.95	0.2181	P	0.4
5	☐	125.000	130.217	189352.00	0.5485	P	1.3
6	☐	250.000	257.789	367476.60	1.0857	P	0.2
7	☐	500.000	505.833	721945.76	2.1302	P	0.8
8	☐	1000.000	994.397	1390368.80	4.1875	P	6.8
9	☐			41419.62	0.1249	P	1.0

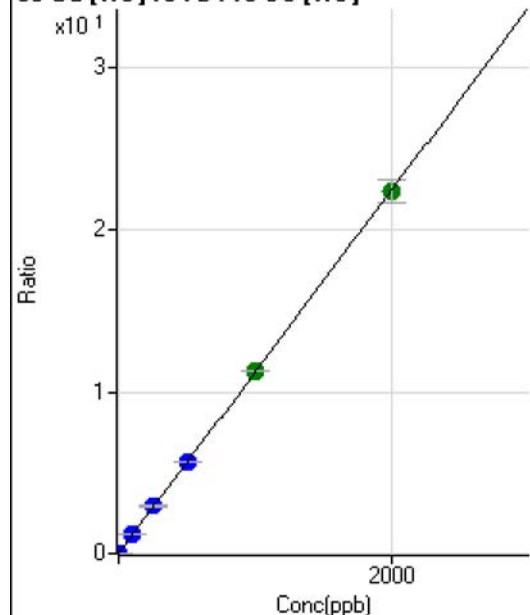
$$y = 0.0042 * x + 2.0399E-004$$

$$R = 0.9999$$

$$DL = 0.03971$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD: ⁴⁵Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1362.31	0.0038	P	0.3
2	☐	0.200					
3	☐	2.000	2.020	9627.74	0.0265	P	4.9
4	☐	100.000	103.622	412322.81	1.1674	P	0.5
5	☐	250.000	258.974	1005136.23	2.9118	P	1.0
6	☐	500.000	509.122	1936249.35	5.7208	P	0.6
7	☐	1000.000	1006.833	3832968.17	11.3096	A	0.3
8	☐	2000.000	1993.000	7433017.25	22.3834	A	6.4
9	☐			17294.89	0.0522	P	2.7

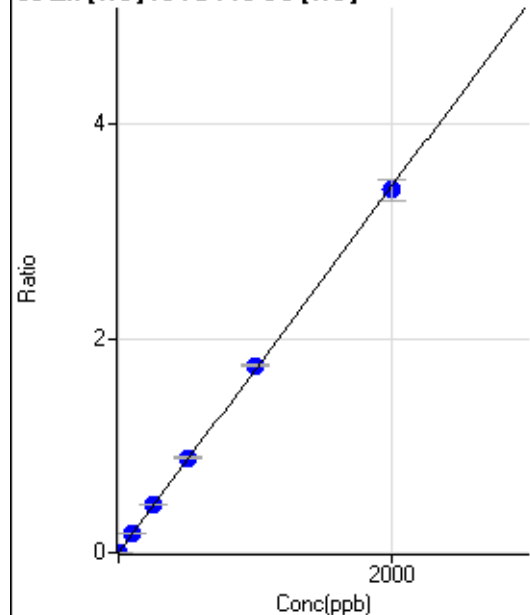
$$y = 0.0112 * x + 0.0038$$

$$R = 1.0000$$

$$DL = 0.0027$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD: ⁴⁵Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	328.90	0.0009	P	4.6
2	☐	0.200					
3	☐	2.000	1.966	1553.45	0.0043	P	6.4
4	☐	100.000	105.782	64075.54	0.1814	P	1.7
5	☐	250.000	262.894	155163.13	0.4495	P	0.7
6	☐	500.000	519.383	300267.02	0.8872	P	0.6
7	☐	1000.000	1020.887	590681.90	1.7429	P	0.7
8	☐	2000.000	1982.810	1123980.65	3.3843	P	6.1
9	☐			7432.00	0.0224	P	1.8

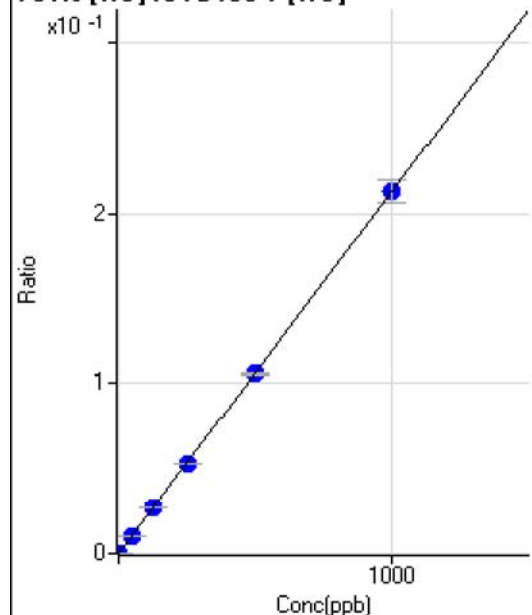
$$y = 0.0017 * x + 9.1539E-004$$

$$R = 0.9999$$

$$DL = 0.07409$$

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	12.96	0.0000	P	38.4
2	☐	0.100					
3	☐	1.000	1.003	450.01	0.0002	P	4.0
4	☐	50.000	49.913	21255.08	0.0106	P	1.5
5	☐	125.000	125.589	52322.00	0.0267	P	0.4
6	☐	250.000	248.974	102173.54	0.0529	P	0.2
7	☐	500.000	497.526	204318.21	0.1058	P	0.7
8	☐	1000.000	1001.424	399057.09	0.2129	P	6.4
9	☐			635.82	0.0003	P	2.5

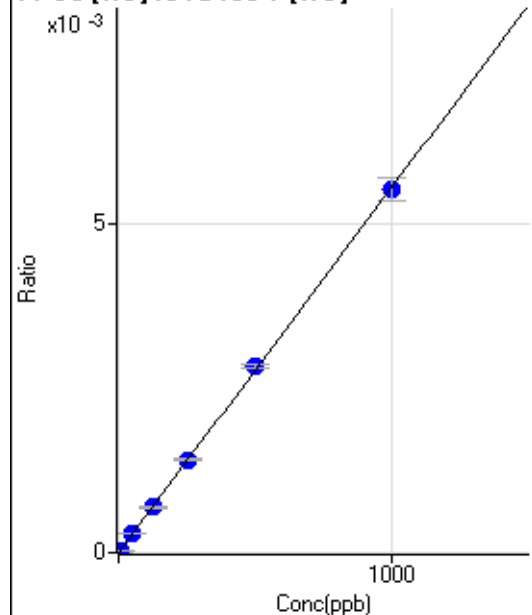
$$y = 2.1257\text{E-}004 * x + 6.4095\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.03469$$

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	1.11	0.0000	P	173.
2	☐	0.500					
3	☐	5.000	6.337	73.33	0.0000	P	15.4
4	☐	50.000	51.231	571.13	0.0003	P	4.2
5	☐	125.000	125.415	1366.76	0.0007	P	3.4
6	☐	250.000	254.687	2733.63	0.0014	P	3.0
7	☐	500.000	509.379	5470.01	0.0028	P	1.7
8	☐	1000.000	994.019	10357.18	0.0055	P	6.5
9	☐			5.56	0.0000	P	34.8

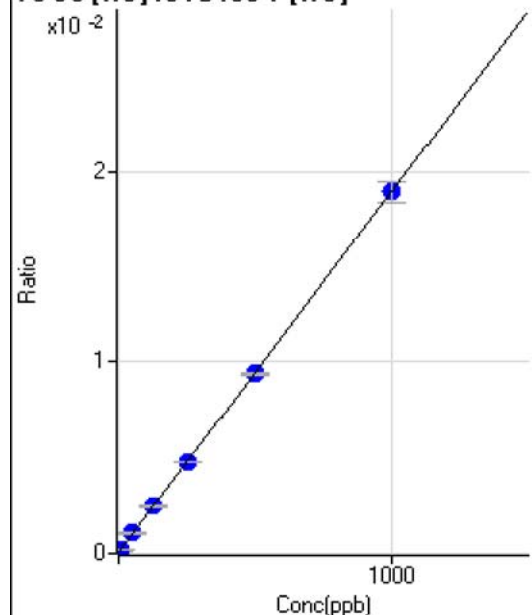
$$y = 5.5579\text{E-}006 * x + 5.5110\text{E-}007$$

$$R = 0.9999$$

$$DL = 0.5152$$

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	112.35	0.0001	P	6.1
2	☐	0.500					
3	☐	5.000	5.114	311.12	0.0002	P	1.0
4	☐	50.000	53.029	2113.75	0.0011	P	3.0
5	☐	125.000	127.748	4830.47	0.0025	P	1.6
6	☐	250.000	252.075	9285.75	0.0048	P	0.7
7	☐	500.000	495.960	18180.60	0.0094	P	0.7
8	☐	1000.000	1001.006	35504.47	0.0189	P	6.1
9	☐			120.37	0.0001	P	11.1

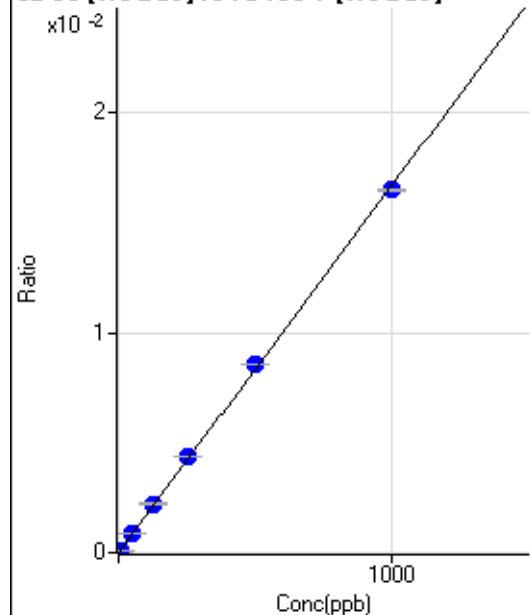
$$y = 1.8864E-005 * x + 5.5458E-005$$

$$R = 1.0000$$

$$DL = 0.534$$

Weight: <None>

Min Conc: 0

82 Se [NoGas] ISTD:89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	16.54	0.0000	P	124.
2	☐	0.500					
3	☐	5.000	5.230	1045.83	0.0001	P	2.7
4	☐	50.000	53.563	10361.66	0.0009	P	0.6
5	☐	125.000	132.942	25456.13	0.0022	P	1.1
6	☐	250.000	261.476	49577.08	0.0044	P	0.3
7	☐	500.000	513.759	97287.09	0.0086	P	0.8
8	☐	1000.000	989.079	186606.03	0.0165	P	0.4
9	☐			256.18	0.0000	P	19.8

