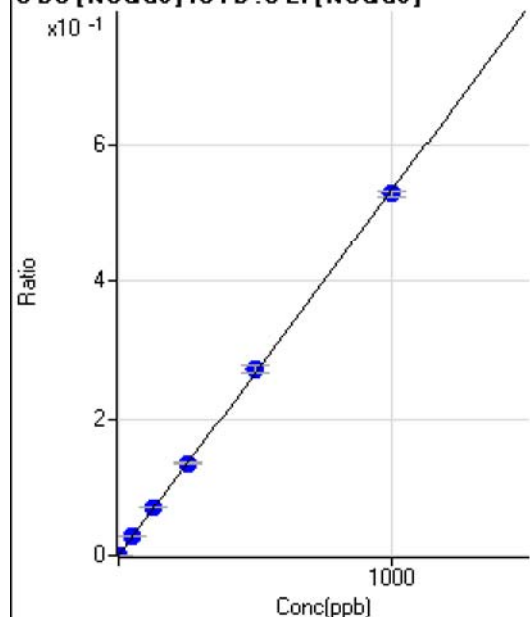


Batch Folder: D:\P8071318MS.b\
Analysis File: P8071318MS.batch.bin
DA Date-Time: 2018-07-13 15:49:43
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2018-07-13 12:41:54
2			
3	005CALS.d	S02	2018-07-13 12:49:16
4	006CALS.d	S03	2018-07-13 12:52:58
5	007CALS.d	S04	2018-07-13 12:56:40
6	008CALS.d	S05	2018-07-13 13:00:17
7	009CALS.d	S06	2018-07-13 13:03:47
8	010CALS.d	S07	2018-07-13 13:07:14
9	011CALS.d	S08	2018-07-13 13:10:38

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	62.97	0.0000	P	10.4
2	☐	0.100					
3	☐	1.000	1.110	1192.68	0.0006	P	6.6
4	☐	50.000	54.269	53702.63	0.0289	P	1.5
5	☐	125.000	131.407	135230.97	0.0700	P	3.9
6	☐	250.000	254.588	256398.53	0.1356	P	1.5
7	☐	500.000	511.589	500632.59	0.2724	P	3.9
8	☐	1000.000	992.044	968310.33	0.5283	P	1.9
9	☐			514.84	0.0003	P	11.3

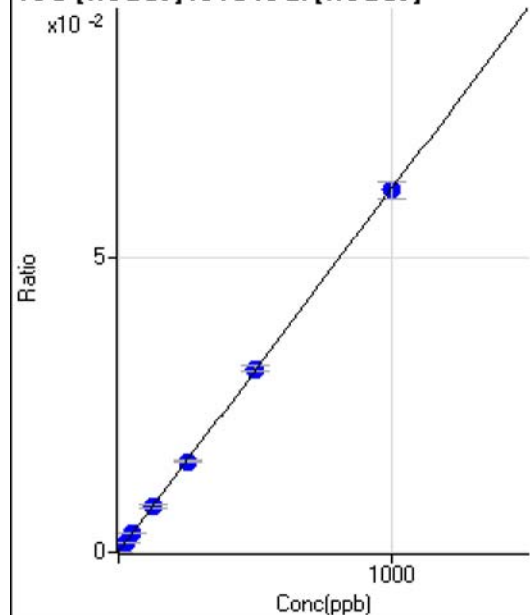
$$y = 5.3247\text{E-}004 * x + 3.3479\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.01968$$

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	119.45	0.0001	P	35.0
2	☐	2.500					
3	☐	25.000	25.480	3117.14	0.0016	P	7.6
4	☐	50.000	52.906	6171.01	0.0033	P	3.0
5	☐	125.000	127.730	15319.87	0.0079	P	7.1
6	☐	250.000	248.727	29110.95	0.0154	P	2.8
7	☐	500.000	504.130	57236.74	0.0311	P	3.4
8	☐	1000.000	997.755	112829.98	0.0616	P	4.7
9	☐			5381.79	0.0029	P	11.2

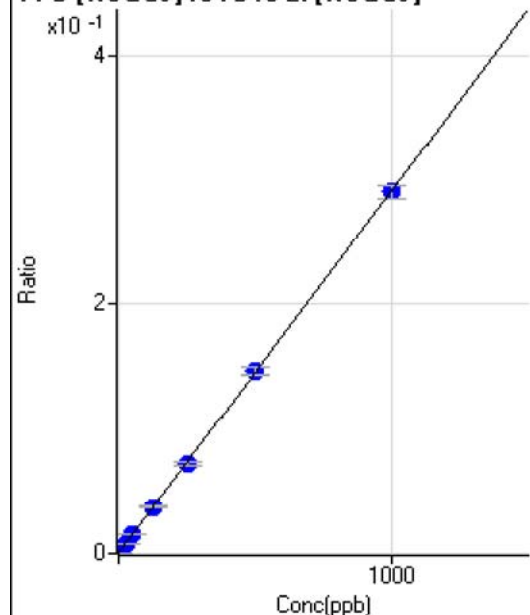
$$y = 6.1648\text{E-}005 * x + 6.3411\text{E-}005$$

$$R = 1.0000$$

$$DL = 1.081$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	597.26	0.0003	P	8.0
2	☐	2.500					
3	☐	25.000	25.523	14774.84	0.0077	P	6.7
4	☐	50.000	52.102	28726.88	0.0155	P	3.3
5	☐	125.000	127.552	72288.10	0.0374	P	5.2
6	☐	250.000	248.250	137175.47	0.0726	P	3.3
7	☐	500.000	502.405	269291.79	0.1465	P	3.5
8	☐	1000.000	998.798	533201.42	0.2910	P	4.0
9	☐			26110.77	0.0138	P	9.9

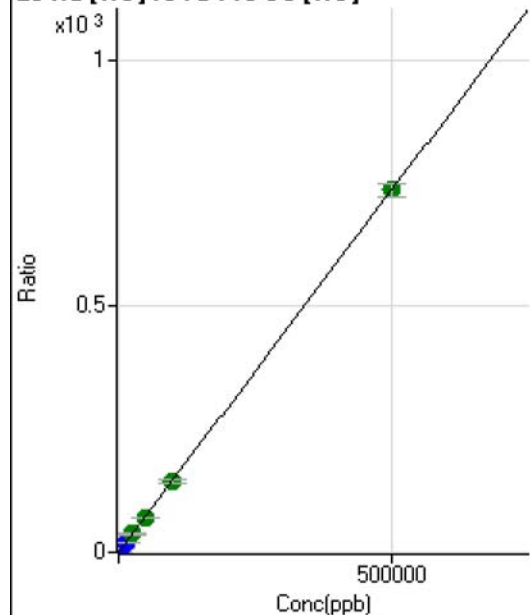
$$y = 2.9100\text{E-}004 * x + 3.1731\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.2613$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	3233.86	0.0813	P	2.2
2	☐	50.000					
3	☐	500.000	521.317	34075.35	0.8488	P	4.4
4	☐	5000.000	4926.243	292797.09	7.3333	P	3.1
5	☐	12500.000	12168.875	714651.57	17.9953	P	1.9
6	☐	25000.000	25440.685	1425422.04	37.5329	A	2.4
7	☐	50000.000	48770.596	2730762.80	71.8772	A	0.3
8	☐	100000.00	97848.716	5337464.10	144.1258	A	3.4
9	☐	500000.00	500540.15	29706607.26	736.9336	A	3.4

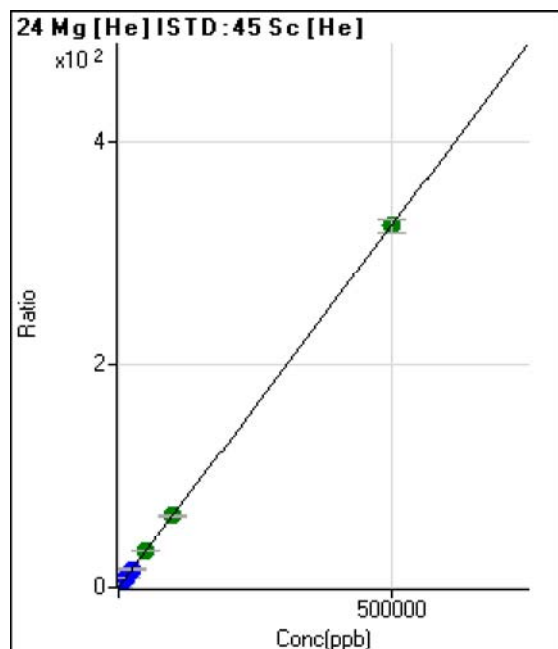
$$y = 0.0015 * x + 0.0813$$

$$R = 1.0000$$

$$DL = 3.67$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	161.12	0.0041	P	16.3
2	☐	50.000					
3	☐	500.000	497.556	13131.62	0.3272	P	5.5
4	☐	5000.000	4995.110	129675.68	3.2477	P	2.8
5	☐	12500.000	12228.749	315556.68	7.9449	P	0.9
6	☐	25000.000	25089.505	618864.17	16.2961	P	2.7
7	☐	50000.000	49585.235	1223389.12	32.2026	A	1.1
8	☐	100000.00	99784.926	2399457.97	64.8001	A	4.0
9	☐	500000.00	500086.84	13090554.02	324.7388	A	3.4

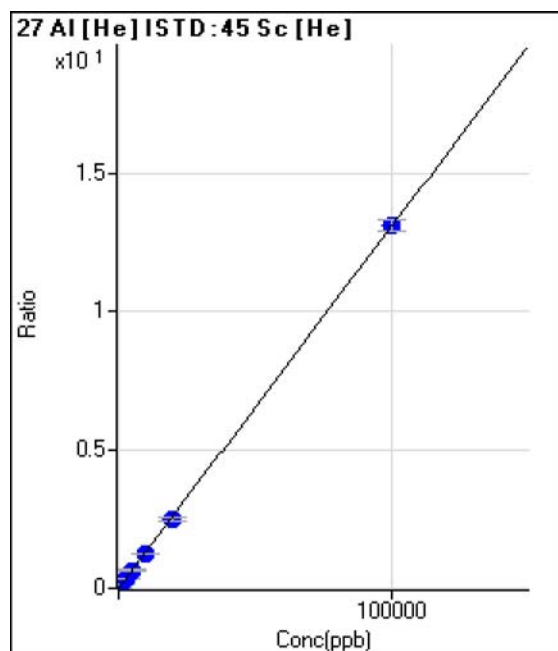
$$y = 6.4936\text{E-}004 * x + 0.0041$$

$$R = 1.0000$$

$$DL = 3.067$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	16.67	0.0004	P	101.2
2	☐	2.000					
3	☐	20.000	21.681	130.57	0.0033	P	26.8
4	☐	1000.000	962.981	5042.78	0.1263	P	4.0
5	☐	2500.000	2504.752	13009.25	0.3277	P	5.2
6	☐	5000.000	5041.656	25031.41	0.6592	P	3.7
7	☐	10000.000	9575.822	47555.96	1.2517	P	0.2
8	☐	20000.000	19184.473	92847.69	2.5073	P	3.7
9	☐	100000.00	100203.69	527863.27	13.0942	P	3.2

$$y = 1.3067\text{E-}004 * x + 4.2185\text{E-}004$$

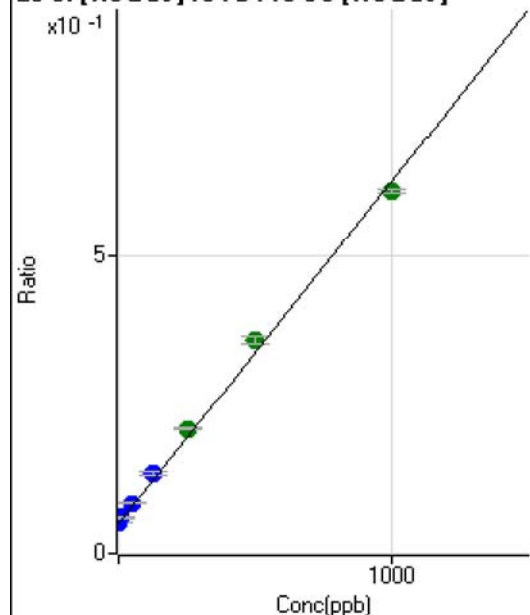
$$R = 1.0000$$

$$DL = 9.801$$

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	263387.72	0.0502	P	0.8
2	☐	1.000					
3	☐	10.000	16.719	319975.88	0.0598	P	2.1
4	☐	50.000	60.517	443181.86	0.0850	P	3.0
5	☐	125.000	147.211	722113.56	0.1348	P	4.1
6	☐	250.000	278.991	1112314.85	0.2105	A	0.7
7	☐	500.000	535.971	1849506.88	0.3581	A	3.5
8	☐	1000.000	971.397	3138709.19	0.6083	A	1.2
9	☐			449235.10	0.0824	P	1.7

$$y = 5.7452\text{E-}004 * x + 0.0502$$

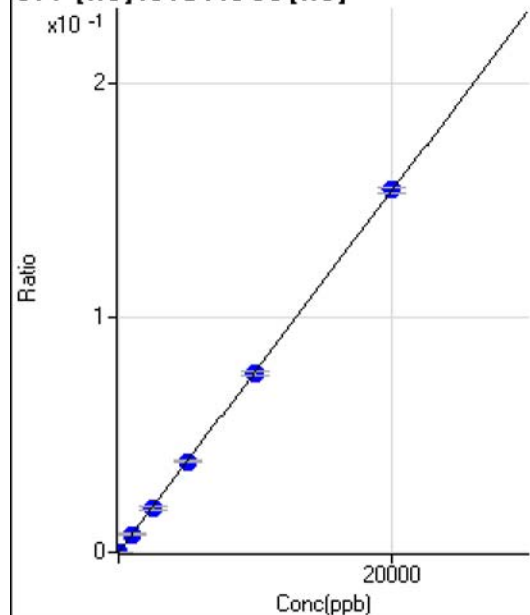
$$R = 0.9985$$

$$DL = 2.098$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-4.565	0.00	0.0000	P	
2	☐	0.000					
3	☐	0.000	4.565	2.78	0.0001	P	173.2
4	☐	1000.000	999.154	308.35	0.0077	P	3.9
5	☐	2500.000	2446.674	750.05	0.0189	P	9.7
6	☐	5000.000	5041.457	1475.15	0.0388	P	1.0
7	☐	10000.000	9851.172	2880.98	0.0758	P	2.4
8	☐	20000.000	20070.758	5723.66	0.1545	P	1.6
9	☐			13.89	0.0004	P	127.0

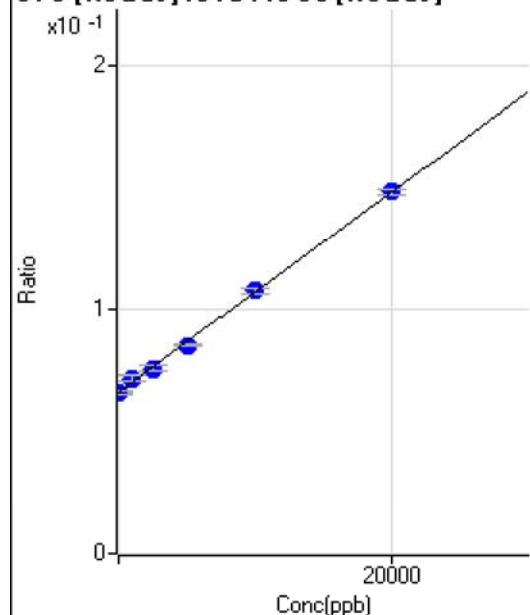
$$y = 7.6942\text{E-}006 * x + 3.5122\text{E-}005$$

$$R = 1.0000$$

$$DL = 23.72$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	63.889	349226.21	0.0666	P	1.6
2	☐	0.000					
3	☐	0.000	-63.889	353338.42	0.0660	P	2.0
4	☐	1000.000	1335.482	374405.98	0.0718	P	3.2
5	☐	2500.000	2335.143	406655.82	0.0759	P	3.7
6	☐	5000.000	4637.643	451017.41	0.0853	P	1.3
7	☐	10000.000	10102.533	556824.89	0.1078	P	2.4
8	☐	20000.000	20043.156	766957.73	0.1486	P	1.4
9	☐			324930.07	0.0596	P	2.0

