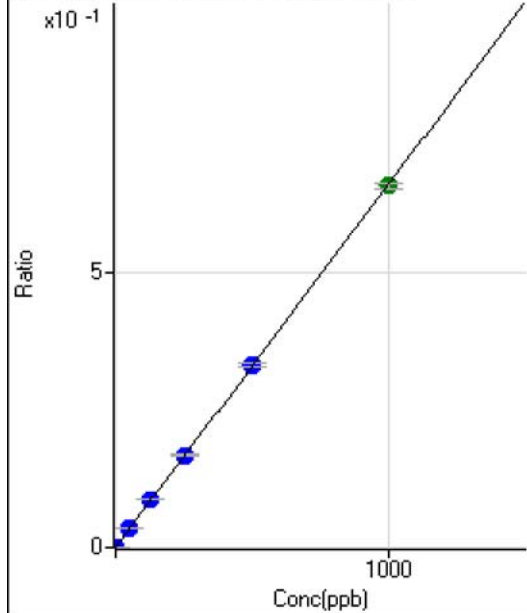


Batch Folder: D:\P8080818-MS .b\
Analysis File: P8080818-MS .batch.bin
DA Date-Time:
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB P8080818-MS.D	S00	2018-08-08 12:28:05
2			
3	005CALS P8080818-MS.D	S02	2018-08-08 12:35:42
4	006CALS P8080818-MS.D	S03	2018-08-08 12:39:25
5	007CALS P8080818-MS.D	S04	2018-08-08 12:43:08
6	008CALS P8080818-MS.D	S05	2018-08-08 12:46:44
7	009CALS P8080818-MS.D	S06	2018-08-08 12:50:14
8	010CALS P8080818-MS.D	S07	2018-08-08 12:53:42
9	011CALS P8080818-MS.D	S08	2018-08-08 12:57:04

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	66.67	0.0000	P	10.0
2	☐	0.100					
3	☐	1.000	0.976	1131.56	0.0007	P	10.2
4	☐	50.000	52.740	57569.03	0.0350	P	1.6
5	☐	125.000	130.120	143227.66	0.0862	P	1.1
6	☐	250.000	254.522	281108.78	0.1685	P	2.1
7	☐	500.000	502.995	543616.99	0.3330	P	2.4
8	☐	1000.000	996.595	1068445.40	0.6598	A	1.6
9	☐			548.17	0.0003	P	11.1

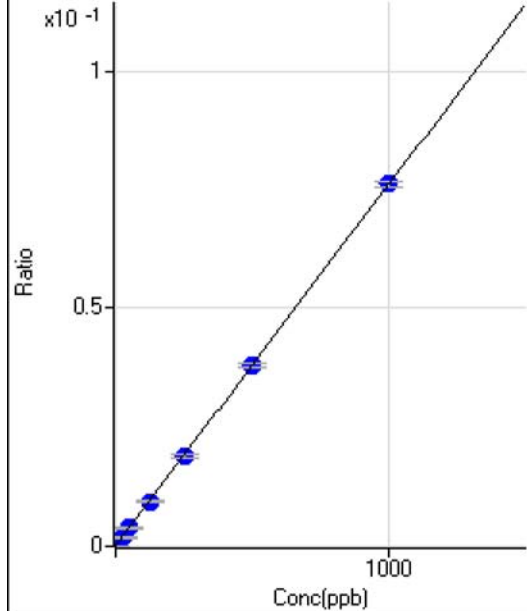
$$y = 6.6203\text{E-}004 * x + 4.0408\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.01824$$

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	250.02	0.0002	P	25.7
2	☐	2.500					
3	☐	25.000	22.009	3005.99	0.0018	P	1.1
4	☐	50.000	49.737	6471.20	0.0039	P	6.5
5	☐	125.000	122.588	15734.29	0.0095	P	2.7
6	☐	250.000	247.053	31566.22	0.0189	P	3.5
7	☐	500.000	497.551	61984.35	0.0380	P	1.8
8	☐	1000.000	1002.350	123623.03	0.0763	P	1.7
9	☐			6782.47	0.0043	P	11.6

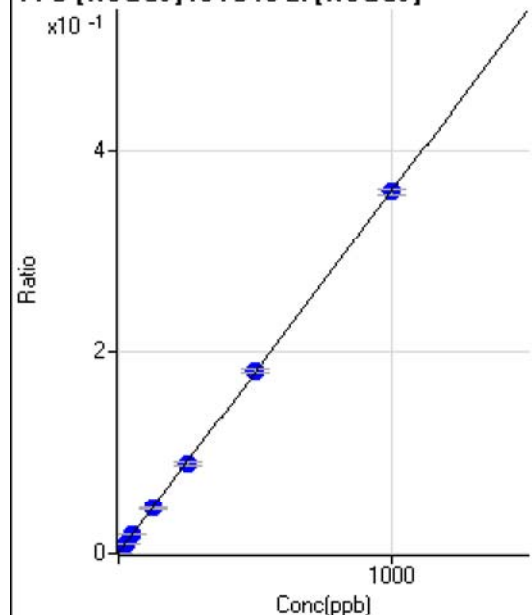
$$y = 7.6006\text{E-}005 * x + 1.5112\text{E-}004$$

$$R = 1.0000$$

$$DL = 1.534$$

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	958.41	0.0006	P	4.1
2	☐	2.500					
3	☐	25.000	23.780	15047.39	0.0091	P	1.9
4	☐	50.000	49.951	30524.98	0.0185	P	3.9
5	☐	125.000	125.054	75683.11	0.0455	P	3.9
6	☐	250.000	248.417	149927.62	0.0899	P	3.3
7	☐	500.000	502.547	295922.15	0.1813	P	2.6
8	☐	1000.000	999.149	582754.79	0.3598	P	1.9
9	☐			30597.51	0.0194	P	7.7

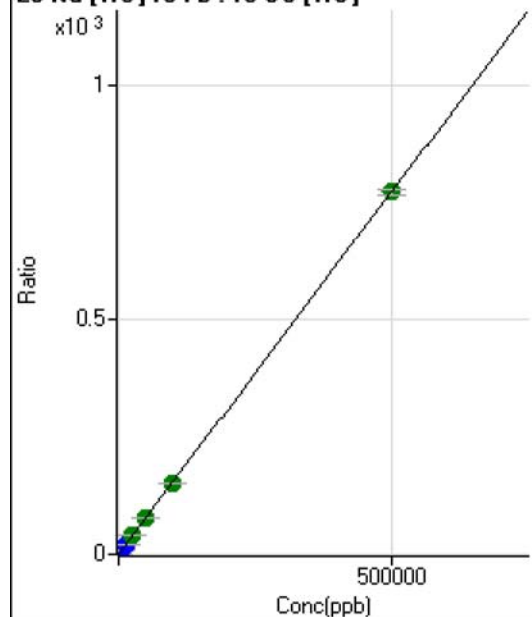
$$y = 3.5956E-004 * x + 5.8036E-004$$

$$R = 1.0000$$

$$DL = 0.1979$$

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	6121.00	0.1448	P	1.7
2	☐	50.000					
3	☐	500.000	488.657	37709.30	0.8993	P	3.8
4	☐	5000.000	5155.763	337427.84	8.1061	P	1.8
5	☐	12500.000	12749.360	839146.67	19.8318	P	1.6
6	☐	25000.000	25583.671	1657276.30	39.6500	A	1.0
7	☐	50000.000	50888.320	3098773.98	78.7243	A	0.8
8	☐	100000.00	98782.617	6028071.27	152.6806	A	0.4
9	☐	500000.00	500117.68	30961064.93	772.4046	A	1.3

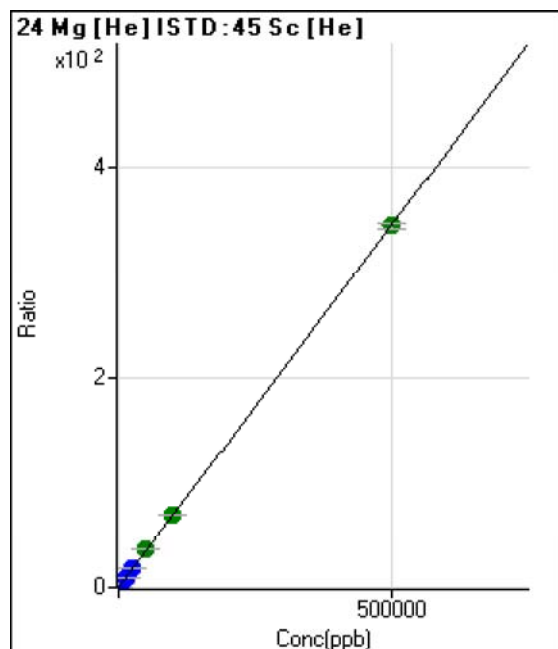
$$y = 0.0015 * x + 0.1448$$

$$R = 1.0000$$

$$DL = 4.824$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	311.13	0.0074	P	9.4
2	☐	50.000					
3	☐	500.000	481.649	14232.78	0.3395	P	3.9
4	☐	5000.000	5183.606	149087.54	3.5814	P	1.3
5	☐	12500.000	12761.081	372635.01	8.8060	P	1.2
6	☐	25000.000	25321.993	730054.56	17.4667	P	1.0
7	☐	50000.000	51786.222	1405775.55	35.7136	A	0.4
8	☐	100000.00	100019.05	2723049.62	68.9698	A	0.3
9	☐	500000.00	499793.12	13813157.77	344.6111	A	1.6

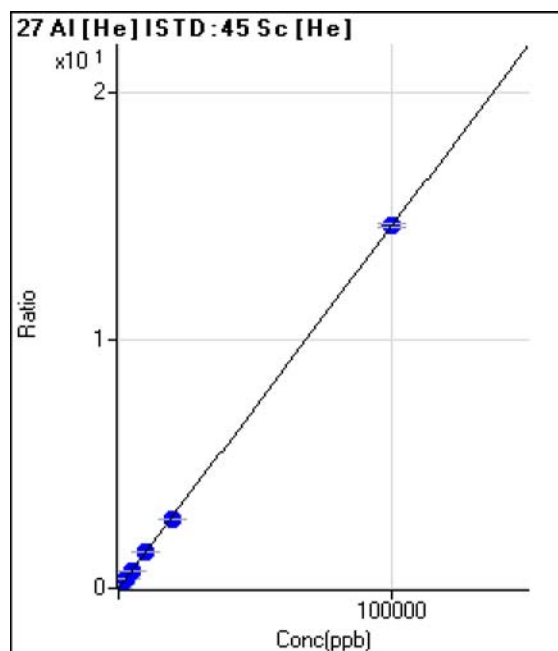
$$y = 6.8949\text{E-}004 * x + 0.0074$$

$$R = 1.0000$$

$$DL = 2.996$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	21.67	0.0005	P	25.3
2	☐	2.000					
3	☐	20.000	16.487	122.53	0.0029	P	18.5
4	☐	1000.000	984.403	6007.84	0.1443	P	1.7
5	☐	2500.000	2432.467	15053.50	0.3558	P	3.3
6	☐	5000.000	4906.717	29980.77	0.7173	P	0.1
7	☐	10000.000	9965.964	57324.77	1.4563	P	1.0
8	☐	20000.000	19248.193	111029.34	2.8122	P	0.7
9	☐	100000.00	100160.27	586488.61	14.6314	P	1.1

$$y = 1.4607\text{E-}004 * x + 5.1359\text{E-}004$$

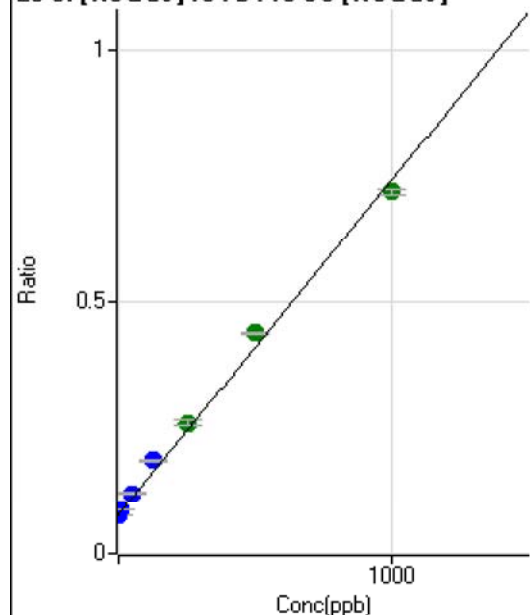
$$R = 1.0000$$

$$DL = 2.665$$

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	369845.00	0.0777	P	0.4
2	☐	1.000					
3	☐	10.000	15.439	427173.87	0.0879	P	2.8
4	☐	50.000	63.987	582364.37	0.1203	P	0.8
5	☐	125.000	162.736	905811.40	0.1860	P	2.7
6	☐	250.000	276.479	1304791.73	0.2618	A	3.1
7	☐	500.000	543.055	2140566.67	0.4394	A	1.0
8	☐	1000.000	966.382	3447633.62	0.7213	A	1.7
9	☐			514310.46	0.1081	P	0.5

$$y = 6.6606\text{E-}004 * x + 0.0777$$

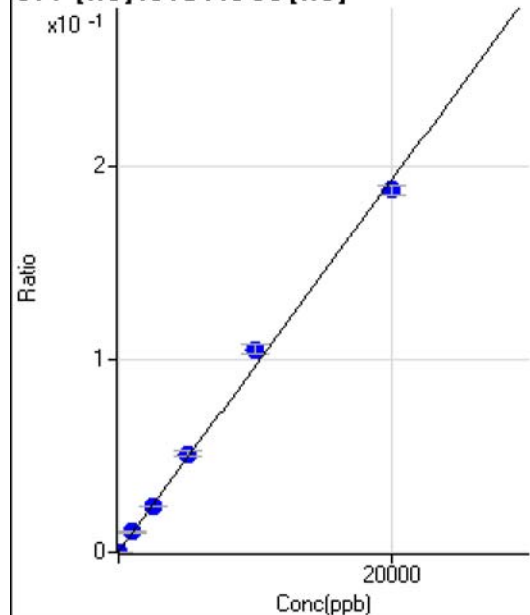
$$R = 0.9978$$

$$DL = 1.503$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-13.830	0.00	0.0000	P	
2	☐	0.000					
3	☐	0.000	13.830	11.11	0.0003	P	45.5
4	☐	1000.000	1072.803	436.14	0.0105	P	17.4
5	☐	2500.000	2494.686	1022.31	0.0242	P	1.9
6	☐	5000.000	5304.734	2141.93	0.0512	P	6.7
7	☐	10000.000	10861.966	4123.02	0.1047	P	4.7
8	☐	20000.000	19489.857	7416.21	0.1878	P	2.7
9	☐			5.56	0.0001	P	173.