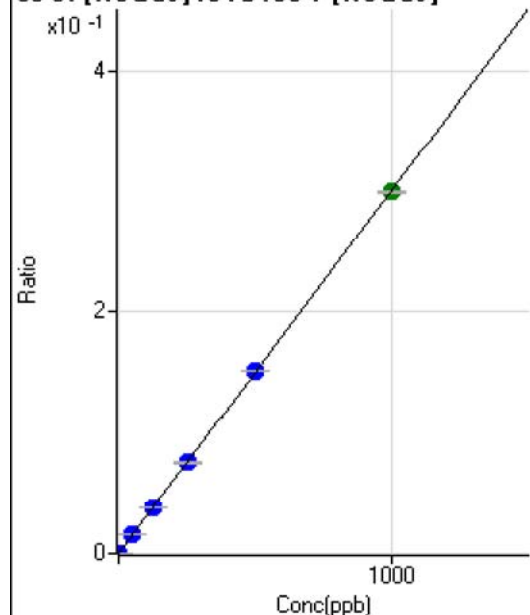
$$y = 1.6670E-005 * x + 1.3952E-006$$

$$R = 0.9998$$

$$DL = 0.3125$$

Weight: <None>

Min Conc: 0

86 Sr [NoGas] ISTD:89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	750.06	0.0001	P	11.6
2	☐	0.100					
3	☐	1.000	0.983	4239.70	0.0004	P	6.9
4	☐	50.000	51.054	178636.54	0.0154	P	0.8
5	☐	125.000	127.454	440776.88	0.0384	P	0.1
6	☐	250.000	251.164	859595.62	0.0756	P	0.1
7	☐	500.000	502.571	1717365.16	0.1512	P	0.2
8	☐	1000.000	998.064	3397582.63	0.3002	A	0.3
9	☐			16710.31	0.0016	P	1.2

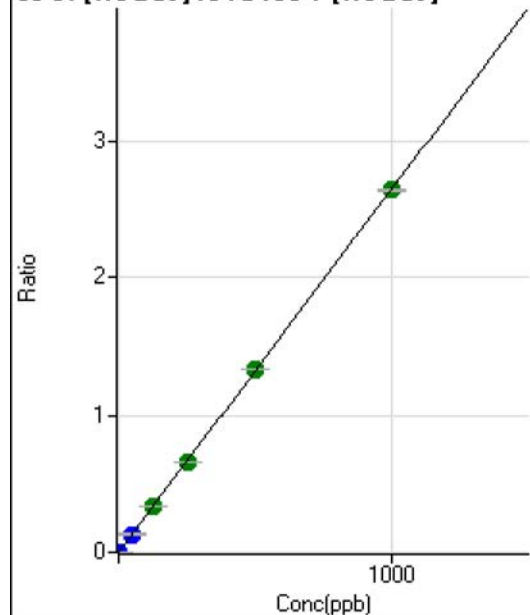
$$y = 3.0074\text{E-}004 * x + 6.3332\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.07347$$

Weight: <None>

Min Conc: 0

88 Sr [NoGas] ISTD:89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	152.79	0.0000	P	11.1
2	☐	0.100					
3	☐	1.000	0.989	31054.02	0.0026	P	2.6
4	☐	50.000	50.209	1539792.33	0.1329	P	0.3
5	☐	125.000	125.864	3824074.18	0.3331	A	0.9
6	☐	250.000	249.512	7508562.15	0.6603	A	0.3
7	☐	500.000	502.695	15109942.18	1.3304	A	0.5
8	☐	1000.000	998.656	29909807.96	2.6429	A	0.2
9	☐			143297.53	0.0135	P	0.6

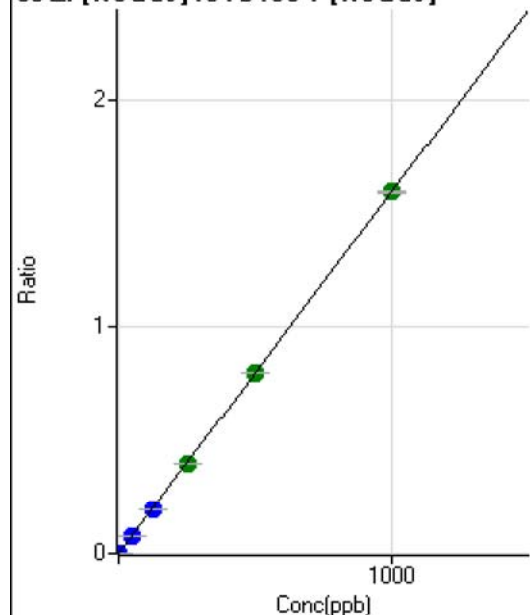
$$y = 0.0026 * x + 1.2891\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.001619$$

Weight: <None>

Min Conc: 0

90 Zr [NoGas] ISTD:89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	950.07	0.0001	P	6.9
2	☐	0.100					
3	☐	1.000	0.990	19619.65	0.0017	P	0.8
4	☐	50.000	49.759	921720.49	0.0795	P	0.3
5	☐	125.000	123.967	2273826.57	0.1981	P	0.4
6	☐	250.000	247.987	4504264.12	0.3961	A	0.8
7	☐	500.000	498.491	9043093.34	0.7962	A	0.5
8	☐	1000.000	1001.399	18099479.40	1.5994	A	0.7
9	☐			5262.32	0.0005	P	13.1

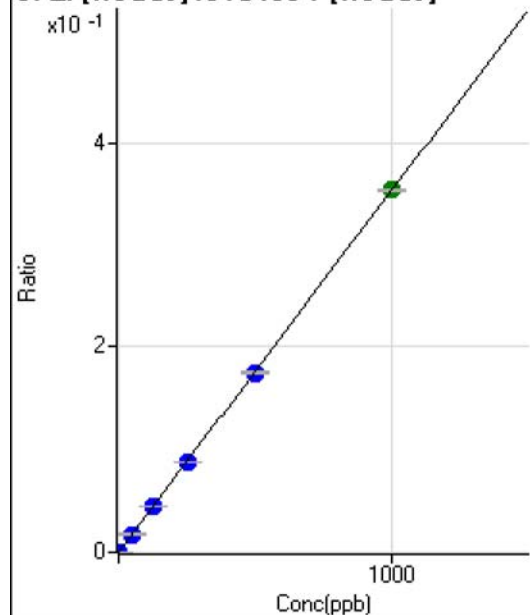
$$y = 0.0016 * x + 8.0151E-005$$

$$R = 1.0000$$

$$DL = 0.01038$$

Weight: <None>

Min Conc: 0

91 Zr [NoGas] ISTD:89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	200.01	0.0000	P	17.7
2	☐	0.100					
3	☐	1.000	1.059	4612.06	0.0004	P	5.0
4	☐	50.000	50.391	206256.54	0.0178	P	0.7
5	☐	125.000	126.335	512050.58	0.0446	P	0.8
6	☐	250.000	248.052	995615.01	0.0876	P	0.6
7	☐	500.000	496.534	1990485.11	0.1753	P	0.3
8	☐	1000.000	1002.034	4002210.16	0.3537	A	0.6
9	☐			1211.22	0.0001	P	13.8

$$y = 3.5292E-004 * x + 1.6869E-005$$

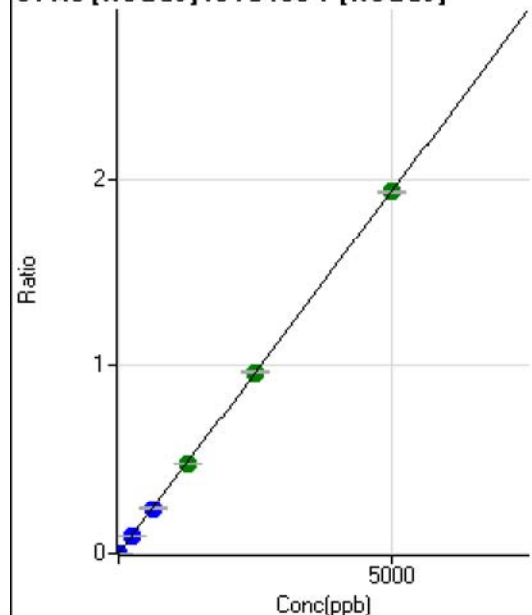
$$R = 1.0000$$

$$DL = 0.02545$$

Weight: <None>

Min Conc: 0

94 Mo [NoGas] ISTD:89 Y [NoGas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	358.35	0.0000	P	5.9
2	☐	0.500					
3	☐	5.000	5.026	23275.35	0.0020	P	0.8
4	☐	250.000	249.587	1117088.66	0.0964	P	0.6
5	☐	625.000	619.827	2748033.05	0.2394	P	1.3
6	☐	1250.000	1242.842	5457506.02	0.4800	A	0.4
7	☐	2500.000	2503.145	10978506.58	0.9666	A	0.9
8	☐	5000.000	5000.884	21854267.50	1.9312	A	0.5
9	☐			25331.75	0.0024	P	4.4

$$y = 3.8616E-004 * x + 3.0239E-005$$

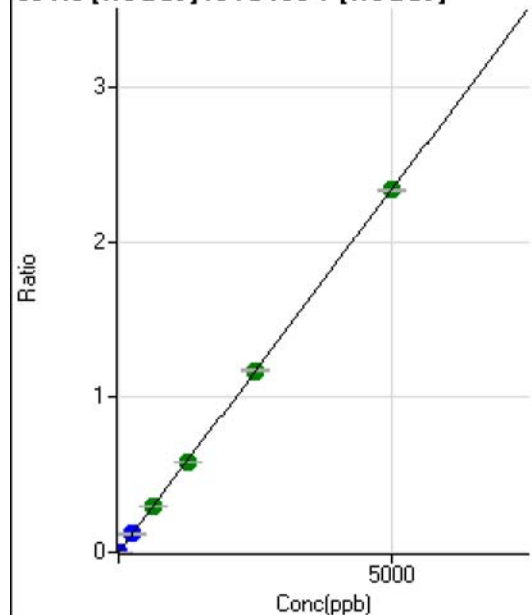
$$R = 1.0000$$

$$DL = 0.01396$$

Weight: <None>

Min Conc: 0

95 Mo [NoGas] ISTD:89 Y [NoGas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	138.90	0.0000	P	28.6
2	☐	0.500					
3	☐	5.000	4.859	26965.21	0.0023	P	0.9
4	☐	250.000	251.851	1364489.02	0.1178	P	0.4
5	☐	625.000	624.902	3354271.69	0.2922	A	0.5
6	☐	1250.000	1240.811	6596585.65	0.5801	A	0.3
7	☐	2500.000	2501.290	13282200.47	1.1695	A	0.5
8	☐	5000.000	5001.572	26463357.01	2.3384	A	0.5
9	☐			40188.12	0.0038	P	2.9

$$y = 4.6754E-004 * x + 1.1728E-005$$

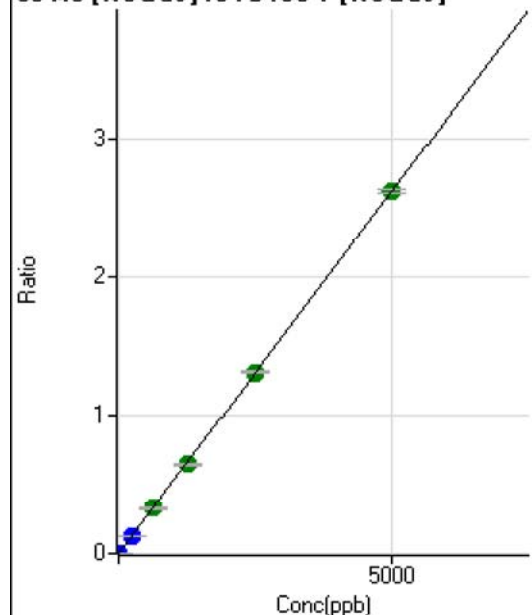
$$R = 1.0000$$

$$DL = 0.02151$$

Weight: <None>

Min Conc: 0

96 Mo [NoGas] ISTD:89 Y [NoGas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	205.56	0.0000	P	3.0
2	☐	0.500					
3	☐	5.000	4.805	29857.11	0.0025	P	2.3
4	☐	250.000	249.795	1512829.82	0.1306	P	0.8
5	☐	625.000	623.686	3742141.44	0.3260	A	0.6
6	☐	1250.000	1235.835	7344104.94	0.6459	A	0.7
7	☐	2500.000	2500.209	14840340.78	1.3067	A	0.7
8	☐	5000.000	5003.611	29592195.80	2.6150	A	1.0
9	☐			53002.11	0.0050	P	3.9

