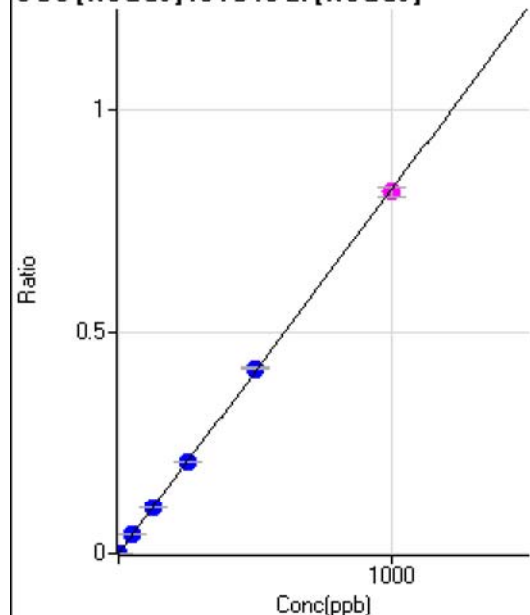


Batch Folder: D:\P8082218 MS.b\
Analysis File: P8082218 MS.batch.bin
DA Date-Time: 2018-08-22 20:05:39
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2018-08-22 14:38:54
2			
3	005CALS.d	S02	2018-08-22 14:46:23
4	006CALS.d	S03	2018-08-22 14:50:08
5	007CALS.d	S04	2018-08-22 14:53:53
6	008CALS.d	S05	2018-08-22 14:57:32
7	009CALS.d	S06	2018-08-22 15:01:05
8	010CALS.d	S07	2018-08-22 15:04:35
9	011CALS.d	S08	2018-08-22 15:08:01

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	133.34	0.0001	P	39.6
2	☐	0.100					
3	☐	1.000	1.052	1251.95	0.0010	P	3.8
4	☐	50.000	52.982	56332.67	0.0437	P	1.2
5	☐	125.000	128.353	136677.82	0.1056	P	0.6
6	☐	250.000	253.228	265953.89	0.2083	P	1.2
7	☐	500.000	507.564	521688.25	0.4175	P	1.5
8	☐	1000.000	994.843	1008538.83	0.8181	M	2.7
9	☐			718.56	0.0006	P	7.1

$$y = 8.2226\text{E-}004 * x + 1.0120\text{E-}004$$

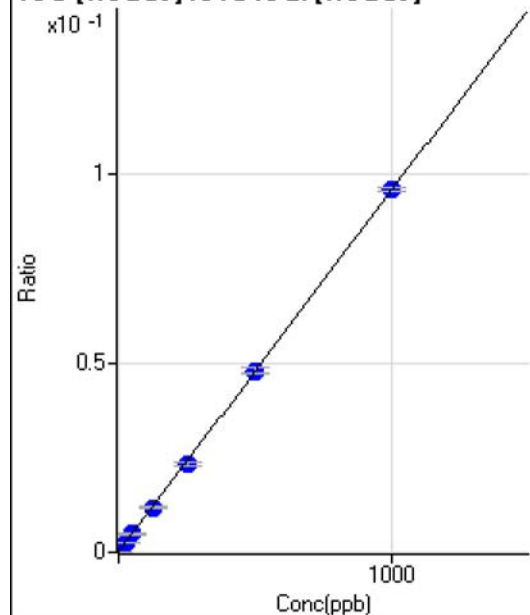
$$R = 0.9999$$

$$DL = 0.1464$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	125.01	0.0001	P	23.8
2	☐	2.500					
3	☐	25.000	23.468	3028.24	0.0023	P	4.1
4	☐	50.000	50.401	6340.56	0.0049	P	5.1
5	☐	125.000	122.830	15314.30	0.0118	P	4.0
6	☐	250.000	244.135	29884.74	0.0234	P	5.5
7	☐	500.000	500.460	59897.89	0.0479	P	2.9
8	☐	1000.000	1001.526	118180.59	0.0958	P	1.2
9	☐			6215.49	0.0052	P	9.8

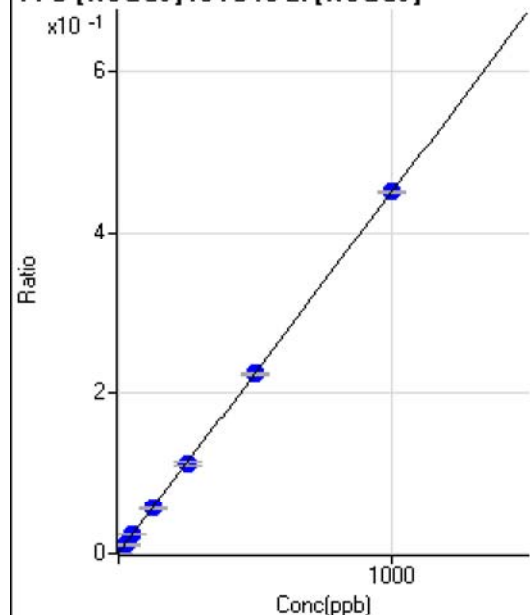
$$y = 9.5593\text{E-}005 * x + 9.4875\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.7078$$

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	552.82	0.0004	P	8.9
2	☐	2.500					
3	☐	25.000	23.031	13951.77	0.0108	P	4.3
4	☐	50.000	50.077	29586.92	0.0229	P	1.9
5	☐	125.000	124.215	72787.95	0.0563	P	2.6
6	☐	250.000	247.117	142265.60	0.1115	P	4.1
7	☐	500.000	496.731	279620.82	0.2237	P	2.0
8	☐	1000.000	1002.499	556240.99	0.4511	P	0.9
9	☐			29968.62	0.0249	P	8.8

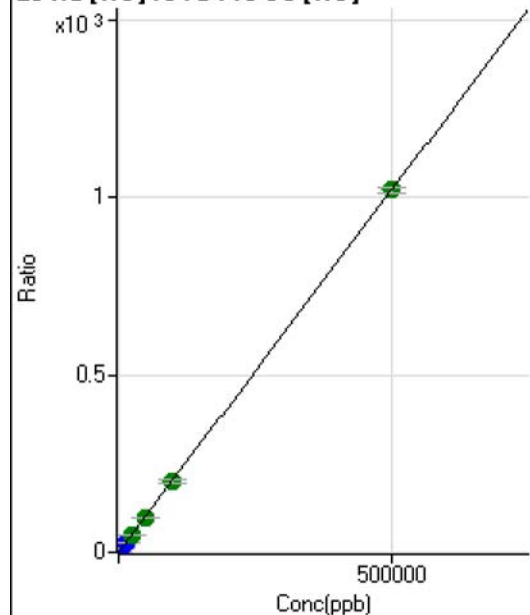
$$y = 4.4955\text{E-}004 * x + 4.1984\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.25$$

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	3733.99	0.1268	P	1.2
2	☐	50.000					
3	☐	500.000	474.776	31483.05	1.0950	P	5.0
4	☐	5000.000	4831.661	295818.14	9.9794	P	1.8
5	☐	12500.000	11931.420	717798.80	24.4569	P	0.7
6	☐	25000.000	24083.496	1328280.51	49.2370	A	1.3
7	☐	50000.000	48067.346	2702948.41	98.1439	A	0.9
8	☐	100000.00	99185.789	5230332.75	202.3827	A	5.7
9	☐	500000.00	500417.85	28554141.96	1,020.559	A	1.6

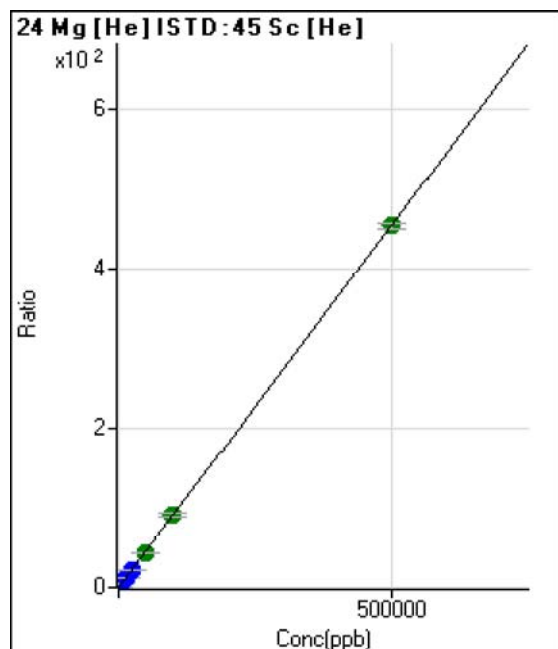
$$y = 0.0020 * x + 0.1268$$

$$R = 1.0000$$

$$DL = 2.236$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	252.79	0.0086	P	3.3
2	☐	50.000					
3	☐	500.000	457.239	12222.43	0.4250	P	4.2
4	☐	5000.000	4833.498	130738.17	4.4102	P	0.8
5	☐	12500.000	11953.583	319745.98	10.8941	P	0.3
6	☐	25000.000	23704.231	582563.98	21.5948	P	1.1
7	☐	50000.000	48400.686	1214141.90	44.0846	A	1.0
8	☐	100000.00	101017.27	2377405.28	91.9999	A	6.0
9	☐	500000.00	500036.63	12740645.59	455.3667	A	1.6

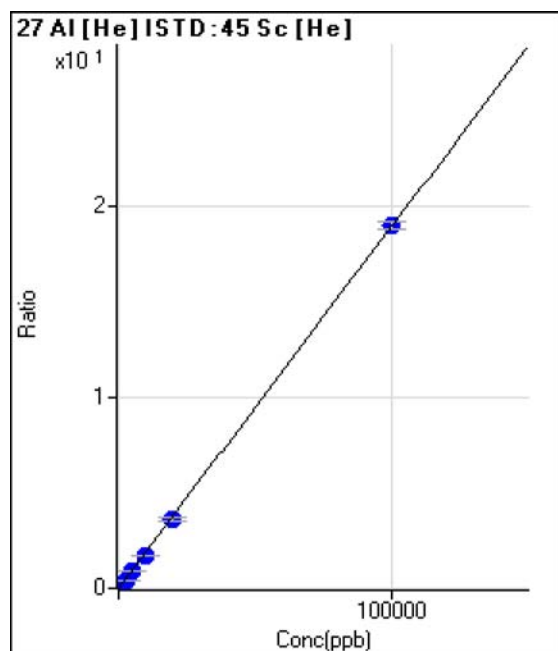
$$y = 9.1065\text{E-}004 * x + 0.0086$$

$$R = 1.0000$$

$$DL = 0.934$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16.67	0.0006	P	27.4
2	☐	2.000					
3	☐	20.000	17.394	110.86	0.0039	P	9.4
4	☐	1000.000	944.495	5314.89	0.1793	P	2.5
5	☐	2500.000	2315.513	12874.98	0.4387	P	1.0
6	☐	5000.000	4636.935	23682.38	0.8779	P	1.8
7	☐	10000.000	9242.493	48178.92	1.7493	P	0.6
8	☐	20000.000	19338.429	94575.19	3.6596	P	5.8
9	☐	100000.00	100231.38	530617.67	18.9653	P	2.0

$$y = 1.8921\text{E-}004 * x + 5.6234\text{E-}004$$

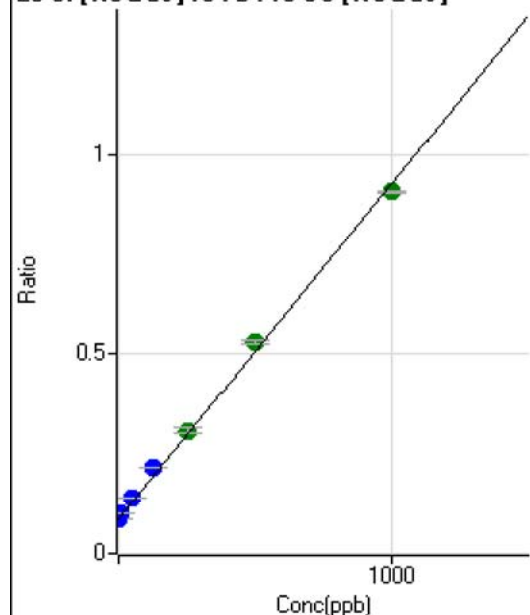
$$R = 1.0000$$

$$DL = 2.445$$

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	336241.08	0.0864	P	1.8
2	☐	1.000					
3	☐	10.000	16.764	384872.21	0.1004	P	1.5
4	☐	50.000	63.660	534048.34	0.1397	P	0.4
5	☐	125.000	155.164	832581.74	0.2163	P	0.4
6	☐	250.000	266.284	1186037.25	0.3094	A	3.6
7	☐	500.000	527.648	1987619.03	0.5283	A	1.2
8	☐	1000.000	977.584	3349306.89	0.9051	A	0.2
9	☐			531062.53	0.1468	P	1.3

$$y = 8.3749\text{E-}004 * x + 0.0864$$

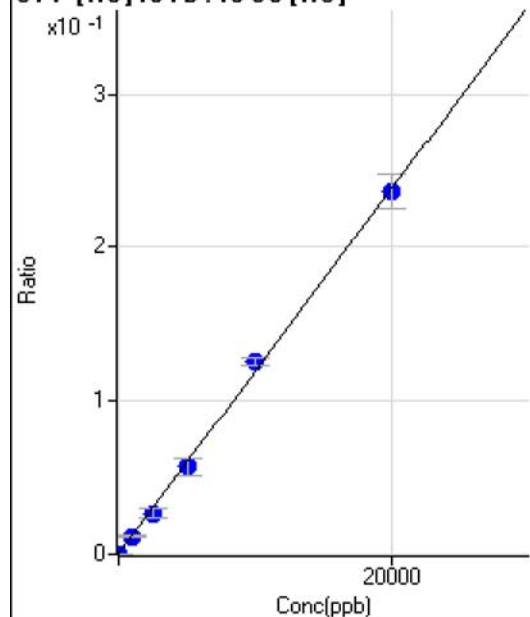
$$R = 0.9991$$

$$DL = 5.579$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-4.448	5.55	0.0002	P	86.6
2	☐	0.000					
3	☐	0.000	4.448	8.33	0.0003	P	4.4
4	☐	1000.000	948.301	341.69	0.0115	P	8.1
5	☐	2500.000	2231.043	786.17	0.0268	P	20.0
6	☐	5000.000	4774.938	1541.83	0.0571	P	19.8
7	☐	10000.000	10507.710	3453.34	0.1254	P	4.3
8	☐	20000.000	19838.615	6109.90	0.2365	P	9.4
9	☐			16.66	0.0006	P	85.0

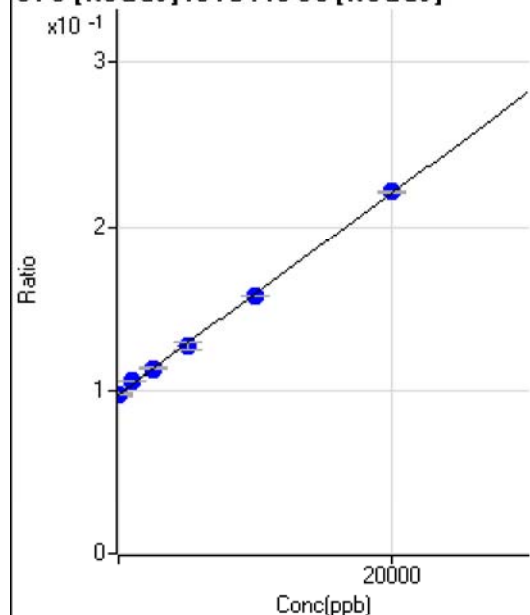
$$y = 1.1910\text{E-}005 * x + 2.3669\text{E-}004$$

$$R = 0.9994$$

$$DL = 21.63$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-67.863	377337.25	0.0969	P	1.5
2	☐	0.000					
3	☐	0.000	67.863	374750.81	0.0978	P	0.8
4	☐	1000.000	1296.278	402655.85	0.1053	P	0.6
5	☐	2500.000	2537.539	434716.69	0.1130	P	1.5
6	☐	5000.000	4837.746	487274.12	0.1271	P	3.6
7	☐	10000.000	9729.726	591487.37	0.1572	P	0.3
8	☐	20000.000	20156.194	819031.20	0.2213	P	0.7
9	☐			351864.75	0.0973	P	1.3