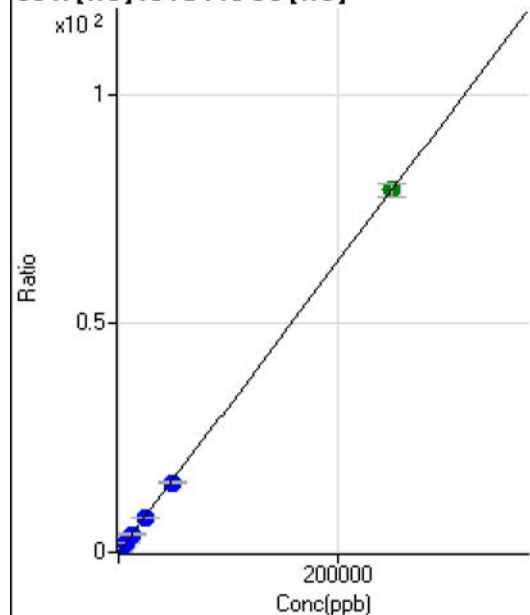
$$y = 4.1085\text{E-}006 * x + 0.0663$$

$$R = 0.9995$$

$$DL = 865.2$$

Weight: <None>

Min Conc: 0

39 K [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1953.00	0.0492	P	9.5
2	☐	50.000					
3	☐	500.000	524.252	8625.25	0.2147	P	4.3
4	☐	2500.000	2461.987	33009.21	0.8266	P	2.0
5	☐	6250.000	6031.892	77602.67	1.9539	P	1.4
6	☐	12500.000	12352.376	150011.20	3.9497	P	2.4
7	☐	25000.000	23919.074	288813.36	7.6022	P	1.4
8	☐	50000.000	48211.234	565620.34	15.2730	P	3.3
9	☐	250000.00	250479.01	3190261.51	79.1439	A	3.6

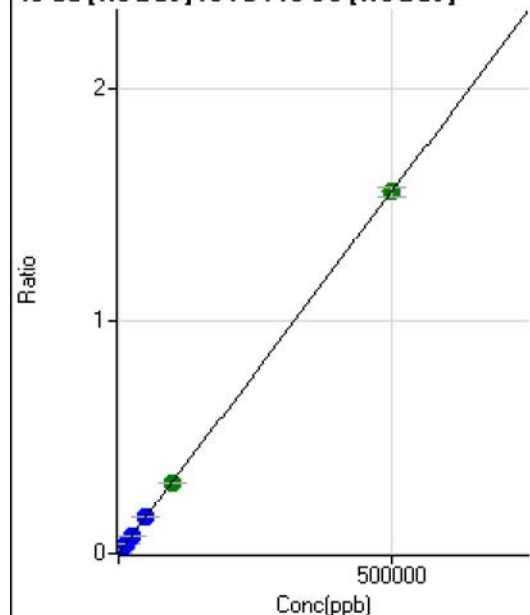
$$y = 3.1577\text{E-}004 * x + 0.0492$$

$$R = 1.0000$$

$$DL = 44.29$$

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	450.03	0.0001	P	3.0
2	☐	50.000					
3	☐	500.000	518.293	9083.90	0.0017	P	4.6
4	☐	5000.000	5072.090	82752.32	0.0159	P	3.4
5	☐	12500.000	12554.798	209789.61	0.0391	P	3.3
6	☐	25000.000	24530.688	403741.58	0.0764	P	1.4
7	☐	50000.000	49619.168	797810.09	0.1545	P	2.3
8	☐	100000.00	98367.580	1579498.73	0.3061	A	1.5
9	☐	500000.00	500385.92	8486142.20	1.5568	A	2.3

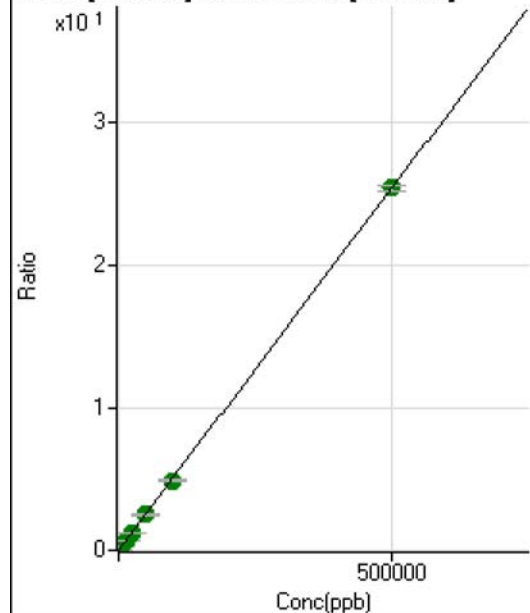
$$y = 3.1110\text{E-}006 * x + 8.5743\text{E-}005$$

$$R = 1.0000$$

$$DL = 2.481$$

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	14975.30	0.0029	P	3.4
2	☐	50.000					
3	☐	500.000	506.792	152927.97	0.0286	P	3.3
4	☐	5000.000	5154.520	1379697.13	0.2645	A	4.0
5	☐	12500.000	12494.194	3414750.94	0.6372	A	3.5
6	☐	25000.000	24227.666	6515618.72	1.2329	A	1.2
7	☐	50000.000	49110.327	12892935.96	2.4962	A	2.8
8	☐	100000.00	96279.923	25236906.64	4.8909	A	1.5
9	☐	500000.00	500870.19	138635064.2	25.4318	A	1.9

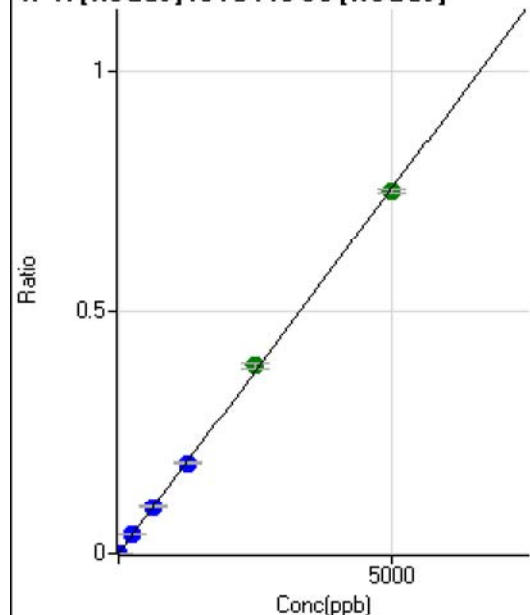
$$y = 5.0770\text{E-}005 * x + 0.0029$$

$$R = 1.0000$$

$$DL = 5.671$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	108.34	0.0000	P	18.9
2	☐	0.500					
3	☐	5.000	5.705	4725.98	0.0009	P	10.7
4	☐	250.000	259.463	204953.99	0.0393	P	3.9
5	☐	625.000	642.647	521419.39	0.0973	P	3.9
6	☐	1250.000	1245.169	996225.84	0.1885	P	0.9
7	☐	2500.000	2572.089	2011092.58	0.3894	A	3.1
8	☐	5000.000	4962.484	3876415.84	0.7512	A	1.1
9	☐			2236.41	0.0004	P	4.4

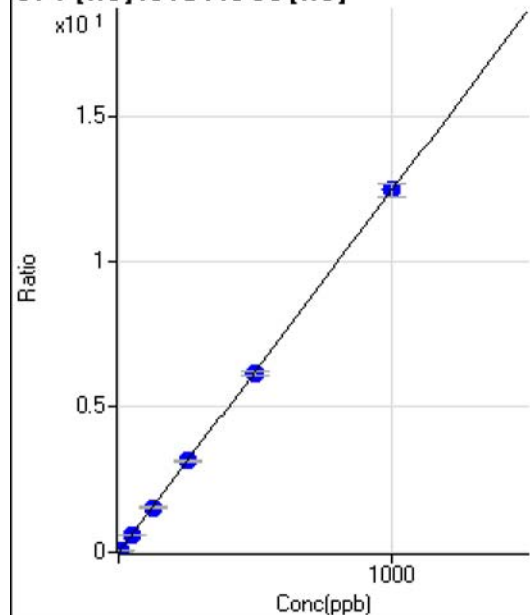
$$y = 1.5138\text{E-}004 * x + 2.0607\text{E-}005$$

$$R = 0.9998$$

$$DL = 0.07709$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8.89	0.0002	P	78.0
2	☐	0.500					
3	☐	5.000	4.970	2489.16	0.0620	P	3.8
4	☐	50.000	49.885	24762.11	0.6200	P	1.6
5	☐	125.000	123.891	61142.89	1.5396	P	1.7
6	☐	250.000	253.112	119442.54	3.1452	P	2.6
7	☐	500.000	493.628	233013.41	6.1336	P	1.5
8	☐	1000.000	1002.553	461284.23	12.4570	P	3.8
9	☐			217.78	0.0054	P	8.5

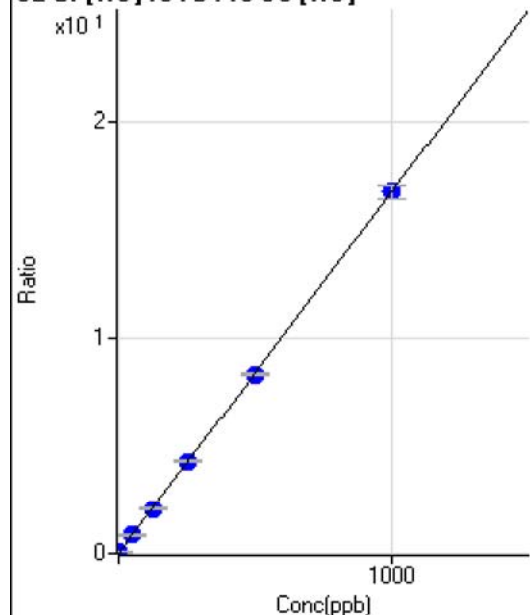
$$y = 0.0124 * x + 2.2414\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.04219$$

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	492.24	0.0124	P	5.1
2	☐	0.200					
3	☐	2.000	2.135	1932.39	0.0482	P	7.8
4	☐	50.000	50.107	34012.53	0.8518	P	2.7
5	☐	125.000	123.953	82951.44	2.0890	P	2.6
6	☐	250.000	256.128	163439.93	4.3033	P	2.1
7	☐	500.000	494.412	315151.71	8.2953	P	0.6
8	☐	1000.000	1001.387	621713.39	16.7888	P	3.6
9	☐			25889.70	0.6422	P	3.4

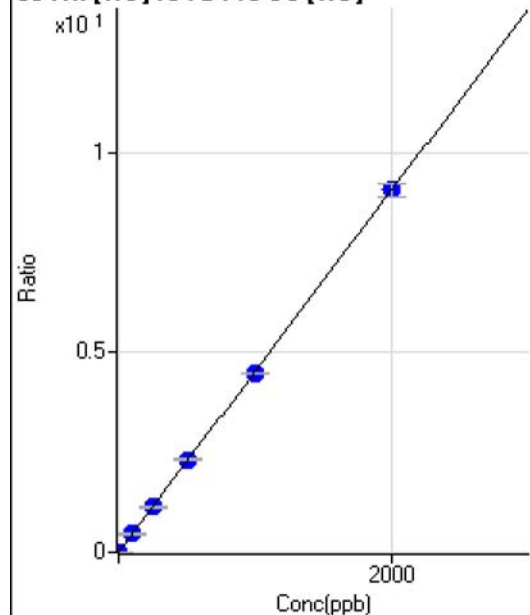
$$y = 0.0168 * x + 0.0124$$

$$R = 1.0000$$

$$DL = 0.1125$$

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	47.78	0.0012	P	24.0
2	☐	0.100					
3	☐	1.000	1.112	251.12	0.0062	P	10.5
4	☐	100.000	100.815	18296.67	0.4582	P	1.7
5	☐	250.000	250.442	45126.23	1.1364	P	2.5
6	☐	500.000	511.687	88124.79	2.3205	P	2.7
7	☐	1000.000	988.838	170327.06	4.4833	P	0.6
8	☐	2000.000	2002.563	336188.97	9.0782	P	3.5
9	☐			1765.70	0.0438	P	3.2

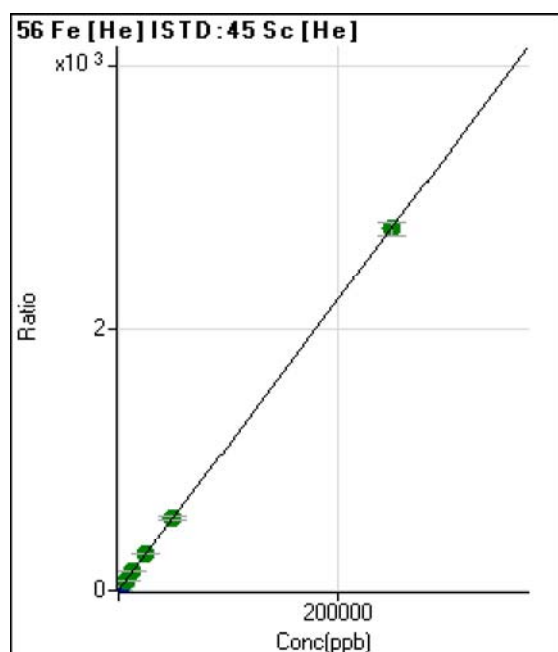
$$y = 0.0045 * x + 0.0012$$

$$R = 1.0000$$

$$DL = 0.1906$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1161.20	0.0292	P	4.3
2	☐	5.000					
3	☐	50.000	53.752	25082.29	0.6246	P	2.1
4	☐	2500.000	2547.080	1127622.16	28.2409	P	2.7
5	☐	6250.000	6371.235	2803651.07	70.5977	A	2.0
6	☐	12500.000	12931.328	5440679.81	143.2579	A	2.3
7	☐	25000.000	24984.395	10514453.01	276.7589	A	0.9
8	☐	50000.000	50465.939	20700581.48	558.9951	A	3.6
9	☐	250000.00	249883.30	111567998.7	2,767.762	A	3.5

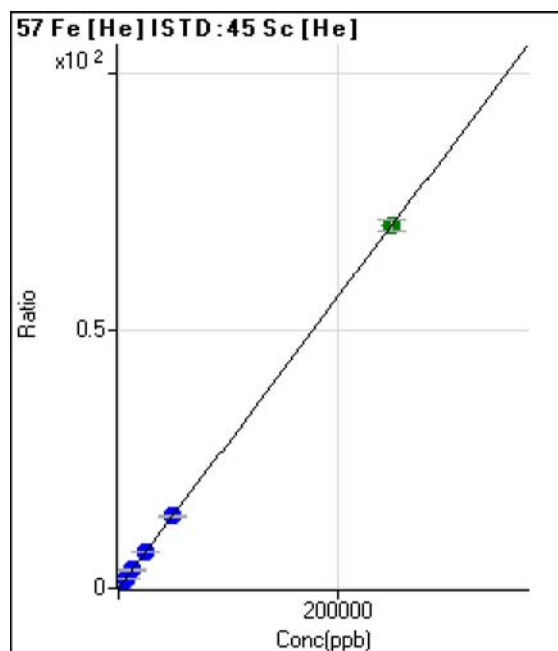
$$y = 0.0111 * x + 0.0292$$

$$R = 1.0000$$

$$DL = 0.3442$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	46.30	0.0012	P	52.6
2	☐	5.000					
3	☐	50.000	55.259	672.26	0.0167	P	7.2
4	☐	2500.000	2501.285	28193.88	0.7061	P	2.5
5	☐	6250.000	6172.390	69130.51	1.7407	P	1.7
6	☐	12500.000	12676.120	135724.57	3.5736	P	2.2
7	☐	25000.000	24699.849	264500.96	6.9622	P	1.0
8	☐	50000.000	49966.232	521447.34	14.0830	P	4.2
9	☐	250000.00	250029.88	2840639.59	70.4662	A	3.3