$$y = 5.2262\text{E-}004 * x + 1.7350\text{E-}005$$

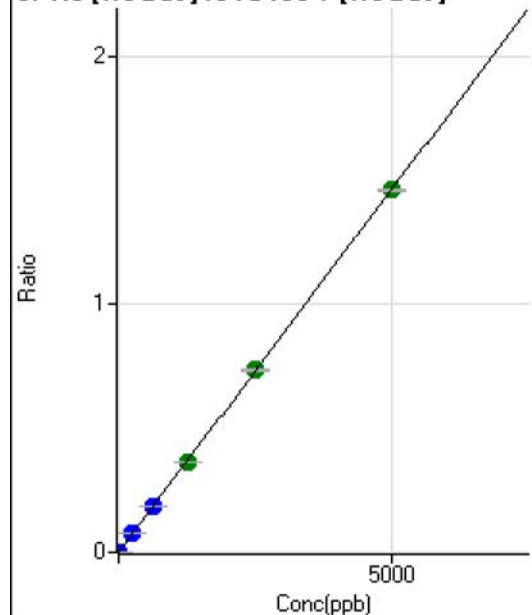
$$R = 1.0000$$

$$DL = 0.003007$$

Weight: <None>

Min Conc: 0

97 Mo [NoGas] ISTD:89 Y [NoGas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	88.89	0.0000	P	14.5
2	☐	0.500					
3	☐	5.000	4.876	16946.83	0.0014	P	5.0
4	☐	250.000	252.465	856477.57	0.0739	P	0.5
5	☐	625.000	626.735	2106464.85	0.1835	P	0.7
6	☐	1250.000	1239.192	4125147.44	0.3628	A	0.4
7	☐	2500.000	2507.347	8336977.18	0.7340	A	0.5
8	☐	5000.000	4998.688	16560821.03	1.4634	A	0.6
9	☐			24816.89	0.0023	P	4.0

$$y = 2.9276\text{E-}004 * x + 7.5028\text{E-}006$$

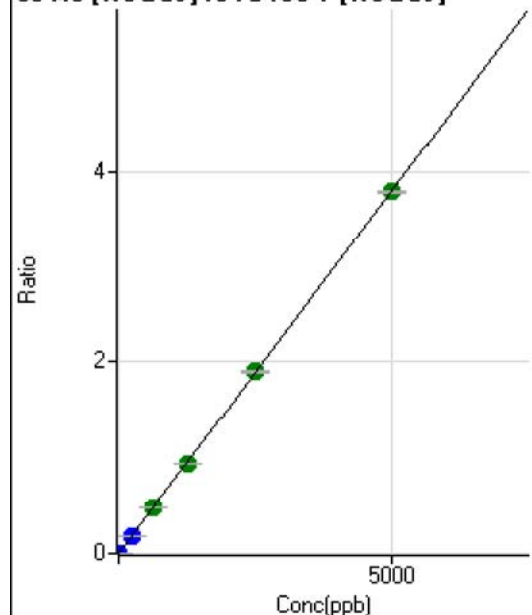
$$R = 1.0000$$

$$DL = 0.01116$$

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	211.12	0.0000	P	18.1
2	☐	0.500					
3	☐	5.000	4.801	43166.38	0.0037	P	1.5
4	☐	250.000	250.177	2196616.32	0.1896	P	0.3
5	☐	625.000	627.061	5454623.86	0.4751	A	1.0
6	☐	1250.000	1239.503	10679262.04	0.9392	A	0.4
7	☐	2500.000	2507.468	21578690.59	1.8999	A	0.4
8	☐	5000.000	4998.624	42861808.25	3.7875	A	0.5
9	☐			64086.61	0.0060	P	3.0

$$y = 7.5771\text{E-}004 * x + 1.7803\text{E-}005$$

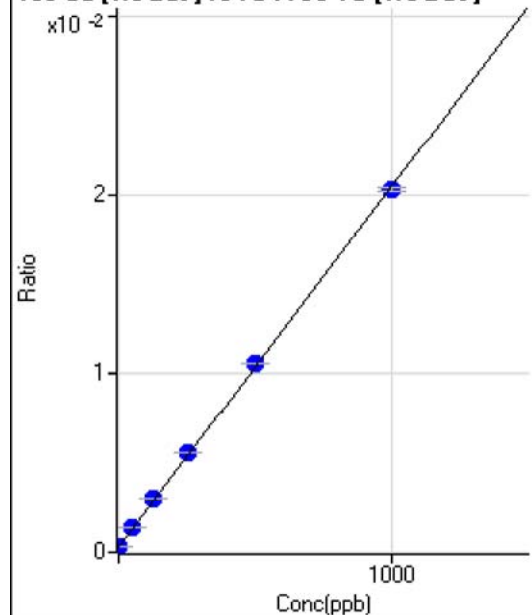
$$R = 1.0000$$

$$DL = 0.01273$$

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	4359.21	0.0003	P	2.4
2	☐	0.100					
3	☐	1.000	1.942	4914.97	0.0003	P	4.2
4	☐	50.000	53.932	20579.50	0.0014	P	1.7
5	☐	125.000	133.336	44442.87	0.0030	P	1.2
6	☐	250.000	261.369	82833.27	0.0056	P	0.1
7	☐	500.000	508.574	158704.62	0.0106	P	0.8
8	☐	1000.000	991.631	303476.31	0.0203	P	1.0
9	☐			4409.20	0.0003	P	4.9

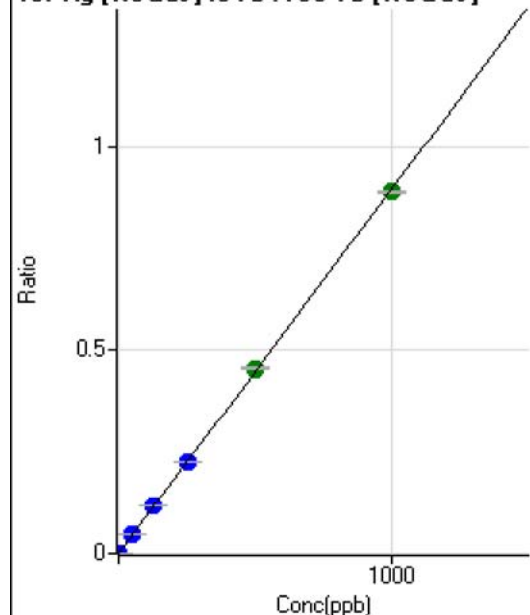
$$y = 2.0186\text{E-}005 * x + 2.8712\text{E-}004$$

$$R = 0.9999$$

$$DL = 1.015$$

Weight: <None>

Min Conc: 0

107 Ag [NoGas] ISTD :159 Tb [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	91.67	0.0000	P	42.0
2	☐	0.100					
3	☐	1.000	1.065	14449.60	0.0010	P	3.7
4	☐	50.000	53.925	722054.16	0.0483	P	0.2
5	☐	125.000	131.793	1760188.04	0.1180	P	0.5
6	☐	250.000	253.818	3382857.80	0.2272	P	0.3
7	☐	500.000	507.875	6836200.85	0.4546	A	0.6
8	☐	1000.000	994.063	13299237.97	0.8898	A	0.4
9	☐			2033.57	0.0001	P	8.4

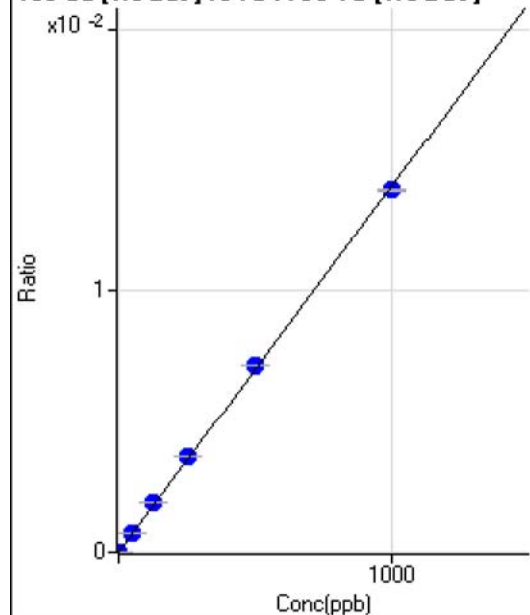
$$y = 8.9508E-004 * x + 6.0470E-006$$

$$R = 0.9999$$

$$DL = 0.008522$$

Weight: <None>

Min Conc: 0

108 Cd [NoGas] ISTD :159 Tb [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16.67	0.0000	P	75.2
2	☐	0.100					
3	☐	1.000	0.983	223.62	0.0000	P	6.9
4	☐	50.000	53.877	11286.65	0.0008	P	1.2
5	☐	125.000	134.729	28129.51	0.0019	P	0.8
6	☐	250.000	261.712	54511.89	0.0037	P	0.2
7	☐	500.000	508.403	106937.10	0.0071	P	0.2
8	☐	1000.000	991.461	207257.01	0.0139	P	0.6
9	☐			66.67	0.0000	P	22.3

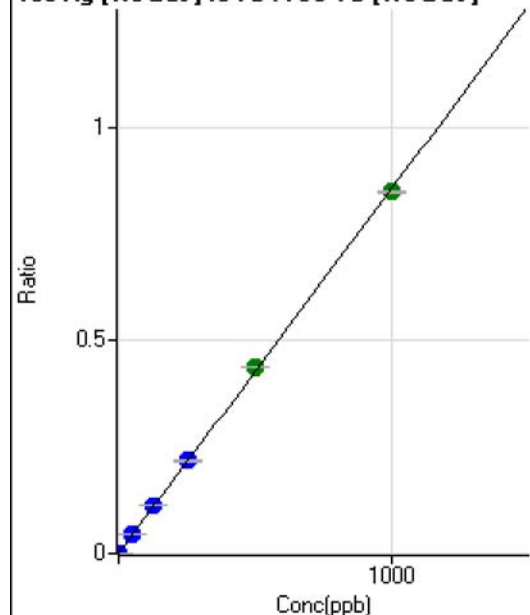
$$y = 1.3985E-005 * x + 1.1008E-006$$

$$R = 0.9998$$

$$DL = 0.1775$$

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	50.00	0.0000	P	16.7
2	☐	0.100					
3	☐	1.000	1.066	13812.81	0.0009	P	0.4
4	☐	50.000	53.761	689659.57	0.0461	P	0.1
5	☐	125.000	132.058	1689774.43	0.1133	P	0.1
6	☐	250.000	255.616	3263935.51	0.2192	P	0.6
7	☐	500.000	509.630	6572382.70	0.4370	A	0.4
8	☐	1000.000	992.710	12724526.33	0.8513	A	0.3
9	☐			1914.10	0.0001	P	18.0