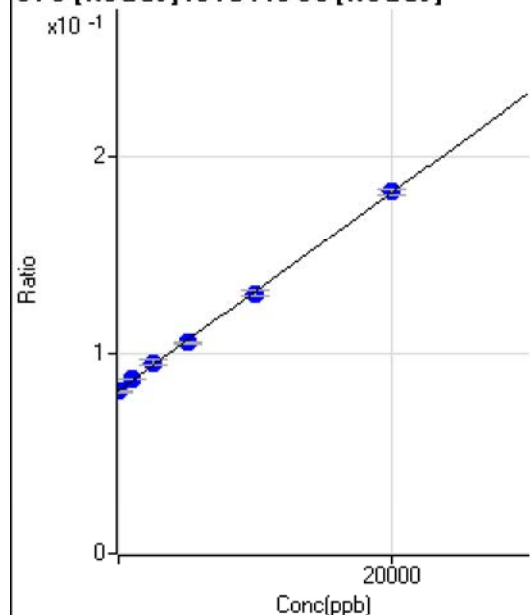
$$y = 9.6314\text{E-}006 * x + 1.3320\text{E-}004$$

$$R = 0.9984$$

$$DL = 18.89$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	44.751	391102.77	0.0821	P	0.5
2	☐	0.000					
3	☐	0.000	-44.751	396788.93	0.0817	P	1.7
4	☐	1000.000	1194.567	425333.85	0.0878	P	0.2
5	☐	2500.000	2808.234	466823.52	0.0959	P	2.3
6	☐	5000.000	4785.658	527004.08	0.1057	P	1.0
7	☐	10000.000	9802.111	636648.02	0.1307	P	2.5
8	☐	20000.000	20104.272	869904.26	0.1820	P	1.5
9	☐			364457.55	0.0766	P	1.3

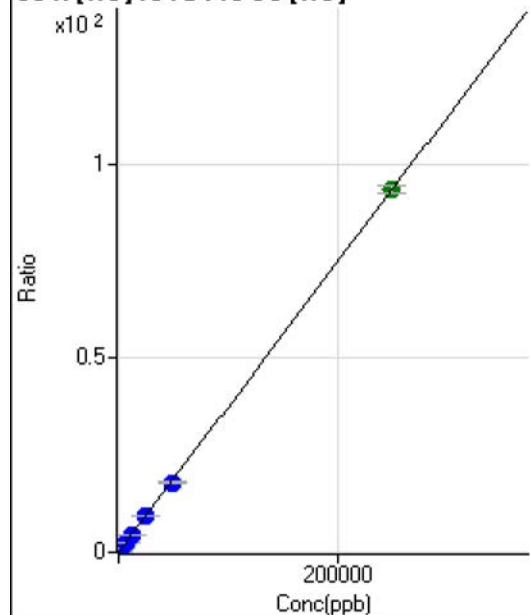
$$y = 4.9793E-006 * x + 0.0819$$

$$R = 0.9996$$

$$DL = 538.5$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	3003.23	0.0711	P	3.9
2	☐	50.000					
3	☐	500.000	466.300	10281.98	0.2452	P	4.3
4	☐	2500.000	2549.897	42604.49	1.0234	P	1.0
5	☐	6250.000	6210.540	101137.75	2.3906	P	2.7
6	☐	12500.000	12343.285	195664.57	4.6811	P	0.8
7	☐	25000.000	24720.192	366214.92	9.3036	P	0.3
8	☐	50000.000	48249.049	714265.30	18.0912	P	0.9
9	☐	250000.00	250386.56	3751171.52	93.5862	A	2.0

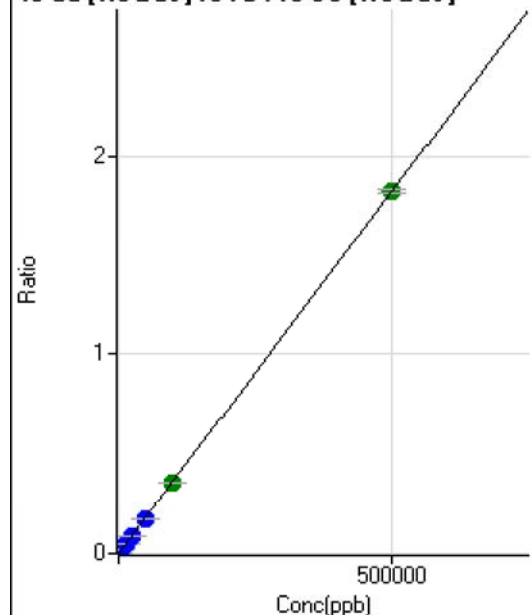
$$y = 3.7348E-004 * x + 0.0711$$

$$R = 1.0000$$

$$DL = 22.23$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	602.82	0.0001	P	12.8
2	☐	50.000					
3	☐	500.000	460.130	8753.11	0.0018	P	2.8
4	☐	5000.000	4904.003	87064.24	0.0180	P	1.2
5	☐	12500.000	12434.050	221015.75	0.0454	P	3.0
6	☐	25000.000	23937.889	435034.93	0.0873	P	1.8
7	☐	50000.000	48120.531	854098.98	0.1753	P	1.4
8	☐	100000.00	98020.102	1706296.57	0.3570	A	1.7
9	☐	500000.00	500639.68	8672782.75	1.8228	A	1.0

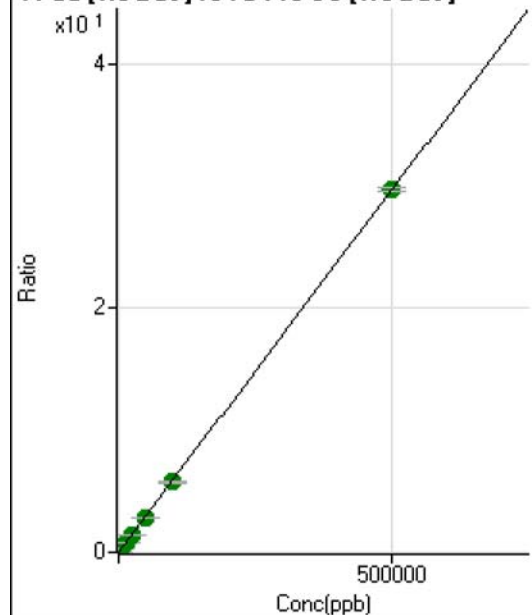
$$y = 3.6407\text{E-}006 * x + 1.2661\text{E-}004$$

$$R = 1.0000$$

$$DL = 13.35$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	19294.62	0.0041	P	0.2
2	☐	50.000					
3	☐	500.000	452.105	150229.33	0.0309	P	1.1
4	☐	5000.000	4978.552	1452181.95	0.2999	A	2.1
5	☐	12500.000	12410.964	3611057.02	0.7416	A	2.2
6	☐	25000.000	24004.546	7131157.89	1.4306	A	1.2
7	☐	50000.000	47921.107	13892891.45	2.8519	A	1.7
8	☐	100000.00	97431.949	27693645.06	5.7942	A	1.8
9	☐	500000.00	500773.76	141609730.9	29.7637	A	1.2

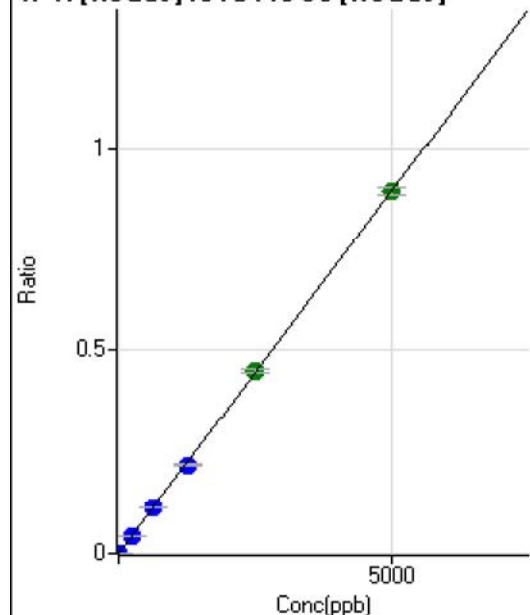
$$y = 5.9427\text{E-}005 * x + 0.0041$$

$$R = 1.0000$$

$$DL = 0.4198$$

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	233.35	0.0000	P	19.3
2	☐	0.500					
3	☐	5.000	5.111	4681.52	0.0010	P	1.7
4	☐	250.000	250.049	216850.98	0.0448	P	0.3
5	☐	625.000	637.139	555281.63	0.1140	P	2.0
6	☐	1250.000	1229.086	1096324.36	0.2199	P	1.4
7	☐	2500.000	2513.426	2190807.15	0.4497	A	1.5
8	☐	5000.000	4996.995	4272990.68	0.8940	A	2.0
9	☐			2480.89	0.0005	P	4.6

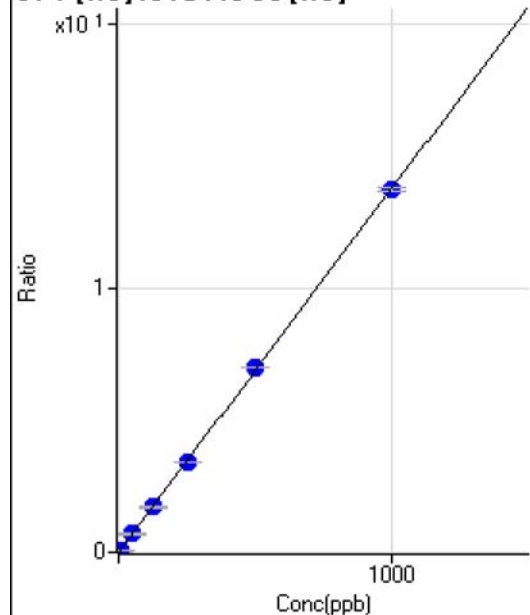
$$y = 1.7890E-004 * x + 4.9018E-005$$

$$R = 1.0000$$

$$DL = 0.159$$

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	2.22	0.0001	P	86.6
2	☐	0.500					
3	☐	5.000	4.867	2817.00	0.0671	P	0.6
4	☐	50.000	50.299	28863.23	0.6934	P	2.3
5	☐	125.000	125.361	73107.38	1.7281	P	3.1
6	☐	250.000	249.610	143815.83	3.4408	P	0.9
7	☐	500.000	506.204	274667.93	6.9779	P	0.2
8	☐	1000.000	996.936	542560.51	13.7424	P	0.9
9	☐			255.56	0.0064	P	8.5

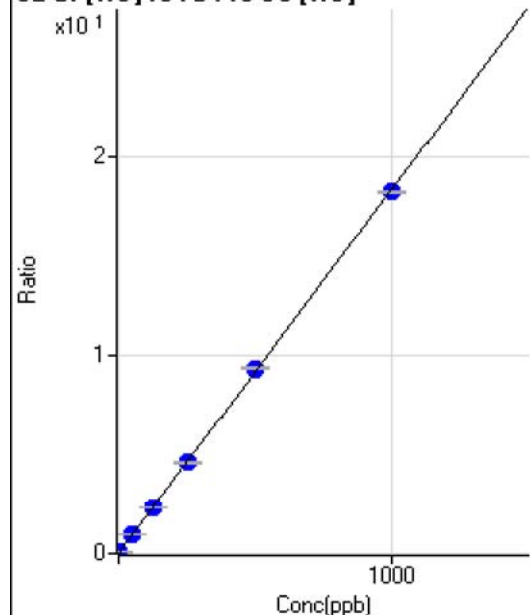
$$y = 0.0138 * x + 5.2158E-005$$

$$R = 1.0000$$

$$DL = 0.009831$$

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	494.46	0.0117	P	10.1
2	☐	0.200					
3	☐	2.000	2.055	2070.19	0.0494	P	3.3
4	☐	50.000	50.847	39261.81	0.9432	P	2.0
5	☐	125.000	126.377	98446.30	2.3269	P	2.5
6	☐	250.000	250.305	192149.02	4.5972	P	1.1
7	☐	500.000	508.611	367223.72	9.3293	P	0.5
8	☐	1000.000	995.404	720430.04	18.2473	P	0.5
9	☐			28349.99	0.7073	P	1.5

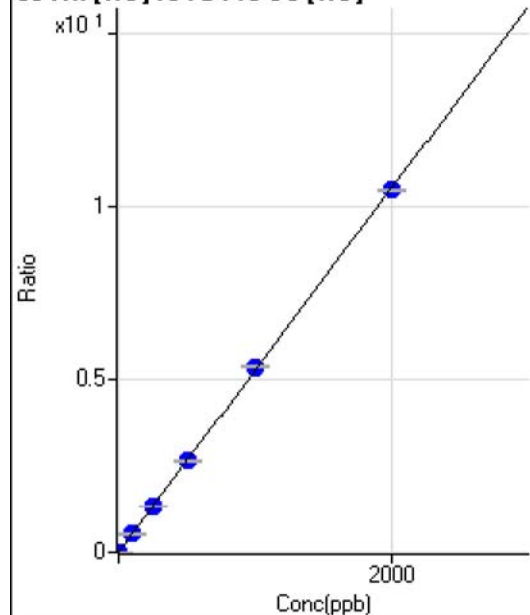
$$y = 0.0183 * x + 0.0117$$

$$R = 0.9999$$

$$DL = 0.1942$$

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	184.45	0.0044	P	5.6
2	☐	0.100					
3	☐	1.000	0.842	368.90	0.0088	P	11.5
4	☐	100.000	99.823	22028.67	0.5291	P	0.9
5	☐	250.000	251.168	56053.23	1.3248	P	1.9
6	☐	500.000	501.455	110369.34	2.6406	P	1.1
7	☐	1000.000	1015.322	210277.62	5.3420	P	0.7
8	☐	2000.000	1991.838	413594.67	10.4757	P	0.6
9	☐			2095.76	0.0523	P	7.8