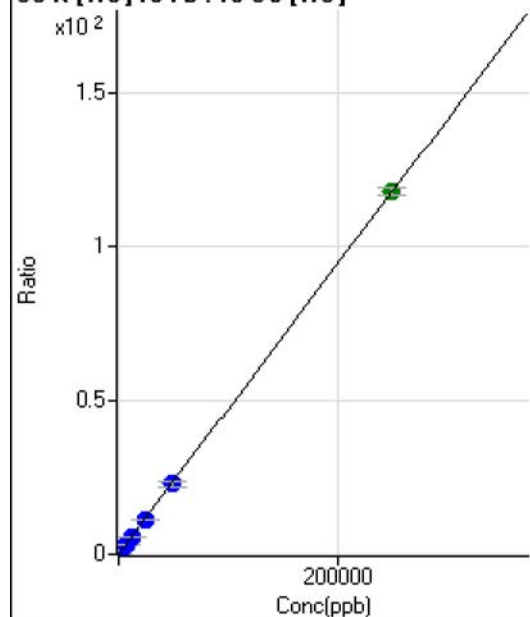
$$y = 6.1511\text{E-}006 * x + 0.0974$$

$$R = 0.9997$$

$$DL = 533.1$$

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	2194.72	0.0746	P	4.4
2	☐	50.000					
3	☐	500.000	446.481	8186.08	0.2848	P	6.4
4	☐	2500.000	2390.169	35570.97	1.1998	P	1.3
5	☐	6250.000	5912.046	83883.53	2.8578	P	1.9
6	☐	12500.000	11615.946	149528.17	5.5429	P	1.4
7	☐	25000.000	23313.182	304315.24	11.0494	P	0.4
8	☐	50000.000	48352.502	590160.79	22.8368	P	5.9
9	☐	250000.00	250552.03	3302079.83	118.0234	A	2.1

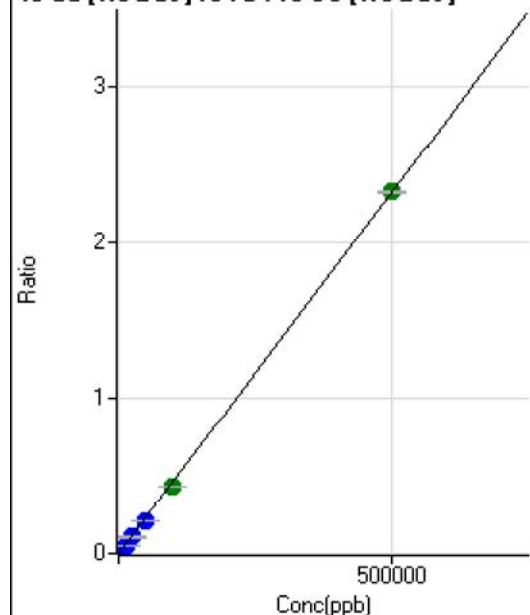
$$y = 4.7076\text{E-}004 * x + 0.0746$$

$$R = 1.0000$$

$$DL = 20.69$$

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	636.16	0.0002	P	17.2
2	☐	50.000					
3	☐	500.000	423.903	8172.19	0.0021	P	6.9
4	☐	5000.000	4682.380	83808.23	0.0219	P	1.0
5	☐	12500.000	11549.641	207183.43	0.0538	P	1.4
6	☐	25000.000	22878.394	408205.37	0.1065	P	3.5
7	☐	50000.000	46013.419	805160.90	0.2140	P	0.7
8	☐	100000.00	93056.120	1600900.95	0.4326	A	0.4
9	☐	500000.00	501920.52	8438862.08	2.3327	A	0.6

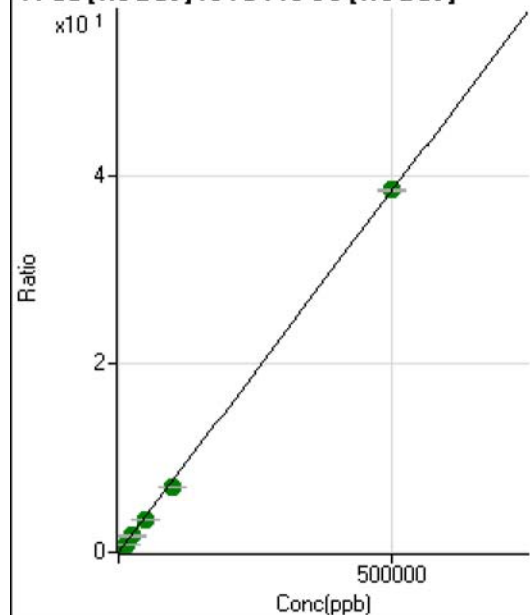
$$y = 4.6472\text{E-}006 * x + 1.6311\text{E-}004$$

$$R = 0.9999$$

$$DL = 18.07$$

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	14572.03	0.0037	P	4.4
2	☐	50.000					
3	☐	500.000	430.864	140837.11	0.0367	P	1.9
4	☐	5000.000	4709.186	1393333.44	0.3645	A	0.8
5	☐	12500.000	11518.878	3410034.97	0.8861	A	1.4
6	☐	25000.000	22598.244	6651229.71	1.7348	A	3.1
7	☐	50000.000	45385.961	13094646.13	3.4803	A	1.0
8	☐	100000.00	91470.211	25941549.36	7.0104	A	0.5
9	☐	500000.00	502314.95	139212540.6	38.4811	A	0.6

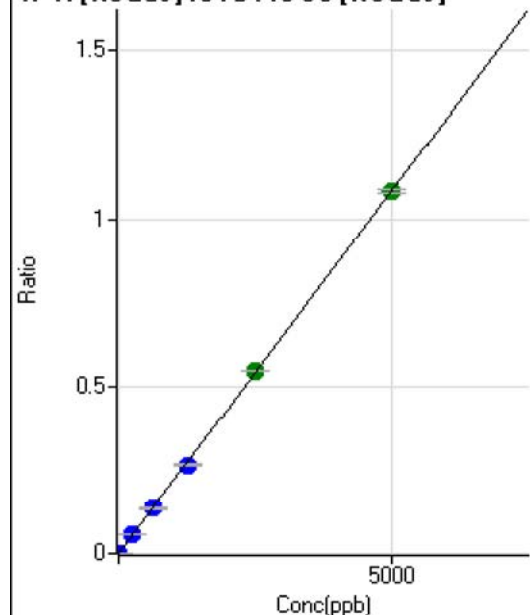
$$y = 7.6600\text{E-}005 * x + 0.0037$$

$$R = 0.9998$$

$$DL = 6.508$$

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	100.01	0.0000	P	15.5
2	☐	0.500					
3	☐	5.000	4.592	3909.06	0.0010	P	3.7
4	☐	250.000	253.407	209884.89	0.0549	P	0.3
5	☐	625.000	622.446	518811.71	0.1348	P	1.8
6	☐	1250.000	1231.244	1022353.98	0.2667	P	3.1
7	☐	2500.000	2515.152	2049399.24	0.5447	A	0.5
8	☐	5000.000	4997.262	4004457.86	1.0822	A	1.2
9	☐			2433.66	0.0007	P	1.1

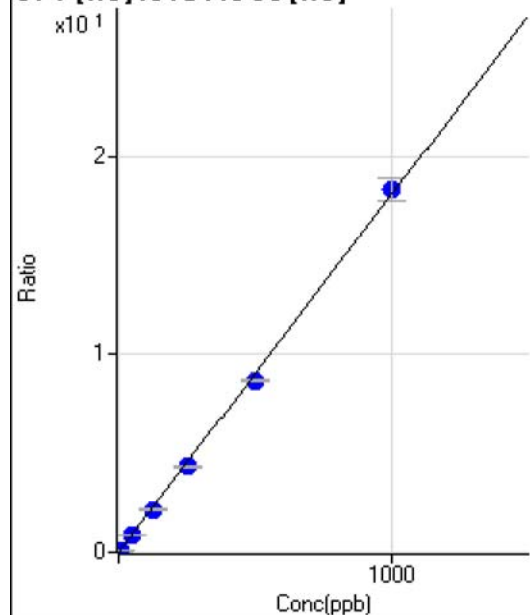
$$y = 2.1655\text{E-}004 * x + 2.5718\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.05508$$

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	6.67	0.0002	P	97.6
2	☐	0.500					
3	☐	5.000	4.649	2418.03	0.0841	P	4.1
4	☐	50.000	47.895	25609.19	0.8639	P	1.7
5	☐	125.000	120.258	63653.83	2.1689	P	1.2
6	☐	250.000	239.220	116386.19	4.3141	P	0.6
7	☐	500.000	479.738	238271.52	8.6514	P	0.5
8	☐	1000.000	1013.526	472269.07	18.2773	P	6.2
9	☐			237.78	0.0085	P	8.2

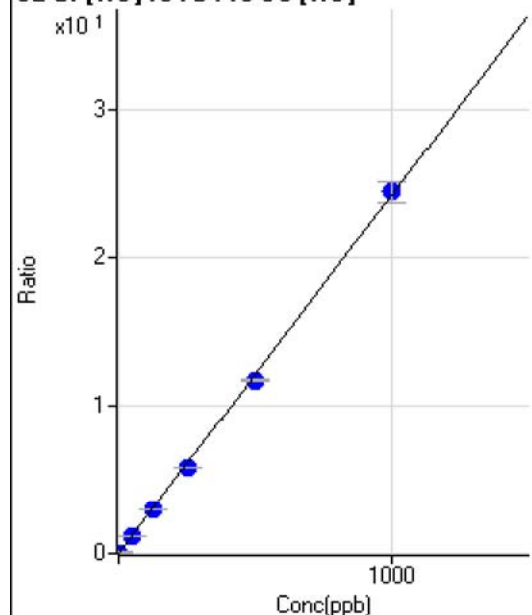
$$y = 0.0180 * x + 2.2811\text{E-}004$$

$$R = 0.9996$$

$$DL = 0.03705$$

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	443.35	0.0151	P	10.8
2	☐	0.200					
3	☐	2.000	2.041	1856.82	0.0645	P	3.7
4	☐	50.000	49.040	35651.06	1.2027	P	1.4
5	☐	125.000	120.894	86366.44	2.9427	P	1.0
6	☐	250.000	240.961	157825.22	5.8503	P	0.5
7	☐	500.000	484.439	323504.11	11.7464	P	1.1
8	☐	1000.000	1010.601	632826.98	24.4881	P	5.9
9	☐			27619.67	0.9871	P	0.8

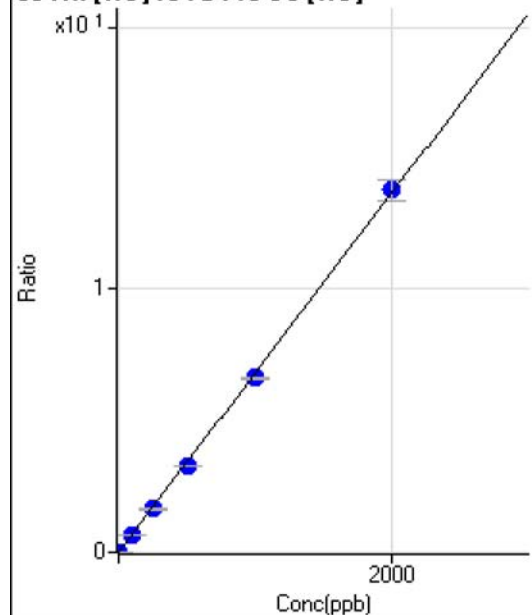
$$y = 0.0242 * x + 0.0151$$

$$R = 0.9998$$

$$DL = 0.2014$$

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	90.00	0.0031	P	6.5
2	☐	0.100					
3	☐	1.000	1.138	311.12	0.0108	P	13.8
4	☐	100.000	96.625	19679.67	0.6639	P	1.5
5	☐	250.000	241.508	48564.32	1.6547	P	1.2
6	☐	500.000	481.937	88998.91	3.2990	P	0.9
7	☐	1000.000	971.323	183034.79	6.6460	P	1.3
8	☐	2000.000	2020.085	357119.30	13.8185	P	5.8
9	☐			2230.22	0.0798	P	10.1

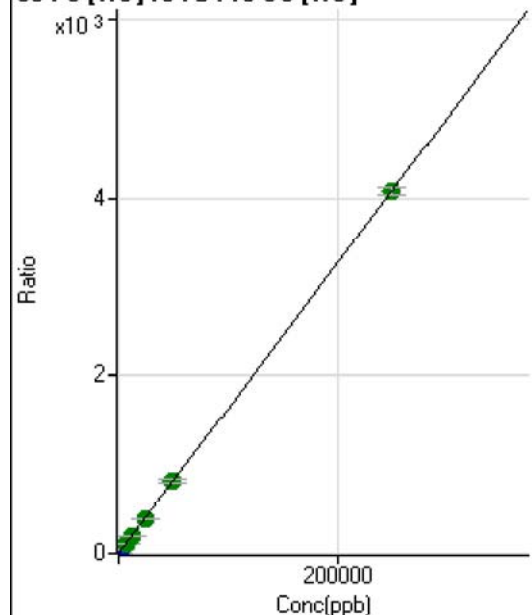
$$y = 0.0068 * x + 0.0031$$

$$R = 0.9998$$

$$DL = 0.08768$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1274.17	0.0433	P	4.3
2	☐	5.000					
3	☐	50.000	48.542	24004.47	0.8348	P	4.9
4	☐	2500.000	2437.914	1179705.00	39.7952	P	0.9
5	☐	6250.000	6133.394	2936447.87	100.0527	A	1.0
6	☐	12500.000	12123.225	5334140.17	197.7211	A	0.2
7	☐	25000.000	24134.370	10839371.07	393.5714	A	0.6
8	☐	50000.000	50705.855	21367577.79	826.8383	A	5.9
9	☐	250000.00	249967.76	114033762.7	4,075.945	A	2.0

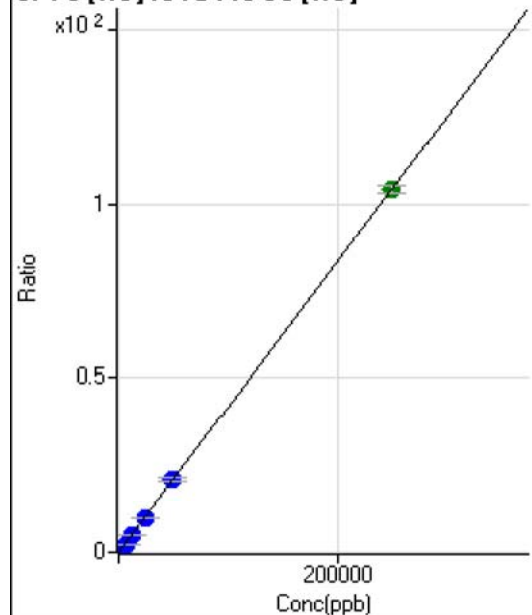
$$y = 0.0163 * x + 0.0433$$

$$R = 1.0000$$

$$DL = 0.3435$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.33	0.0011	P	30.6
2	☐	5.000					
3	☐	50.000	53.231	668.56	0.0233	P	10.5
4	☐	2500.000	2410.389	29732.20	1.0030	P	2.1
5	☐	6250.000	5940.775	72508.63	2.4704	P	0.2
6	☐	12500.000	12018.682	134791.55	4.9967	P	1.7
7	☐	25000.000	23941.437	274098.78	9.9525	P	0.8
8	☐	50000.000	50141.150	538629.54	20.8424	P	5.8
9	☐	250000.00	250110.31	2908518.58	103.9602	A	2.0