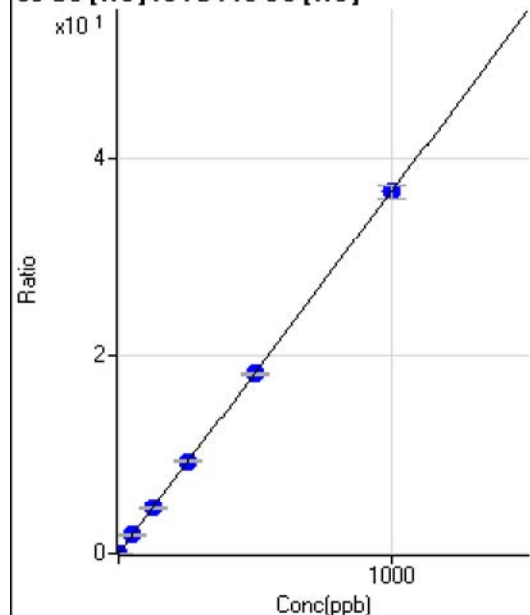
$$y = 2.8183E-004 * x + 0.0012$$

$$R = 1.0000$$

$$DL = 6.479$$

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	70.00	0.0018	P	22.5
2	☐	0.100					
3	☐	1.000	1.114	1709.02	0.0426	P	7.7
4	☐	50.000	50.732	74262.07	1.8597	P	2.3
5	☐	125.000	125.522	182636.22	4.5987	P	1.7
6	☐	250.000	256.033	356176.18	9.3784	P	2.3
7	☐	500.000	496.858	691369.17	18.1981	P	0.6
8	☐	1000.000	999.961	1356239.16	36.6231	P	3.5
9	☐			18592.63	0.4611	P	3.2

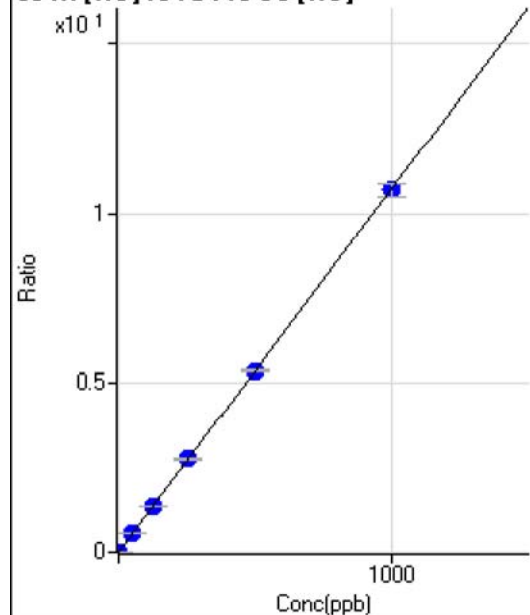
$$y = 0.0366 * x + 0.0018$$

$$R = 1.0000$$

$$DL = 0.03257$$

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	114.45	0.0029	P	8.4
2	☐	0.100					
3	☐	1.000	1.184	625.58	0.0156	P	3.1
4	☐	50.000	50.853	21878.54	0.5479	P	2.3
5	☐	125.000	125.335	53462.21	1.3462	P	1.6
6	☐	250.000	258.563	105362.34	2.7740	P	1.8
7	☐	500.000	499.487	203481.16	5.3561	P	1.2
8	☐	1000.000	998.031	396219.82	10.6993	P	3.5
9	☐			13991.66	0.3469	P	1.7

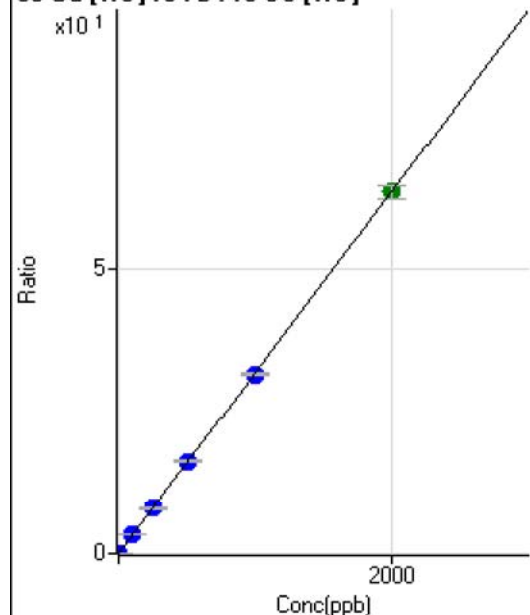
$$y = 0.0107 * x + 0.0029$$

$$R = 1.0000$$

$$DL = 0.06788$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	396.68	0.0100	P	14.0
2	☐	0.200					
3	☐	2.000	2.122	3109.30	0.0774	P	3.1
4	☐	100.000	101.808	129617.68	3.2460	P	2.3
5	☐	250.000	250.887	317091.13	7.9846	P	1.9
6	☐	500.000	512.870	619499.29	16.3119	P	2.3
7	☐	1000.000	988.695	1194282.06	31.4362	P	1.0
8	☐	2000.000	2002.234	2357192.53	63.6522	A	3.5
9	☐			4625.28	0.1147	P	3.2

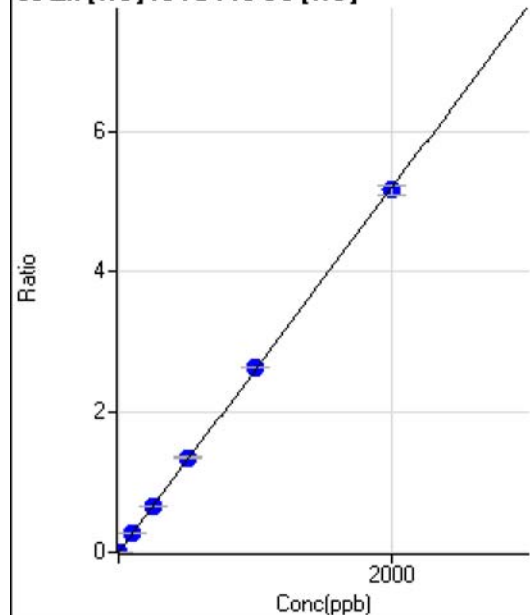
$$y = 0.0318 * x + 0.0100$$

$$R = 1.0000$$

$$DL = 0.1324$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	57.78	0.0014	P	27.8
2	☐	0.200					
3	☐	2.000	2.357	304.45	0.0076	P	5.8
4	☐	100.000	102.999	10752.11	0.2693	P	3.8
5	☐	250.000	252.875	26175.99	0.6591	P	1.8
6	☐	500.000	520.088	51427.33	1.3541	P	2.2
7	☐	1000.000	1009.215	99774.45	2.6262	P	0.3
8	☐	2000.000	1989.861	191726.37	5.1766	P	2.9
9	☐			1711.25	0.0424	P	2.2

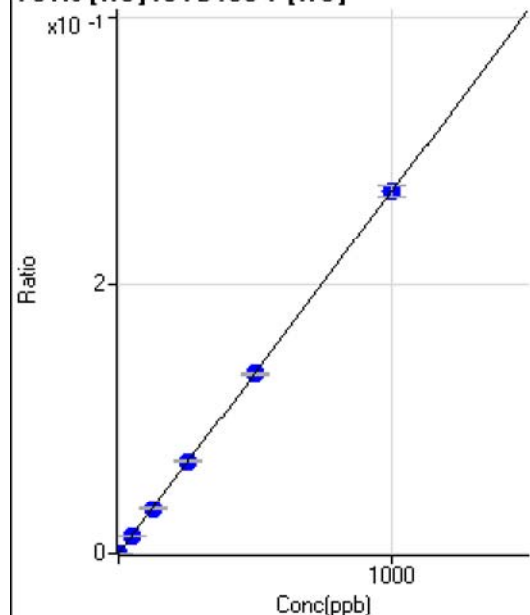
$$y = 0.0026 * x + 0.0014$$

$$R = 0.9999$$

$$DL = 0.465$$

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	3.09	0.0000	P	124.2
2	☐	0.100					
3	☐	1.000	1.045	79.01	0.0003	P	16.2
4	☐	50.000	49.323	3555.43	0.0133	P	3.7
5	☐	125.000	124.201	8910.98	0.0336	P	1.2
6	☐	250.000	254.719	17613.18	0.0689	P	2.2
7	☐	500.000	497.060	34181.11	0.1344	P	0.8
8	☐	1000.000	1000.424	67429.45	0.2704	P	3.2
9	☐			133.34	0.0005	P	11.6

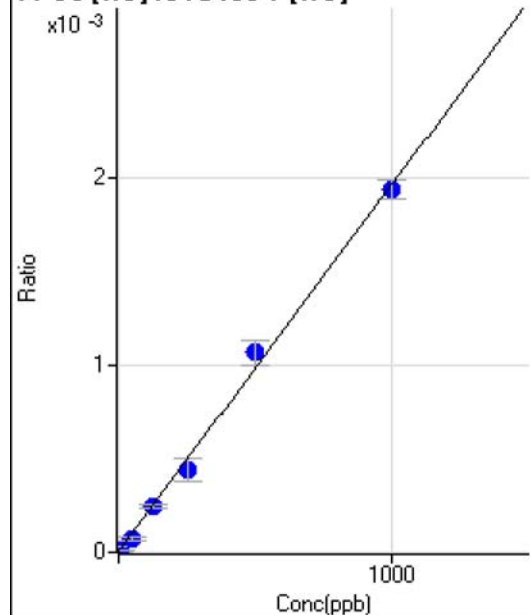
$$y = 2.7027\text{E-}004 * x + 1.1755\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.162$$

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
2	☐	0.500					
3	☐	5.000	8.416	5.56	0.0000	P	91.5
4	☐	50.000	36.156	20.00	0.0001	P	29.3
5	☐	125.000	121.876	64.44	0.0002	P	8.5
6	☐	250.000	222.719	112.23	0.0004	P	26.2
7	☐	500.000	542.185	271.12	0.0011	P	12.4
8	☐	1000.000	986.793	483.35	0.0019	P	5.3
9	☐			0.00	0.0000	P	

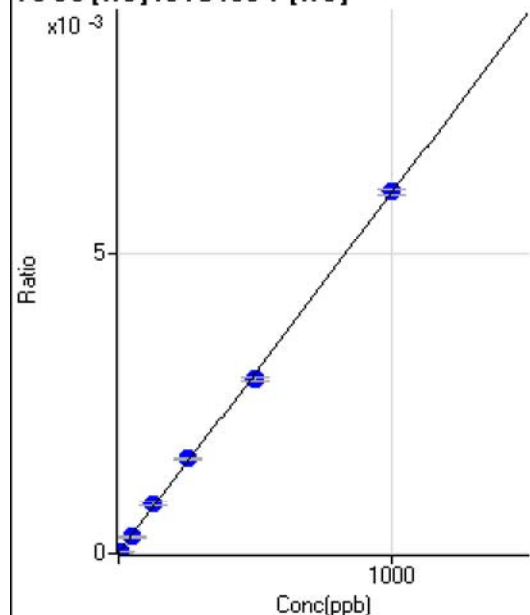
$$y = 1.9579\text{E-}006 * x + 4.3022\text{E-}006$$

$$R = 0.9982$$

$$DL = 11.42$$

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	3.09	0.0000	P	92.2
2	☐	0.500					
3	☐	5.000	2.624	7.41	0.0000	P	25.7
4	☐	50.000	44.507	74.69	0.0003	P	12.2
5	☐	125.000	136.430	220.99	0.0008	P	8.4
6	☐	250.000	262.628	407.42	0.0016	P	0.8
7	☐	500.000	483.503	743.24	0.0029	P	2.2
8	☐	1000.000	1003.949	1509.97	0.0061	P	1.6
9	☐			3.08	0.0000	P	36.5

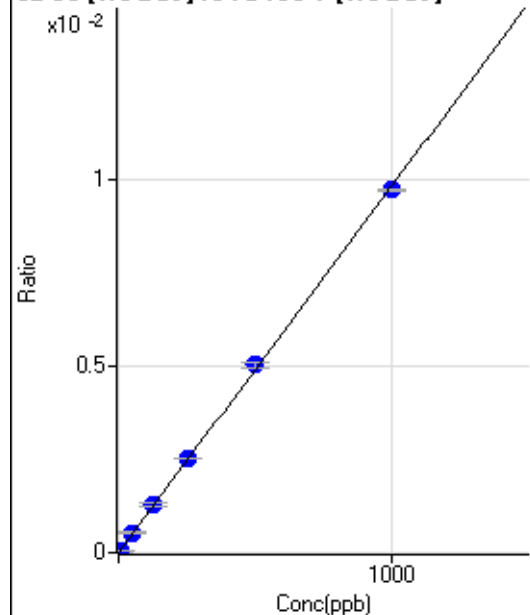
$$y = 6.0176\text{E-}006 * x + 1.1859\text{E-}005$$

$$R = 0.9996$$

$$DL = 5.453$$

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	-10.58	0.0000	P	-466.
2	☐	0.500					
3	☐	5.000	5.724	518.75	0.0001	P	4.2
4	☐	50.000	54.491	4899.27	0.0005	P	4.7
5	☐	125.000	131.319	12289.04	0.0013	P	4.2
6	☐	250.000	257.361	23766.57	0.0025	P	0.3
7	☐	500.000	512.865	46530.26	0.0050	P	3.3
8	☐	1000.000	990.709	90670.62	0.0097	P	0.4
9	☐			89.34	0.0000	P	47.7

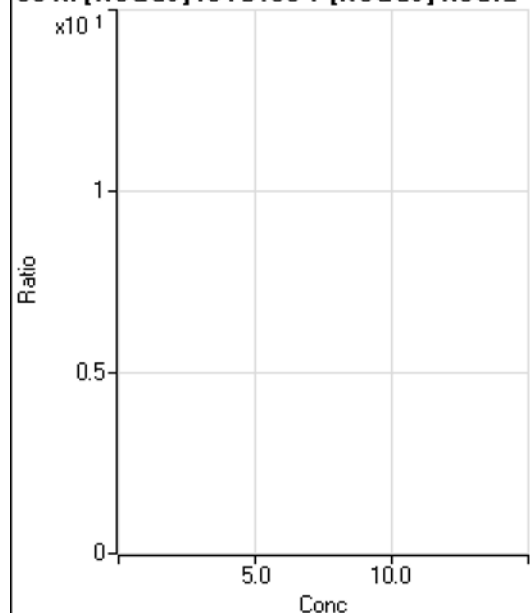
$$y = 9.8381\text{E-}006 * x - 1.1144\text{E-}006$$

$$R = 0.9998$$

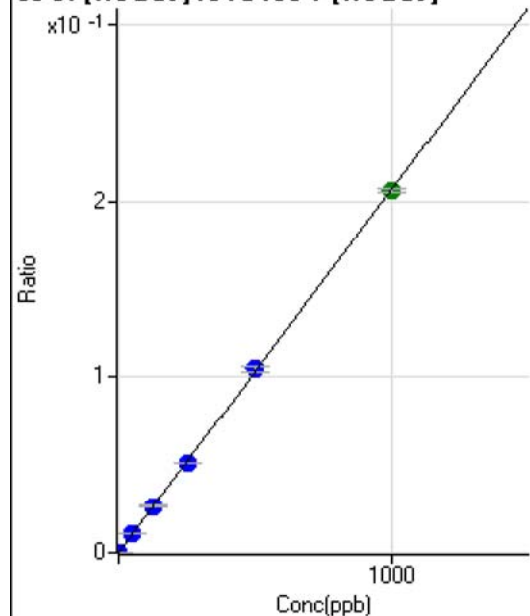
$$DL = 1.586$$

Weight: <None>

Min Conc: 0

83 Kr [NoGas] ISTD:89 Y [NoGas] No av.

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			323.34	0.0000	P	8.9
2	☐						
3	☐			305.56	0.0000	P	11.3
4	☐			295.57	0.0000	P	12.0
5	☐			312.23	0.0000	P	4.2
6	☐			284.45	0.0000	P	9.5
7	☐			278.90	0.0000	P	16.4
8	☐			312.23	0.0000	P	15.4
9	☐			296.68	0.0000	P	6.9