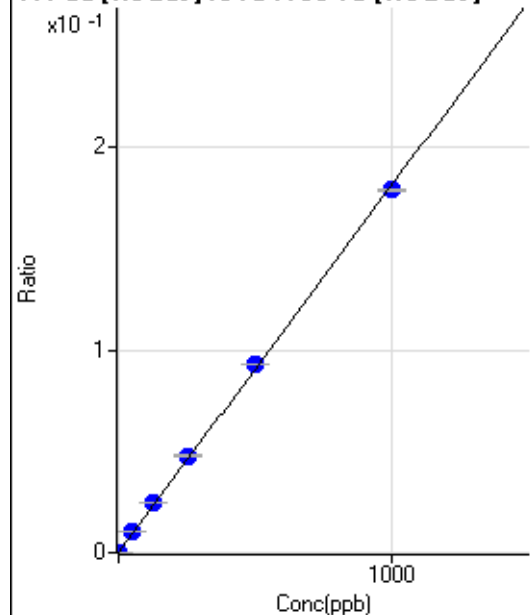
$$y = 8.5756\text{E-}004 * x + 3.2933\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.001928$$

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	1981.92	0.0001	P	1.9
2	☐	0.100					
3	☐	1.000	1.072	4887.49	0.0003	P	4.3
4	☐	50.000	54.641	149799.52	0.0100	P	0.7
5	☐	125.000	134.860	365945.99	0.0245	P	0.7
6	☐	250.000	263.540	711786.60	0.0478	P	0.5
7	☐	500.000	514.083	1400475.61	0.0931	P	0.3
8	☐	1000.000	988.109	2673696.88	0.1789	P	0.5
9	☐			2794.46	0.0002	P	4.2

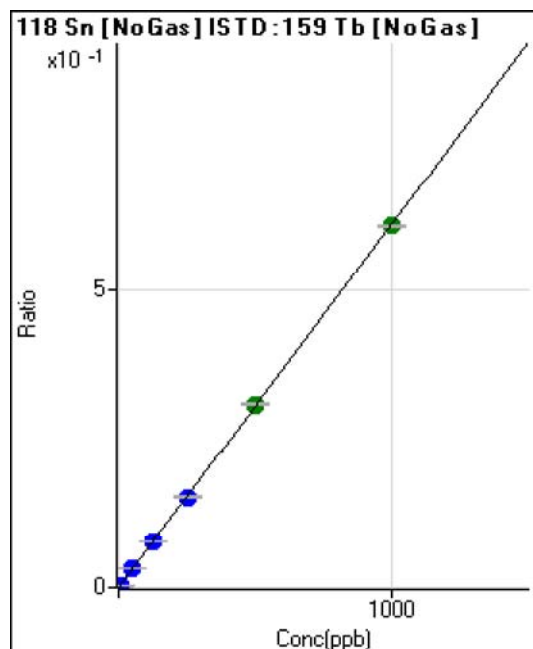
$$y = 1.8090\text{E-}004 * x + 1.3054\text{E-}004$$

$$R = 0.9997$$

$$DL = 0.04122$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	641.71	0.0000	P	8.7
2	☐	0.500					
3	☐	5.000	4.963	46104.42	0.0031	P	1.5
4	☐	50.000	51.810	471956.42	0.0316	P	0.2
5	☐	125.000	128.006	1162222.08	0.0779	P	0.3
6	☐	250.000	250.960	2273253.35	0.1527	P	0.3
7	☐	500.000	503.614	4606703.49	0.3063	A	0.5
8	☐	1000.000	997.487	9068291.52	0.6067	A	0.4
9	☐			19586.68	0.0014	P	4.8

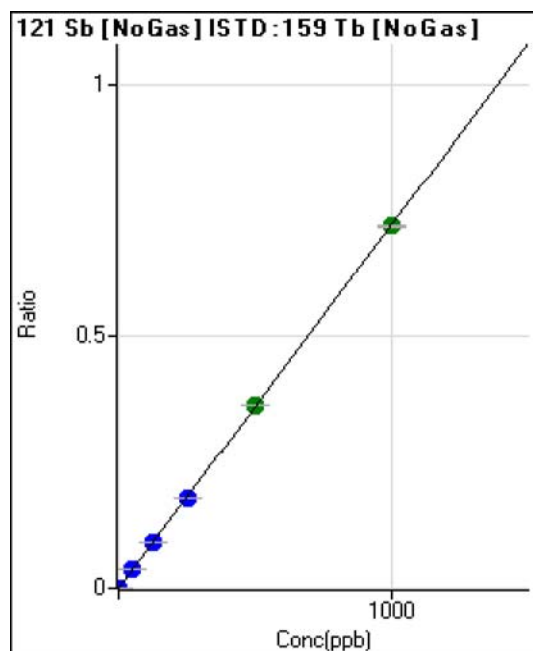
$$y = 6.0818\text{E-}004 * x + 4.2277\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.01807$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44.45	0.0000	P	10.2
2	☐	0.200					
3	☐	2.000	1.976	21536.82	0.0014	P	1.5
4	☐	50.000	51.549	556806.14	0.0372	P	0.2
5	☐	125.000	128.017	1379258.93	0.0924	P	0.5
6	☐	250.000	250.584	2694170.16	0.1809	P	0.2
7	☐	500.000	503.086	5462888.88	0.3633	A	0.5
8	☐	1000.000	997.856	10769650.59	0.7205	A	0.4
9	☐			18251.39	0.0013	P	4.1

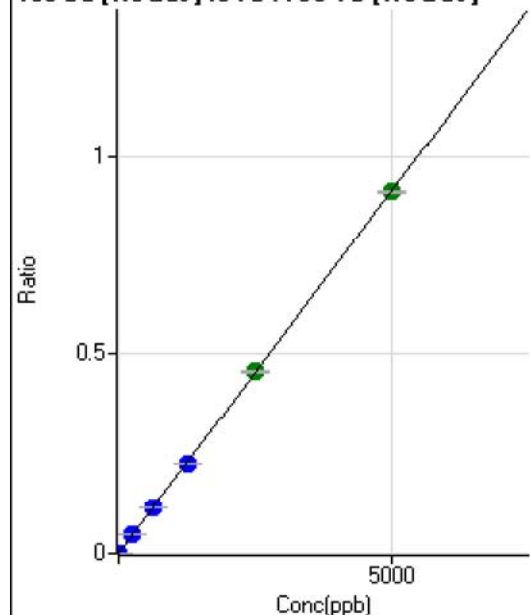
$$y = 7.2207\text{E-}004 * x + 2.9260\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.001238$$

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	44.45	0.0000	P	39.0
2	☐	1.000					
3	☐	10.000	9.880	27180.28	0.0018	P	2.1
4	☐	250.000	256.524	699817.91	0.0468	P	0.8
5	☐	625.000	635.214	1728541.21	0.1159	P	0.9
6	☐	1250.000	1246.662	3385360.58	0.2274	P	0.5
7	☐	2500.000	2505.044	6870624.11	0.4569	A	0.5
8	☐	5000.000	4996.710	13620941.62	0.9113	A	0.6
9	☐			3403.35	0.0002	P	13.7

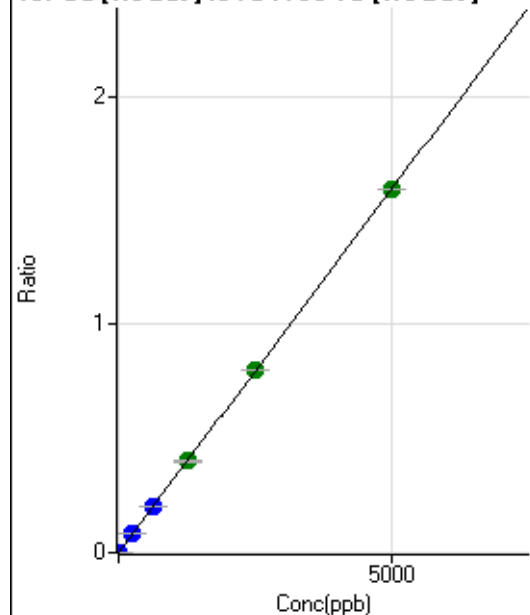
$$y = 1.8238E-004 * x + 2.9261E-006$$

$$R = 1.0000$$

$$DL = 0.01877$$

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	147.23	0.0000	P	28.6
2	☐	1.000					
3	☐	10.000	10.021	48226.72	0.0032	P	2.6
4	☐	250.000	255.917	1219640.81	0.0815	P	0.4
5	☐	625.000	632.621	3007238.20	0.2015	P	0.7
6	☐	1250.000	1257.301	5964120.10	0.4006	A	0.3
7	☐	2500.000	2510.928	12029602.09	0.7999	A	0.6
8	☐	5000.000	4991.462	23768358.34	1.5902	A	0.1
9	☐			6007.13	0.0004	P	5.0