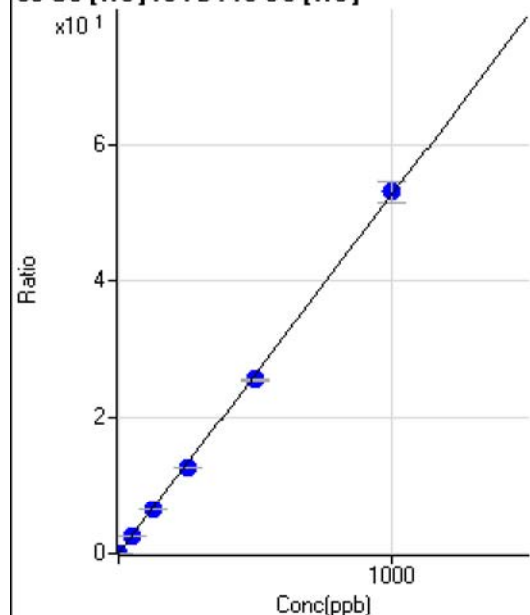
$$y = 4.1565E-004 * x + 0.0011$$

$$R = 1.0000$$

$$DL = 2.509$$

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	58.89	0.0020	P	28.3
2	☐	0.100					
3	☐	1.000	0.971	1529.00	0.0531	P	0.7
4	☐	50.000	48.976	76507.40	2.5809	P	1.6
5	☐	125.000	121.159	187302.91	6.3818	P	0.8
6	☐	250.000	242.293	344235.78	12.7603	P	0.9
7	☐	500.000	484.623	702859.74	25.5206	P	0.9
8	☐	1000.000	1010.147	1374693.68	53.1930	P	5.8
9	☐			18154.28	0.6488	P	1.7

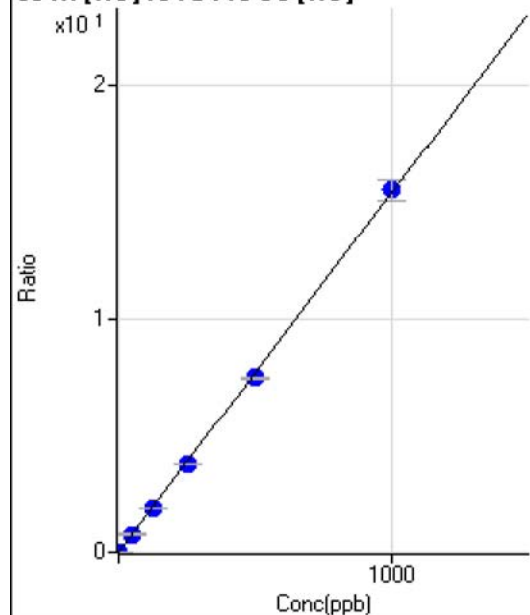
$$y = 0.0527 * x + 0.0020$$

$$R = 0.9998$$

$$DL = 0.03206$$

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	368.90	0.0126	P	15.4
2	☐	0.100					
3	☐	1.000	0.908	763.37	0.0265	P	4.4
4	☐	50.000	49.507	22939.13	0.7739	P	2.3
5	☐	125.000	121.724	55302.91	1.8844	P	1.6
6	☐	250.000	244.692	101847.53	3.7753	P	0.6
7	☐	500.000	485.287	205873.62	7.4750	P	1.0
8	☐	1000.000	1009.118	401350.88	15.5300	P	5.8
9	☐			14799.15	0.5290	P	3.0

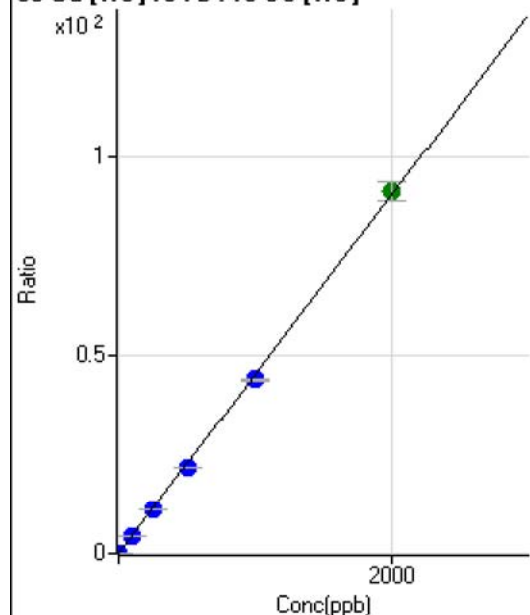
$$y = 0.0154 * x + 0.0126$$

$$R = 0.9998$$

$$DL = 0.3771$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	575.58	0.0195	P	11.2
2	☐	0.200					
3	☐	2.000	1.952	3094.84	0.1076	P	5.7
4	☐	100.000	98.243	132030.97	4.4538	P	0.9
5	☐	250.000	242.972	322449.64	10.9863	P	0.4
6	☐	500.000	485.587	591811.16	21.9370	P	0.4
7	☐	1000.000	969.555	1205792.41	43.7814	P	0.6
8	☐	2000.000	2019.792	2357033.09	91.1850	A	5.2
9	☐			6799.54	0.2430	P	1.9

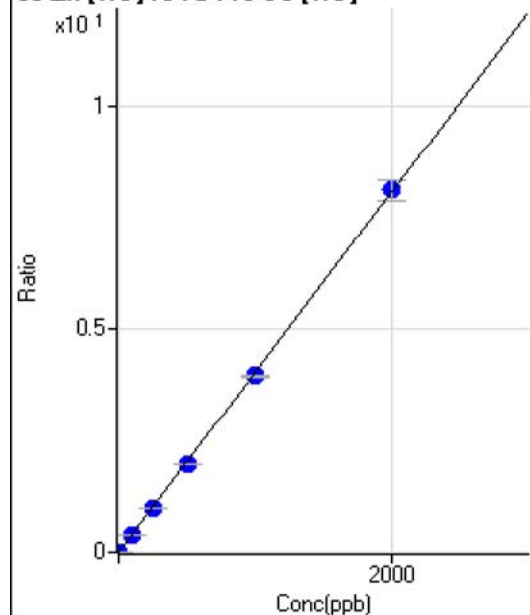
$$y = 0.0451 * x + 0.0195$$

$$R = 0.9998$$

$$DL = 0.1448$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	156.67	0.0053	P	26.0
2	☐	0.200					
3	☐	2.000	1.958	377.79	0.0132	P	16.5
4	☐	100.000	99.065	11988.71	0.4044	P	2.1
5	☐	250.000	244.816	29108.59	0.9917	P	0.8
6	☐	500.000	486.988	53077.76	1.9675	P	0.8
7	☐	1000.000	979.731	108865.01	3.9529	P	1.0
8	☐	2000.000	2014.082	209862.04	8.1206	P	5.8
9	☐			98085.91	3.5057	P	1.9

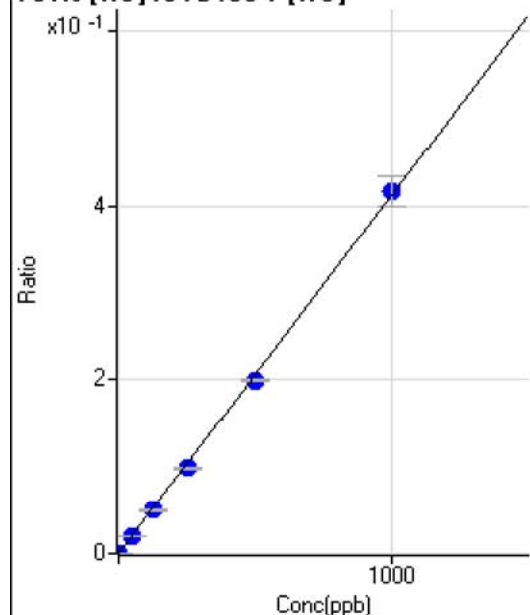
$$y = 0.0040 * x + 0.0053$$

$$R = 0.9999$$

$$DL = 1.022$$

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	3.70	0.0000	P	49.1
2	☐	0.100					
3	☐	1.000	0.887	78.39	0.0004	P	2.1
4	☐	50.000	48.113	4140.16	0.0198	P	1.9
5	☐	125.000	121.183	10366.30	0.0499	P	2.2
6	☐	250.000	240.699	19058.26	0.0991	P	2.0
7	☐	500.000	483.953	39120.00	0.1993	P	1.8
8	☐	1000.000	1010.920	77704.96	0.4163	P	8.5
9	☐			153.71	0.0008	P	8.4

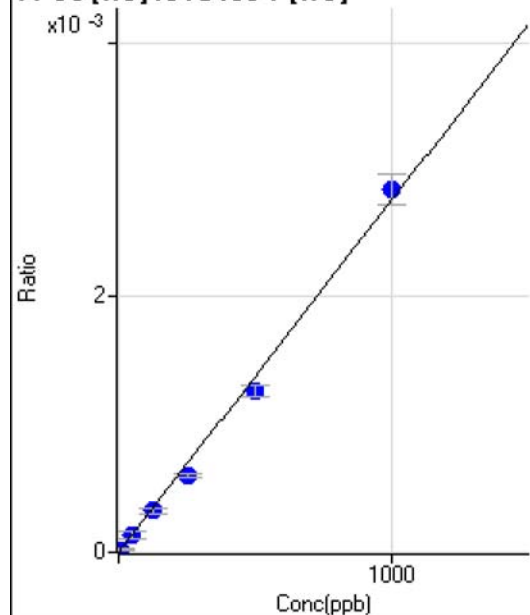
$$y = 4.1177\text{E-}004 * x + 1.7799\text{E-}005$$

$$R = 0.9998$$

$$DL = 0.06368$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	0.500					
3	☐	5.000	5.747	3.33	0.0000	P	100.
4	☐	50.000	48.048	27.78	0.0001	P	41.3
5	☐	125.000	118.171	67.78	0.0003	P	16.0
6	☐	250.000	219.668	116.67	0.0006	P	5.2
7	☐	500.000	456.725	247.79	0.0013	P	7.0
8	☐	1000.000	1030.168	531.13	0.0028	P	8.5
9	☐			0.00	0.0000	P	

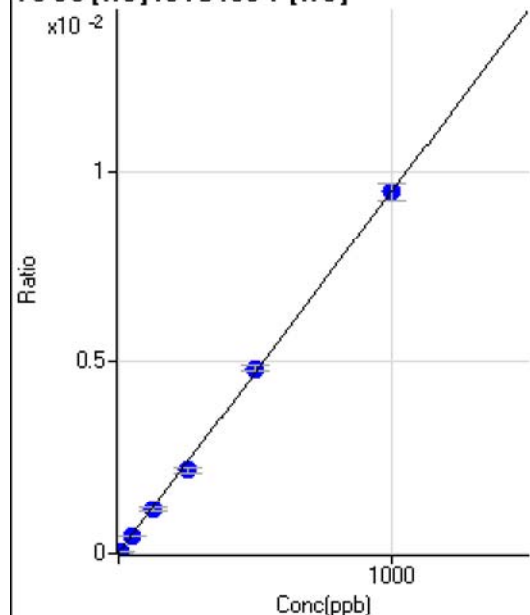
$$y = 2.7619\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9981$$

$$DL = 0$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1.85	0.0000	P	98.7
2	☐	0.500					
3	☐	5.000	4.788	11.11	0.0001	P	26.6
4	☐	50.000	46.278	93.21	0.0004	P	5.6
5	☐	125.000	121.341	240.13	0.0012	P	6.8
6	☐	250.000	230.090	419.76	0.0022	P	6.5
7	☐	500.000	510.539	948.81	0.0048	P	3.2
8	☐	1000.000	1000.353	1770.51	0.0095	P	4.9
9	☐			1.23	0.0000	P	86.6

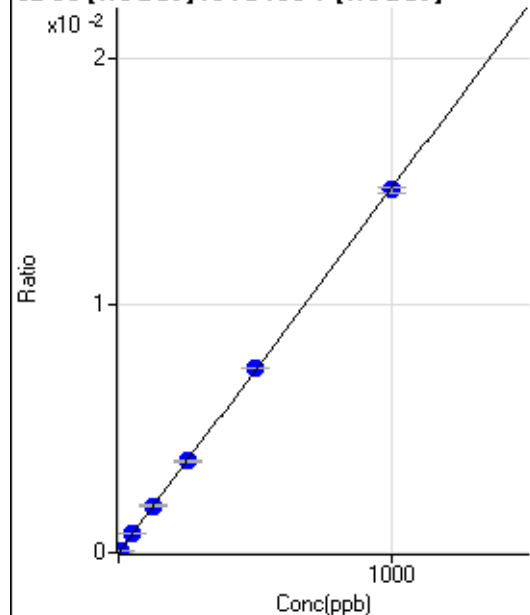
$$y = 9.4505\text{E-}006 * x + 8.9217\text{E-}006$$

$$R = 0.9997$$

$$DL = 2.796$$

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	-16.01	0.0000	P	-83.
2	☐	0.500					
3	☐	5.000	4.950	480.68	0.0001	P	9.4
4	☐	50.000	53.294	5277.17	0.0008	P	2.5
5	☐	125.000	128.577	13013.18	0.0019	P	1.2
6	☐	250.000	252.190	25237.83	0.0037	P	1.8
7	☐	500.000	506.780	50254.97	0.0075	P	0.4
8	☐	1000.000	995.451	99228.77	0.0147	P	1.5
9	☐			68.51	0.0000	P	22.1