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	566.70	0.0001	P	10.7
2	☐	0.100					
3	☐	1.000	1.083	2672.61	0.0003	P	5.5
4	☐	50.000	51.923	98875.74	0.0108	P	2.5
5	☐	125.000	127.173	250918.17	0.0263	P	3.3
6	☐	250.000	250.143	486153.42	0.0518	P	0.4
7	☐	500.000	505.120	963742.49	0.1045	P	3.0
8	☐	1000.000	997.037	1918066.38	0.2062	A	1.1
9	☐			9381.42	0.0010	P	3.9

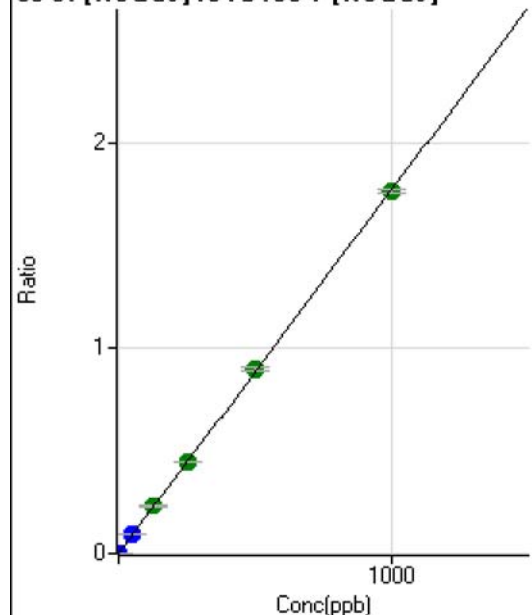
$$y = 2.0672\text{E-}004 * x + 6.0346\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.09406$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	194.46	0.0000	P	23.4
2	☐	0.100					
3	☐	1.000	1.093	18371.54	0.0020	P	8.0
4	☐	50.000	52.627	854573.02	0.0933	P	1.9
5	☐	125.000	129.951	2193312.07	0.2303	A	3.0
6	☐	250.000	253.024	4210864.76	0.4484	A	1.0
7	☐	500.000	505.980	8272252.62	0.8967	A	2.4
8	☐	1000.000	995.503	16413198.11	1.7642	A	1.0
9	☐			77464.31	0.0081	P	1.9

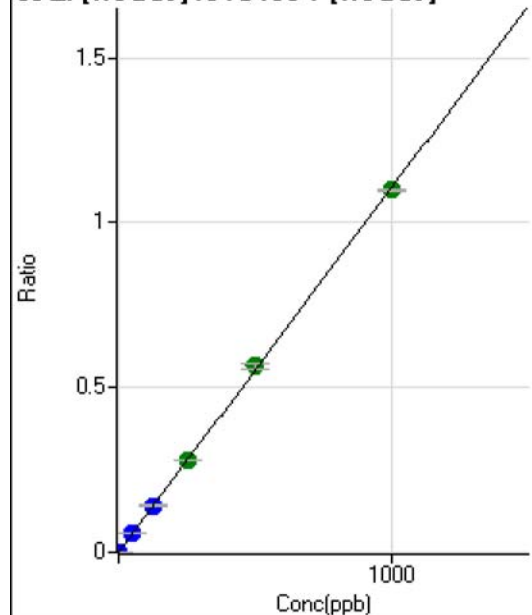
$$y = 0.0018 * x + 2.0703E-005$$

$$R = 1.0000$$

$$DL = 0.008189$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	813.95	0.0001	P	3.4
2	☐	0.100					
3	☐	1.000	1.029	11494.27	0.0012	P	6.3
4	☐	50.000	51.527	522515.49	0.0570	P	2.1
5	☐	125.000	128.592	1354126.77	0.1422	P	3.7
6	☐	250.000	252.016	2616492.42	0.2786	A	0.9
7	☐	500.000	508.844	5188960.49	0.5625	A	2.7
8	☐	1000.000	994.549	10227863.51	1.0993	A	0.5
9	☐			2764.30	0.0003	P	12.7

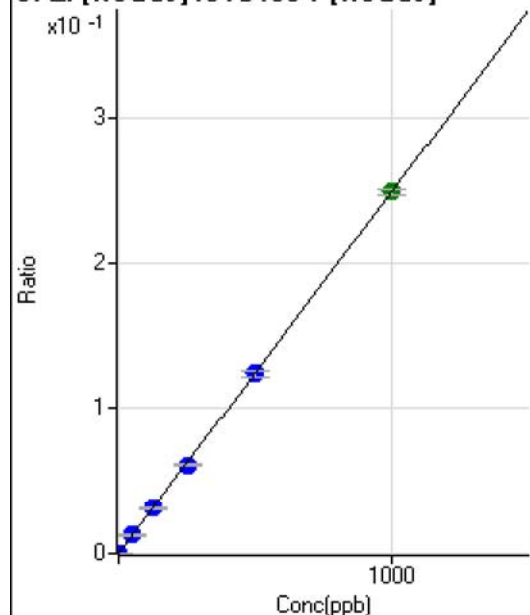
$$y = 0.0011 * x + 8.6692E-005$$

$$R = 0.9999$$

$$DL = 0.008011$$

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	155.56	0.0000	P	27.3
2	☐	0.100					
3	☐	1.000	1.002	2500.35	0.0003	P	4.6
4	☐	50.000	50.784	115974.46	0.0127	P	2.5
5	☐	125.000	126.347	299655.72	0.0315	P	4.0
6	☐	250.000	245.942	575146.12	0.0612	P	1.4
7	☐	500.000	498.455	1144852.72	0.1241	P	3.3
8	☐	1000.000	1001.579	2320122.45	0.2494	A	1.2
9	☐			547.26	0.0001	P	11.0

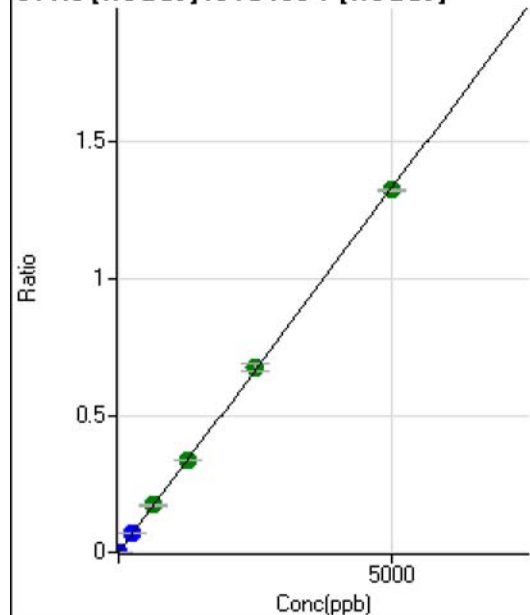
$$y = 2.4897\text{E-}004 * x + 1.6580\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.05458$$

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	330.58	0.0000	P	34.2
2	☐	0.500					
3	☐	5.000	5.252	13471.15	0.0014	P	1.4
4	☐	250.000	258.570	630998.97	0.0689	P	1.9
5	☐	625.000	648.715	1644948.25	0.1728	A	3.4
6	☐	1250.000	1269.072	3173113.85	0.3379	A	1.5
7	☐	2500.000	2526.858	6204878.35	0.6728	A	4.1
8	☐	5000.000	4978.410	12332074.67	1.3255	A	0.8
9	☐			17406.29	0.0018	P	2.5

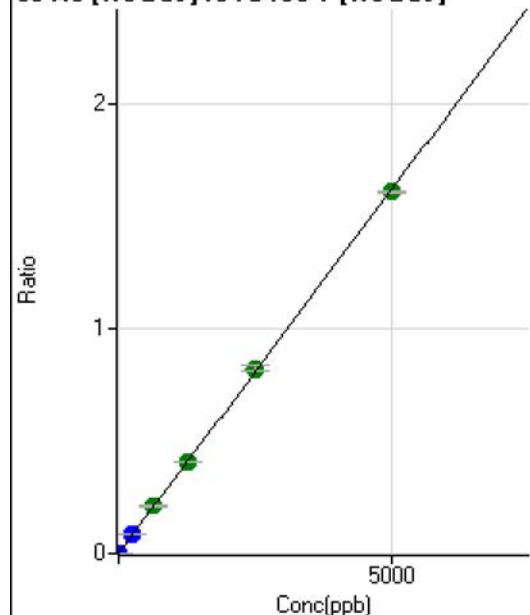
$$y = 2.6624\text{E-}004 * x + 3.5187\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.1356$$

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	88.89	0.0000	P	21.4
2	☐	0.500					
3	☐	5.000	5.203	15901.61	0.0017	P	3.1
4	☐	250.000	260.231	771539.40	0.0842	P	1.8
5	☐	625.000	647.223	1994156.38	0.2094	A	3.8
6	☐	1250.000	1258.803	3825206.73	0.4073	A	0.8
7	☐	2500.000	2540.582	7583427.16	0.8221	A	3.0
8	☐	5000.000	4974.218	14975213.18	1.6096	A	0.7
9	☐			28750.76	0.0030	P	0.5

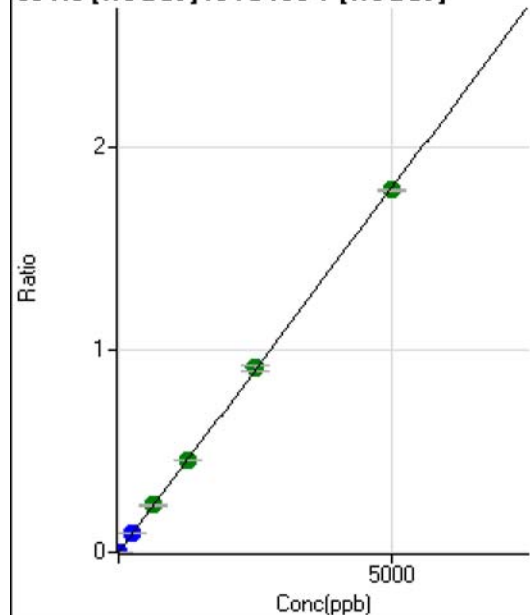
$$y = 3.2359\text{E-}004 * x + 9.4637\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.01876$$

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	200.01	0.0000	P	27.5
2	☐	0.500					
3	☐	5.000	5.125	17520.29	0.0019	P	1.4
4	☐	250.000	261.722	862555.26	0.0941	P	1.7
5	☐	625.000	655.964	2246825.09	0.2359	A	3.3
6	☐	1250.000	1265.187	4272951.74	0.4550	A	1.4
7	☐	2500.000	2531.129	8397038.12	0.9103	A	3.2
8	☐	5000.000	4976.182	16650739.43	1.7897	A	0.6
9	☐			32671.20	0.0034	P	4.3

$$y = 3.5965\text{E-}004 * x + 2.1312\text{E-}005$$

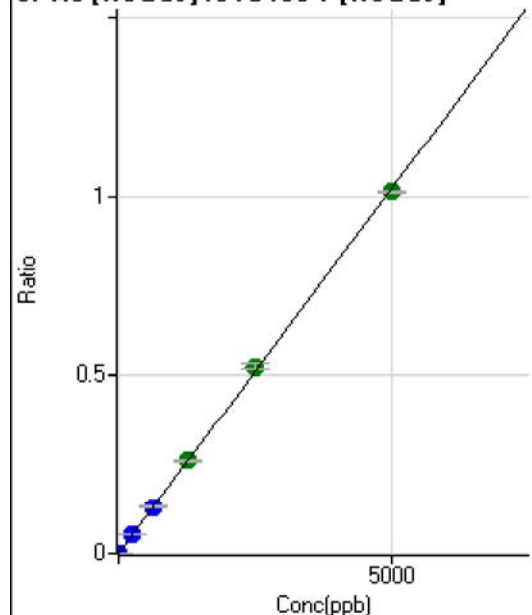
$$R = 1.0000$$

$$DL = 0.04884$$

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	91.67	0.0000	P	39.3
2	☐	0.500					
3	☐	5.000	5.224	10123.64	0.0011	P	5.2
4	☐	250.000	258.872	485083.04	0.0530	P	2.3
5	☐	625.000	636.674	1239846.09	0.1302	P	3.7
6	☐	1250.000	1277.211	2452879.46	0.2612	A	1.2
7	☐	2500.000	2554.849	4819801.06	0.5225	A	3.0
8	☐	5000.000	4963.870	9444912.88	1.0152	A	0.6
9	☐			18385.48	0.0019	P	3.4

$$y = 2.0451E-004 * x + 9.7556E-006$$

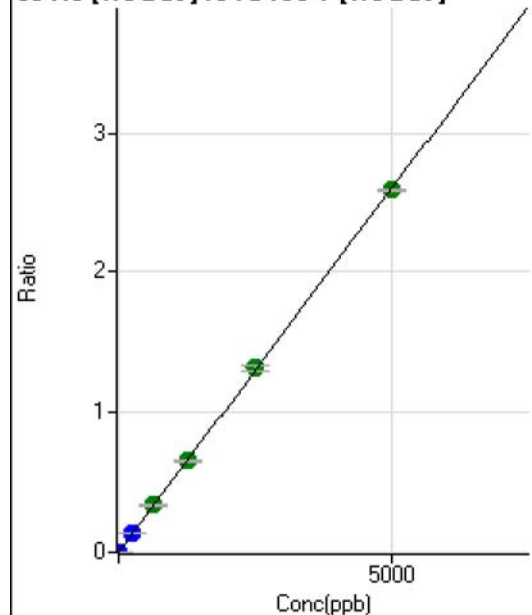
$$R = 0.9999$$

$$DL = 0.0562$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	205.57	0.0000	P	15.4
2	☐	0.500					
3	☐	5.000	5.259	25886.77	0.0028	P	5.2
4	☐	250.000	259.919	1238691.32	0.1352	P	2.0
5	☐	625.000	648.402	3211852.78	0.3373	A	3.3
6	☐	1250.000	1255.108	6130473.92	0.6528	A	1.0
7	☐	2500.000	2524.860	12114006.26	1.3133	A	3.0
8	☐	5000.000	4982.872	24112996.72	2.5917	A	0.2
9	☐			46592.34	0.0049	P	2.0