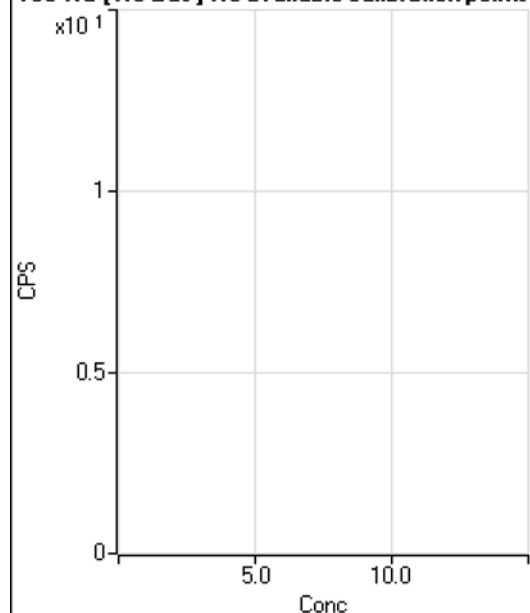
$$y = 3.1858E-004 * x + 9.6885E-006$$

$$R = 1.0000$$

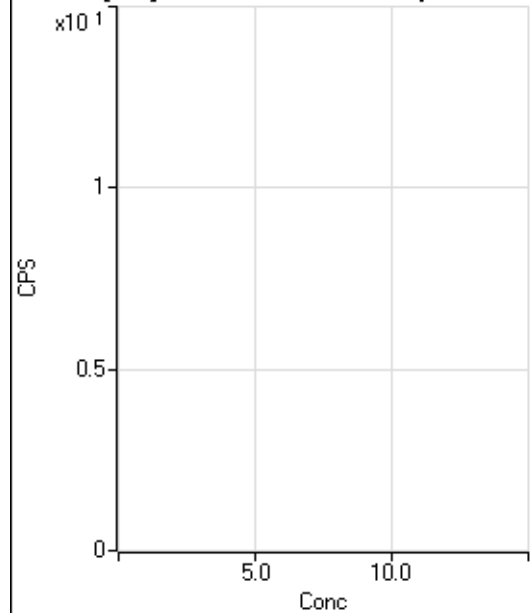
$$DL = 0.02612$$

Weight: <None>

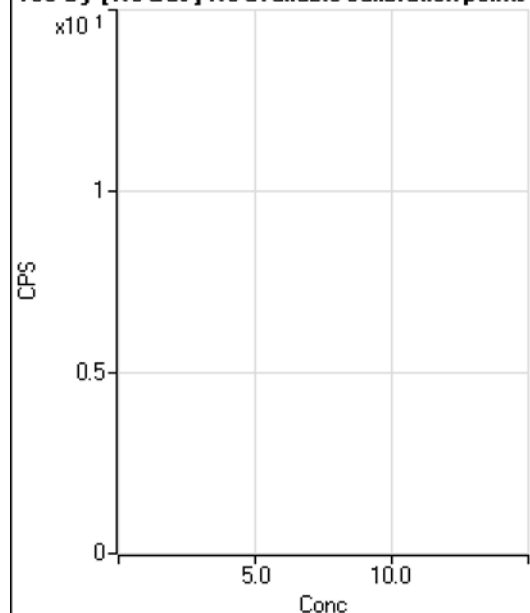
Min Conc: 0

150 Nd [No Gas] No available calibration points

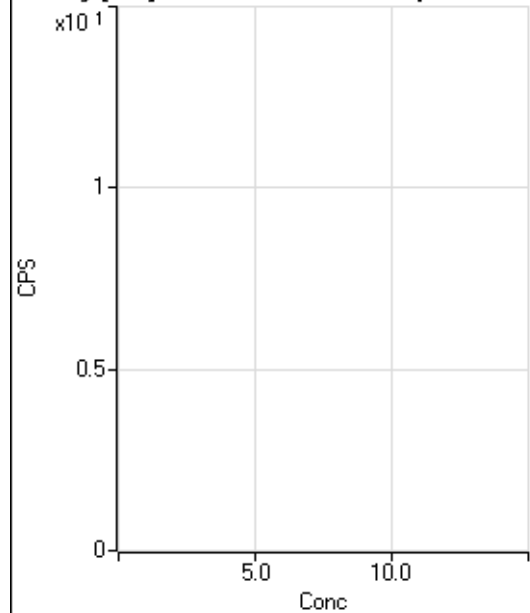
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.45		P	86.6
2	☐						
3	☐			8.89		P	43.3
4	☐			57.78		P	46.6
5	☐			137.78		P	24.8
6	☐			273.35		P	10.6
7	☐			486.69		P	4.1
8	☐			964.52		P	6.6
9	☐			173.34		P	3.8

150 Nd [He] No available calibration points

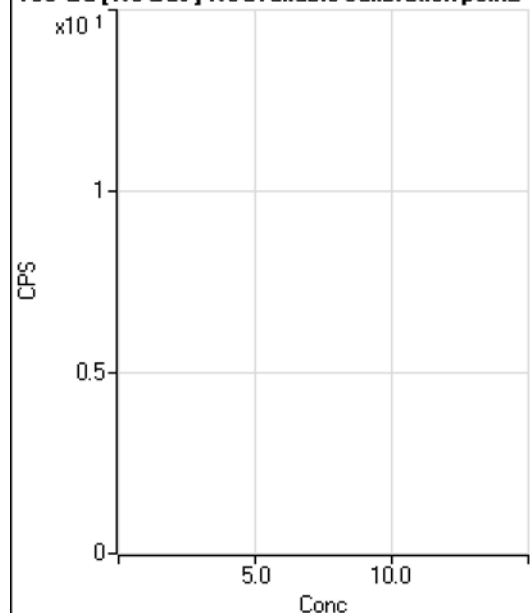
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐						
3	☐			1.11		P	173.
4	☐			6.67		P	0.0
5	☐			15.56		P	32.7
6	☐			27.78		P	6.9
7	☐			77.78		P	23.6
8	☐			121.11		P	17.7
9	☐			71.11		P	21.1

156 Dy [No Gas] No available calibration points

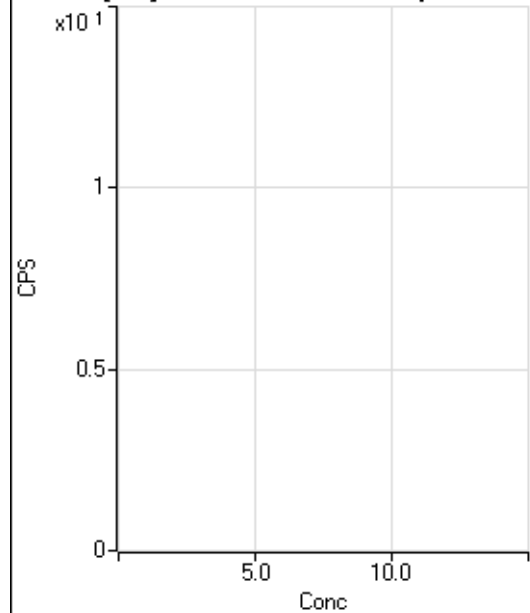
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			19.44		P	65.5
2	☐						
3	☐			5.56		P	173.
4	☐			52.78		P	50.8
5	☐			41.67		P	52.9
6	☐			69.45		P	50.0
7	☐			133.34		P	21.7
8	☐			222.23		P	9.4
9	☐			125.01		P	30.5

156 Dy [He] No available calibration points

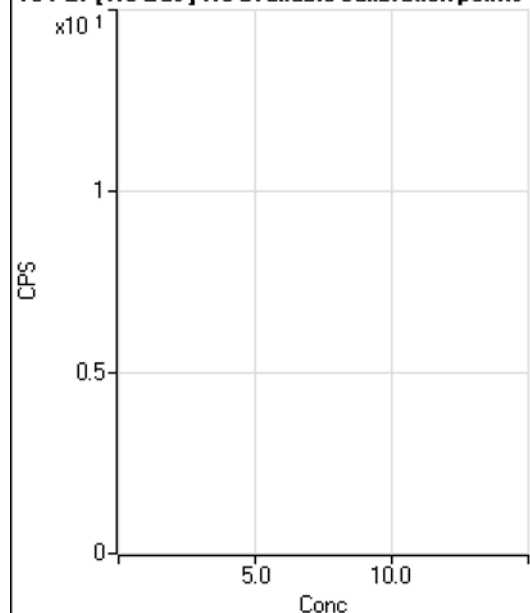
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.56		P	91.6
2	☐						
3	☐			5.56		P	34.7
4	☐			20.00		P	28.9
5	☐			27.78		P	36.7
6	☐			65.56		P	17.9
7	☐			120.00		P	14.7
8	☐			278.90		P	13.9
9	☐			58.89		P	22.9

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

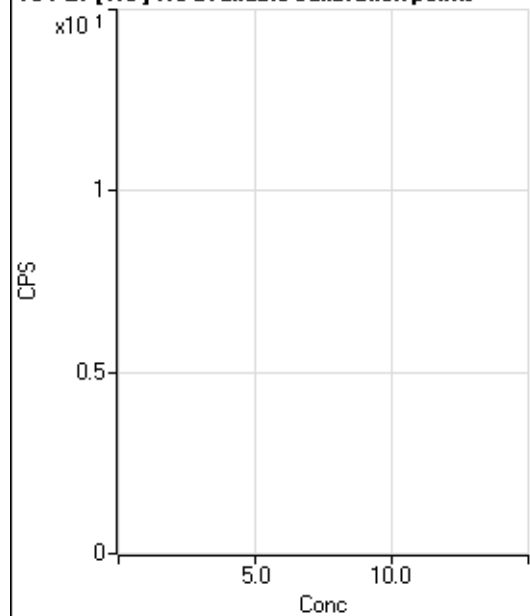
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			94.45		P	45.3
2	☐						
3	☐			102.78		P	28.5
4	☐			108.34		P	20.4
5	☐			102.78		P	9.4
6	☐			113.90		P	16.9
7	☐			147.23		P	23.6
8	☐			188.90		P	25.9
9	☐			163.90		P	38.2

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			223.34		P	6.5
2	☐						
3	☐			242.23		P	15.2
4	☐			243.34		P	14.4
5	☐			254.45		P	18.9
6	☐			241.12		P	16.7
7	☐			252.23		P	9.3
8	☐			254.45		P	2.0
9	☐			284.45		P	1.8

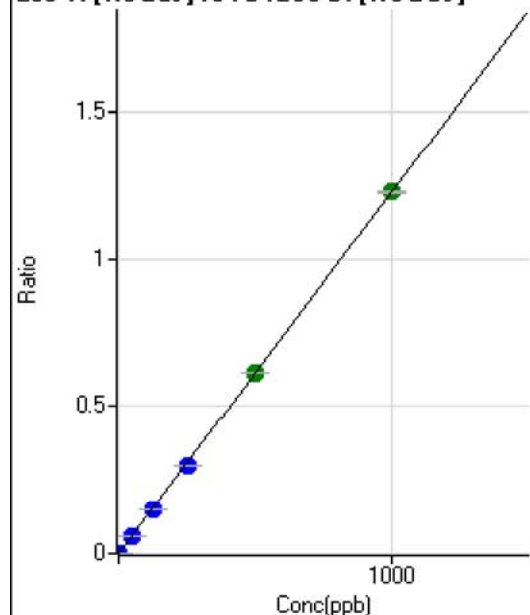
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			52.78		P	39.7
2	☐						
3	☐			50.00		P	44.1
4	☐			47.23		P	20.4
5	☐			69.45		P	18.3
6	☐			41.67		P	20.0
7	☐			52.78		P	18.2
8	☐			52.78		P	24.1
9	☐			47.22		P	36.7