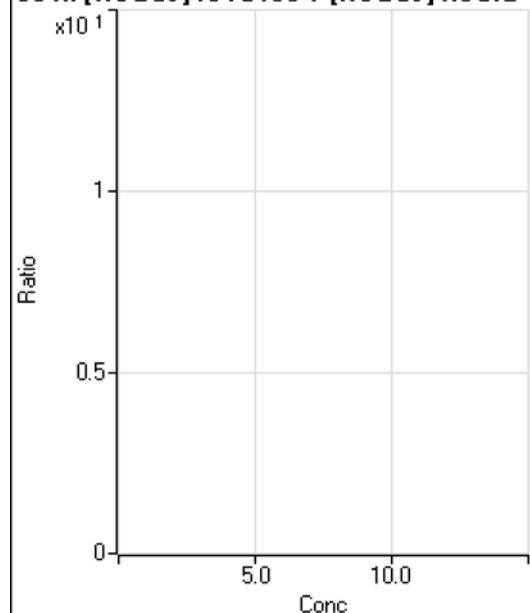
$$y = 1.4746\text{E-}005 * x - 2.3199\text{E-}006$$

$$R = 1.0000$$

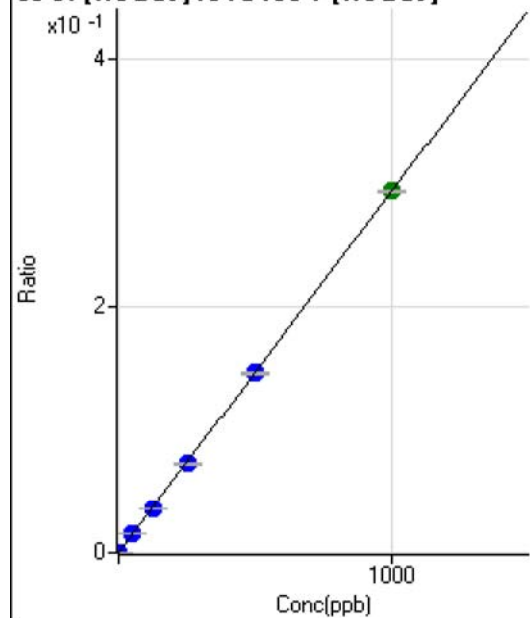
$$DL = 0.3942$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			352.23	0.0001	P	7.4
2	☐						
3	☐			366.68	0.0001	P	1.5
4	☐			354.45	0.0001	P	6.4
5	☐			374.46	0.0001	P	5.3
6	☐			371.12	0.0001	P	18.1
7	☐			366.68	0.0001	P	7.0
8	☐			337.79	0.0000	P	15.7
9	☐			383.35	0.0001	P	0.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	583.37	0.0001	P	7.5
2	☐	0.100					
3	☐	1.000	0.997	2567.02	0.0004	P	9.1
4	☐	50.000	51.126	101681.99	0.0151	P	1.3
5	☐	125.000	123.884	250539.96	0.0365	P	1.0
6	☐	250.000	247.747	494548.17	0.0728	P	1.8
7	☐	500.000	497.944	984018.28	0.1463	P	1.4
8	☐	1000.000	1001.675	1989180.77	0.2942	A	0.4
9	☐			10929.85	0.0017	P	2.1

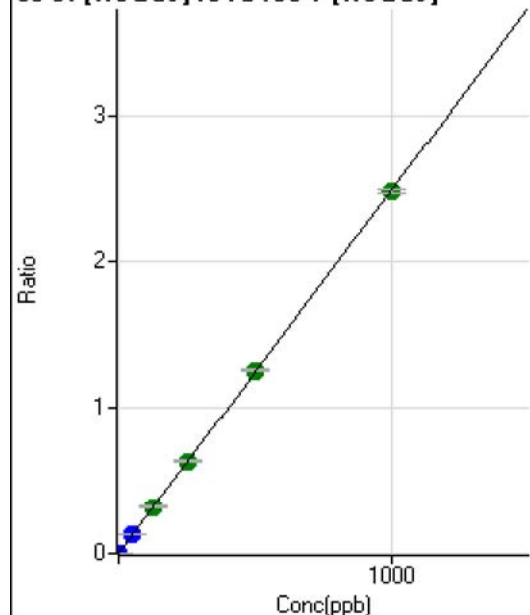
$$y = 2.9360\text{E-}004 * x + 8.4841\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.06478$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	166.67	0.0000	P	12.3
2	☐	0.100					
3	☐	1.000	1.005	17219.81	0.0025	P	3.1
4	☐	50.000	52.098	875448.47	0.1300	P	2.0
5	☐	125.000	128.879	2209382.90	0.3215	A	1.0
6	☐	250.000	254.360	4308245.36	0.6345	A	2.3
7	☐	500.000	503.902	8455370.85	1.2570	A	1.4
8	☐	1000.000	996.369	16804474.16	2.4854	A	1.0
9	☐			89496.07	0.0139	P	1.1

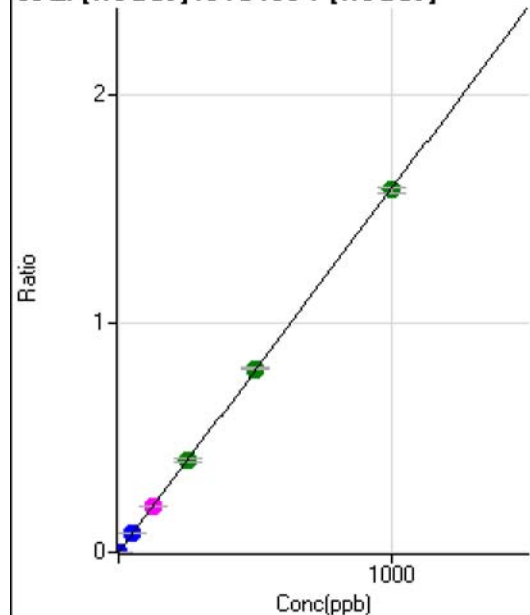
$$y = 0.0025 * x + 2.4221E-005$$

$$R = 1.0000$$

$$DL = 0.003597$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	552.81	0.0001	P	16.8
2	☐	0.100					
3	☐	1.000	0.900	10271.03	0.0015	P	9.3
4	☐	50.000	50.410	540043.36	0.0802	P	0.3
5	☐	125.000	125.326	1368730.48	0.1992	M	1.8
6	☐	250.000	253.875	2738953.69	0.4034	A	2.4
7	☐	500.000	504.333	5390293.31	0.8013	A	1.1
8	☐	1000.000	996.804	10707437.22	1.5837	A	1.6
9	☐			3445.07	0.0005	P	6.3

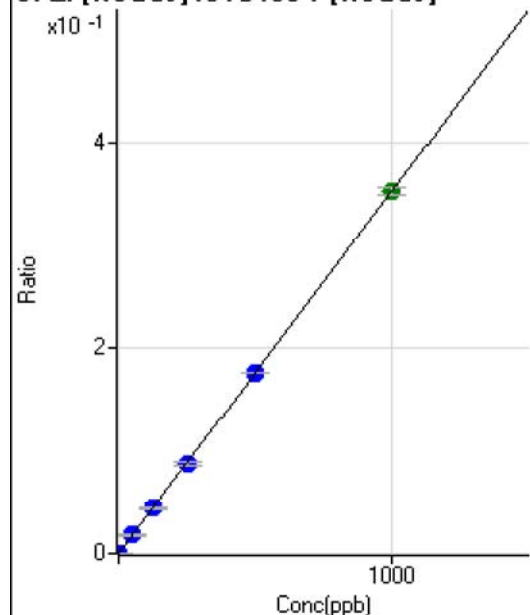
$$y = 0.0016 * x + 8.0483E-005$$

$$R = 1.0000$$

$$DL = 0.02547$$

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	136.12	0.0000	P	26.2
2	☐	0.100					
3	☐	1.000	0.917	2336.43	0.0003	P	4.3
4	☐	50.000	50.374	119945.02	0.0178	P	0.7
5	☐	125.000	124.894	303176.16	0.0441	P	1.2
6	☐	250.000	248.987	596937.69	0.0879	P	2.9
7	☐	500.000	499.347	1186174.59	0.1763	P	0.4
8	☐	1000.000	1000.574	2388578.85	0.3533	A	2.2
9	☐			752.83	0.0001	P	13.0

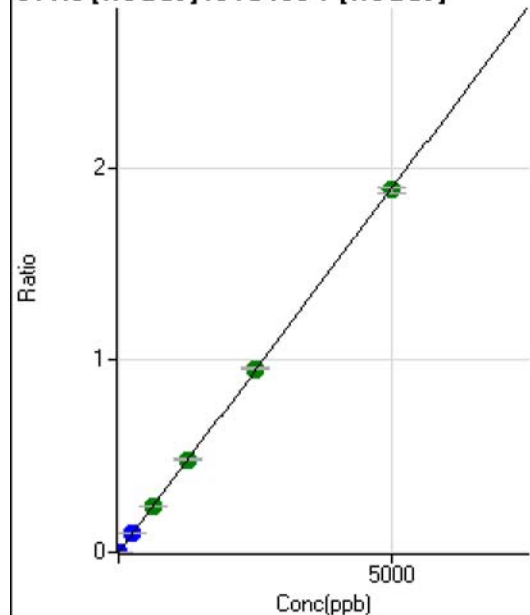
$$y = 3.5308\text{E-}004 * x + 1.9747\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.04403$$

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	300.02	0.0000	P	21.9
2	☐	0.500					
3	☐	5.000	4.773	12581.38	0.0018	P	5.6
4	☐	250.000	257.606	656882.94	0.0975	P	1.2
5	☐	625.000	638.185	1659704.15	0.2415	A	1.9
6	☐	1250.000	1271.156	3266253.24	0.4810	A	2.2
7	☐	2500.000	2517.011	6407145.41	0.9525	A	0.7
8	☐	5000.000	4984.177	12751193.51	1.8860	A	1.7
9	☐			16961.26	0.0026	P	4.0

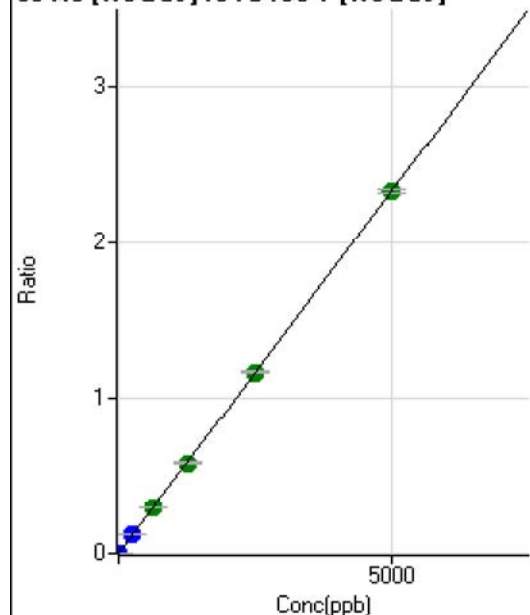
$$y = 3.7839\text{E-}004 * x + 4.3623\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.07584$$

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	125.01	0.0000	P	47.5
2	☐	0.500					
3	☐	5.000	4.738	15134.06	0.0022	P	0.8
4	☐	250.000	257.058	806287.30	0.1197	P	1.6
5	☐	625.000	632.903	2025165.60	0.2947	A	1.3
6	☐	1250.000	1249.599	3950975.09	0.5818	A	1.9
7	☐	2500.000	2500.915	7833239.50	1.1644	A	0.6
8	☐	5000.000	4998.302	15735121.53	2.3272	A	1.2
9	☐			27787.81	0.0043	P	2.2

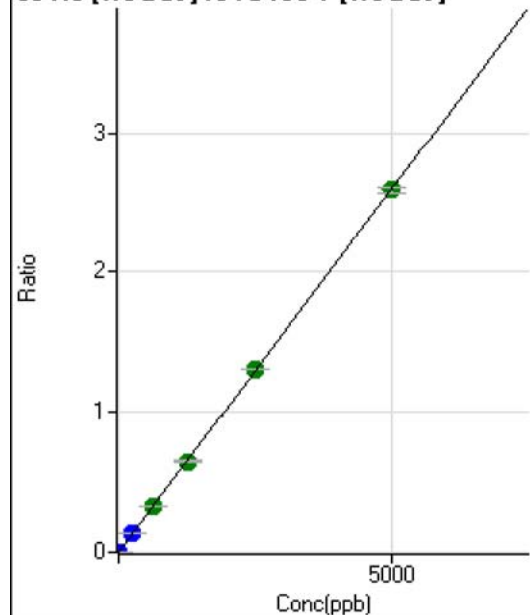
$$y = 4.6560E-004 * x + 1.8257E-005$$

$$R = 1.0000$$

$$DL = 0.0559$$

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	213.90	0.0000	P	21.7
2	☐	0.500					
3	☐	5.000	4.790	17128.14	0.0025	P	2.5
4	☐	250.000	256.272	896343.90	0.1331	P	1.7
5	☐	625.000	634.718	2264673.46	0.3295	A	1.1
6	☐	1250.000	1255.256	4425482.65	0.6517	A	1.9
7	☐	2500.000	2507.497	8757410.96	1.3018	A	0.3
8	☐	5000.000	4993.409	17527525.39	2.5924	A	1.4
9	☐			31685.27	0.0049	P	1.0

$$y = 5.1916E-004 * x + 3.1050E-005$$

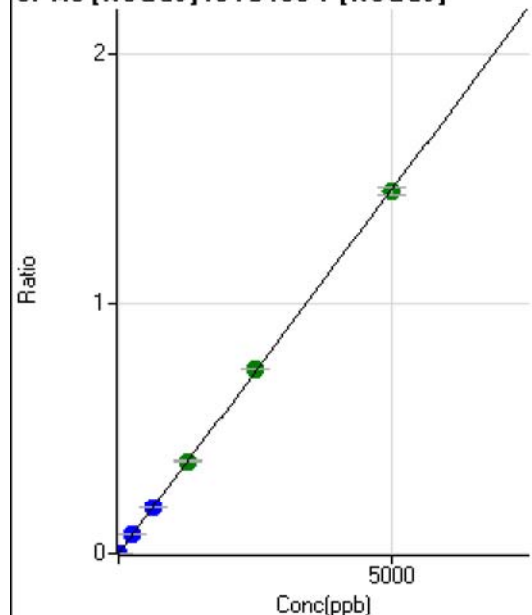
$$R = 1.0000$$

$$DL = 0.03893$$

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	83.34	0.0000	P	37.2
2	☐	0.500					
3	☐	5.000	4.697	9400.89	0.0014	P	1.8
4	☐	250.000	255.921	502662.62	0.0746	P	2.3
5	☐	625.000	625.499	1253374.37	0.1824	P	1.5
6	☐	1250.000	1272.246	2518415.61	0.3710	A	2.9
7	☐	2500.000	2531.410	4965497.29	0.7381	A	0.8
8	☐	5000.000	4978.376	9813709.51	1.4516	A	2.2
9	☐			17890.24	0.0028	P	2.1

$$y = 2.9158\text{E-}004 * x + 1.2161\text{E-}005$$

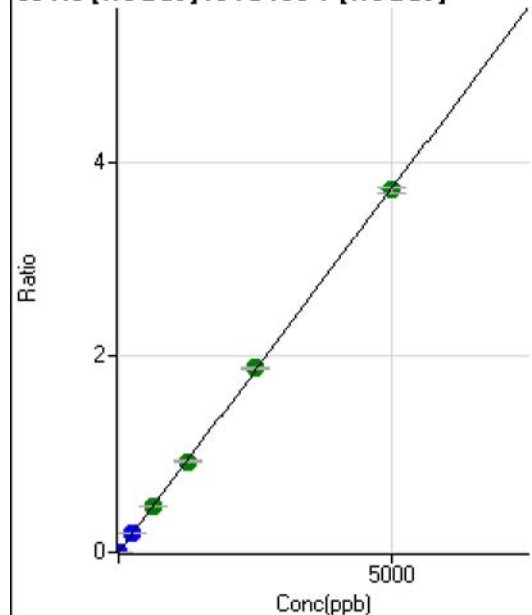
$$R = 1.0000$$

$$DL = 0.0465$$

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	163.90	0.0000	P	33.1
2	☐	0.500					
3	☐	5.000	4.835	24676.10	0.0036	P	1.4
4	☐	250.000	256.849	1289278.39	0.1914	P	1.9
5	☐	625.000	631.774	3235275.01	0.4708	A	1.3
6	☐	1250.000	1247.308	6312067.24	0.9295	A	1.6
7	☐	2500.000	2527.836	12671492.47	1.8837	A	0.4
8	☐	5000.000	4985.566	25118266.01	3.7151	A	1.3
9	☐			44945.02	0.0070	P	3.1