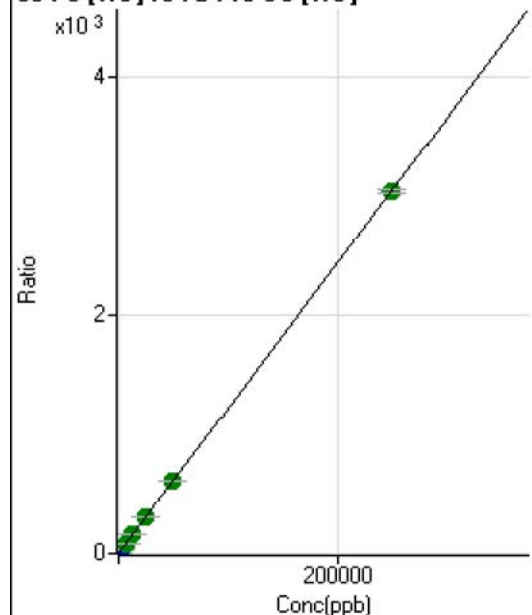
$$y = 0.0053 * x + 0.0044$$

$$R = 1.0000$$

$$DL = 0.1406$$

Weight: <None>

Min Conc: 0

⁵⁶Fe [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1931.68	0.0457	P	2.5
2	☐	5.000					
3	☐	50.000	49.502	27165.92	0.6478	P	2.7
4	☐	2500.000	2576.812	1306580.50	31.3863	P	1.0
5	☐	6250.000	6443.554	3317707.83	78.4158	A	2.3
6	☐	12500.000	12696.670	6456134.29	154.4696	A	1.5
7	☐	25000.000	25679.464	12295871.34	312.3735	A	0.2
8	☐	50000.000	50417.907	24212234.34	613.2561	A	0.5
9	☐	250000.00	249833.03	121801180.5	3,038.653	A	1.2

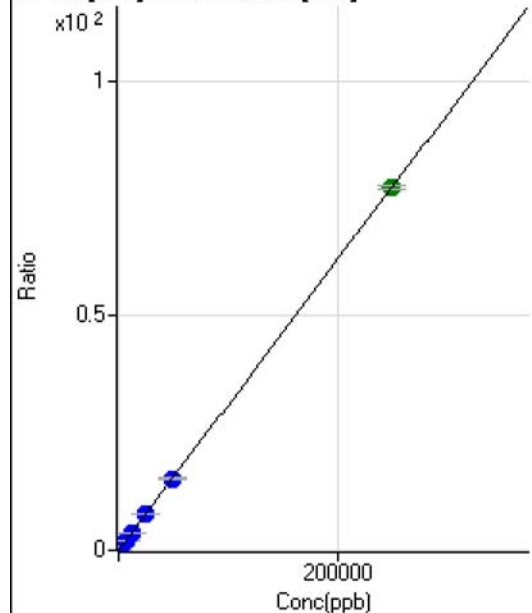
$$y = 0.0122 * x + 0.0457$$

$$R = 1.0000$$

$$DL = 0.2785$$

Weight: <None>

Min Conc: 0

⁵⁷Fe [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	55.56	0.0013	P	19.9
2	☐	5.000					
3	☐	50.000	47.965	679.67	0.0162	P	10.0
4	☐	2500.000	2521.986	32568.33	0.7824	P	1.9
5	☐	6250.000	6247.504	81926.75	1.9362	P	1.7
6	☐	12500.000	12467.975	161445.67	3.8627	P	1.4
7	☐	25000.000	25219.613	307495.01	7.8120	P	0.9
8	☐	50000.000	49569.782	606171.83	15.3534	P	0.6
9	☐	250000.00	250065.52	3104475.07	77.4481	A	0.9

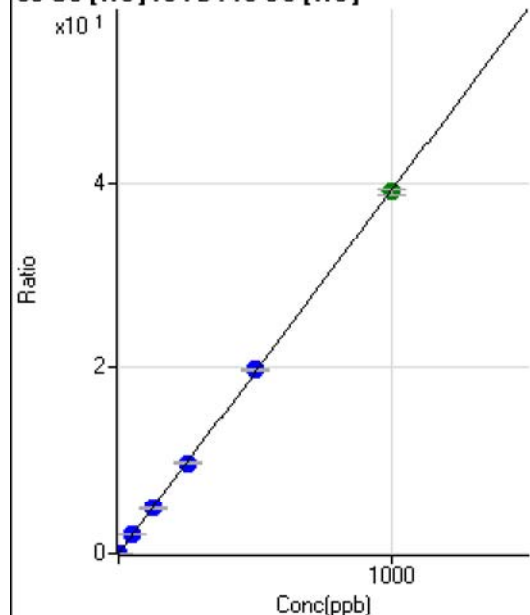
$$y = 3.0971E-004 * x + 0.0013$$

$$R = 1.0000$$

$$DL = 2.537$$

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	108.89	0.0026	P	13.6
2	☐	0.100					
3	☐	1.000	0.946	1662.35	0.0396	P	2.0
4	☐	50.000	50.991	83293.66	2.0009	P	1.0
5	☐	125.000	125.308	207882.42	4.9133	P	2.1
6	☐	250.000	249.836	409325.80	9.7934	P	1.3
7	☐	500.000	505.771	780286.61	19.8232	P	0.5
8	☐	1000.000	997.068	1542837.72	39.0766	A	1.5
9	☐			19108.93	0.4767	P	0.8

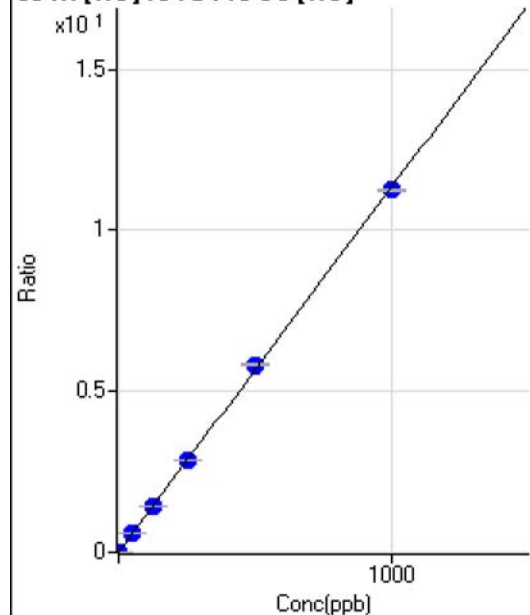
$$y = 0.0392 * x + 0.0026$$

$$R = 1.0000$$

$$DL = 0.02681$$

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	200.01	0.0047	P	4.1
2	☐	0.100					
3	☐	1.000	1.020	683.36	0.0163	P	1.7
4	☐	50.000	51.294	24385.97	0.5859	P	3.1
5	☐	125.000	126.615	60894.73	1.4392	P	2.1
6	☐	250.000	251.804	119439.08	2.8576	P	0.9
7	☐	500.000	512.826	228888.15	5.8149	P	0.6
8	☐	1000.000	992.869	444317.65	11.2537	P	0.3
9	☐			14825.90	0.3699	P	2.4

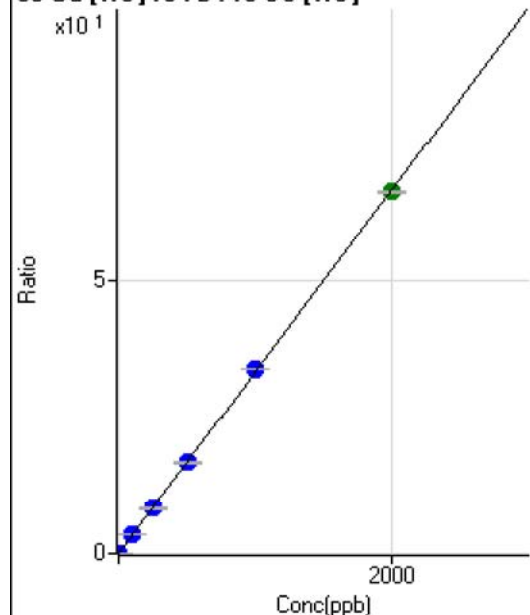
$$y = 0.0113 * x + 0.0047$$

$$R = 0.9999$$

$$DL = 0.05153$$

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	502.24	0.0119	P	1.4
2	☐	0.200					
3	☐	2.000	1.962	3237.10	0.0772	P	1.3
4	☐	100.000	102.081	141932.15	3.4094	P	0.8
5	☐	250.000	250.795	353649.50	8.3590	P	2.5
6	☐	500.000	502.232	699144.61	16.7274	P	1.2
7	☐	1000.000	1011.547	1325683.30	33.6787	P	0.3
8	☐	2000.000	1993.465	2619988.24	66.3595	A	0.3
9	☐			6652.81	0.1660	P	2.6

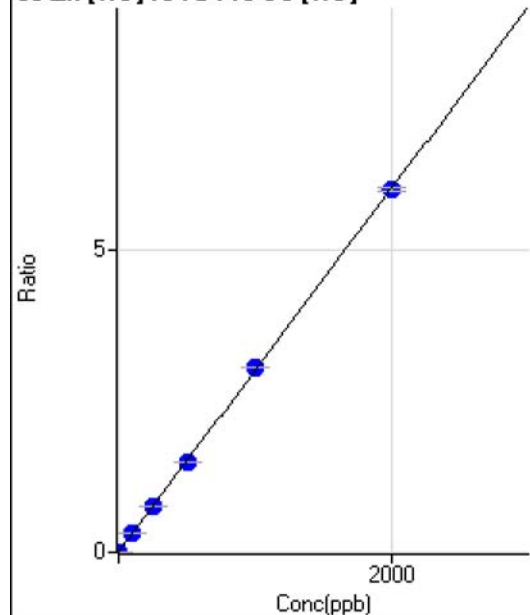
$$y = 0.0333 * x + 0.0119$$

$$R = 1.0000$$

$$DL = 0.01446$$

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	190.00	0.0045	P	10.1
2	☐	0.200					
3	☐	2.000	1.913	430.02	0.0103	P	6.2
4	☐	100.000	101.499	12905.07	0.3100	P	1.4
5	☐	250.000	251.695	32237.58	0.7620	P	2.8
6	☐	500.000	497.515	62772.48	1.5019	P	1.1
7	☐	1000.000	1016.251	120571.28	3.0631	P	0.4
8	☐	2000.000	1992.209	236902.12	6.0004	P	0.9
9	☐			2628.08	0.0656	P	4.2

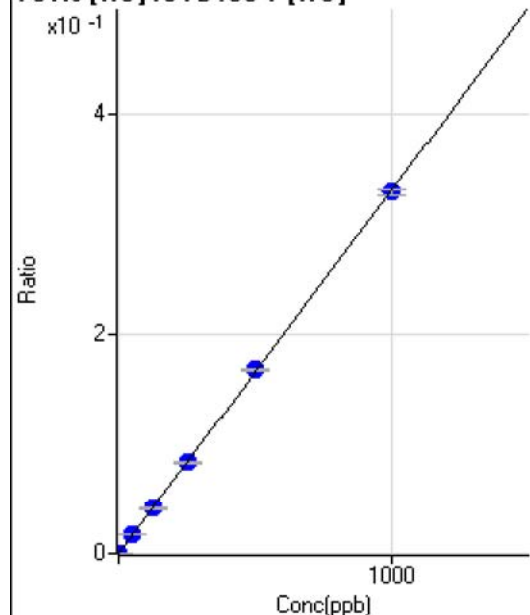
$$y = 0.0030 * x + 0.0045$$

$$R = 1.0000$$

$$DL = 0.4507$$

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	3.08	0.0000	P	35.3
2	☐	0.100					
3	☐	1.000	0.997	95.68	0.0003	P	2.3
4	☐	50.000	50.907	4681.09	0.0169	P	1.3
5	☐	125.000	124.461	11579.61	0.0412	P	3.1
6	☐	250.000	251.712	23266.59	0.0833	P	1.1
7	☐	500.000	505.715	44572.16	0.1674	P	1.5
8	☐	1000.000	996.736	87778.73	0.3299	P	1.3
9	☐			158.64	0.0006	P	8.9

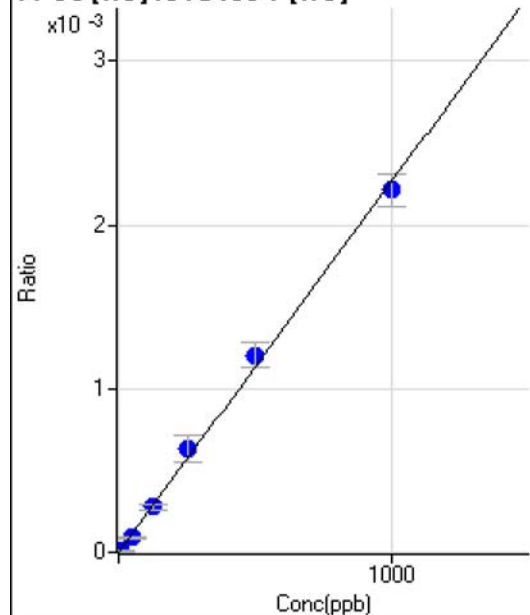
$$y = 3.3101\text{E-}004 * x + 1.0992\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.03512$$

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	3.513	2.22	0.0000	P	86.6
4	☐	50.000	38.882	24.44	0.0001	P	20.6
5	☐	125.000	122.014	77.78	0.0003	P	15.5
6	☐	250.000	281.413	177.78	0.0006	P	25.8
7	☐	500.000	530.625	320.01	0.0012	P	13.0
8	☐	1000.000	977.771	588.91	0.0022	P	8.7
9	☐			3.33	0.0000	P	0.1

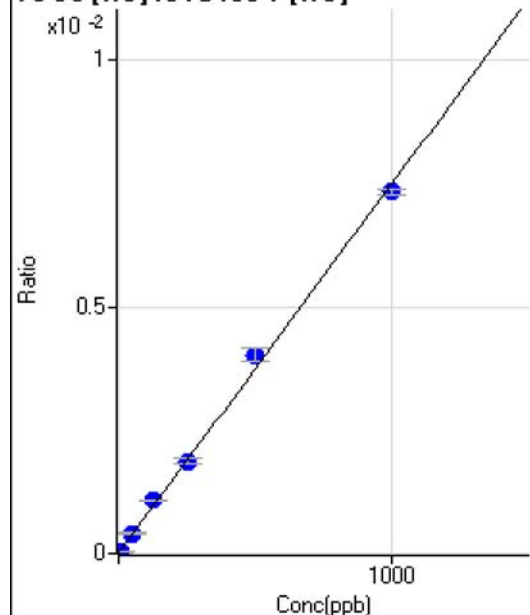
$$y = 2.2638\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9985$$

$$DL = 0$$

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	2.47	0.0000	P	114.
2	☐	0.500					
3	☐	5.000	1.481	5.56	0.0000	P	1.2
4	☐	50.000	51.724	109.88	0.0004	P	11.8
5	☐	125.000	141.958	301.24	0.0011	P	2.2
6	☐	250.000	250.491	525.94	0.0019	P	6.4
7	☐	500.000	535.271	1069.19	0.0040	P	6.8
8	☐	1000.000	980.053	1954.48	0.0073	P	1.5
9	☐			4.32	0.0000	P	107.