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			27.78		P	30.2
2	☐						
3	☐			26.67		P	25.0
4	☐			30.00		P	11.1
5	☐			32.22		P	74.8
6	☐			25.56		P	60.2
7	☐			34.45		P	20.1
8	☐			35.56		P	14.3
9	☐			33.33		P	20.0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	77.78	0.0000	P	27.1
2	☐	0.100					
3	☐	1.000	0.962	11018.94	0.0012	P	0.2
4	☐	50.000	49.191	555414.31	0.0604	P	0.9
5	☐	125.000	123.334	1387979.25	0.1514	P	0.2
6	☐	250.000	243.972	2760694.01	0.2995	P	0.6
7	☐	500.000	498.670	5658245.78	0.6122	A	0.2
8	☐	1000.000	1002.421	11011171.08	1.2307	A	0.6
9	☐			5548.62	0.0007	P	5.6

$$y = 0.0012 * x + 8.2845E-006$$

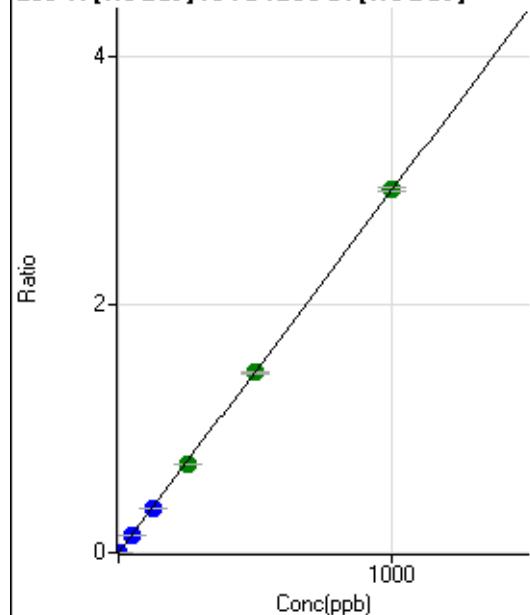
$$R = 1.0000$$

$$DL = 0.005478$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	236.13	0.0000	P	8.9
2	☐	0.100					
3	☐	1.000	0.971	26427.27	0.0029	P	2.1
4	☐	50.000	49.313	1320740.28	0.1436	P	1.1
5	☐	125.000	122.574	3271919.58	0.3570	P	0.2
6	☐	250.000	245.413	6586869.46	0.7147	A	0.8
7	☐	500.000	497.705	13395143.88	1.4494	A	0.4
8	☐	1000.000	1002.632	26122998.68	2.9198	A	0.9
9	☐			13576.93	0.0018	P	6.0

$$y = 0.0029 * x + 2.5150E-005$$

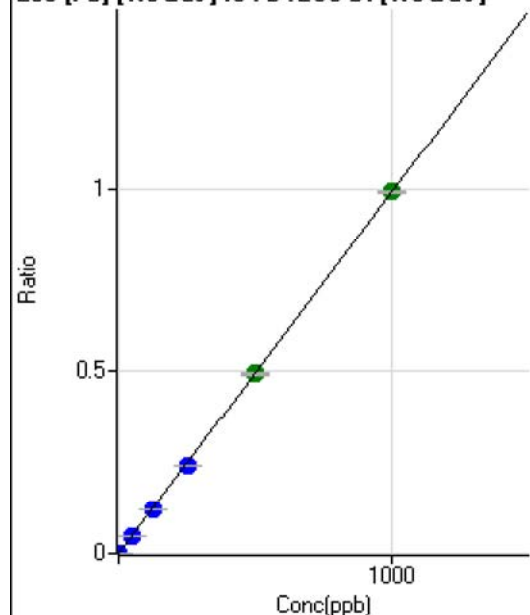
$$R = 1.0000$$

$$DL = 0.002312$$

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	366.68	0.0000	P	13.2
2	☐	0.100					
3	☐	1.000	0.963	9175.64	0.0010	P	2.0
4	☐	50.000	49.399	449252.02	0.0489	P	0.6
5	☐	125.000	124.232	1125631.29	0.1228	P	0.3
6	☐	250.000	243.530	2218475.70	0.2407	P	0.5
7	☐	500.000	497.272	4542017.87	0.4915	A	0.5
8	☐	1000.000	1003.108	8869444.99	0.9913	A	0.8
9	☐			52046.41	0.0068	P	1.0

$$y = 9.8821\text{E-}004 * x + 3.9063\text{E-}005$$

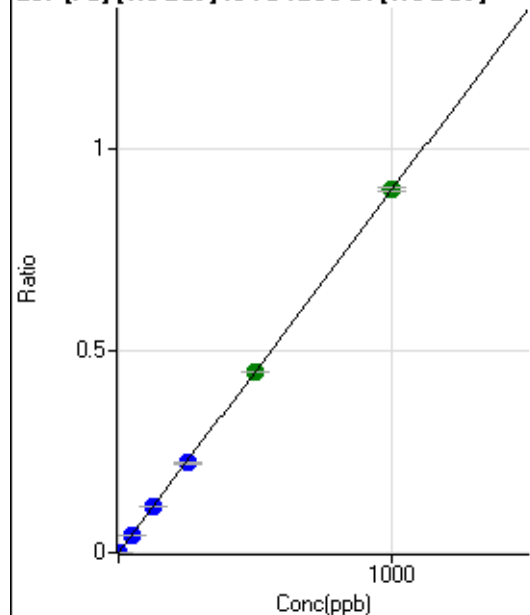
$$R = 1.0000$$

$$DL = 0.01567$$

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	416.69	0.0000	P	8.0
2	☐	0.100					
3	☐	1.000	0.984	8567.81	0.0009	P	2.0
4	☐	50.000	49.896	411147.96	0.0447	P	0.3
5	☐	125.000	125.139	1027163.23	0.1121	P	0.7
6	☐	250.000	247.269	2040542.00	0.2214	P	0.9
7	☐	500.000	498.602	4125559.35	0.4464	A	0.5
8	☐	1000.000	1001.369	8020505.97	0.8965	A	1.2
9	☐			44160.72	0.0058	P	1.5

$$y = 8.9519\text{E-}004 * x + 4.4380\text{E-}005$$

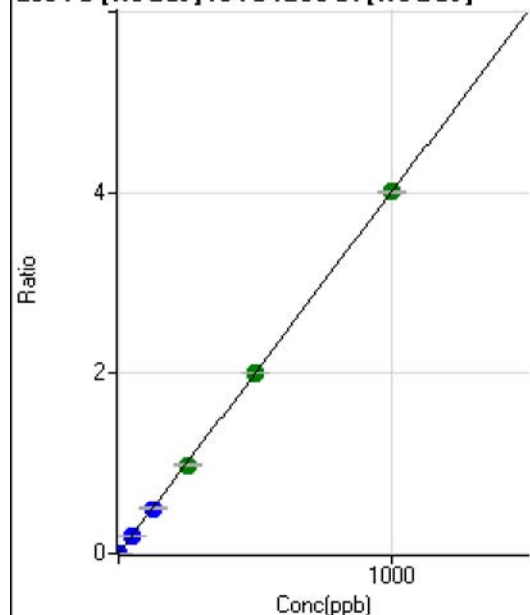
$$R = 1.0000$$

$$DL = 0.01183$$

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	1646.39	0.0002	P	5.5
2	☐	0.100					
3	☐	1.000	0.972	37688.46	0.0041	P	0.8
4	☐	50.000	49.615	1829688.41	0.1990	P	0.6
5	☐	125.000	124.534	4575303.81	0.4992	P	0.3
6	☐	250.000	246.535	9106262.32	0.9880	A	0.5
7	☐	500.000	498.357	18456548.15	1.9970	A	0.1
8	☐	1000.000	1001.765	35914757.63	4.0141	A	0.8
9	☐			204229.67	0.0266	P	0.9

$$y = 0.0040 * x + 1.7532E-004$$

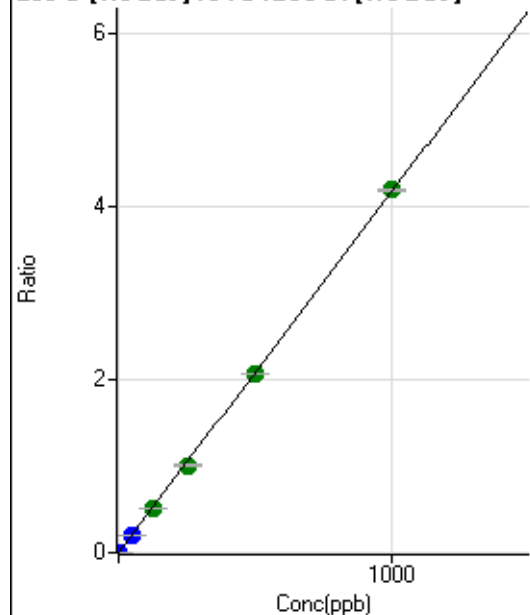
$$R = 1.0000$$

$$DL = 0.007279$$

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	836.18	0.0001	P	13.6
2	☐	0.100					
3	☐	1.000	0.913	36134.41	0.0039	P	1.5
4	☐	50.000	47.248	1814218.47	0.1973	P	0.9
5	☐	125.000	120.548	4612561.82	0.5032	A	0.5
6	☐	250.000	241.950	9308328.07	1.0100	A	0.7
7	☐	500.000	495.097	19098641.92	2.0666	A	0.6
8	☐	1000.000	1005.158	37537989.38	4.1955	A	0.4
9	☐			5682.10	0.0007	P	12.1

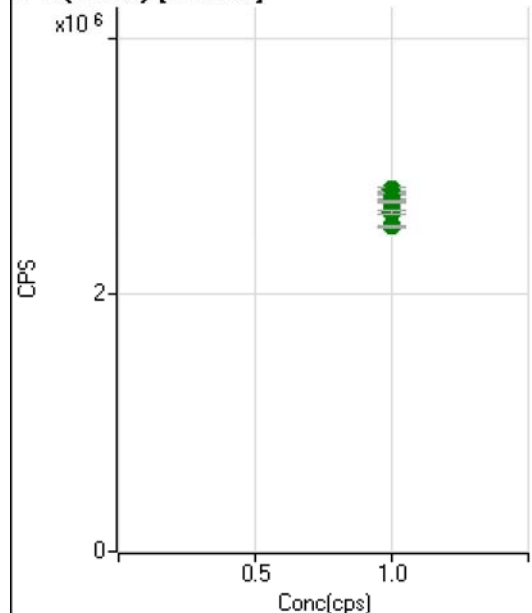
$$y = 0.0042 * x + 8.9066E-005$$

$$R = 0.9999$$

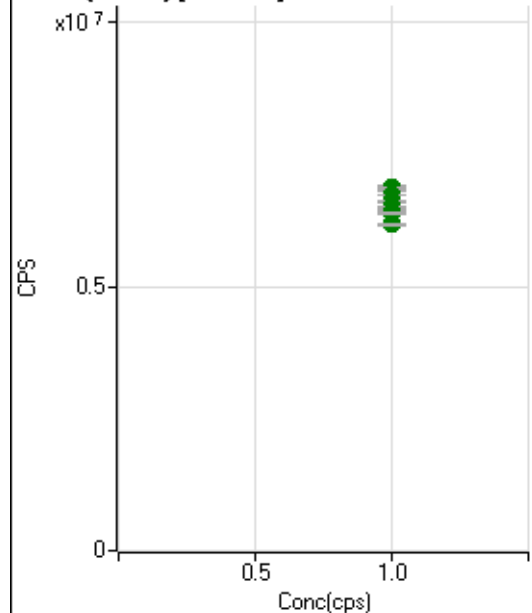
$$DL = 0.008735$$

Weight: <None>

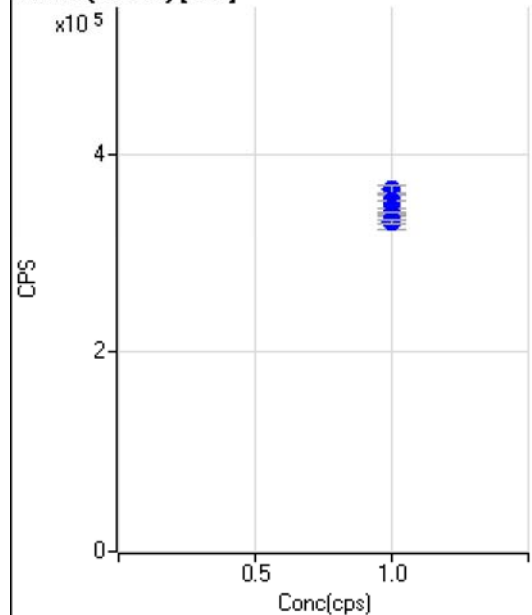
Min Conc: 0

6 Li(ISTD) [No Gas]

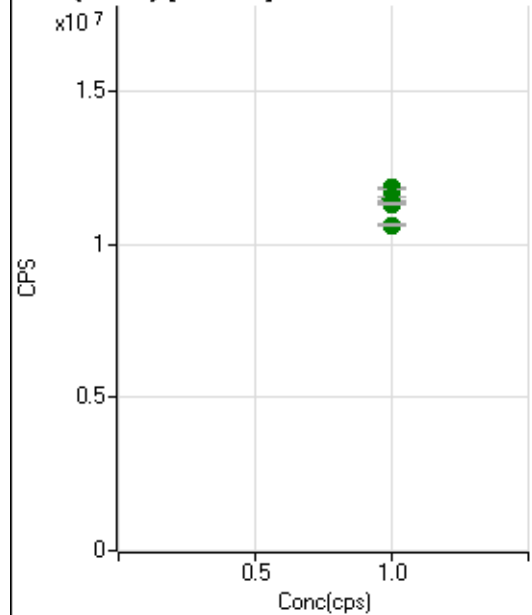
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2826171.42		A	0.9
2	☐	1.000					
3	☐	1.000		2796493.29		A	0.8
4	☐	1.000		2795592.77		A	0.2
5	☐	1.000		2794179.44		A	0.2
6	☐	1.000		2759976.56		A	0.2
7	☐	1.000		2733307.60		A	0.4
8	☐	1.000		2653912.46		A	1.0
9	☐	1.000		2542578.11		A	0.7