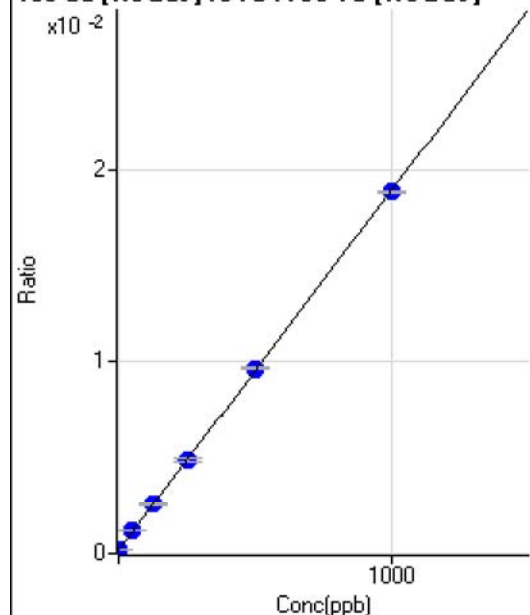
$$y = 7.4516\text{E-}004 * x + 2.3778\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.03166$$

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	1583.51	0.0002	P	2.6
2	☐	0.100					
3	☐	1.000	0.330	1616.85	0.0002	P	3.9
4	☐	50.000	53.092	10565.71	0.0012	P	1.4
5	☐	125.000	127.052	23571.42	0.0026	P	3.7
6	☐	250.000	252.628	44887.02	0.0049	P	4.3
7	☐	500.000	504.209	88028.83	0.0096	P	1.5
8	☐	1000.000	996.828	173342.27	0.0188	P	0.5
9	☐			1541.83	0.0002	P	3.2

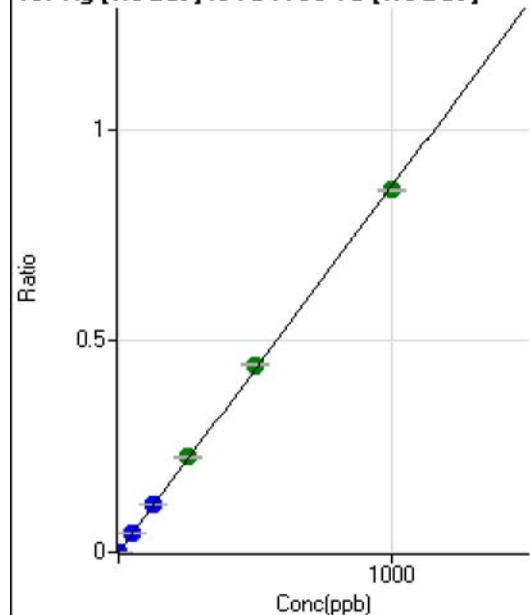
$$y = 1.8731\text{E-}005 * x + 1.7400\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.7136$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	61.11	0.0000	P	42.6
2	☐	0.100					
3	☐	1.000	1.054	8255.68	0.0009	P	2.4
4	☐	50.000	53.499	419191.51	0.0464	P	0.8
5	☐	125.000	130.248	1041621.40	0.1129	P	0.2
6	☐	250.000	260.682	2067391.47	0.2259	A	2.2
7	☐	500.000	511.375	4054835.64	0.4431	A	1.3
8	☐	1000.000	990.811	7895796.19	0.8584	A	0.7
9	☐			1061.21	0.0001	P	17.0

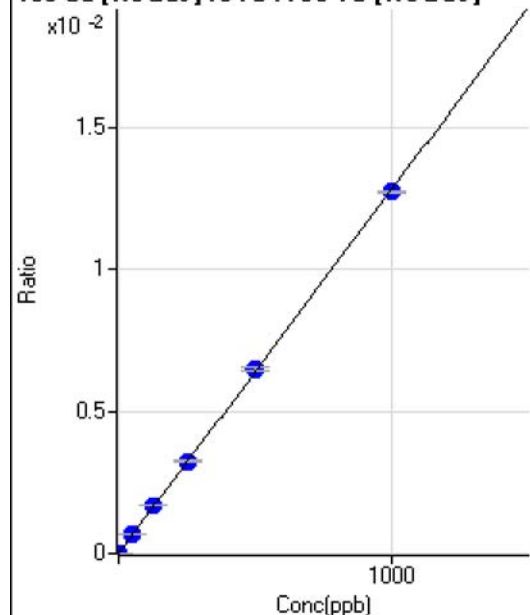
$$y = 8.6638\text{E-}004 * x + 6.7340\text{E-}006$$

$$R = 0.9998$$

$$DL = 0.009923$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5.55	0.0000	P	86.6
2	☐	0.100					
3	☐	1.000	1.017	122.23	0.0000	P	25.1
4	☐	50.000	54.160	6271.04	0.0007	P	1.3
5	☐	125.000	130.589	15425.80	0.0017	P	1.0
6	☐	250.000	255.340	29897.36	0.0033	P	3.5
7	☐	500.000	505.848	59233.67	0.0065	P	1.5
8	☐	1000.000	994.834	117073.22	0.0127	P	0.3
9	☐			70.83	0.0000	P	33.0

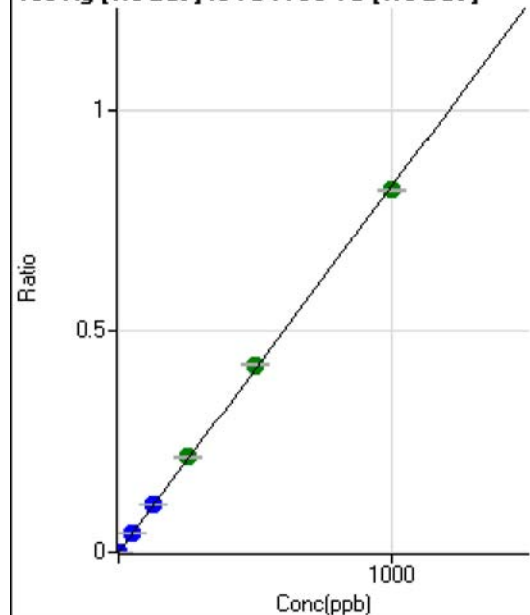
$$y = 1.2794\text{E-}005 * x + 6.0591\text{E-}007$$

$$R = 1.0000$$

$$DL = 0.123$$

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	41.67	0.0000	P	39.2
2	☐	0.100					
3	☐	1.000	1.028	7688.63	0.0009	P	0.6
4	☐	50.000	53.511	401334.67	0.0444	P	1.1
5	☐	125.000	129.855	994028.68	0.1077	P	1.0
6	☐	250.000	260.803	1979966.26	0.2163	A	2.1
7	☐	500.000	510.843	3877513.54	0.4237	A	0.7
8	☐	1000.000	991.095	7560125.52	0.8220	A	0.6
9	☐			897.30	0.0001	P	14.0

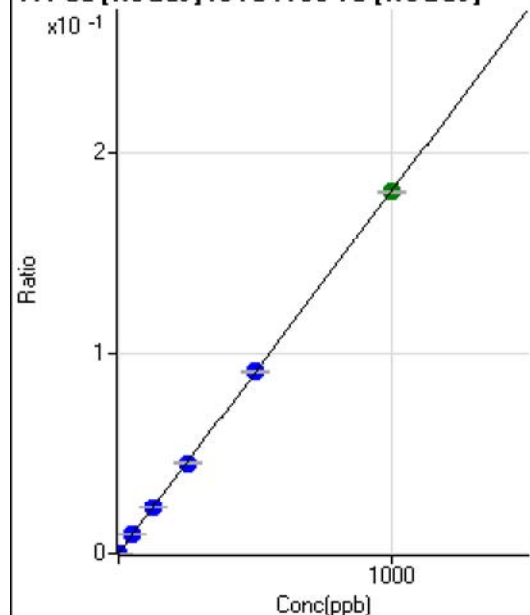
$$y = 8.2933\text{E-}004 * x + 4.5663\text{E-}006$$

$$R = 0.9998$$

$$DL = 0.00647$$

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	1119.84	0.0001	P	2.2
2	☐	0.100					
3	☐	1.000	0.880	2533.86	0.0003	P	1.5
4	☐	50.000	51.800	85913.83	0.0095	P	0.6
5	☐	125.000	126.634	212735.03	0.0230	P	0.8
6	☐	250.000	250.513	416201.58	0.0455	P	2.8
7	☐	500.000	501.445	831973.05	0.0909	P	0.7
8	☐	1000.000	998.855	1664377.78	0.1810	A	0.4
9	☐			1488.05	0.0002	P	1.8

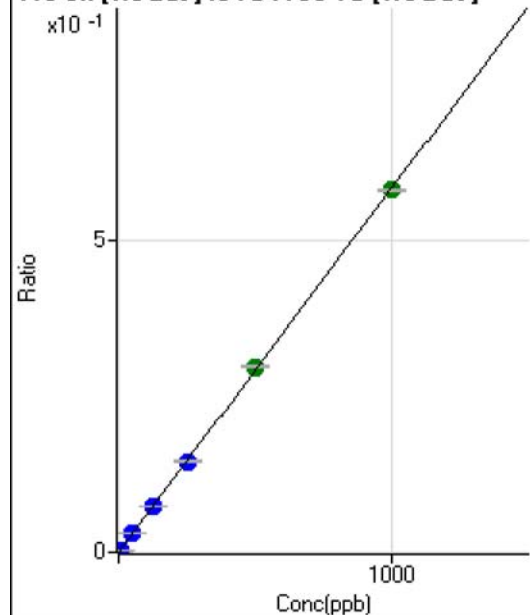
$$y = 1.8104\text{E-}004 * x + 1.2305\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.04399$$

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	783.39	0.0001	P	7.2
2	☐	0.500					
3	☐	5.000	4.805	25917.61	0.0029	P	1.7
4	☐	50.000	51.119	270407.63	0.0299	P	0.4
5	☐	125.000	125.915	678672.25	0.0735	P	0.4
6	☐	250.000	250.012	1335589.32	0.1459	P	2.3
7	☐	500.000	507.559	2710259.30	0.2961	A	1.1
8	☐	1000.000	996.049	5344509.49	0.5811	A	0.3
9	☐			27507.08	0.0031	P	0.8

$$y = 5.8328\text{E-}004 * x + 8.6103\text{E-}005$$

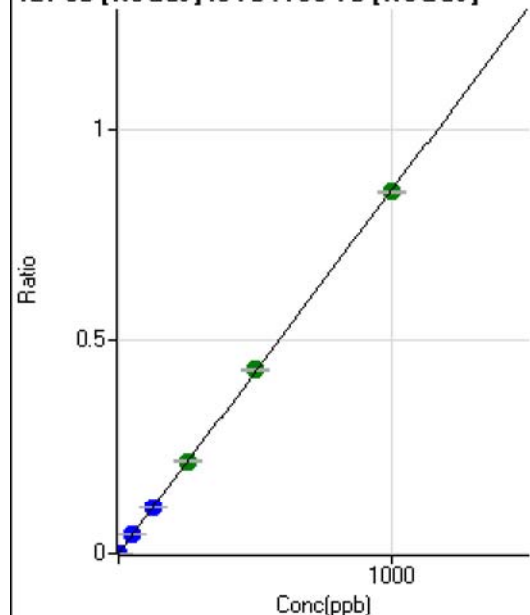
$$R = 1.0000$$

$$DL = 0.03184$$

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	80.56	0.0000	P	41.4
2	☐	0.200					
3	☐	2.000	1.948	15034.10	0.0017	P	4.2
4	☐	50.000	51.211	396366.26	0.0438	P	0.6
5	☐	125.000	125.978	995082.24	0.1078	P	0.2
6	☐	250.000	254.998	1997489.78	0.2182	A	2.1
7	☐	500.000	504.389	3950291.15	0.4316	A	0.7
8	☐	1000.000	996.373	7842121.79	0.8526	A	0.8
9	☐			28381.19	0.0032	P	2.7

$$y = 8.5571\text{E-}004 * x + 8.8493\text{E-}006$$

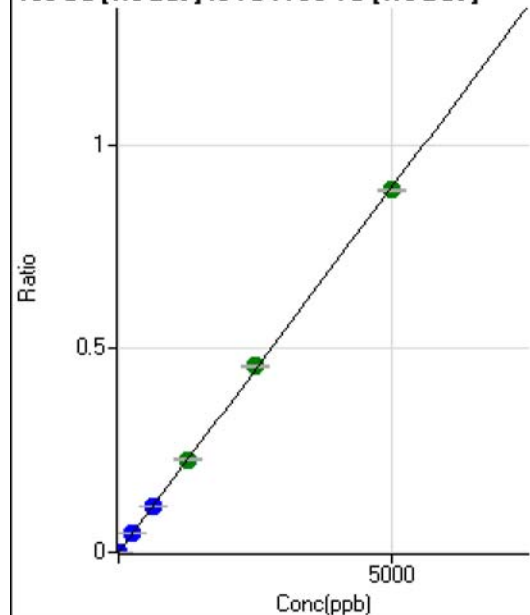
$$R = 1.0000$$

$$DL = 0.01284$$

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	72.22	0.0000	P	5.5
2	☐	1.000					
3	☐	10.000	9.758	15718.28	0.0018	P	4.3
4	☐	250.000	259.962	420238.61	0.0465	P	1.0
5	☐	625.000	632.257	1043151.95	0.1130	P	0.4
6	☐	1250.000	1274.849	2086061.85	0.2279	A	1.9
7	☐	2500.000	2543.240	4160414.42	0.4546	A	1.3
8	☐	5000.000	4970.763	8172079.87	0.8885	A	0.7
9	☐			2664.29	0.0003	P	4.8

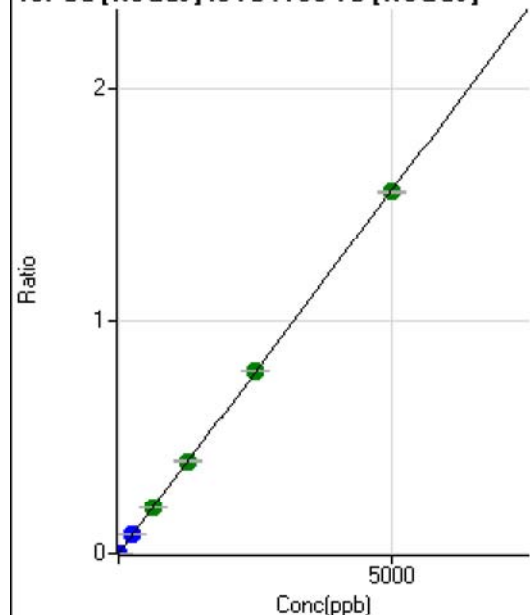
$$y = 1.7874\text{E-}004 * x + 7.9331\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.007267$$

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	63.89	0.0000	P	33.8
2	☐	1.000					
3	☐	10.000	9.628	27109.21	0.0030	P	2.4
4	☐	250.000	258.183	730987.17	0.0808	P	0.9
5	☐	625.000	639.210	1847184.89	0.2001	A	0.8
6	☐	1250.000	1270.709	3641693.74	0.3978	A	2.2
7	☐	2500.000	2508.470	7187822.38	0.7854	A	0.5
8	☐	5000.000	4988.403	14364764.73	1.5618	A	0.7
9	☐			4642.72	0.0005	P	5.1