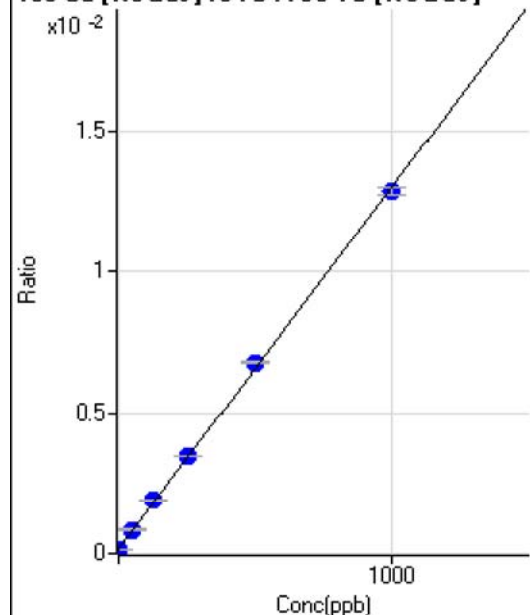
$$y = 5.2012E-004 * x + 2.1897E-005$$

$$R = 1.0000$$

$$DL = 0.01943$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1928.00	0.0002	P	7.7
2	☐	0.100					
3	☐	1.000	0.231	1964.13	0.0002	P	7.1
4	☐	50.000	53.318	9959.67	0.0008	P	4.4
5	☐	125.000	134.073	23409.96	0.0019	P	3.6
6	☐	250.000	257.700	42629.65	0.0035	P	1.2
7	☐	500.000	515.296	82091.59	0.0068	P	1.5
8	☐	1000.000	989.128	160524.59	0.0129	P	2.1
9	☐			1961.36	0.0002	P	6.9

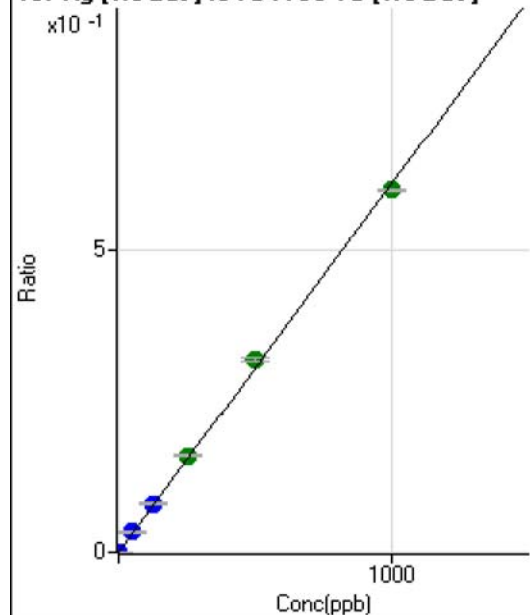
$$y = 1.2839\text{E-}005 * x + 1.6084\text{E-}004$$

$$R = 0.9998$$

$$DL = 2.887$$

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	66.67	0.0000	P	26.0
2	☐	0.100					
3	☐	1.000	1.193	8794.90	0.0007	P	5.0
4	☐	50.000	55.223	398243.30	0.0338	P	2.1
5	☐	125.000	132.826	1010927.26	0.0813	P	3.7
6	☐	250.000	263.069	1977825.78	0.1610	A	1.0
7	☐	500.000	522.518	3872515.75	0.3197	A	2.4
8	☐	1000.000	984.235	7518093.31	0.6023	A	0.6
9	☐			963.97	0.0001	P	1.3

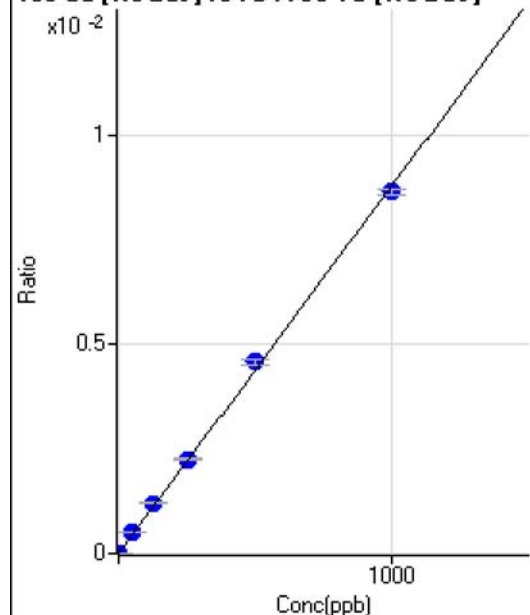
$$y = 6.1191\text{E-}004 * x + 5.5750\text{E-}006$$

$$R = 0.9995$$

$$DL = 0.007113$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4.17	0.0000	P	99.3
2	☐	0.100					
3	☐	1.000	1.214	130.56	0.0000	P	34.3
4	☐	50.000	55.569	5758.30	0.0005	P	0.1
5	☐	125.000	135.987	14864.02	0.0012	P	3.9
6	☐	250.000	258.158	27866.57	0.0023	P	2.1
7	☐	500.000	521.218	55456.75	0.0046	P	2.8
8	☐	1000.000	985.699	108097.29	0.0087	P	1.5
9	☐			40.28	0.0000	P	16.5

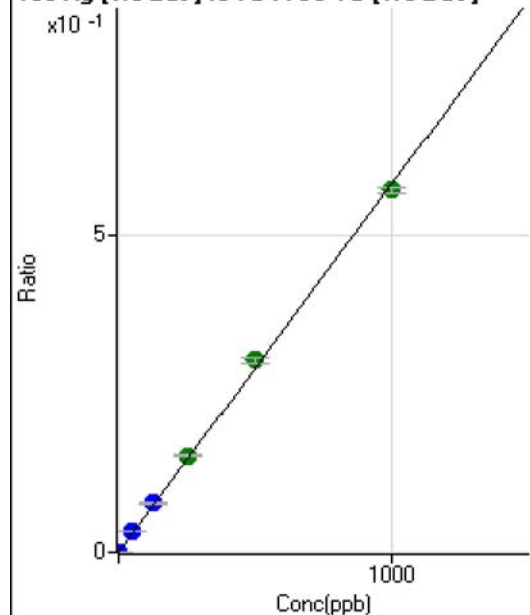
$$y = 8.7853\text{E-}006 * x + 3.4665\text{E-}007$$

$$R = 0.9996$$

$$DL = 0.1175$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	52.78	0.0000	P	33.7
2	☐	0.100					
3	☐	1.000	1.162	8127.80	0.0007	P	6.2
4	☐	50.000	55.959	383344.47	0.0325	P	2.8
5	☐	125.000	133.683	966583.41	0.0777	P	3.7
6	☐	250.000	262.931	1878012.45	0.1529	A	0.6
7	☐	500.000	520.628	3665280.94	0.3027	A	2.7
8	☐	1000.000	985.070	7148022.55	0.5726	A	1.5
9	☐			1025.09	0.0001	P	10.7

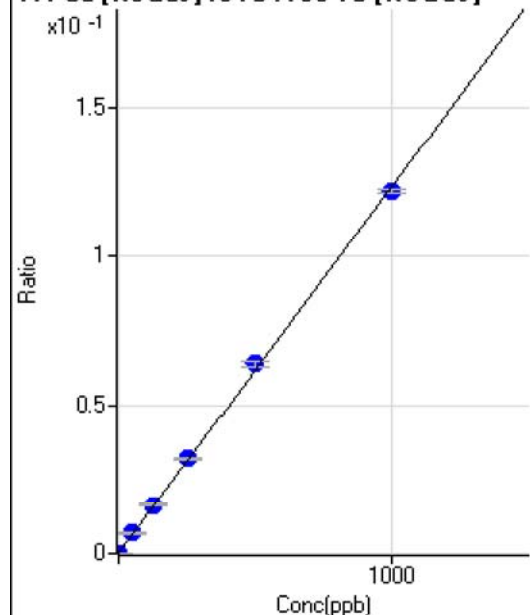
$$y = 5.8132\text{E-}004 * x + 4.4155\text{E-}006$$

$$R = 0.9996$$

$$DL = 0.007682$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1360.57	0.0001	P	7.2
2	☐	0.100					
3	☐	1.000	1.014	2853.08	0.0002	P	1.3
4	☐	50.000	54.791	80862.48	0.0069	P	2.8
5	☐	125.000	132.740	204797.46	0.0165	P	3.4
6	☐	250.000	258.982	393372.83	0.0320	P	0.8
7	☐	500.000	516.347	771669.17	0.0637	P	2.8
8	☐	1000.000	988.374	1521248.54	0.1219	P	1.1
9	☐			1728.11	0.0001	P	4.2

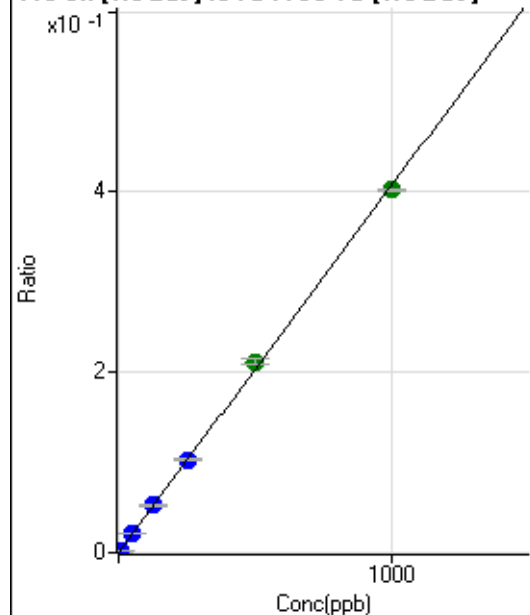
$$y = 1.2319\text{E-}004 * x + 1.1351\text{E-}004$$

$$R = 0.9997$$

$$DL = 0.2$$

Weight: <None>

Min Conc: 0

118 Sn [NoGas] ISTD:159 Tb [NoGas]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	850.08	0.0001	P	3.0
2	☐	0.500					
3	☐	5.000	5.479	27495.86	0.0023	P	4.9
4	☐	50.000	53.724	258382.44	0.0219	P	2.1
5	☐	125.000	130.434	660734.87	0.0531	P	4.3
6	☐	250.000	253.349	1267205.79	0.1031	P	1.0
7	☐	500.000	520.004	2562701.60	0.2116	A	3.1
8	☐	1000.000	988.293	5020002.63	0.4021	A	0.5
9	☐			13462.90	0.0011	P	3.7

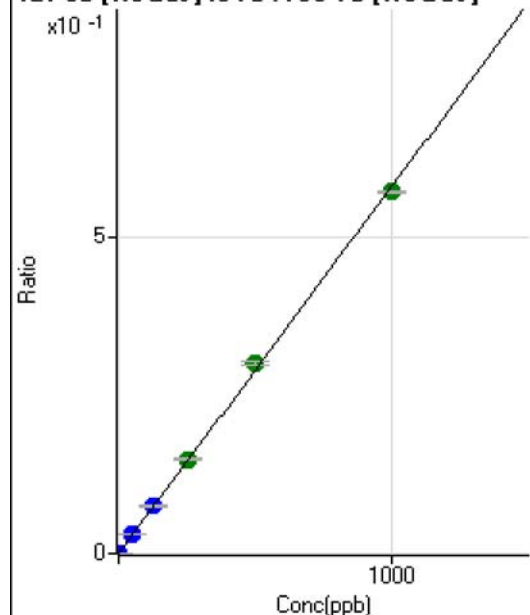
$$y = 4.0684\text{E-}004 * x + 7.0961\text{E-}005$$

$$R = 0.9997$$

$$DL = 0.01583$$

Weight: <None>

Min Conc: 0

121 Sb [NoGas] ISTD : 159 Tb [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	136.12	0.0000	P	20.5
2	☐	0.200					
3	☐	2.000	2.091	14622.49	0.0012	P	4.7
4	☐	50.000	53.166	363207.21	0.0308	P	3.0
5	☐	125.000	130.182	938531.69	0.0755	P	3.9
6	☐	250.000	258.348	1839829.45	0.1498	A	1.2
7	☐	500.000	519.698	3648378.73	0.3012	A	2.2
8	☐	1000.000	987.258	7143177.77	0.5722	A	0.8
9	☐			19467.70	0.0016	P	4.7

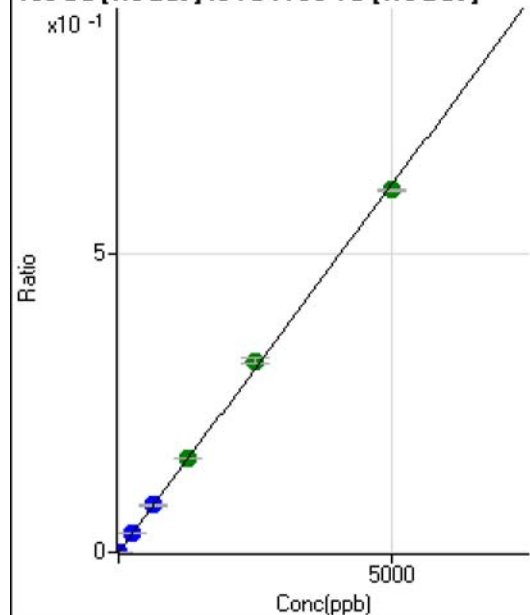
$$y = 5.7961\text{E-}004 * x + 1.1345\text{E-}005$$

$$R = 0.9997$$

$$DL = 0.01201$$

Weight: <None>

Min Conc: 0

135 Ba [NoGas] ISTD : 159 Tb [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	27.78	0.0000	P	95.6
2	☐	1.000					
3	☐	10.000	10.740	15893.47	0.0013	P	4.9
4	☐	250.000	269.871	392994.64	0.0334	P	2.3
5	☐	625.000	652.434	1002703.55	0.0806	P	3.9
6	☐	1250.000	1289.637	1958110.42	0.1594	A	0.4
7	☐	2500.000	2600.419	3891520.70	0.3214	A	3.0
8	☐	5000.000	4935.457	7613662.50	0.6099	A	0.4
9	☐			1605.73	0.0001	P	3.1

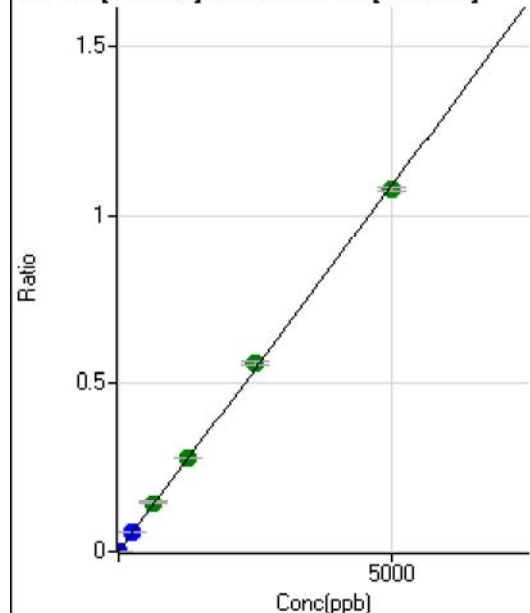
$$y = 1.2358\text{E-}004 * x + 2.3069\text{E-}006$$

$$R = 0.9997$$

$$DL = 0.05352$$

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	55.56	0.0000	P	16.4
2	☐	1.000					
3	☐	10.000	10.614	27668.72	0.0023	P	3.9
4	☐	250.000	269.056	689691.90	0.0585	P	2.6
5	☐	625.000	661.415	1789244.23	0.1439	A	4.3
6	☐	1250.000	1292.962	3455840.44	0.2813	A	0.6
7	☐	2500.000	2568.646	6767704.93	0.5588	A	2.2
8	☐	5000.000	4949.431	13440372.52	1.0767	A	0.9
9	☐			2717.09	0.0002	P	6.4