45 Sc(ISTD) [No Gas]

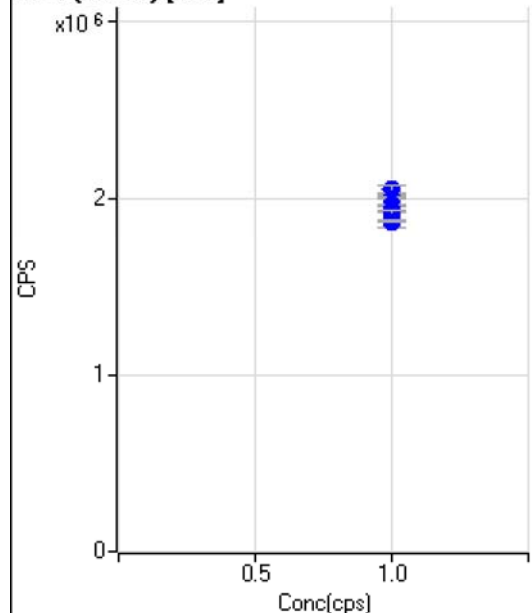
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6862967.95		A	1.3
2	☐	1.000					
3	☐	1.000		6870514.21		A	0.8
4	☐	1.000		6727663.04		A	0.2
5	☐	1.000		6611773.41		A	0.5
6	☐	1.000		6509037.65		A	0.8
7	☐	1.000		6422435.26		A	0.9
8	☐	1.000		6391136.38		A	0.7
9	☐	1.000		6175378.39		A	0.2

45 Sc(ISTD) [He]

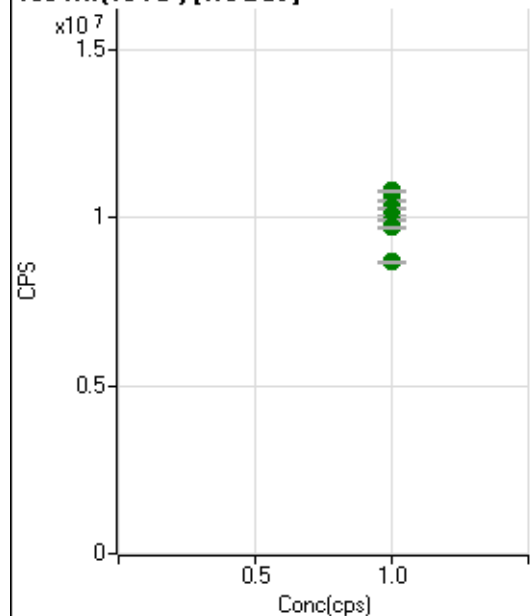
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		359254.57		P	0.4
2	☐	1.000					
3	☐	1.000		363971.86		P	2.1
4	☐	1.000		353209.34		P	0.3
5	☐	1.000		345190.51		P	0.4
6	☐	1.000		338462.80		P	0.4
7	☐	1.000		338914.86		P	0.5
8	☐	1.000		332878.44		P	5.7
9	☐	1.000		331633.78		P	1.0

89 Y(ISTD) [No Gas]

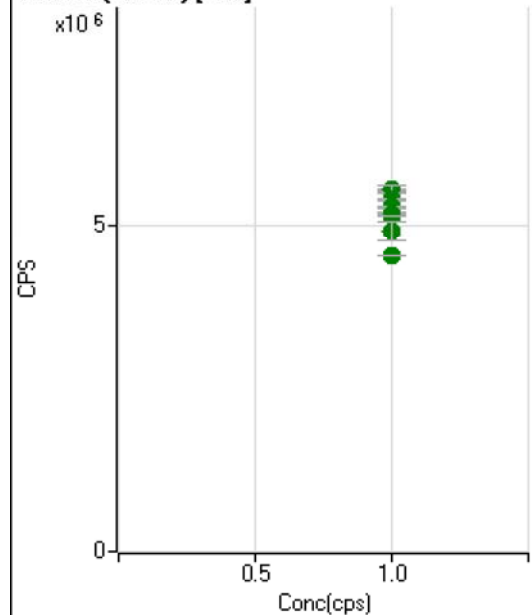
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11849879.41		A	0.7
2	☐	1.000					
3	☐	1.000		11808459.68		A	0.5
4	☐	1.000		11586852.74		A	0.0
5	☐	1.000		11480606.36		A	1.0
6	☐	1.000		11370728.16		A	0.3
7	☐	1.000		11357776.22		A	0.7
8	☐	1.000		11316885.94		A	0.7
9	☐	1.000		10640202.90		A	0.2

89 Y (ISTD) [He]

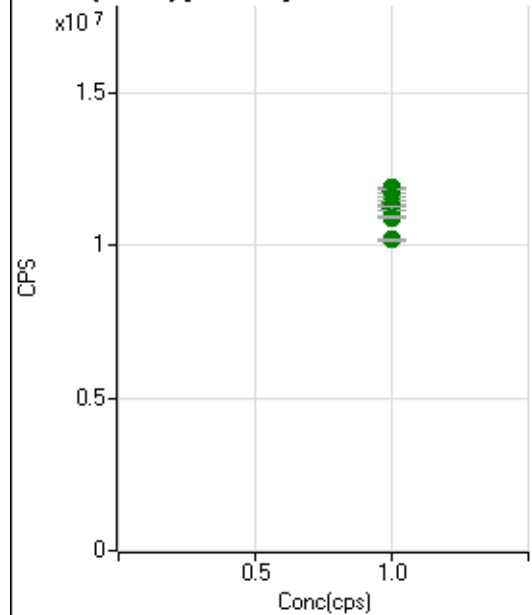
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2025302.56		P	0.6
2	☐	1.000					
3	☐	1.000		2048043.44		P	2.0
4	☐	1.000		2002176.58		P	0.4
5	☐	1.000		1959442.00		P	0.6
6	☐	1.000		1930338.90		P	0.7
7	☐	1.000		1931841.67		P	0.4
8	☐	1.000		1878707.21		P	5.2
9	☐	1.000		1870456.12		P	0.6

103 Rh (ISTD) [NoGas]

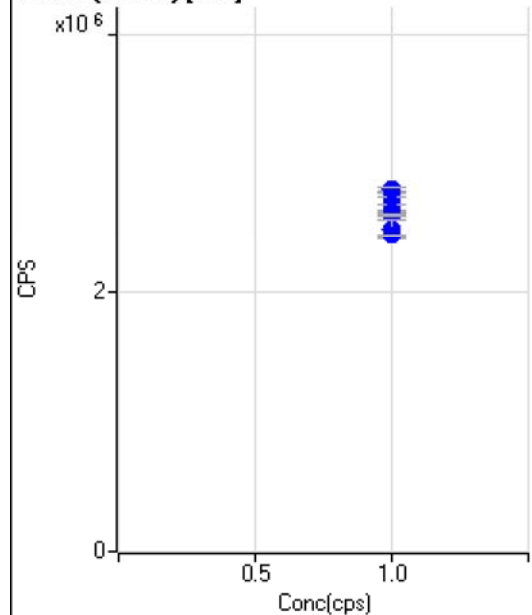
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10758366.74		A	0.6
2	☐	1.000					
3	☐	1.000		10781259.18		A	0.5
4	☐	1.000		10471161.60		A	0.3
5	☐	1.000		10261864.47		A	0.9
6	☐	1.000		10063944.58		A	0.4
7	☐	1.000		9910372.70		A	0.7
8	☐	1.000		9691485.98		A	0.6
9	☐	1.000		8660468.77		A	0.2

¹⁰³Rh(ISTD) [He]

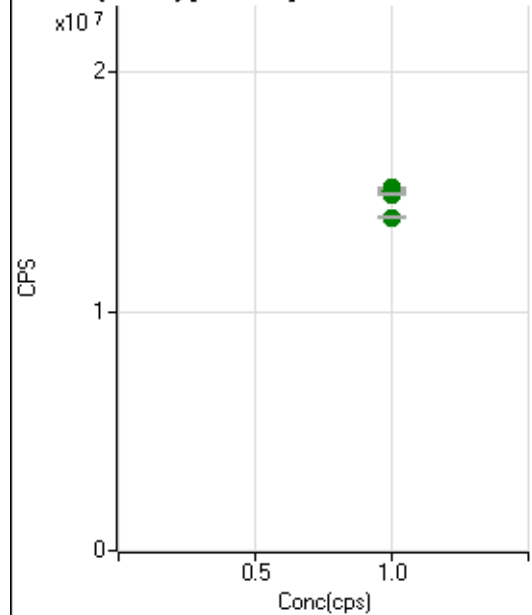
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5551784.02		A	0.2
2	☐	1.000					
3	☐	1.000		5562200.06		A	2.2
4	☐	1.000		5411878.39		A	0.4
5	☐	1.000		5298237.66		A	0.6
6	☐	1.000		5196321.03		A	0.7
7	☐	1.000		5150819.68		A	0.2
8	☐	1.000		4918995.58		A	6.1
9	☐	1.000		4539214.24		A	0.3

¹¹⁵In(ISTD) [NoGas]

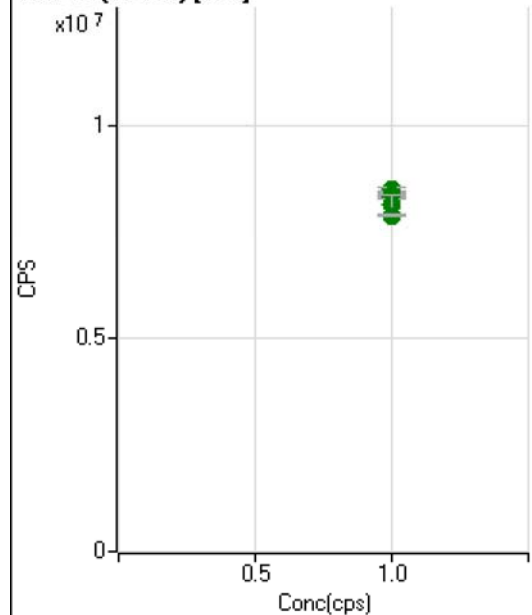
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11866054.40		A	0.7
2	☐	1.000					
3	☐	1.000		11774921.86		A	0.8
4	☐	1.000		11573648.86		A	0.3
5	☐	1.000		11382337.61		A	0.6
6	☐	1.000		11288339.91		A	0.1
7	☐	1.000		11181994.69		A	1.0
8	☐	1.000		10905154.73		A	0.9
9	☐	1.000		10161056.82		A	0.4