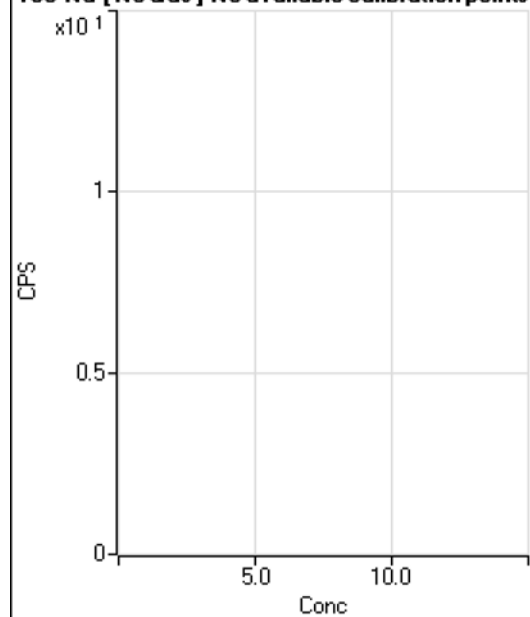
$$y = 3.1308\text{E-}004 * x + 7.0376\text{E-}006$$

$$R = 1.0000$$

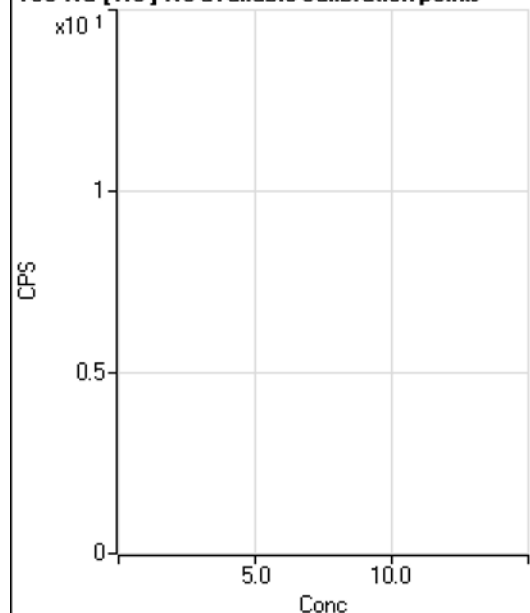
$$DL = 0.02282$$

Weight: <None>

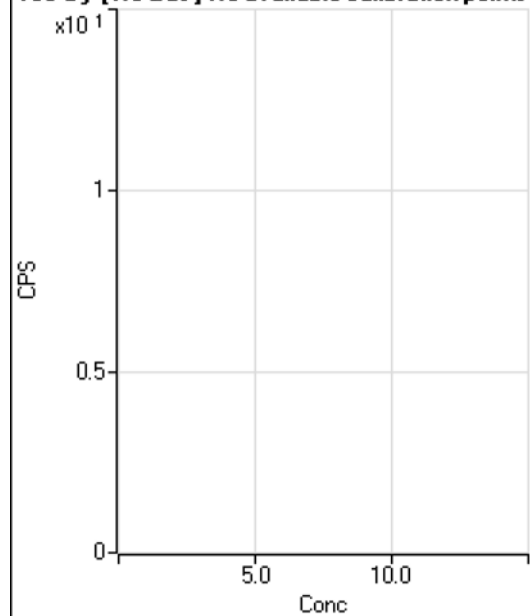
Min Conc: 0

150 Nd [No Gas] No available calibration points

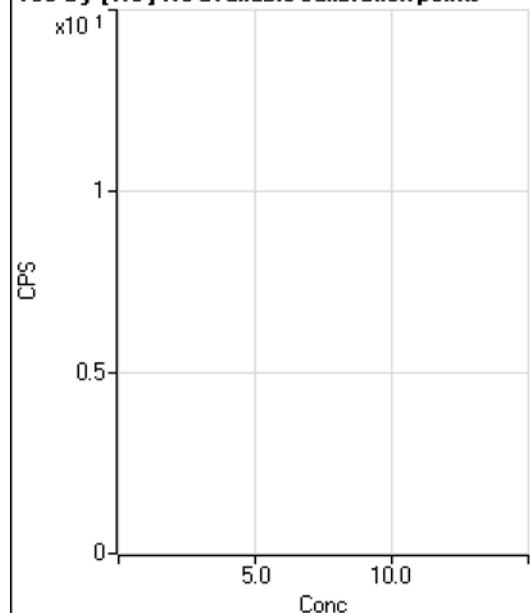
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	100.
2	☐						
3	☐			6.67		P	100.
4	☐			28.89		P	58.1
5	☐			60.00		P	0.0
6	☐			84.45		P	37.3
7	☐			157.78		P	6.5
8	☐			311.13		P	20.8
9	☐			104.45		P	46.2

150 Nd [He] No available calibration points

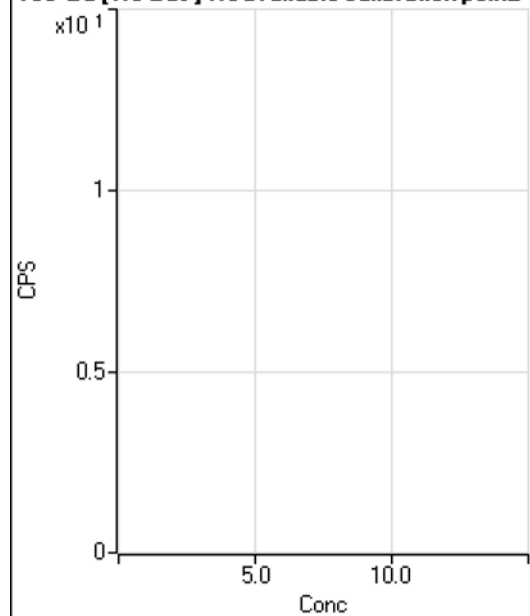
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			0.00		P	
4	☐			2.22		P	173.
5	☐			1.11		P	173.
6	☐			3.33		P	100.
7	☐			3.33		P	100.
8	☐			5.55		P	69.3
9	☐			14.44		P	81.1

156 Dy [No Gas] No available calibration points

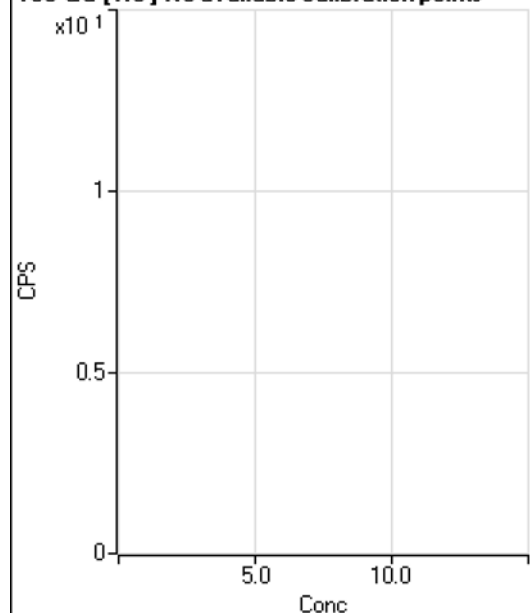
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			27.78		P	34.6
2	☐						
3	☐			13.89		P	34.7
4	☐			27.78		P	45.8
5	☐			27.78		P	62.5
6	☐			36.11		P	26.7
7	☐			61.11		P	28.4
8	☐			75.01		P	19.2
9	☐			138.89		P	38.6

156 Dy [He] No available calibration points

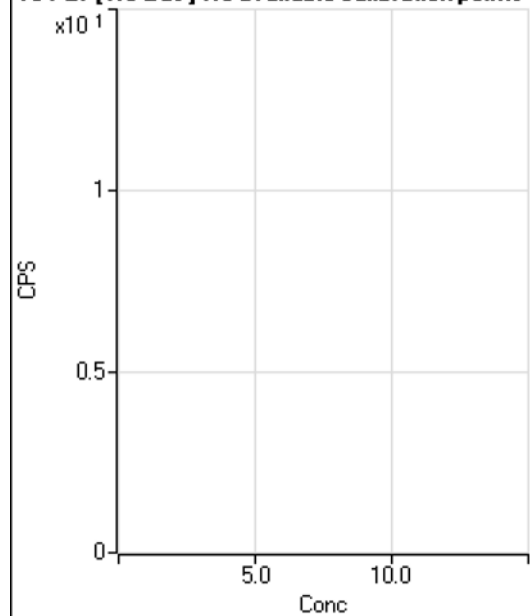
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	86.6
2	☐						
3	☐			1.11		P	173.
4	☐			0.00		P	
5	☐			3.33		P	100.
6	☐			1.11		P	173.
7	☐			6.67		P	0.0
8	☐			8.89		P	57.3
9	☐			21.11		P	9.1

160 Gd [No Gas] No available calibration poin_

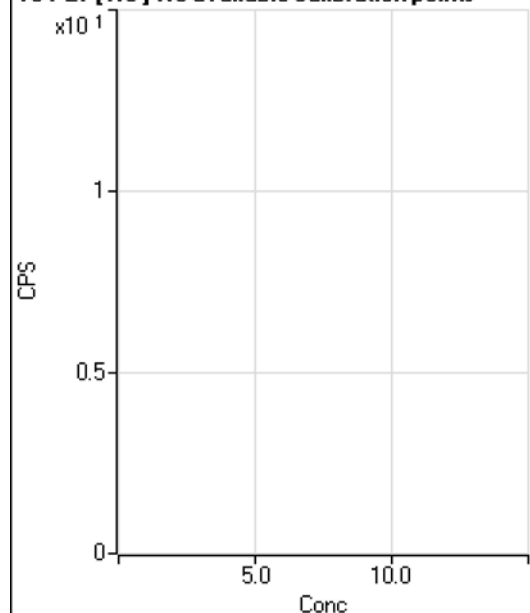
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			41.67		P	34.6
2	☐						
3	☐			50.00		P	28.9
4	☐			52.78		P	36.5
5	☐			63.89		P	15.1
6	☐			58.34		P	51.5
7	☐			83.34		P	34.6
8	☐			72.23		P	43.7
9	☐			111.12		P	31.2

160 Gd [He] No available calibration points

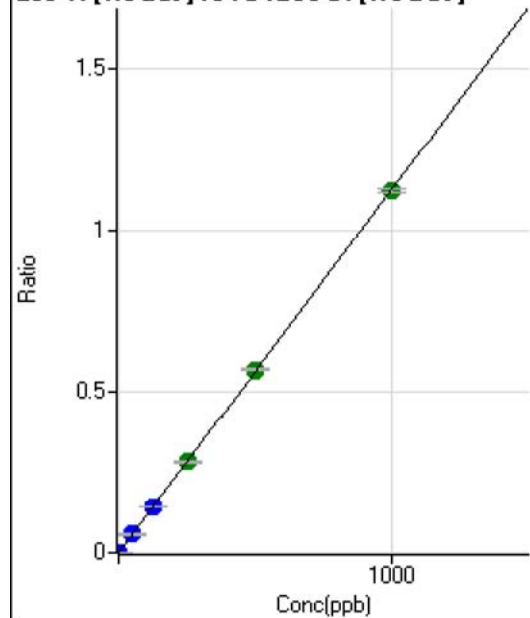
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	0.0
2	☐						
3	☐			6.66		P	86.6
4	☐			2.22		P	86.6
5	☐			11.11		P	62.5
6	☐			5.55		P	69.3
7	☐			14.44		P	35.3
8	☐			10.00		P	33.3
9	☐			25.56		P	37.7

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			44.45		P	39.0
2	☐						
3	☐			61.11		P	43.8
4	☐			22.22		P	78.1
5	☐			36.11		P	81.0
6	☐			50.00		P	50.0
7	☐			61.12		P	41.7
8	☐			41.67		P	72.1
9	☐			50.00		P	33.3

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			10.00		P	33.3
2	☐						
3	☐			12.22		P	15.7
4	☐			7.78		P	49.5
5	☐			4.45		P	86.6
6	☐			1.11		P	173.
7	☐			8.89		P	57.3
8	☐			5.56		P	34.7
9	☐			7.78		P	49.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	180.57	0.0000	P	32.0
2	☐	0.100					
3	☐	1.000	0.978	6677.09	0.0011	P	4.2
4	☐	50.000	50.324	338177.93	0.0566	P	0.9
5	☐	125.000	125.938	847719.36	0.1416	P	0.5
6	☐	250.000	251.515	1692034.29	0.2827	A	2.2
7	☐	500.000	504.032	3419072.73	0.5666	A	0.6
8	☐	1000.000	997.472	6749766.38	1.1212	A	1.0
9	☐			4478.83	0.0008	P	8.3

$$y = 0.0011 * x + 2.9996E-005$$

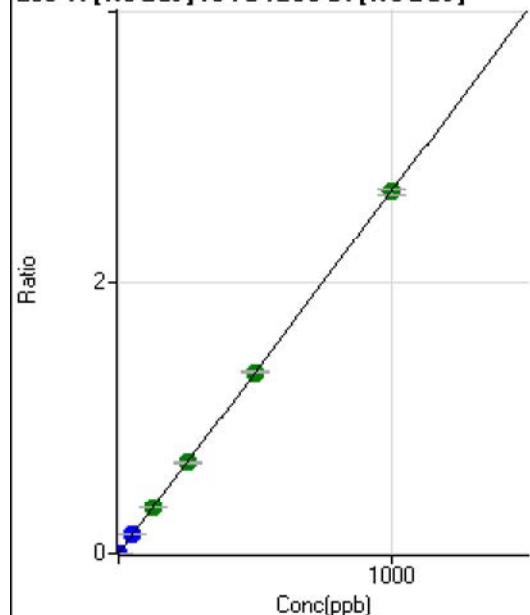
$$R = 1.0000$$

$$DL = 0.02565$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	394.47	0.0001	P	27.4
2	☐	0.100					
3	☐	1.000	1.005	16305.64	0.0028	P	4.3
4	☐	50.000	50.711	812814.90	0.1360	P	1.0
5	☐	125.000	128.288	2059609.77	0.3440	A	1.4
6	☐	250.000	252.707	4054672.44	0.6776	A	2.3
7	☐	500.000	499.751	8085943.41	1.3399	A	1.2
8	☐	1000.000	999.001	16124157.48	2.6785	A	1.6
9	☐			10860.69	0.0020	P	2.4

$$y = 0.0027 * x + 6.5194E-005$$

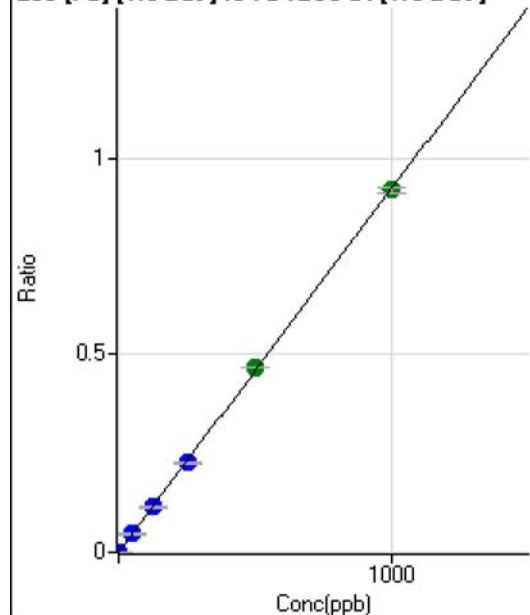
$$R = 1.0000$$

$$DL = 0.01996$$

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	231.49	0.0000	P	19.5
2	☐	0.100					
3	☐	1.000	0.986	5597.69	0.0009	P	3.3
4	☐	50.000	50.318	277268.27	0.0464	P	0.7
5	☐	125.000	124.753	688396.70	0.1150	P	1.1
6	☐	250.000	246.342	1358467.69	0.2270	P	2.1
7	☐	500.000	507.851	2823942.83	0.4680	A	0.6
8	☐	1000.000	997.004	5530204.64	0.9186	A	1.4
9	☐			36541.87	0.0067	P	1.0