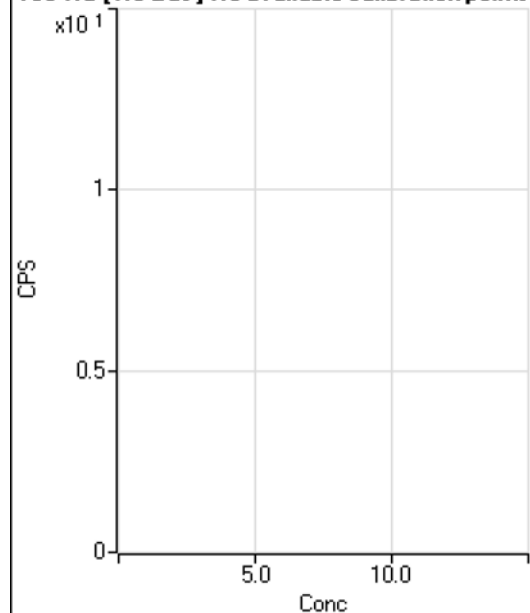
$$y = 2.1754\text{E-}004 * x + 4.6327\text{E-}006$$

$$R = 0.9998$$

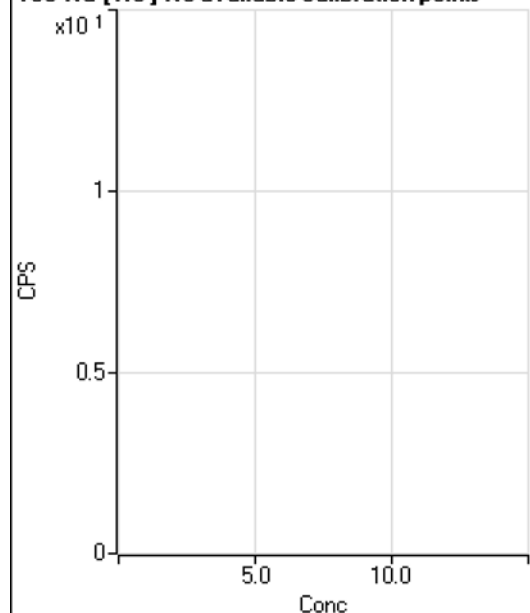
$$DL = 0.01045$$

Weight: <None>

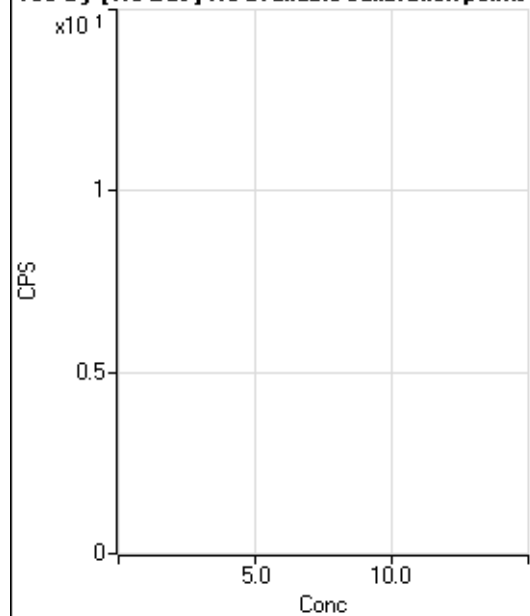
Min Conc: 0

150 Nd [No Gas] No available calibration points

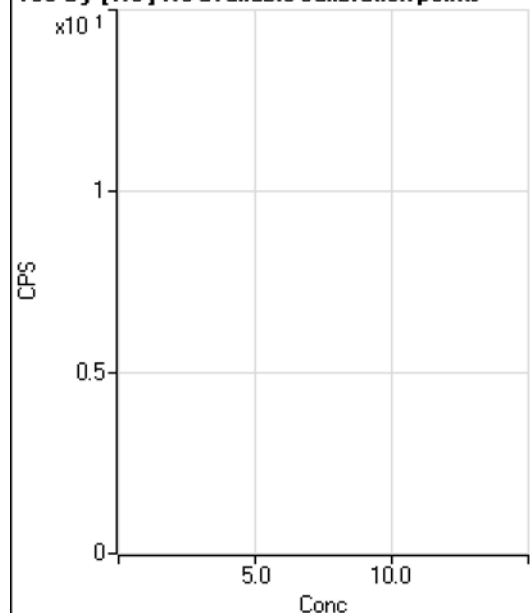
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.45		P	86.6
2	☐						
3	☐			11.11		P	91.7
4	☐			17.78		P	57.3
5	☐			75.56		P	18.4
6	☐			57.78		P	40.5
7	☐			202.23		P	15.6
8	☐			317.79		P	13.6
9	☐			71.11		P	37.9

150 Nd [He] No available calibration points

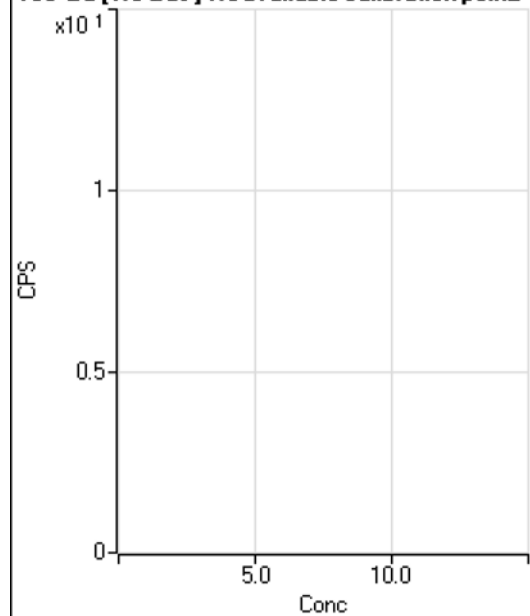
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			0.00		P	
4	☐			0.00		P	
5	☐			1.11		P	173.2
6	☐			0.00		P	
7	☐			5.56		P	91.6
8	☐			3.33		P	100.1
9	☐			7.78		P	65.5

156 Dy [No Gas] No available calibration points

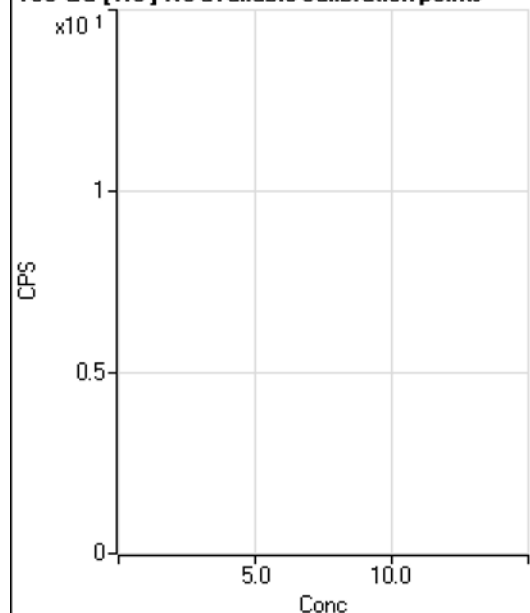
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			19.45		P	24.7
2	☐						
3	☐			36.11		P	13.3
4	☐			38.89		P	12.4
5	☐			38.89		P	49.5
6	☐			58.34		P	14.3
7	☐			102.78		P	16.9
8	☐			97.23		P	26.2
9	☐			105.56		P	4.6

156 Dy [He] No available calibration points

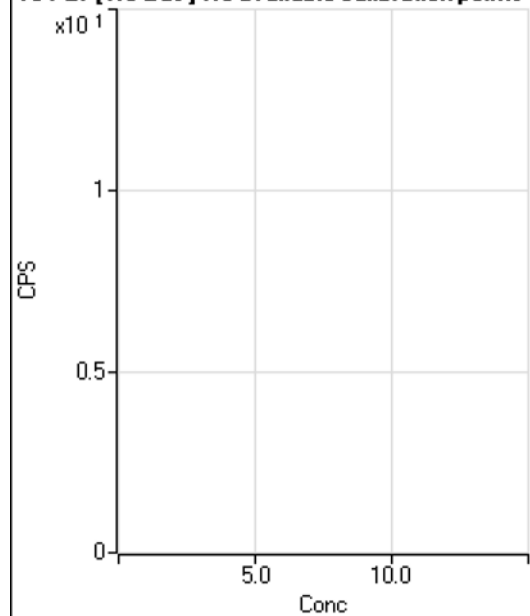
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			1.11		P	173.2
4	☐			3.33		P	0.0
5	☐			0.00		P	
6	☐			3.33		P	100.1
7	☐			11.11		P	75.5
8	☐			7.78		P	89.2
9	☐			11.11		P	17.3

160 Gd [No Gas] No available calibration poin_

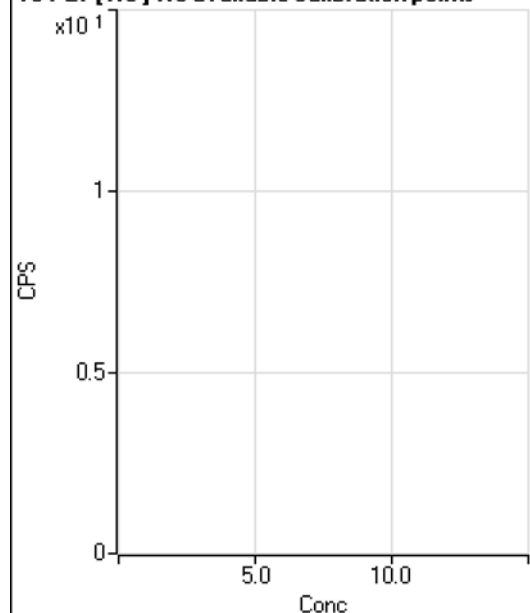
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			75.00		P	40.1
2	☐						
3	☐			69.45		P	66.1
4	☐			44.45		P	10.8
5	☐			86.11		P	14.8
6	☐			52.78		P	24.1
7	☐			94.45		P	18.4
8	☐			77.79		P	27.0
9	☐			150.01		P	16.7

160 Gd [He] No available calibration points

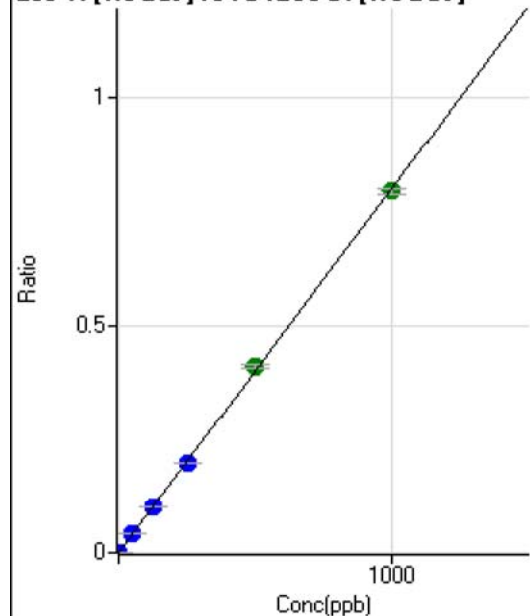
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7.78		P	65.5
2	☐						
3	☐			8.89		P	43.3
4	☐			7.78		P	89.2
5	☐			10.00		P	66.7
6	☐			6.67		P	50.0
7	☐			15.56		P	53.9
8	☐			13.33		P	75.0
9	☐			13.33		P	25.0

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			22.22		P	21.6
2	☐						
3	☐			52.78		P	24.1
4	☐			27.78		P	45.8
5	☐			75.01		P	19.2
6	☐			22.22		P	43.3
7	☐			72.23		P	59.2
8	☐			38.89		P	32.7
9	☐			55.56		P	31.2

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	0.0
2	☐						
3	☐			5.55		P	124.9
4	☐			2.22		P	86.6
5	☐			7.78		P	89.2
6	☐			5.56		P	34.7
7	☐			11.11		P	75.5
8	☐			6.67		P	86.6
9	☐			3.33		P	173.2

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	183.34	0.0000	P	49.2
2	☐	0.100					
3	☐	1.000	1.047	6574.28	0.0009	P	8.5
4	☐	50.000	51.260	306664.41	0.0411	P	2.3
5	☐	125.000	126.960	788998.33	0.1018	P	3.0
6	☐	250.000	249.097	1540997.96	0.1997	P	0.7
7	☐	500.000	510.254	3115203.35	0.4091	A	2.1
8	☐	1000.000	994.791	6163518.20	0.7976	A	1.3
9	☐			3914.70	0.0005	P	4.0

$$y = 8.0179\text{E-}004 * x + 2.4153\text{E-}005$$

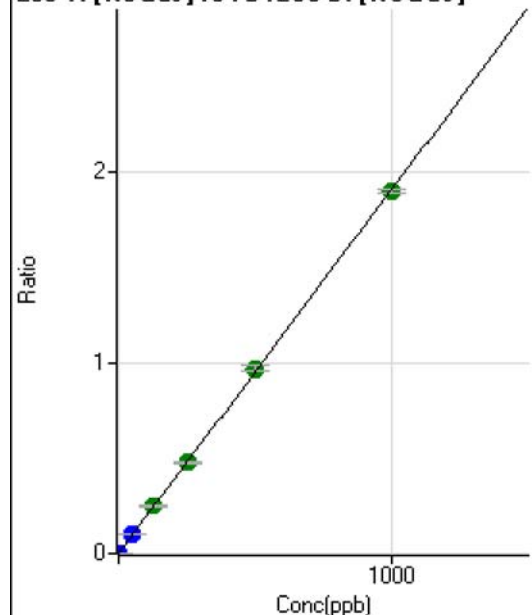
$$R = 0.9999$$

$$DL = 0.04445$$

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	505.59	0.0001	P	16.7
2	☐	0.100					
3	☐	1.000	1.077	16166.50	0.0021	P	2.8
4	☐	50.000	51.933	739728.99	0.0992	P	1.7
5	☐	125.000	129.684	1918305.47	0.2476	A	3.7
6	☐	250.000	251.664	3706387.50	0.4804	A	1.0
7	☐	500.000	507.308	7372566.49	0.9684	A	2.9
8	☐	1000.000	995.247	14680189.39	1.8997	A	1.0
9	☐			8792.30	0.0012	P	4.0

$$y = 0.0019 * x + 6.6388E-005$$

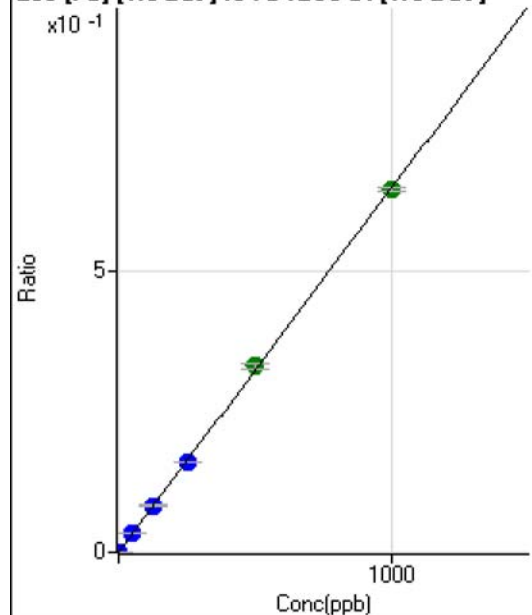
$$R = 1.0000$$

$$DL = 0.01745$$

Weight: <None>

Min Conc: 0

206 [Pb] [No Gas] ISTD : 209 Bi [No Gas]