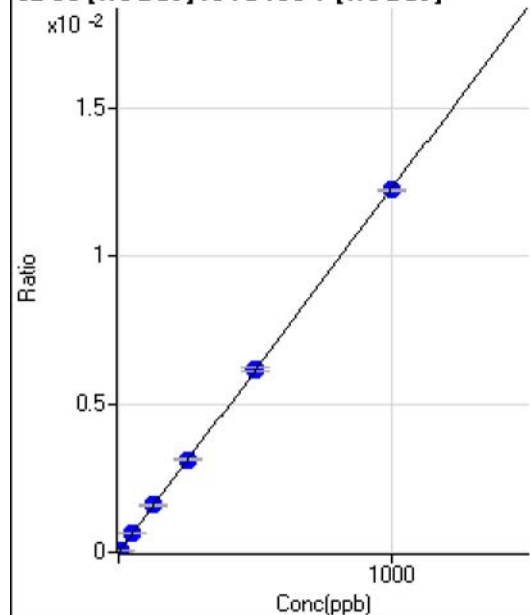
$$y = 7.4864\text{E-}006 * x + 8.7267\text{E-}006$$

$$R = 0.9989$$

$$DL = 3.994$$

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	-64.33	0.0000	P	-63.
2	☐	0.500					
3	☐	5.000	5.133	462.94	0.0001	P	4.5
4	☐	50.000	52.336	5285.31	0.0006	P	2.6
5	☐	125.000	130.492	13528.83	0.0016	P	3.2
6	☐	250.000	255.528	26831.50	0.0031	P	1.4
7	☐	500.000	502.094	52211.51	0.0062	P	2.1
8	☐	1000.000	996.767	103827.13	0.0122	P	0.5
9	☐			56.33	0.0000	P	81.9

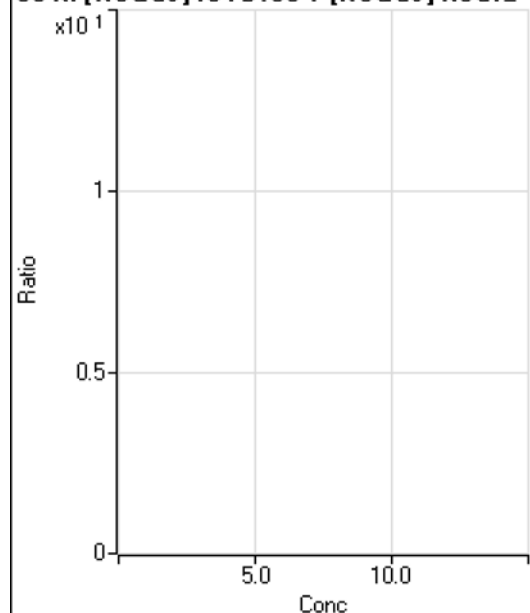
$$y = 1.2290\text{E-}005 * x - 7.7908\text{E-}006$$

$$R = 1.0000$$

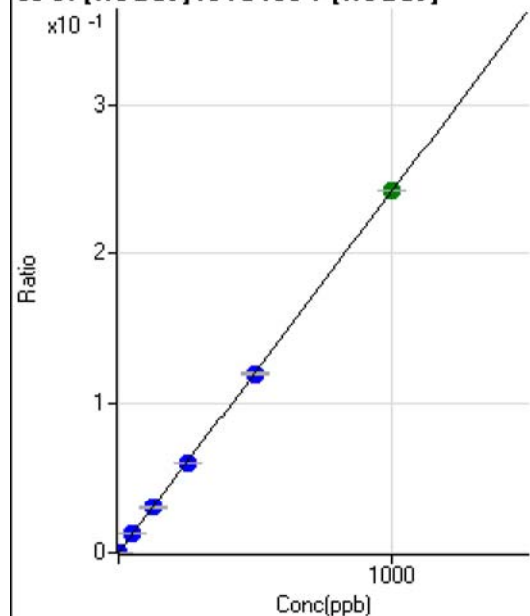
$$DL = 1.21$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			398.90	0.0000	P	7.6
2	☐						
3	☐			392.24	0.0000	P	3.7
4	☐			386.68	0.0000	P	11.3
5	☐			392.24	0.0000	P	6.9
6	☐			415.57	0.0000	P	8.7
7	☐			351.13	0.0000	P	8.3
8	☐			418.91	0.0000	P	5.4
9	☐			392.24	0.0000	P	11.2

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	630.60	0.0001	P	13.3
2	☐	0.100					
3	☐	1.000	0.955	2569.83	0.0003	P	3.0
4	☐	50.000	50.722	102603.32	0.0123	P	1.9
5	☐	125.000	126.039	258890.24	0.0305	P	2.7
6	☐	250.000	248.223	514498.45	0.0601	P	0.9
7	☐	500.000	495.104	1014419.42	0.1197	P	1.5
8	☐	1000.000	1002.726	2055902.71	0.2424	A	0.1
9	☐			10384.94	0.0013	P	0.5

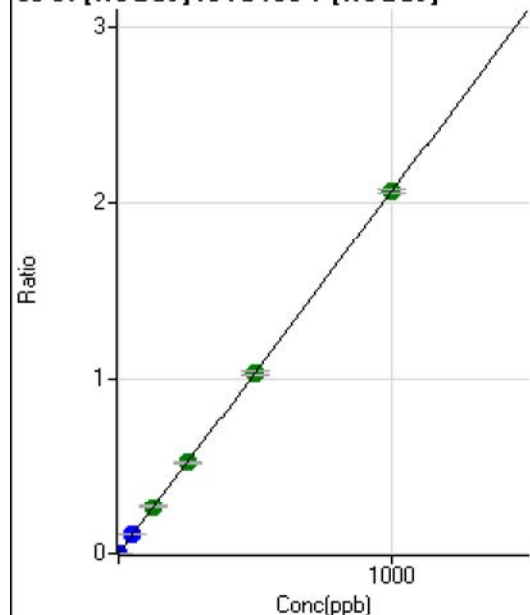
$$y = 2.4167\text{E-}004 * x + 7.6051\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.1252$$

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	275.02	0.0000	P	5.4
2	☐	0.100					
3	☐	1.000	1.022	17954.21	0.0021	P	2.1
4	☐	50.000	51.424	884349.76	0.1063	P	1.6
5	☐	125.000	129.336	2266251.07	0.2673	A	3.0
6	☐	250.000	252.354	4467493.11	0.5216	A	0.8
7	☐	500.000	497.634	8713482.05	1.0285	A	1.6
8	☐	1000.000	999.981	17526974.18	2.0666	A	1.0
9	☐			87298.69	0.0106	P	1.0

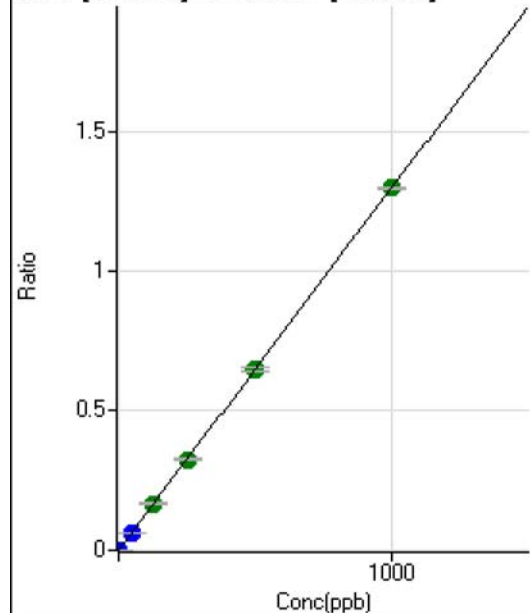
$$y = 0.0021 * x + 3.3181E-005$$

$$R = 1.0000$$

$$DL = 0.002617$$

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	716.72	0.0001	P	12.3
2	☐	0.100					
3	☐	1.000	0.963	11199.50	0.0013	P	3.1
4	☐	50.000	49.960	540550.47	0.0650	P	0.9
5	☐	125.000	129.699	1428990.32	0.1685	A	2.4
6	☐	250.000	251.539	2798858.07	0.3268	A	2.0
7	☐	500.000	497.067	5470348.39	0.6457	A	1.7
8	☐	1000.000	1000.496	11021284.62	1.2995	A	0.8
9	☐			3144.99	0.0004	P	3.1

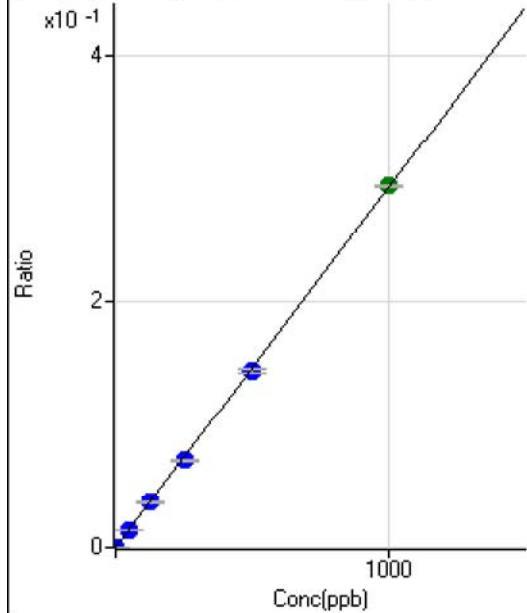
$$y = 0.0013 * x + 8.6530E-005$$

$$R = 1.0000$$

$$DL = 0.02464$$

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	127.79	0.0000	P	25.4
2	☐	0.100					
3	☐	1.000	1.007	2600.38	0.0003	P	9.1
4	☐	50.000	48.878	119308.43	0.0143	P	1.1
5	☐	125.000	125.491	311924.56	0.0368	P	3.1
6	☐	250.000	244.410	613685.21	0.0716	P	1.4
7	☐	500.000	489.389	1215281.09	0.1434	P	2.2
8	☐	1000.000	1006.698	2502430.15	0.2951	A	0.8
9	☐			727.83	0.0001	P	7.6

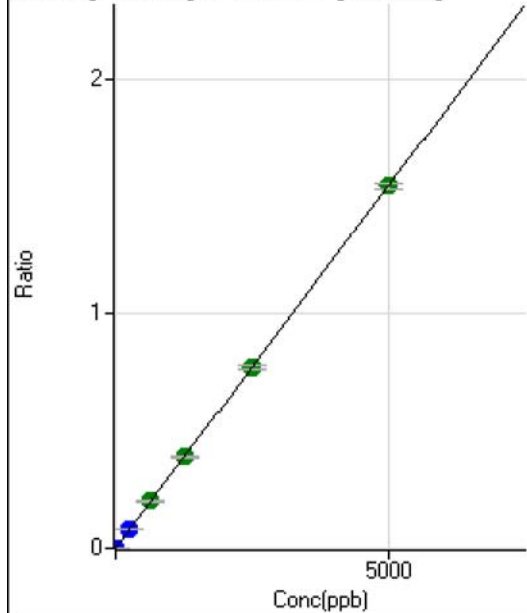
$$y = 2.9308\text{E-}004 * x + 1.5399\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.04011$$

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	311.13	0.0000	P	34.0
2	☐	0.500					
3	☐	5.000	4.856	12895.57	0.0015	P	3.1
4	☐	250.000	254.028	654217.06	0.0786	P	1.4
5	☐	625.000	649.803	1705074.58	0.2011	A	2.4
6	☐	1250.000	1259.748	3339272.86	0.3898	A	0.9
7	☐	2500.000	2489.629	6527165.73	0.7704	A	1.9
8	☐	5000.000	4999.447	13120097.34	1.5470	A	1.3
9	☐			16955.75	0.0021	P	1.8

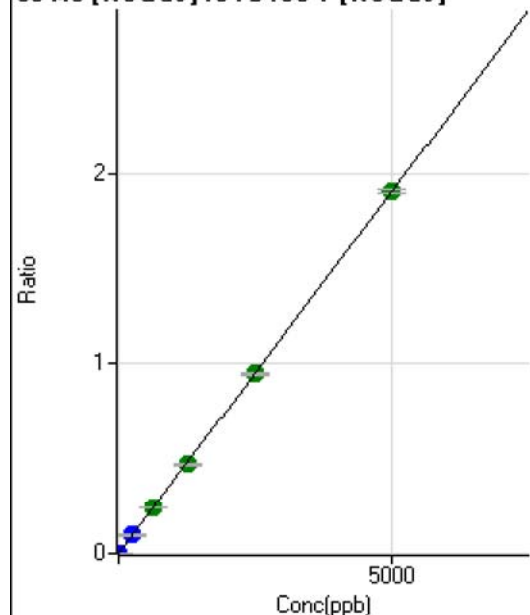
$$y = 3.0943\text{E-}004 * x + 3.7599\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.1238$$