$$y = 9.2136E-004 * x + 3.8436E-005$$

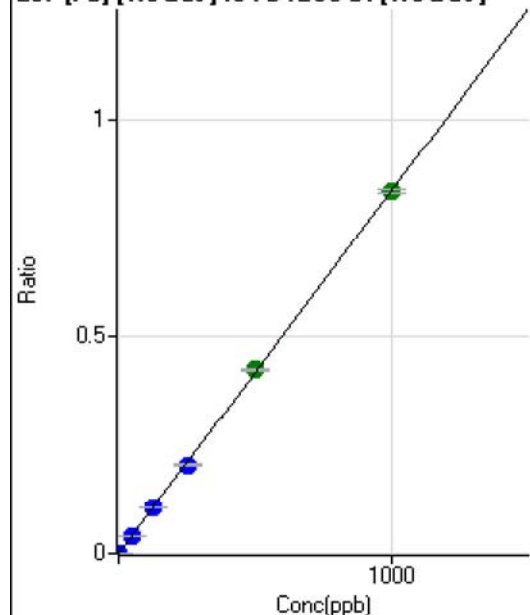
$$R = 0.9999$$

$$DL = 0.02441$$

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	183.34	0.0000	P	5.7
2	☐	0.100					
3	☐	1.000	0.937	4810.33	0.0008	P	4.1
4	☐	50.000	49.879	249296.71	0.0417	P	0.7
5	☐	125.000	124.940	625392.49	0.1045	P	0.8
6	☐	250.000	245.368	1227282.06	0.2051	P	2.5
7	☐	500.000	505.938	2551997.86	0.4229	A	0.9
8	☐	1000.000	998.203	5022792.99	0.8343	A	1.0
9	☐			31285.41	0.0058	P	0.5

$$y = 8.3580E-004 * x + 3.0370E-005$$

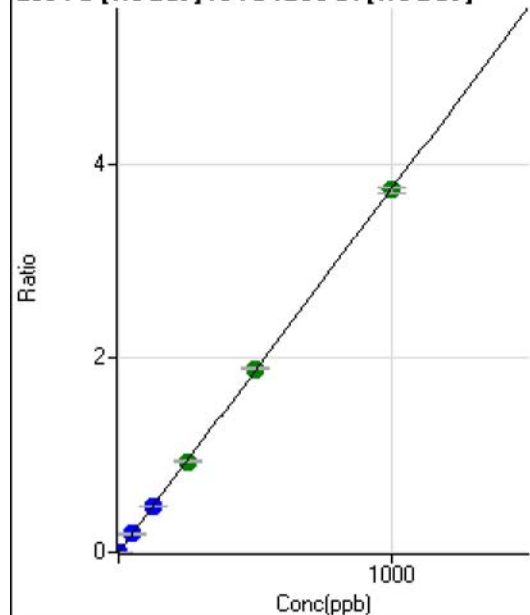
$$R = 1.0000$$

$$DL = 0.006237$$

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	950.05	0.0002	P	13.2
2	☐	0.100					
3	☐	1.000	0.960	22152.67	0.0037	P	2.9
4	☐	50.000	50.377	1126275.39	0.1885	P	0.7
5	☐	125.000	125.462	2808872.45	0.4692	P	1.3
6	☐	250.000	249.764	5587647.97	0.9338	A	2.5
7	☐	500.000	504.250	11376469.53	1.8852	A	0.5
8	☐	1000.000	997.857	22457247.32	3.7304	A	1.3
9	☐			143828.25	0.0266	P	0.6

$$y = 0.0037 * x + 1.5758E-004$$

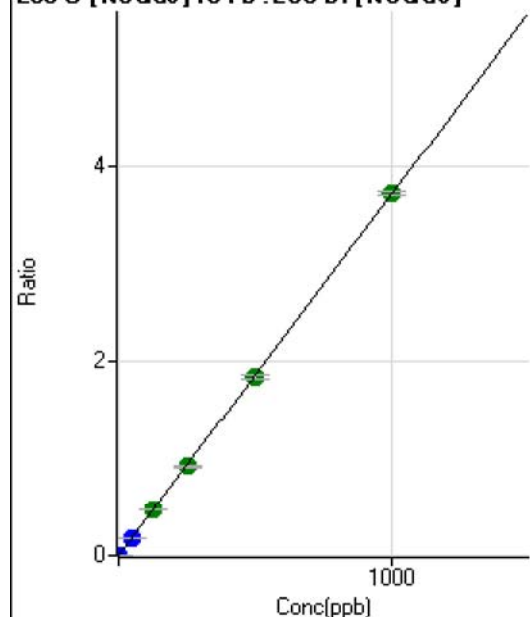
$$R = 1.0000$$

$$DL = 0.01667$$

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	63.89	0.0000	P	21.6
2	☐	0.100					
3	☐	1.000	0.965	21230.05	0.0036	P	5.7
4	☐	50.000	49.833	1105244.00	0.1850	P	1.1
5	☐	125.000	127.514	2833652.89	0.4733	A	0.7
6	☐	250.000	248.279	5514837.75	0.9215	A	1.8
7	☐	500.000	494.809	11082338.27	1.8365	A	1.5
8	☐	1000.000	1002.720	22404729.84	3.7216	A	1.2
9	☐			2558.72	0.0005	P	8.7

$$y = 0.0037 * x + 1.0597E-005$$

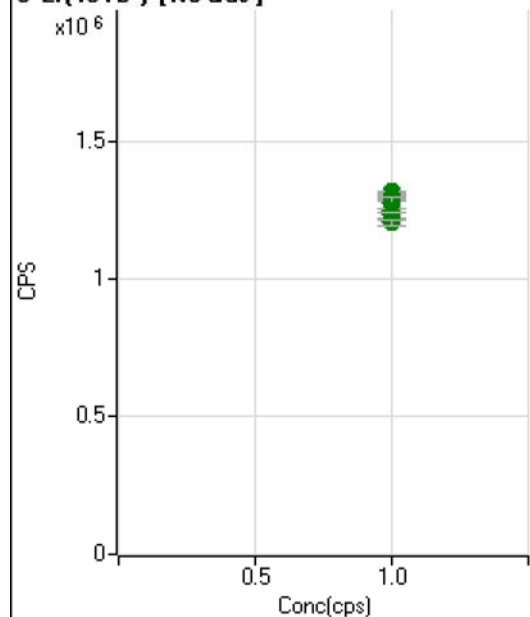
$$R = 1.0000$$

$$DL = 0.001846$$

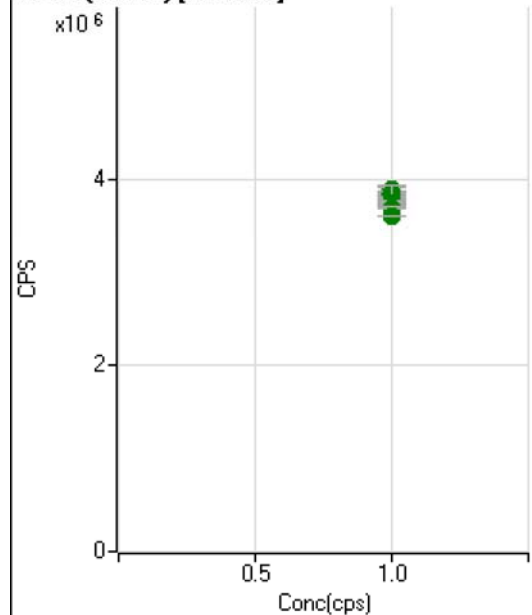
Weight: <None>

Min Conc: 0

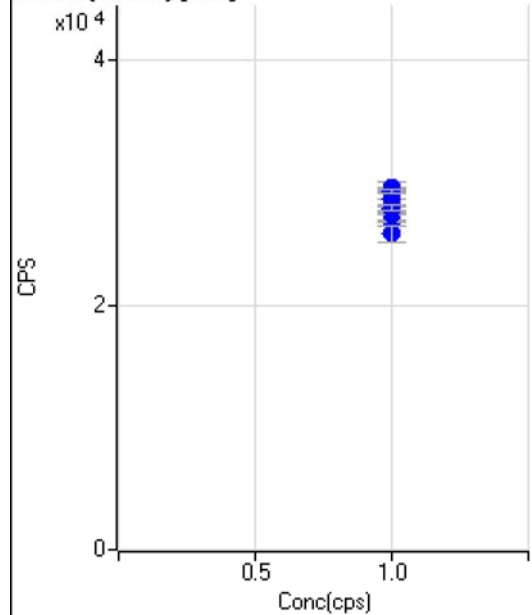
6 Li (ISTD) [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1317021.78		A	0.4
2	☐	1.000					
3	☐	1.000		1295389.43		A	1.1
4	☐	1.000		1290186.09		A	1.0
5	☐	1.000		1293806.29		A	0.4
6	☐	1.000		1277000.78		A	3.6
7	☐	1.000		1249878.50		A	1.4
8	☐	1.000		1233055.34		A	1.5
9	☐	1.000		1204434.34		A	1.6

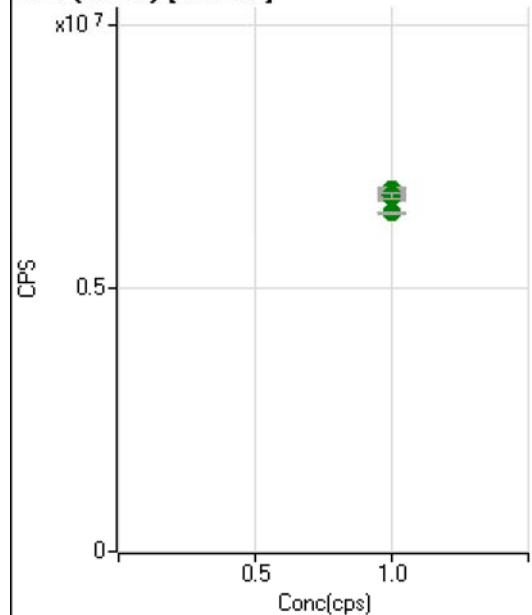
45 Sc(ISTD) [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3893261.59		A	1.6
2	☐	1.000					
3	☐	1.000		3833259.25		A	1.6
4	☐	1.000		3822955.47		A	0.4
5	☐	1.000		3848779.77		A	1.1
6	☐	1.000		3837971.22		A	4.9
7	☐	1.000		3762661.02		A	0.8
8	☐	1.000		3700511.28		A	0.6
9	☐	1.000		3617711.50		A	0.2

45 Sc(ISTD) [He]

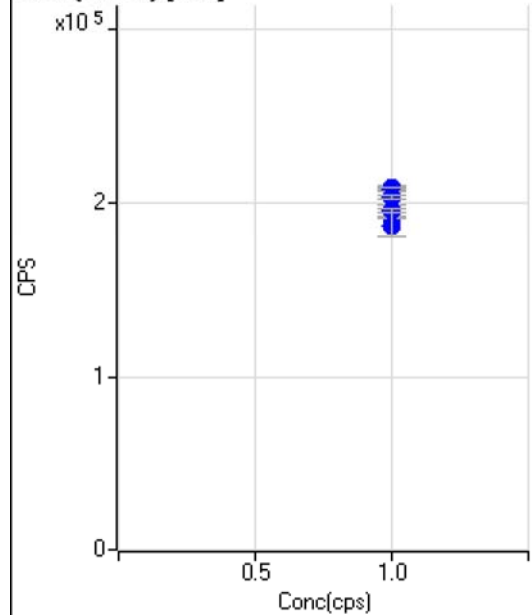
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		29445.57		P	4.7
2	☐	1.000					
3	☐	1.000		28792.03		P	4.3
4	☐	1.000		29645.82		P	0.8
5	☐	1.000		29350.83		P	0.9
6	☐	1.000		26978.29		P	0.8
7	☐	1.000		27541.64		P	0.6
8	☐	1.000		25896.39		P	5.3
9	☐	1.000		27983.59		P	1.7

89 Y (ISTD) [No Gas]

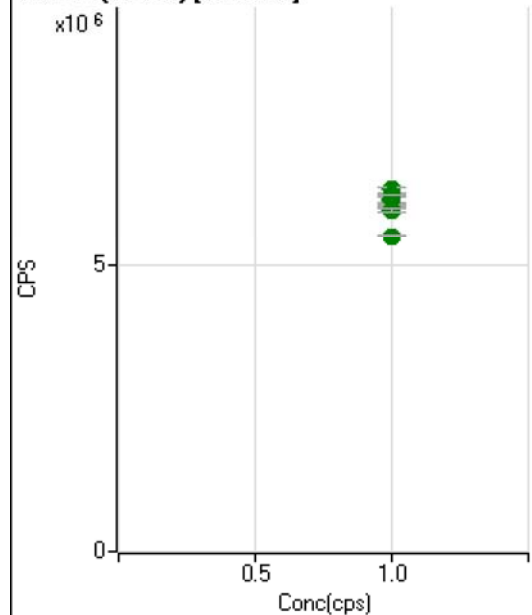


	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6876097.74		A	1.4
2	☐	1.000					
3	☐	1.000		6804091.70		A	0.9
4	☐	1.000		6736749.21		A	1.6
5	☐	1.000		6872509.62		A	1.0
6	☐	1.000		6793896.71		A	4.0
7	☐	1.000		6727140.32		A	0.5
8	☐	1.000		6762011.08		A	1.4
9	☐	1.000		6440668.72		A	0.4

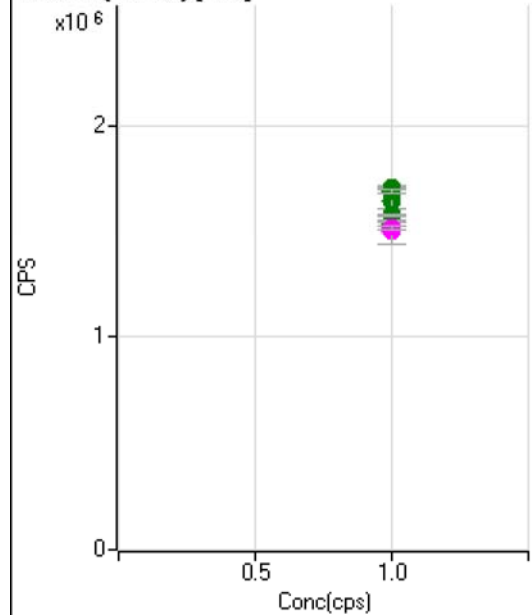
89 Y (ISTD) [He]



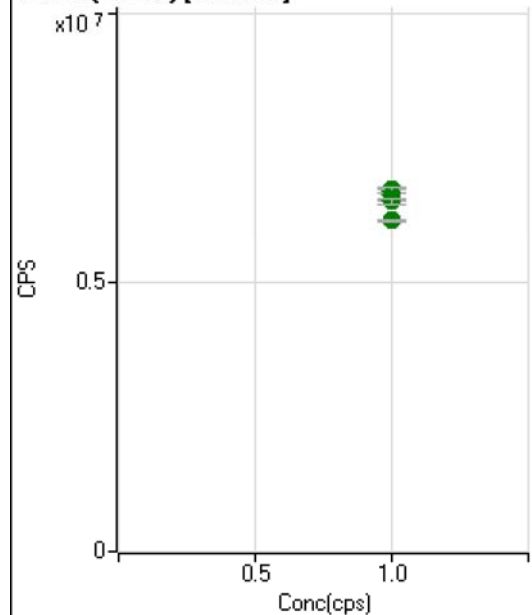
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		206991.61		P	2.1
2	☐	1.000					
3	☐	1.000		204539.10		P	4.8
4	☐	1.000		208810.70		P	0.9
5	☐	1.000		207702.18		P	1.1
6	☐	1.000		192266.76		P	0.5
7	☐	1.000		196320.41		P	1.2
8	☐	1.000		187471.14		P	7.6
9	☐	1.000		203722.32		P	1.2