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	266.68	0.0000	P	9.3
2	☐	0.100					
3	☐	1.000	1.088	5653.26	0.0007	P	4.4
4	☐	50.000	51.742	251090.70	0.0337	P	2.4
5	☐	125.000	127.401	642078.23	0.0829	P	2.8
6	☐	250.000	247.553	1241803.82	0.1610	P	0.9
7	☐	500.000	509.830	2523690.31	0.3315	A	2.4
8	☐	1000.000	995.309	5000209.31	0.6471	A	1.0
9	☐			28012.92	0.0038	P	0.9

$$y = 6.5009E-004 * x + 3.4983E-005$$

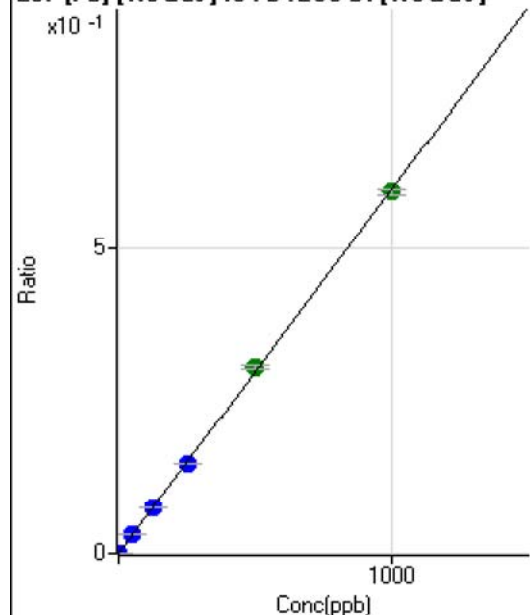
$$R = 0.9999$$

$$DL = 0.01503$$

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	5.0
2	☐	0.100					
3	☐	1.000	1.052	5040.07	0.0007	P	6.6
4	☐	50.000	51.065	227064.18	0.0304	P	1.7
5	☐	125.000	126.388	583572.16	0.0753	P	2.9
6	☐	250.000	246.359	1132201.54	0.1468	P	0.9
7	☐	500.000	511.205	2318494.58	0.3045	A	1.9
8	☐	1000.000	995.081	4579784.02	0.5927	A	1.3
9	☐			23700.45	0.0032	P	1.6

$$y = 5.9557E-004 * x + 3.5436E-005$$

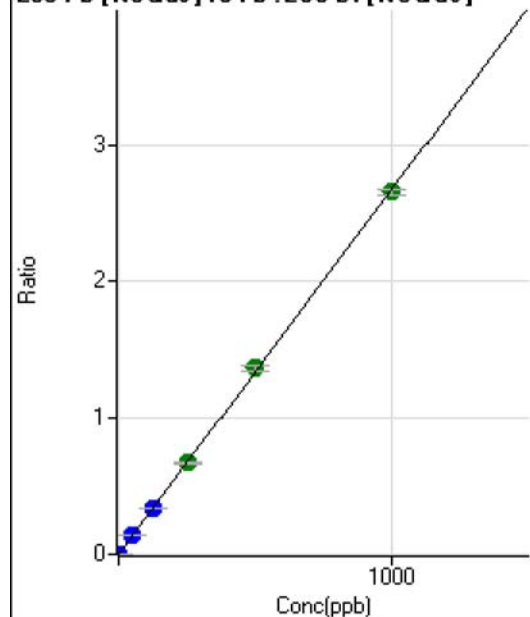
$$R = 0.9999$$

$$DL = 0.008906$$

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	1116.72	0.0001	P	7.3
2	☐	0.100					
3	☐	1.000	1.048	22436.13	0.0029	P	4.0
4	☐	50.000	51.331	1023096.58	0.1372	P	2.2
5	☐	125.000	126.805	2624607.23	0.3387	P	3.1
6	☐	250.000	250.924	5169761.07	0.6701	A	0.6
7	☐	500.000	509.934	10366664.18	1.3617	A	2.8
8	☐	1000.000	994.510	20519443.23	2.6555	A	1.3
9	☐			109945.19	0.0150	P	0.6

$$y = 0.0027 * x + 1.4646E-004$$

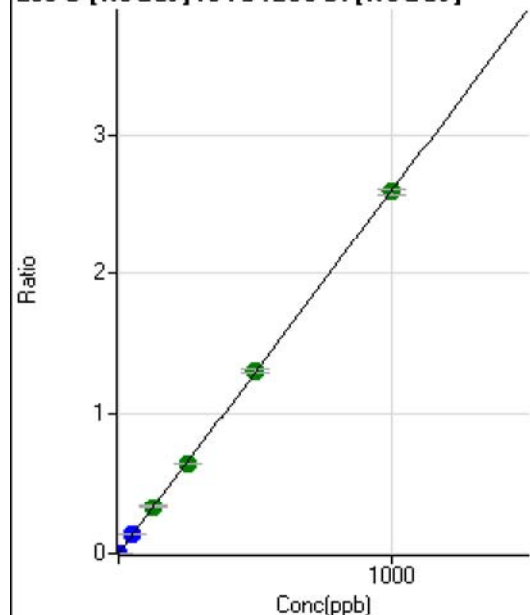
$$R = 0.9999$$

$$DL = 0.01203$$

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	27.78	0.0000	P	35.8
2	☐	0.100					
3	☐	1.000	1.030	20406.43	0.0027	P	2.5
4	☐	50.000	50.678	981081.68	0.1316	P	1.3
5	☐	125.000	128.084	2576335.37	0.3325	A	3.4
6	☐	250.000	250.293	5012441.26	0.6497	A	0.3
7	☐	500.000	502.431	9930368.28	1.3042	A	2.0
8	☐	1000.000	998.292	20023918.16	2.5914	A	1.4
9	☐			1878.02	0.0003	P	17.0

$$y = 0.0026 * x + 3.6546E-006$$

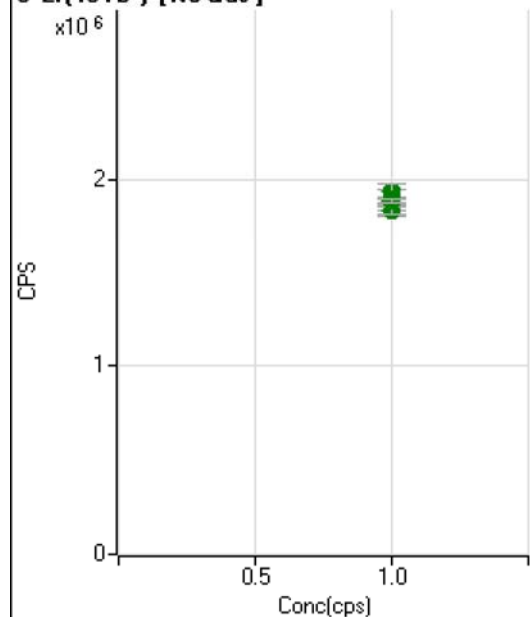
$$R = 1.0000$$

$$DL = 0.001514$$

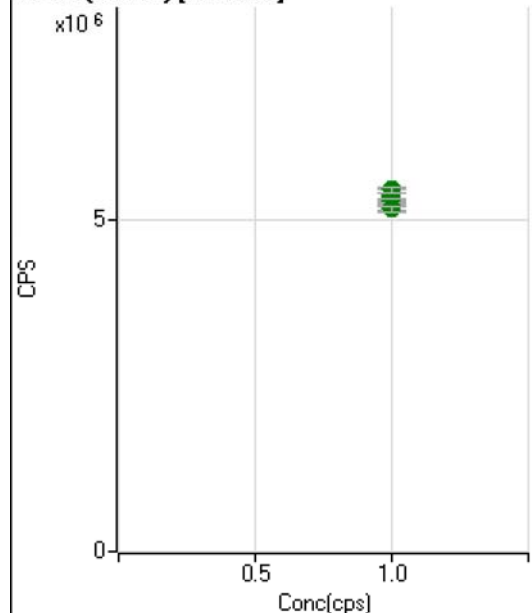
Weight: <None>

Min Conc: 0

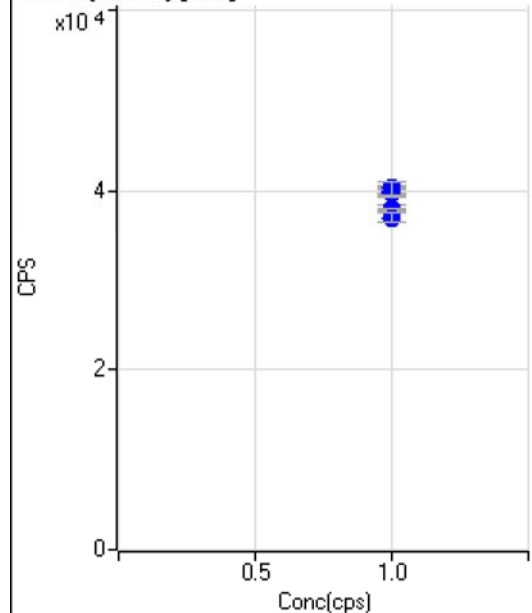
6 Li (ISTD) [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1881185.32		A	1.1
2	☐	1.000					
3	☐	1.000		1911002.26		A	4.1
4	☐	1.000		1856652.04		A	1.9
5	☐	1.000		1933932.31		A	4.4
6	☐	1.000		1891226.66		A	1.6
7	☐	1.000		1839405.76		A	3.8
8	☐	1.000		1833429.40		A	1.8
9	☐	1.000		1887054.74		A	1.0

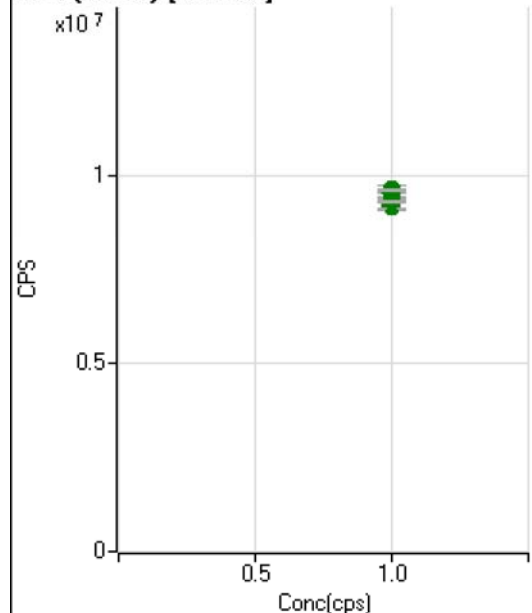
⁴⁵Sc(ISTD) [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5248182.28		A	1.6
2	☐	1.000					
3	☐	1.000		5352881.11		A	2.3
4	☐	1.000		5219799.73		A	3.2
5	☐	1.000		5363949.12		A	3.9
6	☐	1.000		5284956.54		A	0.9
7	☐	1.000		5167182.93		A	2.2
8	☐	1.000		5160559.57		A	1.4
9	☐	1.000		5452376.90		A	1.7

⁴⁵Sc(ISTD) [He]

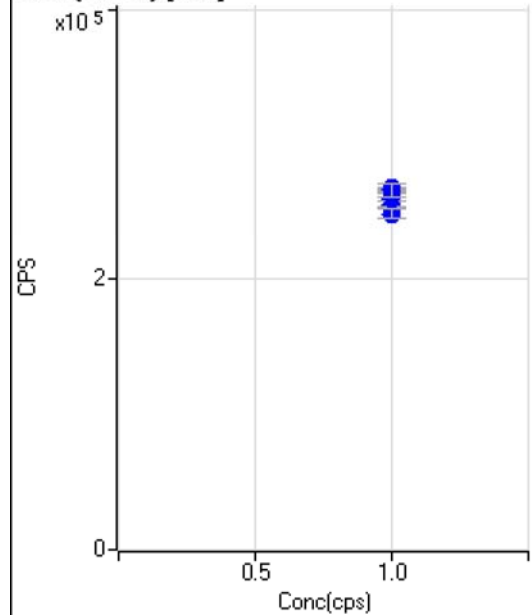
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		39757.48		P	1.8
2	☐	1.000					
3	☐	1.000		40170.85		P	2.2
4	☐	1.000		39945.81		P	2.4
5	☐	1.000		39722.80		P	2.0
6	☐	1.000		37990.35		P	2.1
7	☐	1.000		37992.43		P	0.7
8	☐	1.000		37060.14		P	3.2
9	☐	1.000		40342.45		P	3.5

89 Y (ISTD) [No Gas]

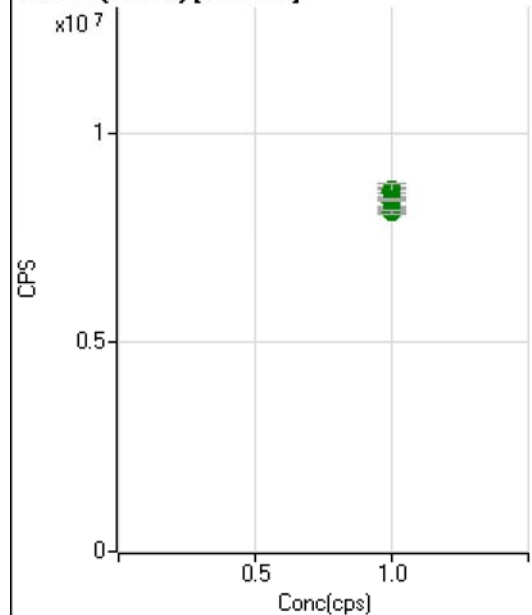


	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9388540.90		A	0.4
2	☐	1.000					
3	☐	1.000		9395887.71		A	2.3
4	☐	1.000		9163274.24		A	1.9
5	☐	1.000		9529570.48		A	3.5
6	☐	1.000		9390996.87		A	0.9
7	☐	1.000		9229658.06		A	2.8
8	☐	1.000		9303908.33		A	0.6
9	☐	1.000		9601669.16		A	0.8

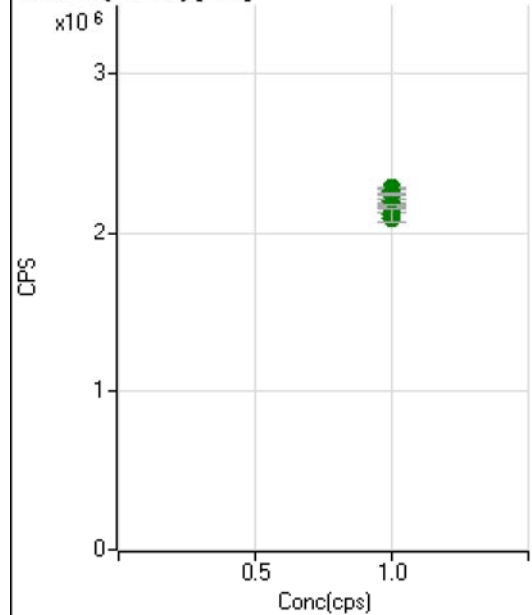
89 Y (ISTD) [He]



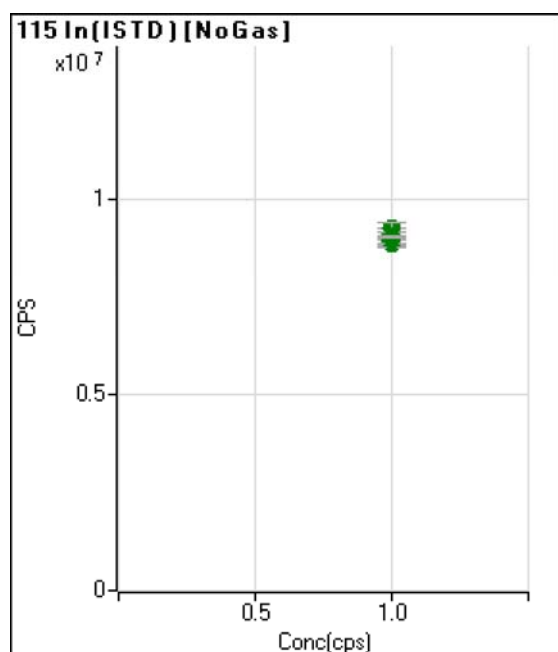
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		259897.61		P	1.3
2	☐	1.000					
3	☐	1.000		268383.66		P	0.8
4	☐	1.000		266612.33		P	2.0
5	☐	1.000		265369.66		P	0.8
6	☐	1.000		255894.57		P	2.4
7	☐	1.000		254420.81		P	0.4
8	☐	1.000		249512.03		P	2.6
9	☐	1.000		266768.16		P	3.9