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	77.78	0.0000	P	43.7
2	☐	0.500					
3	☐	5.000	4.746	15195.24	0.0018	P	3.0
4	☐	250.000	253.242	801419.48	0.0963	P	1.8
5	☐	625.000	640.466	2065731.62	0.2436	A	2.1
6	☐	1250.000	1244.078	4053324.61	0.4732	A	1.8
7	☐	2500.000	2482.736	8001704.34	0.9444	A	1.4
8	☐	5000.000	5008.018	16156281.61	1.9050	A	0.9
9	☐			27203.37	0.0033	P	3.9

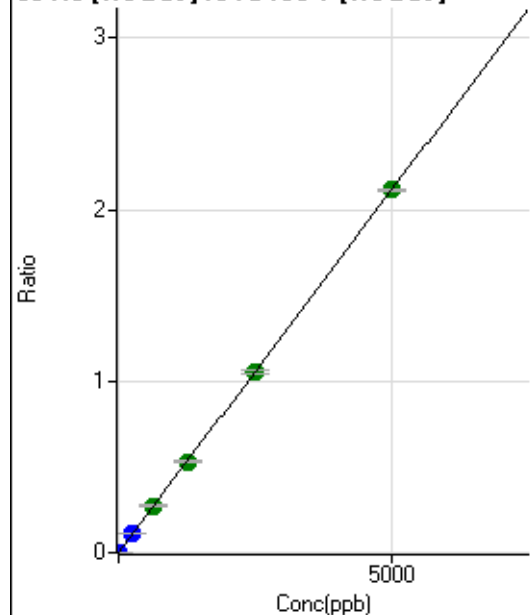
$$y = 3.8039E-004 * x + 9.4061E-006$$

$$R = 1.0000$$

$$DL = 0.03245$$

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	166.68	0.0000	P	15.8
2	☐	0.500					
3	☐	5.000	4.850	17328.39	0.0021	P	2.8
4	☐	250.000	254.105	893546.18	0.1074	P	1.6
5	☐	625.000	649.373	2326691.85	0.2745	A	3.2
6	☐	1250.000	1254.411	4541188.52	0.5302	A	1.1
7	☐	2500.000	2483.232	8891385.01	1.0495	A	2.1
8	☐	5000.000	5004.030	17936267.24	2.1149	A	0.5
9	☐			30746.85	0.0037	P	6.4

$$y = 4.2263E-004 * x + 2.0130E-005$$

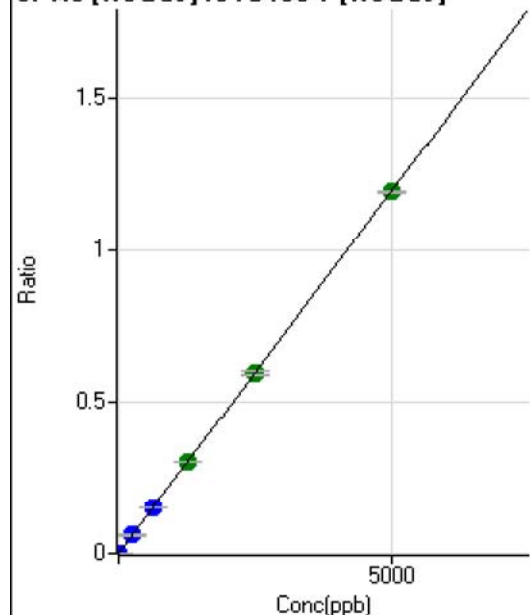
$$R = 1.0000$$

$$DL = 0.02251$$

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	55.56	0.0000	P	22.4
2	☐	0.500					
3	☐	5.000	4.972	9998.56	0.0012	P	3.9
4	☐	250.000	253.567	503829.91	0.0606	P	2.0
5	☐	625.000	635.521	1286778.57	0.1518	P	2.9
6	☐	1250.000	1270.639	2599368.20	0.3035	A	1.1
7	☐	2500.000	2493.541	5045550.29	0.5955	A	1.9
8	☐	5000.000	4996.576	10120537.99	1.1933	A	0.8
9	☐			17623.30	0.0021	P	5.3

$$y = 2.3883\text{E-}004 * x + 6.6996\text{E-}006$$

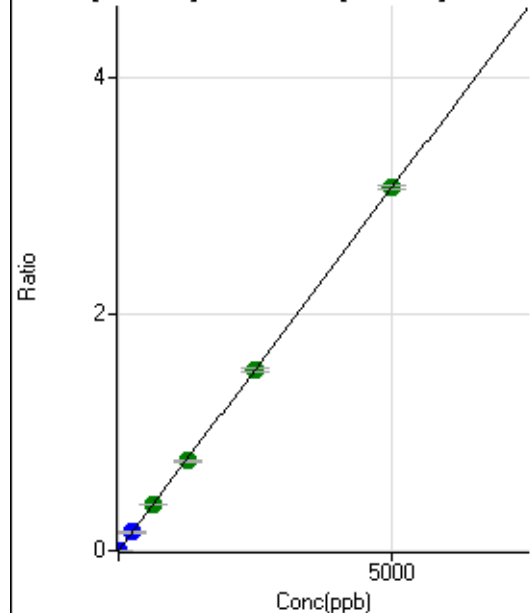
$$R = 1.0000$$

$$DL = 0.01884$$

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	97.23	0.0000	P	33.8
2	☐	0.500					
3	☐	5.000	4.737	24381.27	0.0029	P	3.8
4	☐	250.000	252.926	1288619.36	0.1549	P	1.6
5	☐	625.000	639.043	3318123.73	0.3914	A	2.4
6	☐	1250.000	1238.091	6494557.78	0.7582	A	1.2
7	☐	2500.000	2493.198	12935682.06	1.5268	A	2.0
8	☐	5000.000	5004.477	25992500.58	3.0648	A	1.2
9	☐			43994.88	0.0053	P	2.7

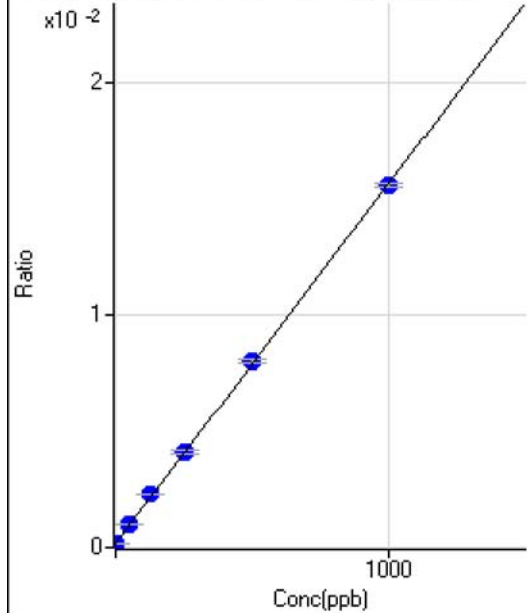
$$y = 6.1240\text{E-}004 * x + 1.1711\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.01938$$

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	1911.34	0.0002	P	8.8
2	☐	0.100					
3	☐	1.000	0.739	2072.47	0.0002	P	10.2
4	☐	50.000	50.945	10604.72	0.0010	P	2.1
5	☐	125.000	135.647	25121.55	0.0023	P	0.4
6	☐	250.000	255.189	46553.83	0.0041	P	2.6
7	☐	500.000	503.924	90158.83	0.0080	P	2.0
8	☐	1000.000	995.363	177631.20	0.0156	P	1.1
9	☐			1953.03	0.0002	P	4.4

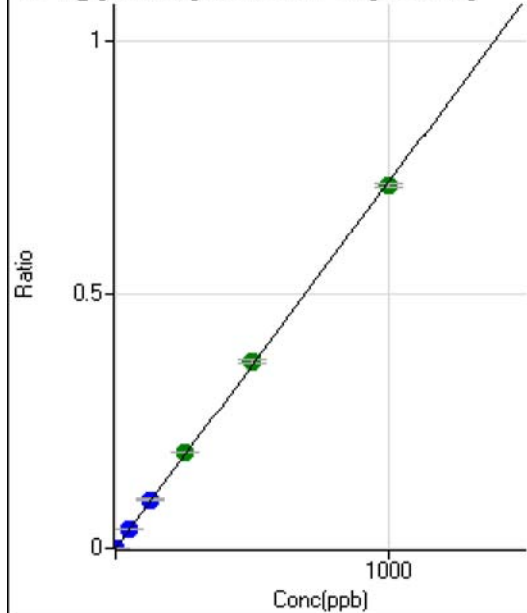
$$y = 1.5514\text{E-}005 * x + 1.7834\text{E-}004$$

R = 0.9999

DL = 3.018

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	108.34	0.0000	P	40.4
2	☐	0.100					
3	☐	1.000	1.039	8286.22	0.0008	P	3.3
4	☐	50.000	52.840	417501.59	0.0381	P	0.7
5	☐	125.000	133.522	1060289.33	0.0964	P	1.6
6	☐	250.000	263.280	2138115.24	0.1900	A	1.3
7	☐	500.000	510.370	4152863.59	0.3683	A	1.6
8	☐	1000.000	990.288	8126812.42	0.7146	A	0.9
9	☐			900.08	0.0001	P	4.4

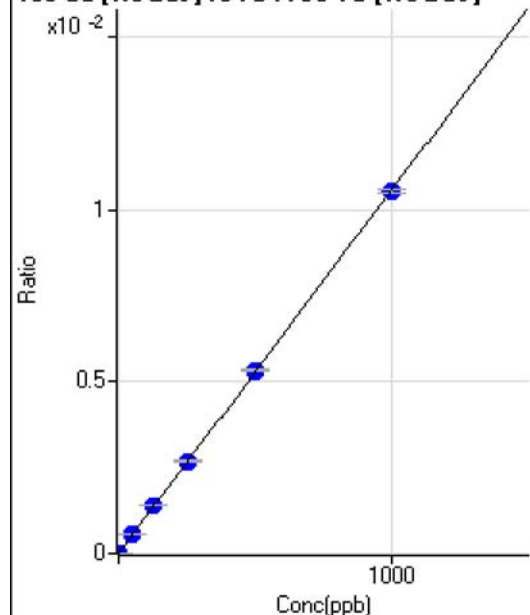
$$y = 7.2163\text{E-}004 * x + 1.0124\text{E-}005$$

R = 0.9998

DL = 0.017

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	12.50	0.0000	P	67.0
2	☐	0.100					
3	☐	1.000	0.978	125.00	0.0000	P	35.0
4	☐	50.000	51.862	6007.03	0.0005	P	2.0
5	☐	125.000	133.553	15528.66	0.0014	P	1.3
6	☐	250.000	255.799	30406.75	0.0027	P	1.2
7	☐	500.000	502.353	59819.61	0.0053	P	1.3
8	☐	1000.000	996.211	119628.83	0.0105	P	1.0
9	☐			55.55	0.0000	P	15.2

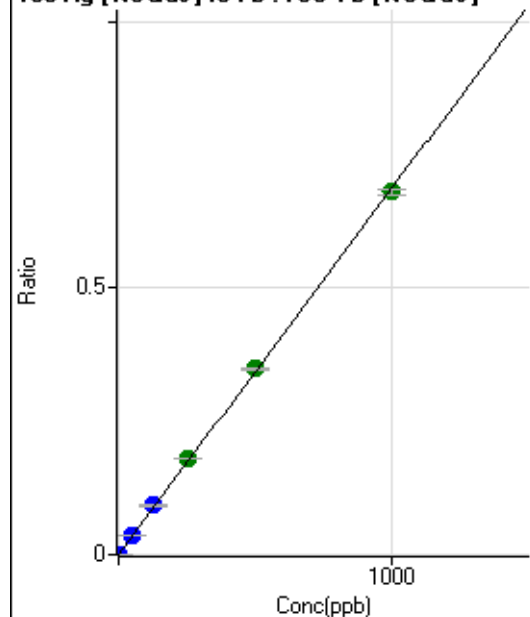
$$y = 1.0558\text{E-}005 * x + 1.1712\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.2228$$

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	66.67	0.0000	P	1.0
2	☐	0.100					
3	☐	1.000	1.045	7883.25	0.0007	P	5.9
4	☐	50.000	52.989	397951.43	0.0364	P	0.4
5	☐	125.000	134.350	1014084.75	0.0922	P	1.8
6	☐	250.000	262.358	2025258.33	0.1800	A	1.5
7	☐	500.000	508.301	3931868.88	0.3487	A	0.6
8	☐	1000.000	991.442	7733822.31	0.6801	A	1.3
9	☐			905.64	0.0001	P	5.5

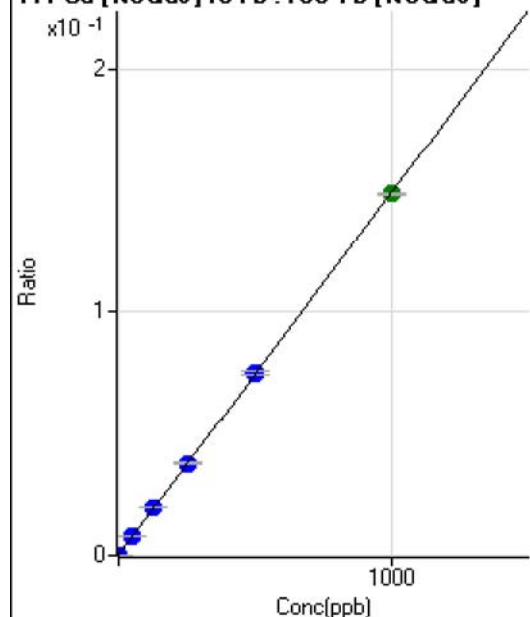
$$y = 6.8596\text{E-}004 * x + 6.2242\text{E-}006$$

$$R = 0.9998$$

$$DL = 0.0002843$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1340.30	0.0001	P	9.9
2	☐	0.100					
3	☐	1.000	0.949	2910.58	0.0003	P	8.4
4	☐	50.000	52.275	86726.91	0.0079	P	1.0
5	☐	125.000	132.385	218662.98	0.0199	P	1.7
6	☐	250.000	253.486	426898.62	0.0379	P	1.9
7	☐	500.000	501.171	844380.68	0.0749	P	1.4
8	☐	1000.000	997.506	1693575.74	0.1489	A	0.7
9	☐			1829.64	0.0002	P	1.6