103 Rh(ISTD) [NoGas]

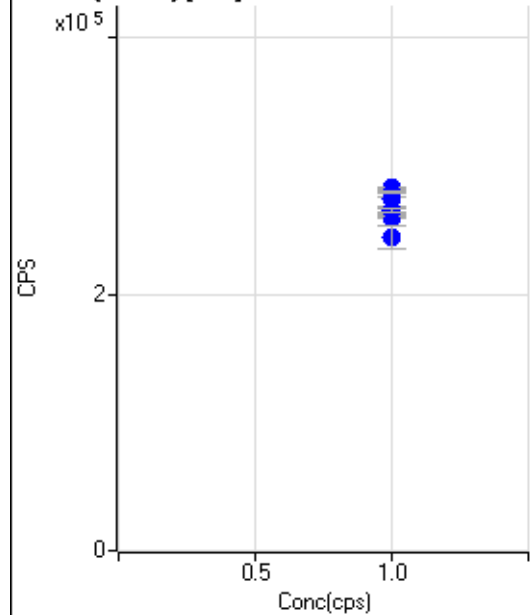
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6345079.48		A	1.5
2	☐	1.000					
3	☐	1.000		6263819.37		A	0.9
4	☐	1.000		6184635.08		A	1.6
5	☐	1.000		6232911.12		A	0.8
6	☐	1.000		6144061.25		A	3.9
7	☐	1.000		6080975.79		A	0.6
8	☐	1.000		5984444.27		A	1.1
9	☐	1.000		5523706.46		A	0.7

103 Rh(ISTD) [He]

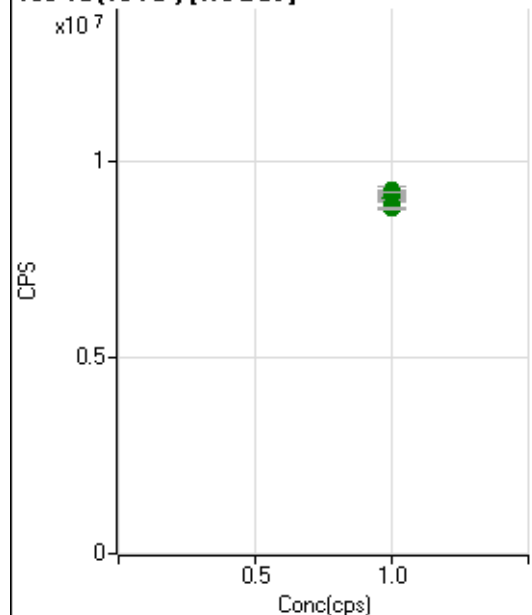
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1698801.00		A	2.6
2	☐	1.000					
3	☐	1.000		1643888.38		A	4.5
4	☐	1.000		1704503.41		A	0.5
5	☐	1.000		1692255.23		A	0.9
6	☐	1.000		1537540.41		A	1.2
7	☐	1.000		1576800.86		A	0.6
8	☐	1.000		1496700.55		M	7.8
9	☐	1.000		1515766.38		M	1.5

115 In(ISTD) [NoGas]

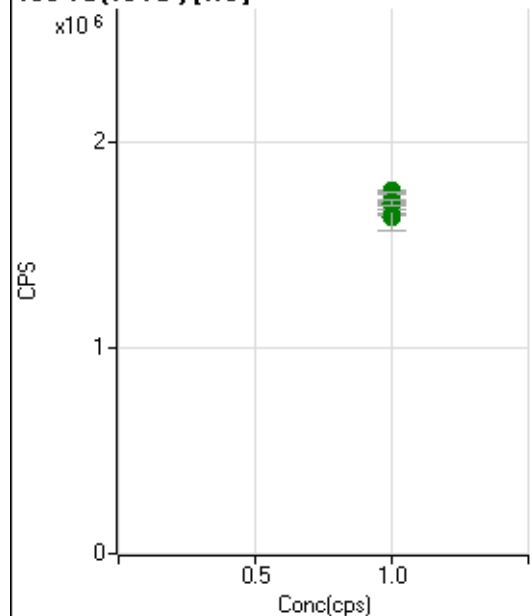
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6735646.39		A	1.3
2	☐	1.000					
3	☐	1.000		6710087.10		A	1.1
4	☐	1.000		6632412.08		A	1.5
5	☐	1.000		6716850.74		A	1.2
6	☐	1.000		6651832.50		A	3.9
7	☐	1.000		6569373.10		A	0.1
8	☐	1.000		6516041.86		A	1.8
9	☐	1.000		6174292.02		A	0.6

115 In(ISTD) [He]

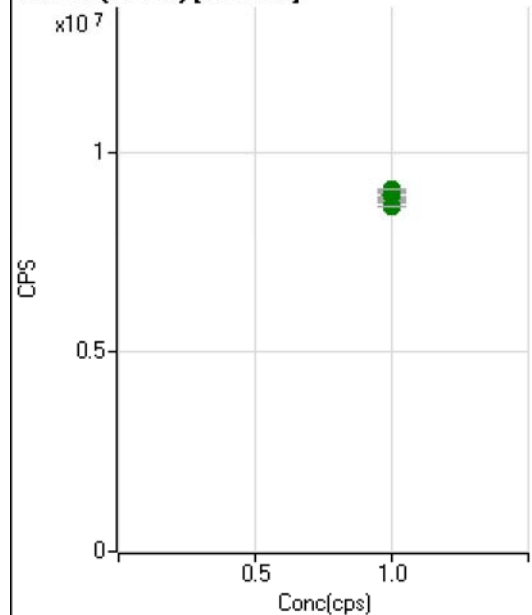
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		279227.39		P	1.9
2	☐	1.000					
3	☐	1.000		275013.22		P	4.6
4	☐	1.000		282834.86		P	0.8
5	☐	1.000		279531.07		P	0.7
6	☐	1.000		259989.47		P	0.4
7	☐	1.000		262144.70		P	0.5
8	☐	1.000		244722.94		P	7.3
9	☐	1.000		265326.01		P	0.6

159 Tb(ISTD) [NoGas]

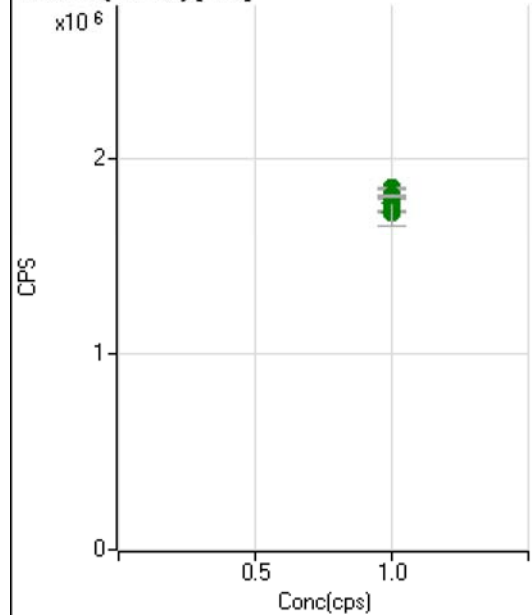
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9099941.67		A	1.2
2	☐	1.000					
3	☐	1.000		8972569.10		A	0.5
4	☐	1.000		9042942.02		A	0.8
5	☐	1.000		9229988.20		A	0.5
6	☐	1.000		9158822.71		A	3.9
7	☐	1.000		9152474.86		A	0.6
8	☐	1.000		9197901.05		A	0.4
9	☐	1.000		8781901.26		A	0.4

159 Tb(ISTD) [He]

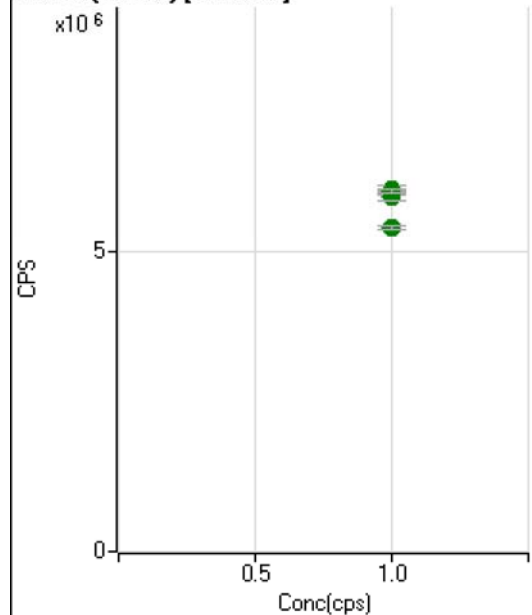
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1746246.07		A	2.3
2	☐	1.000					
3	☐	1.000		1709030.88		A	4.5
4	☐	1.000		1765747.49		A	0.5
5	☐	1.000		1752179.14		A	0.4
6	☐	1.000		1650920.96		A	0.4
7	☐	1.000		1715372.11		A	1.1
8	☐	1.000		1639687.77		A	8.4
9	☐	1.000		1707301.50		A	1.7

¹⁶⁵Ho(ISTD) [NoGas]

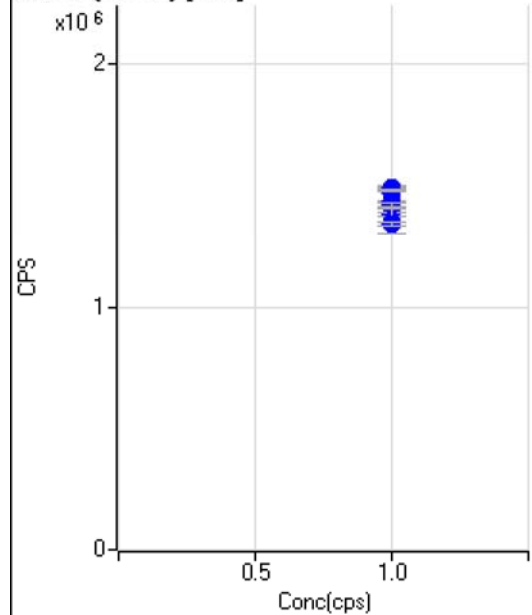
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8801135.96		A	1.9
2	☐	1.000					
3	☐	1.000		8809087.17		A	1.0
4	☐	1.000		8778822.33		A	0.6
5	☐	1.000		8951953.85		A	1.2
6	☐	1.000		8912124.94		A	3.2
7	☐	1.000		8976364.70		A	0.3
8	☐	1.000		9055634.40		A	0.2
9	☐	1.000		8631789.78		A	0.3

¹⁶⁵Ho(ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1816922.40		A	2.8
2	☐	1.000					
3	☐	1.000		1774435.24		A	4.8
4	☐	1.000		1850934.88		A	0.5
5	☐	1.000		1849007.66		A	1.0
6	☐	1.000		1734092.96		A	0.7
7	☐	1.000		1806869.47		A	0.4
8	☐	1.000		1729781.68		A	7.8
9	☐	1.000		1812504.05		A	0.5

209 Bi(ISTD) [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6043071.23		A	2.7
2	☐	1.000					
3	☐	1.000		5912889.29		A	1.3
4	☐	1.000		5975747.34		A	0.9
5	☐	1.000		5987636.58		A	1.4
6	☐	1.000		5987404.56		A	3.8
7	☐	1.000		6034824.70		A	0.5
8	☐	1.000		6020497.55		A	0.9
9	☐	1.000		5416719.02		A	0.8

209 Bi(ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1469188.14		P	3.6
2	☐	1.000					
3	☐	1.000		1444211.73		P	4.7
4	☐	1.000		1493827.70		P	1.2
5	☐	1.000		1486136.38		P	0.8
6	☐	1.000		1385470.10		P	1.0
7	☐	1.000		1426713.82		P	0.8
8	☐	1.000		1356496.80		P	7.7
9	☐	1.000		1346300.26		P	1.6

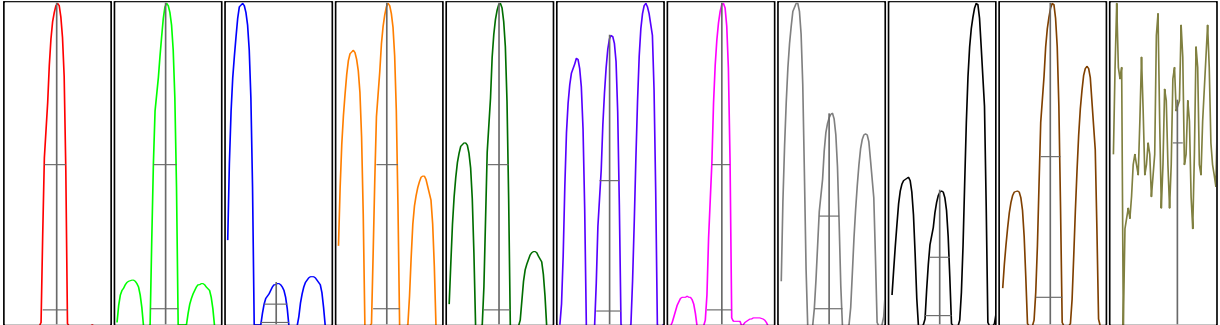
US EPA Tune Check Sample Report

Batch Folder D:\P8082218 MS.b
Report Comment
Instrument Name G8403A JP17141814

[No Gas]				
Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	5712	2.82	5.00	
24	286004	2.95	5.00	
25	37342	2.79	5.00	
26	43194	2.80	5.00	
59	58110	2.86	5.00	
113	8385	2.67	5.00	
115	104057	2.77	5.00	
206	27198	3.25	5.00	
207	24909	2.81	5.00	
208	58977	2.71	5.00	
220	1	15.56		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	5708	5848	5452	5845	5707
24	284060	292236	272297	292830	288597
25	37167	38134	35614	38086	37711
26	43263	44169	41142	44003	43394
59	57812	59472	55372	59273	58622
113	8327	8454	8036	8636	8471
115	103254	104486	99633	107237	105674
206	27205	27129	25787	28075	27796
207	24910	24950	23753	25505	25426
208	59232	59231	56245	60359	59819
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	10003	9.00	8.9 - 9.1		0.738	0.900	
24	477637	23.95	23.9 - 24.1		0.785	0.900	
25	62533	24.95	24.9 - 25.1		0.786	0.900	
26	73312	25.95	25.9 - 26.1		0.782	0.900	
59	102314	59.00	58.9 - 59.1		0.773	0.900	
113	15961	113.00	112.9 - 113.1		0.727	0.900	
115	195613	115.05	114.9 - 115.1		0.726	0.900	
206	49772	205.95	205.9 - 206.1		0.782	0.900	
207	45251	206.95	206.9 - 207.1		0.736	0.900	
208	108407	207.95	207.9 - 208.1		0.749	0.900	
220	1	220.40	-				

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	10.1	V	Deflect	13.8	V
Extract 2	-240.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-100	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	7478	0.74	
89	6057	0.67	
205	12128	0.60	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	7494	7494	7509	7515	7380
89	6077	6097	6063	6059	5989
205	12175	12186	12114	12155	12009

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	10.1	V	Deflect	1.6	V
Extract 2	-240.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-100	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	200	V			