103 Rh(ISTD) [NoGas]

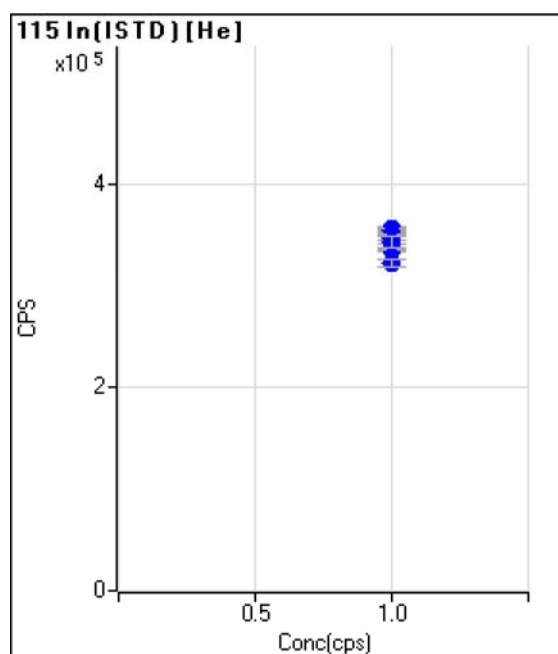
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8607761.31		A	0.7
2	☐	1.000					
3	☐	1.000		8541735.87		A	3.3
4	☐	1.000		8319894.03		A	1.7
5	☐	1.000		8636293.77		A	3.5
6	☐	1.000		8408802.44		A	0.7
7	☐	1.000		8142525.88		A	2.3
8	☐	1.000		8150453.83		A	0.7
9	☐	1.000		8108265.55		A	1.0

103 Rh(ISTD) [He]

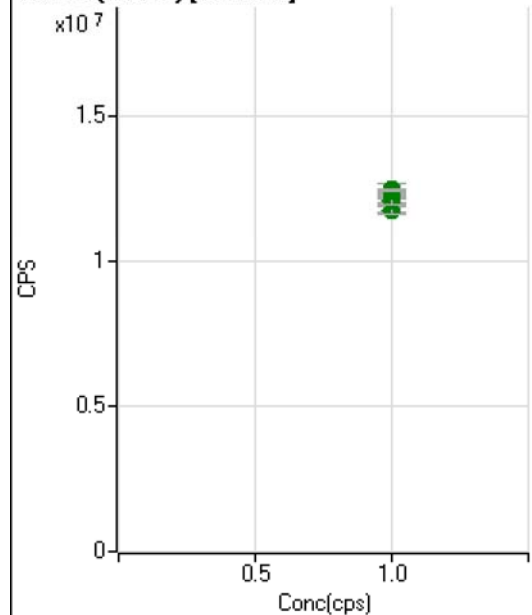
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2199264.32		A	1.4
2	☐	1.000					
3	☐	1.000		2284589.81		A	0.9
4	☐	1.000		2267516.11		A	1.8
5	☐	1.000		2246247.00		A	0.2
6	☐	1.000		2176907.52		A	1.6
7	☐	1.000		2170656.93		A	0.5
8	☐	1.000		2097972.75		A	2.9
9	☐	1.000		2116407.12		A	3.8



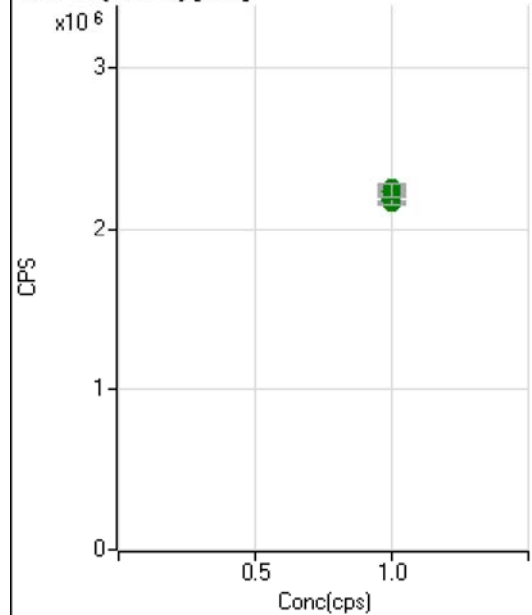
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9105469.78		A	0.9
2	☐	1.000					
3	☐	1.000		9109671.95		A	2.8
4	☐	1.000		8886915.07		A	1.9
5	☐	1.000		9230885.37		A	3.7
6	☐	1.000		9055109.52		A	2.0
7	☐	1.000		8874759.12		A	2.9
8	☐	1.000		8940728.80		A	1.6
9	☐	1.000		9023809.70		A	0.6



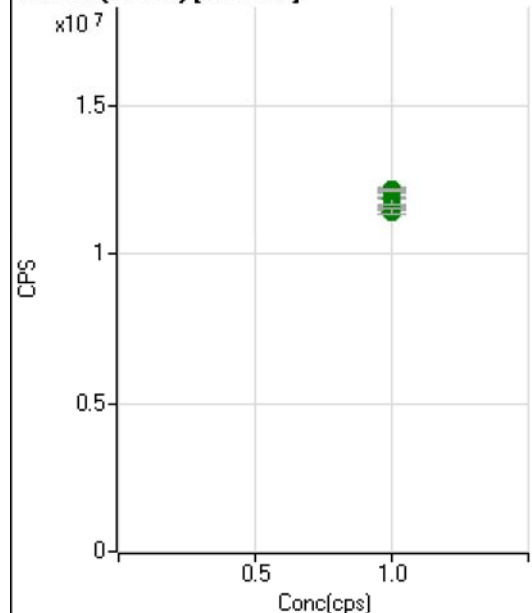
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		347530.54		P	2.1
2	☐	1.000					
3	☐	1.000		355392.14		P	1.1
4	☐	1.000		354963.33		P	1.0
5	☐	1.000		350315.11		P	0.2
6	☐	1.000		337619.39		P	2.0
7	☐	1.000		335527.83		P	0.3
8	☐	1.000		322017.41		P	2.4
9	☐	1.000		343045.97		P	3.5

159 Tb(ISTD) [NoGas]

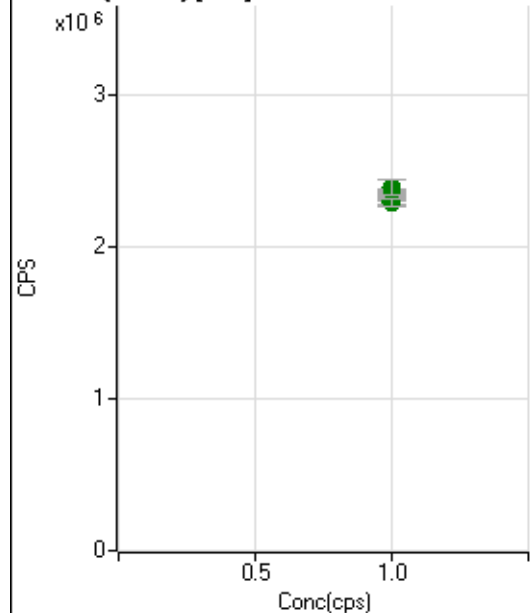
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11980800.93		A	1.1
2	☐	1.000					
3	☐	1.000		11970235.93		A	4.3
4	☐	1.000		11786602.74		A	2.0
5	☐	1.000		12450264.26		A	4.4
6	☐	1.000		12286837.18		A	1.0
7	☐	1.000		12116199.26		A	2.7
8	☐	1.000		12483439.12		A	0.9
9	☐	1.000		12465119.82		A	0.8

159 Tb(ISTD) [He]

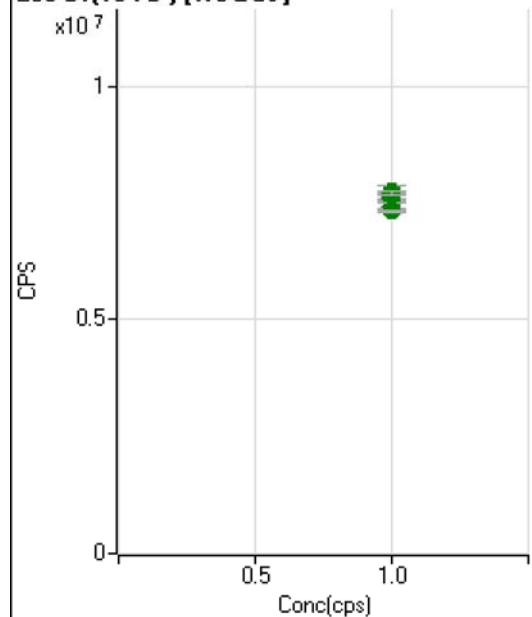
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2160168.91		A	1.0
2	☐	1.000					
3	☐	1.000		2251058.89		A	2.0
4	☐	1.000		2239876.93		A	1.5
5	☐	1.000		2256087.69		A	0.5
6	☐	1.000		2186511.60		A	2.4
7	☐	1.000		2230642.55		A	0.3
8	☐	1.000		2171512.71		A	2.1
9	☐	1.000		2241064.95		A	4.0

¹⁶⁵Ho(ISTD) [NoGas]

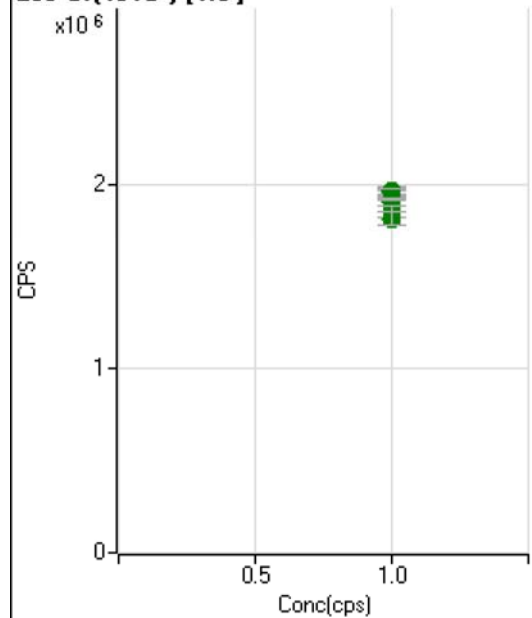
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11643135.68		A	0.5
2	☐	1.000					
3	☐	1.000		11685930.12		A	3.2
4	☐	1.000		11467217.10		A	1.8
5	☐	1.000		12068443.67		A	3.1
6	☐	1.000		11923712.68		A	0.2
7	☐	1.000		11894882.56		A	3.2
8	☐	1.000		12143955.91		A	0.6
9	☐	1.000		12195590.20		A	0.6

¹⁶⁵Ho(ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2299134.39		A	1.0
2	☐	1.000					
3	☐	1.000		2359915.33		A	0.4
4	☐	1.000		2373119.15		A	0.8
5	☐	1.000		2371638.76		A	0.4
6	☐	1.000		2314519.93		A	2.4
7	☐	1.000		2341173.80		A	0.5
8	☐	1.000		2292153.51		A	2.1
9	☐	1.000		2393145.96		A	4.2

209 Bi(ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7631509.12		A	1.9
2	☐	1.000					
3	☐	1.000		7622544.68		A	2.4
4	☐	1.000		7458533.43		A	1.3
5	☐	1.000		7754637.04		A	3.7
6	☐	1.000		7714877.73		A	0.5
7	☐	1.000		7616298.43		A	2.1
8	☐	1.000		7728161.34		A	1.5
9	☐	1.000		7338615.24		A	0.3

209 Bi(ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1898641.83		A	1.9
2	☐	1.000					
3	☐	1.000		1955982.28		A	1.5
4	☐	1.000		1957562.09		A	2.5
5	☐	1.000		1962525.48		A	1.5
6	☐	1.000		1899749.38		A	2.1
7	☐	1.000		1920302.40		A	0.5
8	☐	1.000		1848411.66		A	3.6
9	☐	1.000		1814627.87		A	4.5

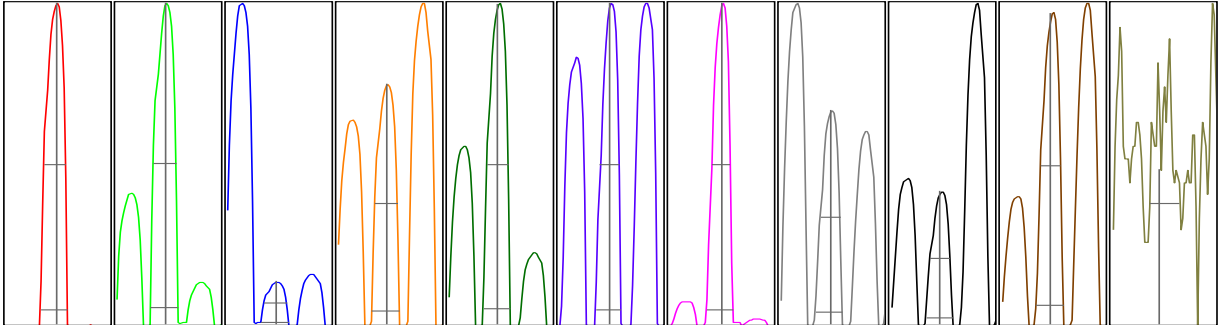
US EPA Tune Check Sample Report

Batch Folder D:\P8071318MS.b
Report Comment
Instrument Name G8403A JP17141814

[No Gas]				
Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	6223	1.66	5.00	
24	99386	1.83	5.00	
25	13552	2.10	5.00	
26	15787	2.12	5.00	
59	63563	2.80	5.00	
113	9422	2.60	5.00	
115	124837	3.09	5.00	
206	27299	2.67	5.00	
207	24961	2.22	5.00	
208	59701	1.83	5.00	
220	1	26.25		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	6139	6091	6289	6260	6335
24	99925	96179	99879	100607	100342
25	13704	13050	13611	13729	13667
26	16034	15212	15835	16016	15836
59	65427	60798	63525	64767	63298
113	9755	9217	9402	9569	9167
115	129546	122480	124589	127628	119945
206	27866	27032	26593	28263	26742
207	25263	24894	24279	25716	24656
208	59849	59933	58103	61144	59477
220	1	1	1	1	1

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	10682	9.00	8.9 - 9.1		0.777	0.900	
24	164313	23.95	23.9 - 24.1		0.786	0.900	
25	22366	24.95	24.9 - 25.1		0.786	0.900	
26	26267	25.95	25.9 - 26.1		0.785	0.900	
59	110680	58.95	58.9 - 59.1		0.777	0.900	
113	17828	113.00	112.9 - 113.1		0.727	0.900	
115	235060	115.05	114.9 - 115.1		0.761	0.900	
206	49954	206.00	205.9 - 206.1		0.775	0.900	
207	45231	206.95	206.9 - 207.1		0.776	0.900	
208	108929	207.95	207.9 - 208.1		0.780	0.900	
220	1	219.90	-				

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
Plasma Mode		HMI	Aerosol Dilution		HMI-8			

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.1	V	Deflect	14.2	V
Extract 2	-240.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-115	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination		5.0 V
He Flow	0.0	mL/min	OctP RF	190	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	8014	0.96	
89	7686	1.50	
205	11856	1.33	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	8072	8075	8060	7950	7912
89	7770	7771	7766	7587	7536
205	11918	11942	12008	11806	11606

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Plasma Mode		HMI	Aerosol Dilution		HMI-8			

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.1	V	Deflect	2.4	V
Extract 2	-240.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-115	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	5.0	mL/min	OctP RF	190	V			