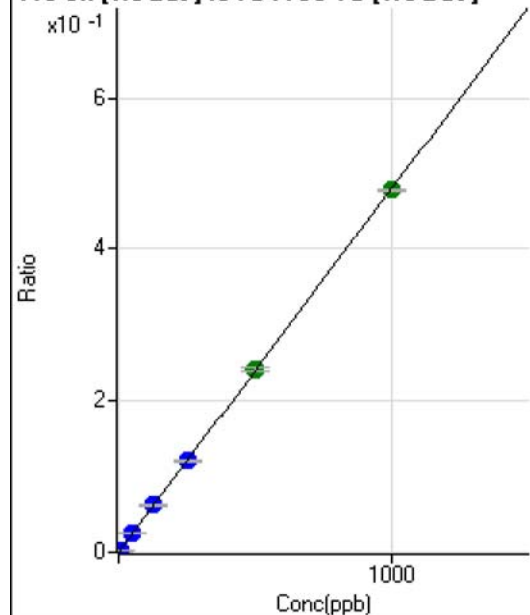
$$y = 1.4917\text{E-}004 * x + 1.2505\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.2501$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1217.32	0.0001	P	28.3
2	☐	0.500					
3	☐	5.000	4.817	26454.78	0.0024	P	1.6
4	☐	50.000	51.130	269826.86	0.0247	P	1.0
5	☐	125.000	129.826	686767.74	0.0624	P	1.7
6	☐	250.000	252.563	1365181.75	0.1213	P	1.3
7	☐	500.000	502.493	2720285.76	0.2413	A	1.4
8	☐	1000.000	997.454	5444768.52	0.4788	A	0.8
9	☐			19392.54	0.0018	P	2.8

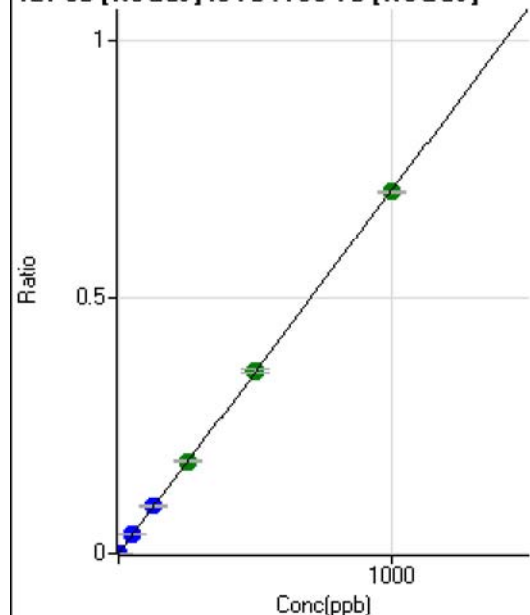
$$y = 4.7989\text{E-}004 * x + 1.1380\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.2011$$

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	91.67	0.0000	P	23.3
2	☐	0.200					
3	☐	2.000	1.936	15081.35	0.0014	P	2.4
4	☐	50.000	50.722	394071.68	0.0360	P	1.5
5	☐	125.000	130.380	1018081.65	0.0925	P	2.1
6	☐	250.000	255.260	2038499.13	0.1811	A	1.4
7	☐	500.000	501.565	4013221.31	0.3559	A	1.8
8	☐	1000.000	997.194	8047311.46	0.7076	A	0.5
9	☐			21688.01	0.0020	P	6.0

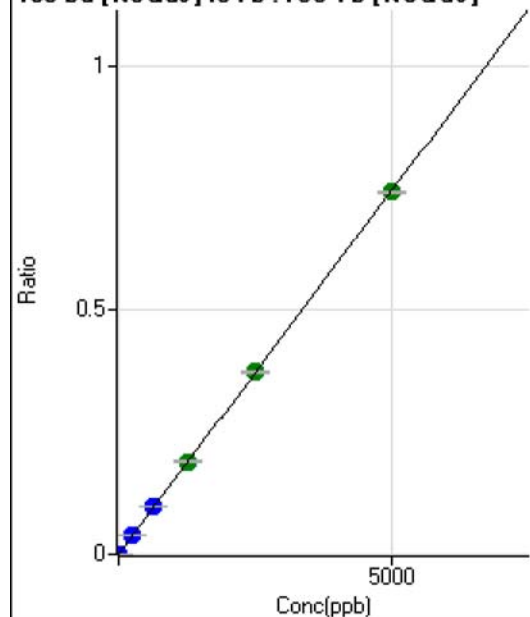
$$y = 7.0963\text{E-}004 * x + 8.5471\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.008433$$

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	52.78	0.0000	P	54.5
2	☐	1.000					
3	☐	10.000	9.845	16018.73	0.0015	P	0.9
4	☐	250.000	255.190	415358.60	0.0379	P	1.2
5	☐	625.000	652.151	1066961.97	0.0970	P	1.2
6	☐	1250.000	1275.703	2134474.27	0.1897	A	1.1
7	☐	2500.000	2504.415	4198751.27	0.3724	A	0.9
8	☐	5000.000	4987.714	8433138.99	0.7416	A	0.6
9	☐			1633.52	0.0001	P	3.7

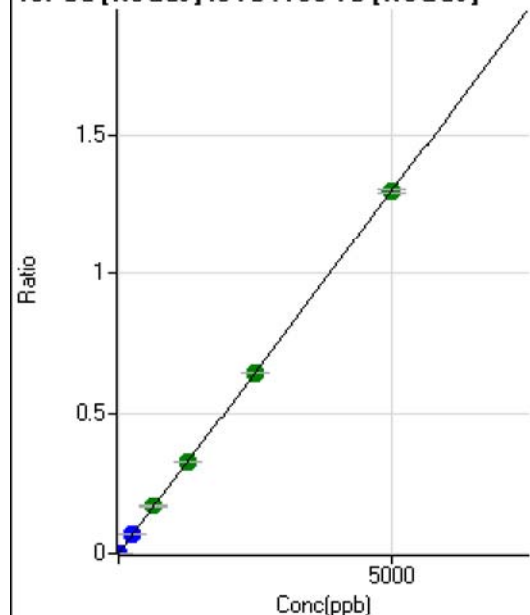
$$y = 1.4868\text{E-}004 * x + 4.9118\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.05404$$

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	108.34	0.0000	P	12.8
2	☐	1.000					
3	☐	10.000	9.928	28206.06	0.0026	P	0.5
4	☐	250.000	256.976	729875.06	0.0667	P	1.6
5	☐	625.000	655.518	1871277.93	0.1701	A	2.2
6	☐	1250.000	1266.921	3699058.63	0.3287	A	1.2
7	☐	2500.000	2490.636	7286613.18	0.6462	A	0.7
8	☐	5000.000	4996.288	14740655.88	1.2963	A	1.1
9	☐			2739.30	0.0002	P	3.3

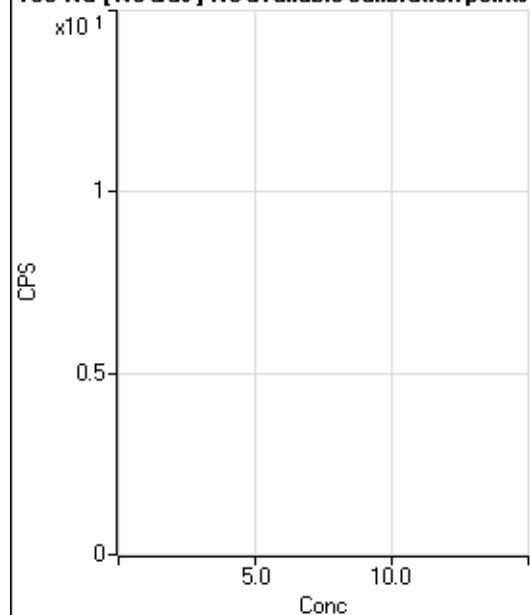
$$y = 2.5944\text{E-}004 * x + 1.0108\text{E-}005$$

$$R = 1.0000$$

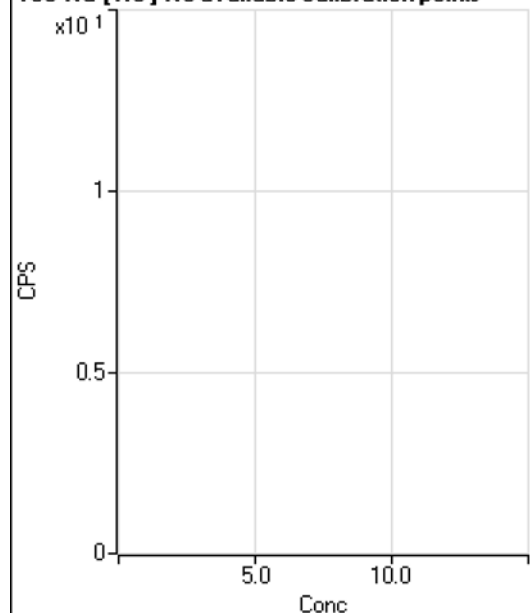
$$DL = 0.0149$$

Weight: <None>

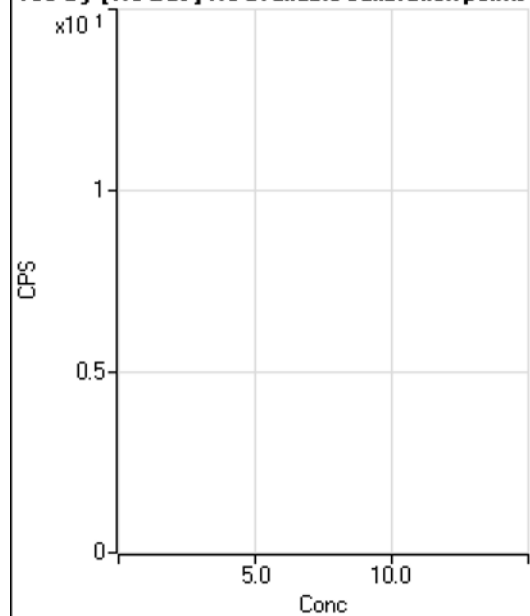
Min Conc: 0

150 Nd [No Gas] No available calibration points

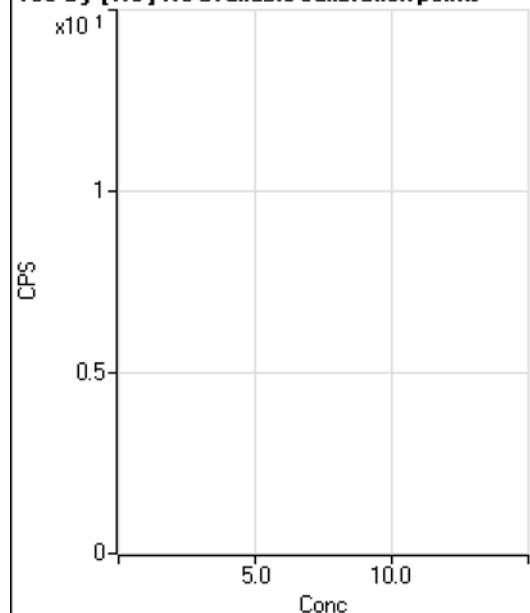
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			13.33		P	50.0
2	☐						
3	☐			13.33		P	100.
4	☐			28.89		P	13.3
5	☐			42.22		P	48.2
6	☐			75.56		P	18.4
7	☐			175.56		P	24.7
8	☐			304.46		P	3.3
9	☐			104.45		P	14.7

150 Nd [He] No available calibration points

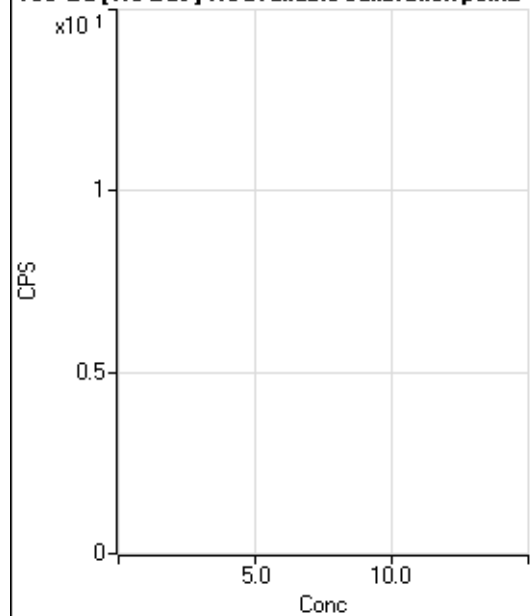
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			0.00		P	
4	☐			0.00		P	
5	☐			1.11		P	173.
6	☐			2.22		P	173.
7	☐			2.22		P	173.
8	☐			6.67		P	50.0
9	☐			7.78		P	65.5

156 Dy [No Gas] No available calibration points

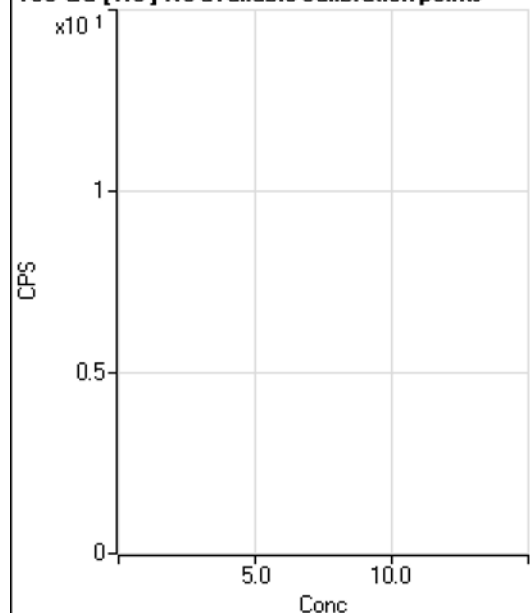
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			50.00		P	28.9
2	☐						
3	☐			69.45		P	34.6
4	☐			75.00		P	11.1
5	☐			72.23		P	13.3
6	☐			61.11		P	56.8
7	☐			113.89		P	21.1
8	☐			163.90		P	21.2
9	☐			136.12		P	19.7

156 Dy [He] No available calibration points

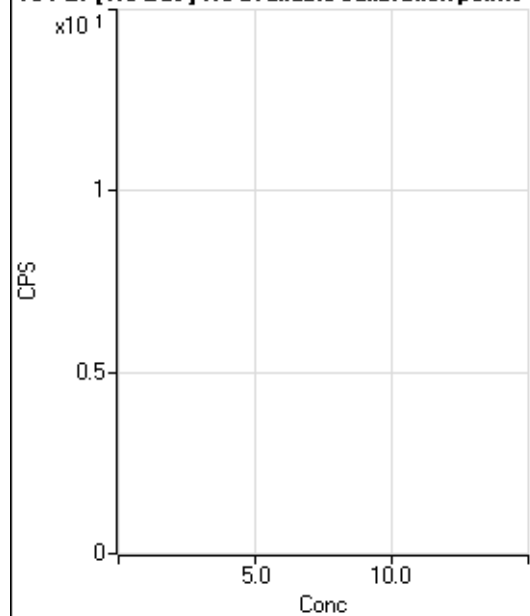
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐						
3	☐			1.11		P	173.
4	☐			3.33		P	173.
5	☐			2.22		P	173.
6	☐			3.33		P	100.
7	☐			5.55		P	69.3
8	☐			10.00		P	33.3
9	☐			8.89		P	142.