115 In(ISTD) [He]

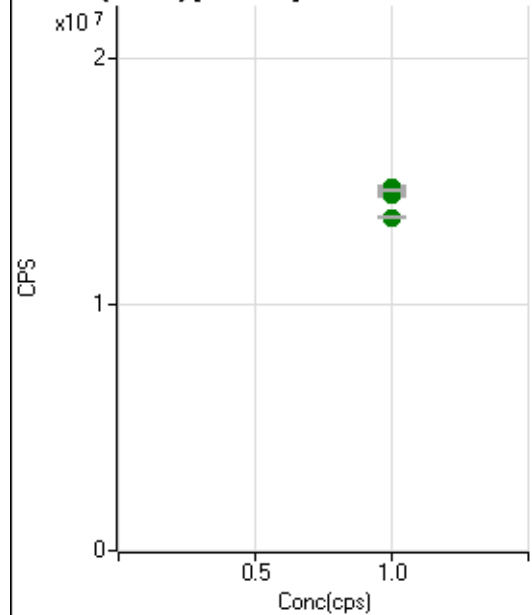
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2776774.70		P	0.6
2	☐	1.000					
3	☐	1.000		2800875.90		P	1.9
4	☐	1.000		2741315.71		P	0.1
5	☐	1.000		2682701.35		P	0.2
6	☐	1.000		2633575.98		P	0.6
7	☐	1.000		2606157.68		P	0.4
8	☐	1.000		2490879.16		P	5.8
9	☐	1.000		2446401.49		P	0.4

159 Tb(ISTD) [NoGas]

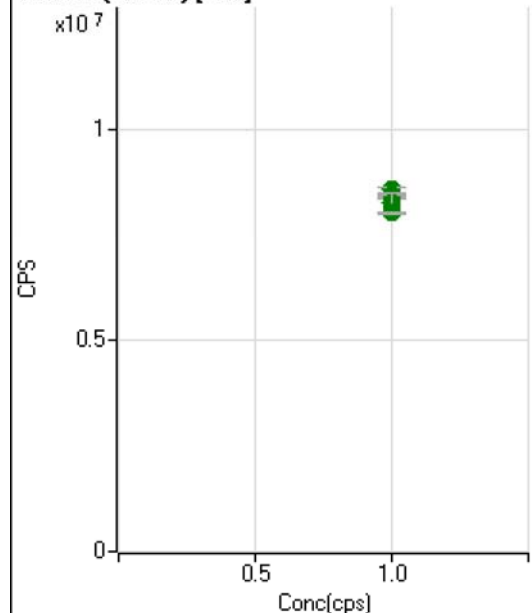
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		15183822.69		A	0.6
2	☐	1.000					
3	☐	1.000		15061167.00		A	0.5
4	☐	1.000		14957816.86		A	0.2
5	☐	1.000		14920685.61		A	0.4
6	☐	1.000		14889715.19		A	0.3
7	☐	1.000		15038532.83		A	0.7
8	☐	1.000		14947016.30		A	0.5
9	☐	1.000		13936114.79		A	0.5

159 Tb(ISTD) [He]

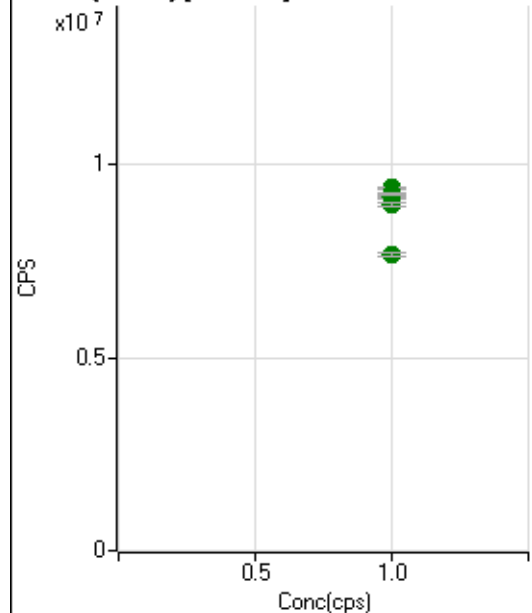
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8425873.62		A	0.5
2	☐	1.000					
3	☐	1.000		8494858.69		A	1.8
4	☐	1.000		8363783.21		A	0.3
5	☐	1.000		8311519.67		A	0.6
6	☐	1.000		8278871.12		A	0.3
7	☐	1.000		8330392.58		A	0.8
8	☐	1.000		8132111.41		A	5.6
9	☐	1.000		7900513.22		A	0.3

165 Ho(ISTD) [NoGas]

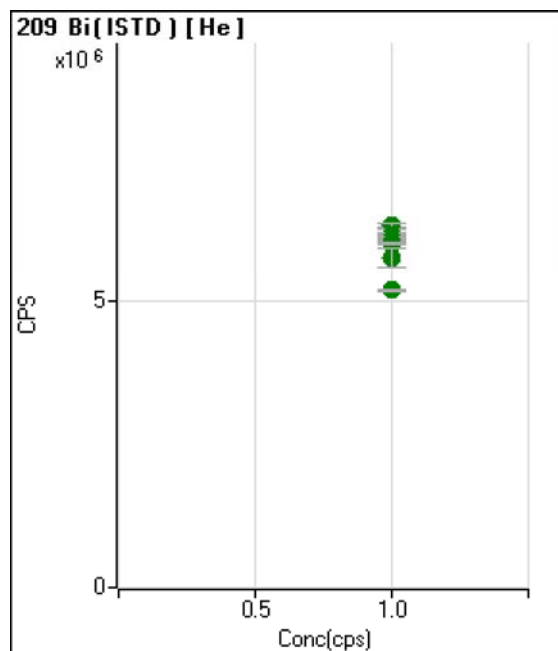
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14741119.43		A	0.9
2	☐	1.000					
3	☐	1.000		14584955.36		A	1.0
4	☐	1.000		14483958.83		A	0.4
5	☐	1.000		14422743.55		A	0.8
6	☐	1.000		14533930.71		A	0.4
7	☐	1.000		14726076.37		A	0.4
8	☐	1.000		14624290.60		A	0.4
9	☐	1.000		13554954.47		A	0.4

165 Ho(ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8480494.32		A	0.1
2	☐	1.000					
3	☐	1.000		8578420.15		A	1.7
4	☐	1.000		8444547.44		A	0.4
5	☐	1.000		8438754.60		A	0.4
6	☐	1.000		8395773.42		A	0.6
7	☐	1.000		8462414.25		A	0.5
8	☐	1.000		8280271.89		A	5.7
9	☐	1.000		8036248.08		A	0.5

209 Bi(ISTD) [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9388966.67		A	0.8
2	☐	1.000					
3	☐	1.000		9261439.03		A	1.5
4	☐	1.000		9195722.50		A	0.6
5	☐	1.000		9165902.08		A	0.8
6	☐	1.000		9216739.10		A	0.6
7	☐	1.000		9241927.50		A	0.6
8	☐	1.000		8947429.87		A	0.8
9	☐	1.000		7673861.83		A	0.9



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6290380.39		A	0.5
2	☐	1.000					
3	☐	1.000		6322056.50		A	1.8
4	☐	1.000		6176271.92		A	0.4
5	☐	1.000		6109422.69		A	0.4
6	☐	1.000		6048020.19		A	0.6
7	☐	1.000		6011950.54		A	0.6
8	☐	1.000		5767978.80		A	6.1
9	☐	1.000		5181784.75		A	0.5

US EPA Tune Check Sample Report

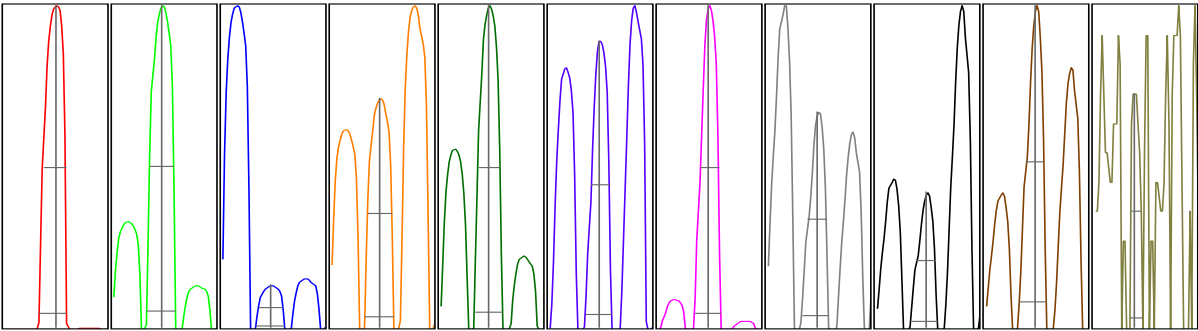
Batch Folder D:\ICP-MS Data\P7072818-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	11932	0.86	5.00	
24	175868	0.93	5.00	
25	24035	0.93	5.00	
26	27535	0.88	5.00	
59	97518	0.75	5.00	
113	13003	0.83	5.00	
115	157775	0.79	5.00	
206	36918	0.91	5.00	
207	34032	0.73	5.00	
208	79477	1.02	5.00	
220	0	40.57		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	11923	11944	12011	11766	12019
24	175517	177126	176897	173176	176625
25	23934	24121	24227	23693	24199
26	27381	27646	27755	27188	27704
59	97207	97935	98190	96390	97869
113	12938	13068	13105	12846	13057
115	157707	158682	158647	155658	158179
206	36593	36994	37230	36536	37237
207	33829	34129	34198	33713	34292
208	78976	79569	80298	78369	80174
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	18805	9.05	8.9 - 9.1		0.791	0.900	
24	265354	23.95	23.9 - 24.1		0.835	0.900	
25	35660	24.95	24.9 - 25.1		0.837	0.900	
26	41306	25.95	25.9 - 26.1		0.836	0.900	
59	159387	58.95	58.9 - 59.1		0.827	0.900	
113	24641	113.00	112.9 - 113.1		0.768	0.900	
115	299685	115.00	114.9 - 115.1		0.764	0.900	
206	71839	206.00	205.9 - 206.1		0.775	0.900	
207	65376	207.00	206.9 - 207.1		0.774	0.900	
208	154994	208.00	207.9 - 208.1		0.780	0.900	
220	0	219.70	-		0.342		

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	7.9	V	Deflect	15.4	V
Extract 2	-115.0	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	27947	0.35	
89	68083	0.21	
205	35706	0.42	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	27997	27904	27808	28071	27954
89	68003	67906	68114	68283	68110
205	35767	35453	35684	35797	35830

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	9.0	V	Deflect	1.8	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			