160 Gd [No Gas] No available calibration poin_

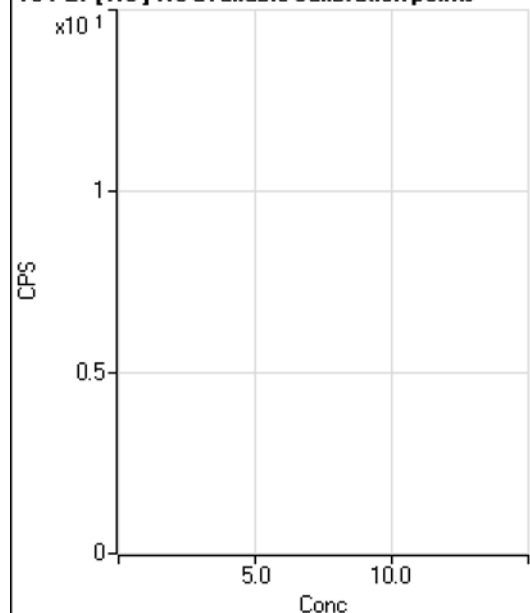
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			75.00		P	29.4
2	☐						
3	☐			72.22		P	46.6
4	☐			91.67		P	32.8
5	☐			44.45		P	28.7
6	☐			102.78		P	26.1
7	☐			75.00		P	11.1
8	☐			91.67		P	9.1
9	☐			122.23		P	45.4

160 Gd [He] No available calibration points

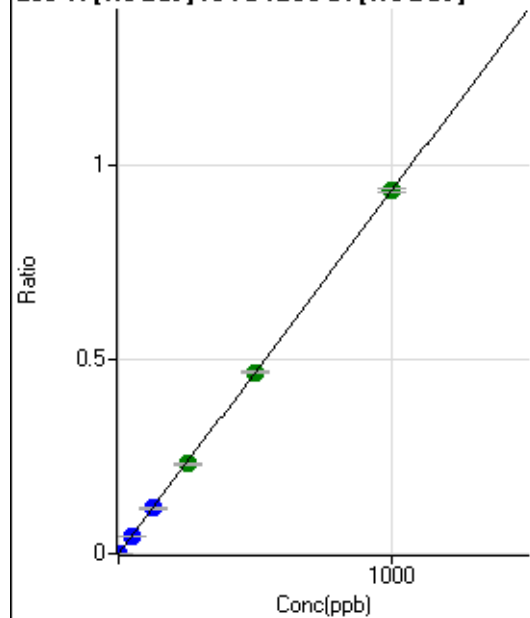
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.55		P	124.
2	☐						
3	☐			14.44		P	53.3
4	☐			10.00		P	88.2
5	☐			16.67		P	52.9
6	☐			11.11		P	45.8
7	☐			16.67		P	34.6
8	☐			18.89		P	10.2
9	☐			24.45		P	15.8

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			33.33		P	25.0
2	☐						
3	☐			38.89		P	44.6
4	☐			30.56		P	56.8
5	☐			69.45		P	27.7
6	☐			52.78		P	48.2
7	☐			47.22		P	53.9
8	☐			50.00		P	60.1
9	☐			36.11		P	48.0

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7.78		P	24.7
2	☐						
3	☐			7.78		P	49.5
4	☐			3.33		P	100.
5	☐			6.67		P	86.6
6	☐			8.89		P	57.3
7	☐			7.78		P	24.7
8	☐			7.78		P	65.5
9	☐			7.78		P	89.2

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	138.90	0.0000	P	31.6
2	☐	0.100					
3	☐	1.000	0.962	6521.44	0.0009	P	2.9
4	☐	50.000	49.755	330728.02	0.0464	P	1.9
5	☐	125.000	126.350	841097.67	0.1179	P	3.1
6	☐	250.000	247.572	1699716.77	0.2310	A	1.6
7	☐	500.000	500.588	3381093.70	0.4671	A	0.4
8	☐	1000.000	1000.156	6809660.22	0.9332	A	1.0
9	☐			4314.85	0.0006	P	5.7

$$y = 9.3302E-004 * x + 1.9737E-005$$

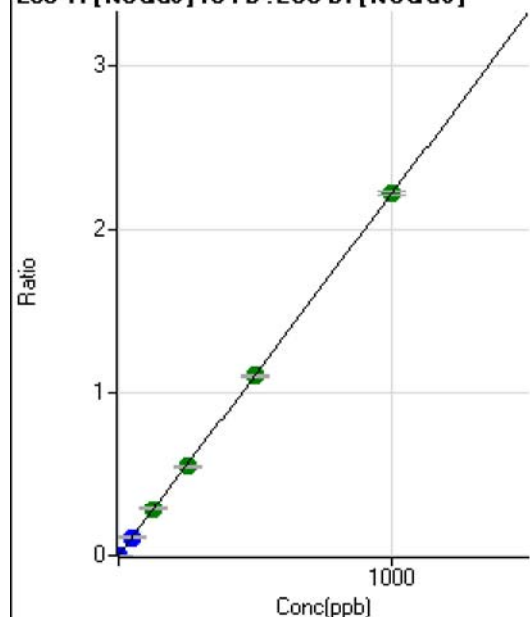
$$R = 1.0000$$

$$DL = 0.02006$$

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	322.24	0.0000	P	5.0
2	☐	0.100					
3	☐	1.000	0.959	15404.41	0.0022	P	5.4
4	☐	50.000	50.295	792837.13	0.1113	P	1.4
5	☐	125.000	129.045	2037351.00	0.2856	A	2.7
6	☐	250.000	248.326	4043033.47	0.5495	A	1.5
7	☐	500.000	497.053	7961253.56	1.0998	A	1.1
8	☐	1000.000	1001.372	16168247.23	2.2157	A	1.2
9	☐			10263.01	0.0015	P	5.9

$$y = 0.0022 * x + 4.5611E-005$$

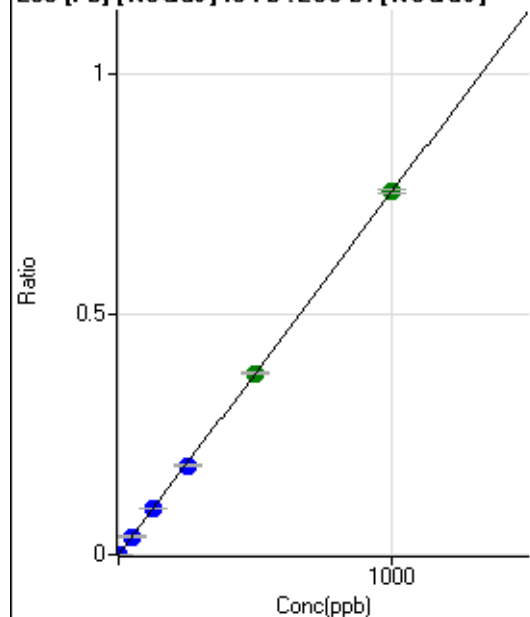
$$R = 1.0000$$

$$DL = 0.003112$$

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	281.49	0.0000	P	17.4
2	☐	0.100					
3	☐	1.000	0.960	5432.83	0.0008	P	6.0
4	☐	50.000	50.300	270669.20	0.0380	P	2.0
5	☐	125.000	127.068	684537.28	0.0960	P	2.9
6	☐	250.000	245.344	1362879.31	0.1852	P	1.4
7	☐	500.000	500.206	2733319.56	0.3776	A	1.0
8	☐	1000.000	1000.788	5512778.83	0.7555	A	0.9
9	☐			34753.54	0.0052	P	0.9

$$y = 7.5483E-004 * x + 3.9771E-005$$

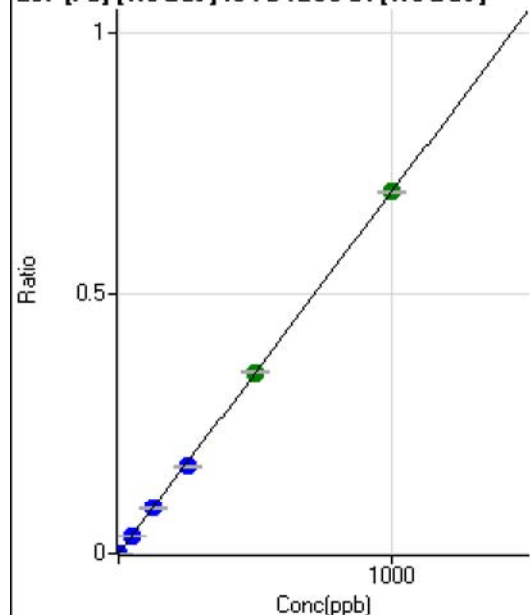
$$R = 1.0000$$

$$DL = 0.02744$$

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	229.64	0.0000	P	8.1
2	☐	0.100					
3	☐	1.000	0.955	4954.82	0.0007	P	2.3
4	☐	50.000	49.483	245409.35	0.0345	P	0.9
5	☐	125.000	125.086	621072.46	0.0871	P	2.9
6	☐	250.000	241.749	1237768.84	0.1682	P	1.2
7	☐	500.000	501.216	2524370.34	0.3487	A	0.6
8	☐	1000.000	1001.470	5084680.73	0.6968	A	0.6
9	☐			28679.35	0.0043	P	3.0

$$y = 6.9573E-004 * x + 3.2485E-005$$

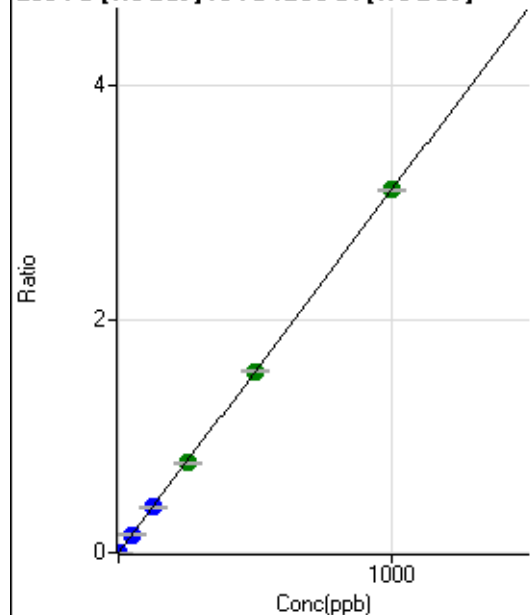
$$R = 1.0000$$

$$DL = 0.01134$$

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	968.57	0.0001	P	9.1
2	☐	0.100					
3	☐	1.000	0.967	22315.77	0.0031	P	3.4
4	☐	50.000	49.995	1106581.77	0.1554	P	1.5
5	☐	125.000	126.289	2798673.33	0.3923	P	2.8
6	☐	250.000	247.929	5665654.12	0.7700	A	1.4
7	☐	500.000	499.814	11235558.91	1.5522	A	0.6
8	☐	1000.000	1000.450	22671251.37	3.1068	A	0.8
9	☐			134090.14	0.0201	P	1.6

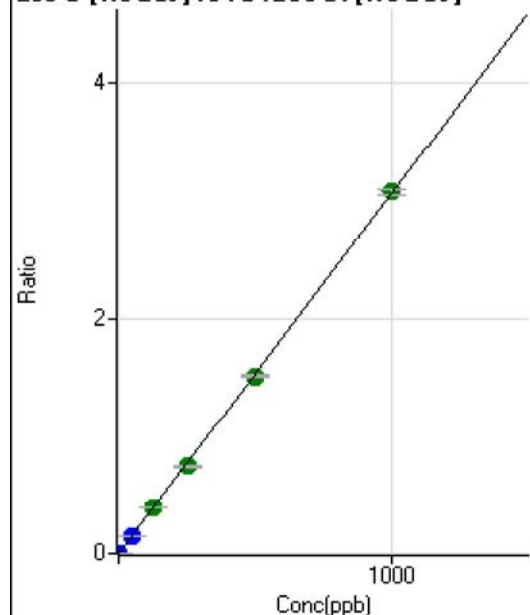
$$y = 0.0031 * x + 1.3700E-004$$

$$R = 1.0000$$

$$DL = 0.0121$$

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	38.89	0.0000	P	14.2
2	☐	0.100					
3	☐	1.000	0.923	20167.14	0.0028	P	1.4
4	☐	50.000	49.299	1077788.02	0.1513	P	0.9
5	☐	125.000	127.687	2796334.50	0.3920	A	2.7
6	☐	250.000	243.282	5494332.20	0.7468	A	2.3
7	☐	500.000	492.014	10932142.17	1.5103	A	1.1
8	☐	1000.000	1005.372	22520229.32	3.0862	A	1.3
9	☐			2008.60	0.0003	P	6.4

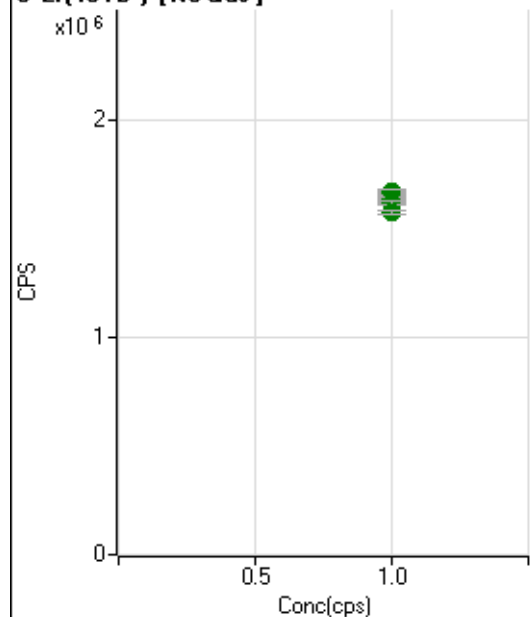
$$y = 0.0031 * x + 5.5173E-006$$

$$R = 0.9999$$

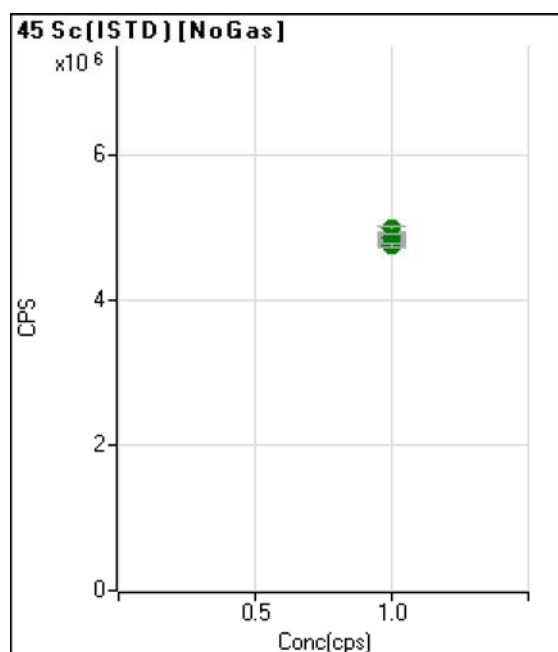
$$DL = 0.0007639$$

Weight: <None>

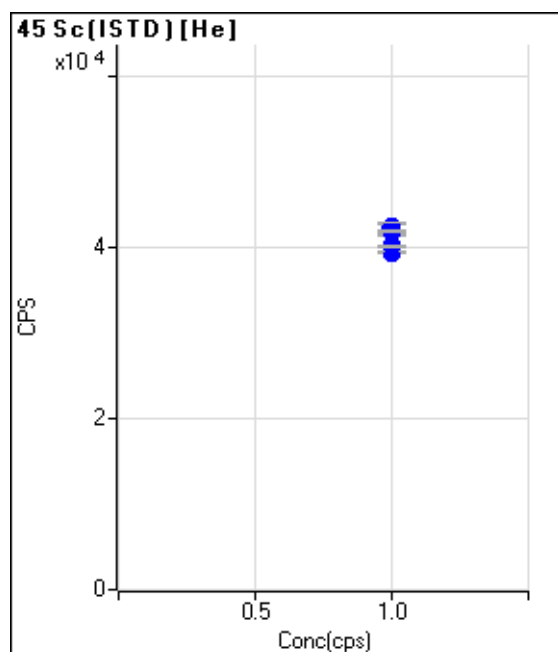
Min Conc: 0

6 Li (ISTD) [No Gas]

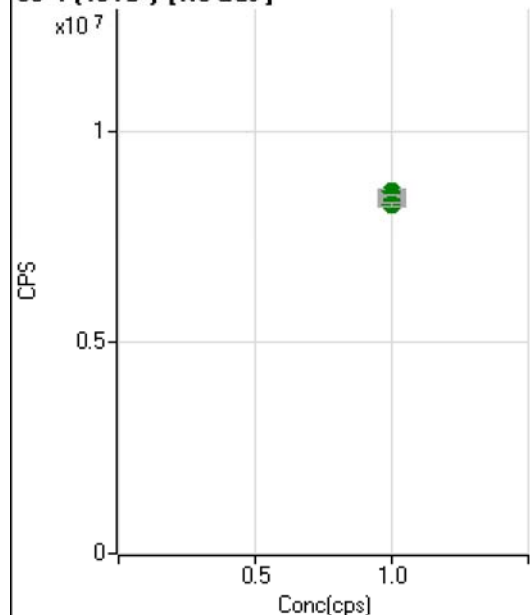
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1651673.29		A	1.7
2	☐	1.000					
3	☐	1.000		1648065.74		A	1.1
4	☐	1.000		1647011.78		A	1.6
5	☐	1.000		1662016.29		A	1.1
6	☐	1.000		1668278.29		A	1.7
7	☐	1.000		1632718.38		A	1.7
8	☐	1.000		1619444.94		A	1.0
9	☐	1.000		1574925.31		A	1.5



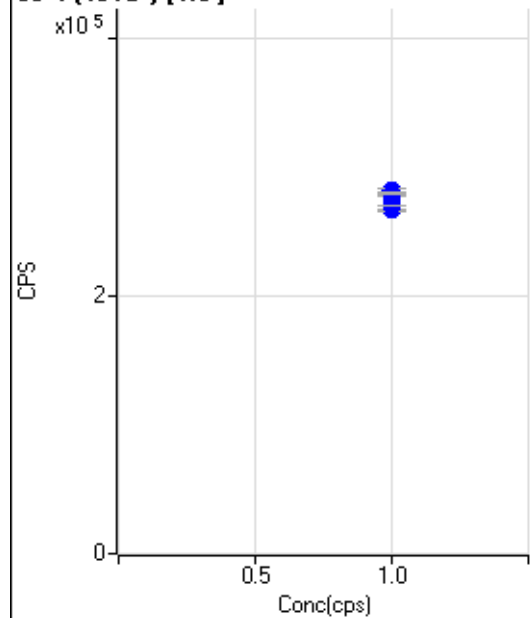
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4763008.09		A	0.5
2	☐	1.000					
3	☐	1.000		4859490.78		A	1.7
4	☐	1.000		4842196.64		A	0.3
5	☐	1.000		4870771.94		A	2.2
6	☐	1.000		4985359.44		A	1.5
7	☐	1.000		4872301.45		A	1.5
8	☐	1.000		4780471.68		A	1.6
9	☐	1.000		4758277.50		A	1.3



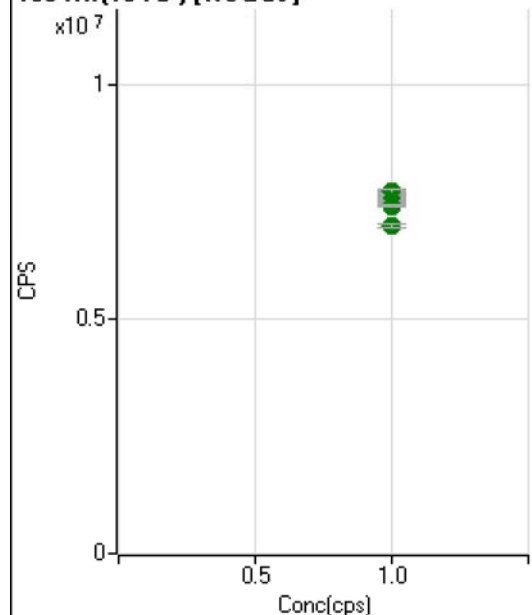
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		42280.25		P	1.2
2	☐	1.000					
3	☐	1.000		41958.19		P	2.7
4	☐	1.000		41631.70		P	1.0
5	☐	1.000		42322.67		P	2.2
6	☐	1.000		41798.92		P	0.8
7	☐	1.000		39363.03		P	0.6
8	☐	1.000		39482.14		P	0.5
9	☐	1.000		40086.18		P	0.7

89 Y (ISTD) [No Gas]

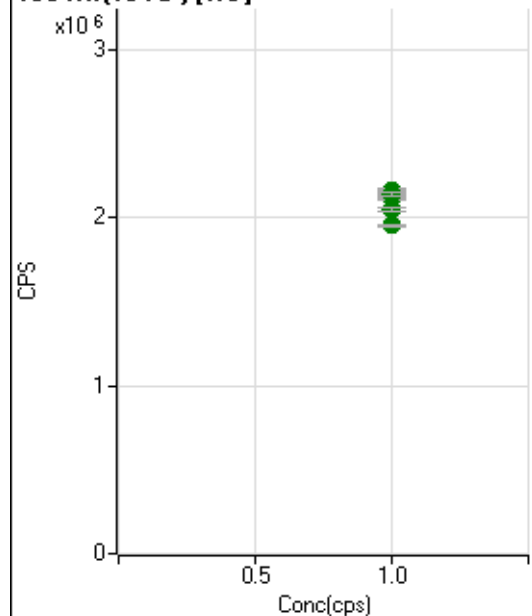
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8286753.42		A	0.8
2	☐	1.000					
3	☐	1.000		8372631.96		A	0.5
4	☐	1.000		8319945.43		A	1.2
5	☐	1.000		8481955.57		A	2.6
6	☐	1.000		8566347.10		A	1.3
7	☐	1.000		8473859.53		A	1.5
8	☐	1.000		8481165.50		A	0.4
9	☐	1.000		8268686.26		A	0.7

89 Y (ISTD) [He]

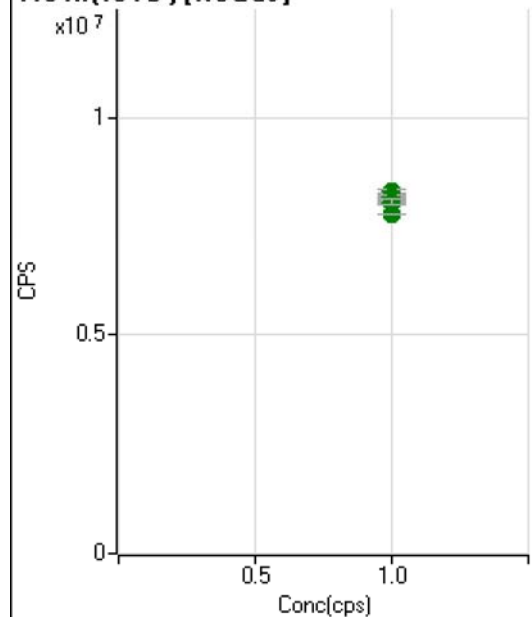
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		281075.47		P	0.9
2	☐	1.000					
3	☐	1.000		280645.69		P	1.2
4	☐	1.000		277636.05		P	0.8
5	☐	1.000		281105.29		P	1.8
6	☐	1.000		279220.56		P	0.5
7	☐	1.000		266274.46		P	0.8
8	☐	1.000		266059.51		P	0.7
9	☐	1.000		270240.10		P	0.1

103 Rh(ISTD) [NoGas]

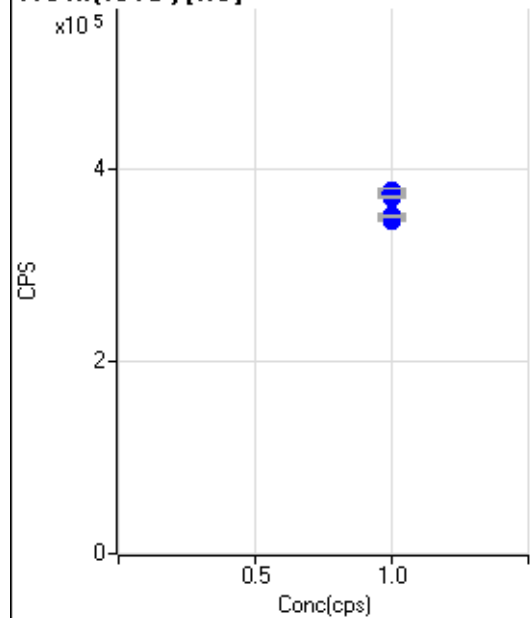
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7644772.39		A	1.5
2	☐	1.000					
3	☐	1.000		7668466.32		A	1.3
4	☐	1.000		7540689.92		A	0.5
5	☐	1.000		7661270.74		A	2.2
6	☐	1.000		7721107.20		A	1.4
7	☐	1.000		7511517.70		A	1.0
8	☐	1.000		7424148.86		A	0.7
9	☐	1.000		7007017.52		A	1.5

103 Rh(ISTD) [He]

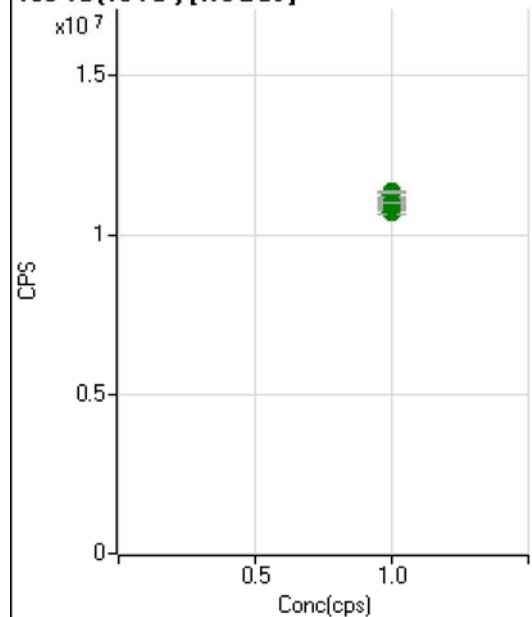
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2157006.72		A	1.1
2	☐	1.000					
3	☐	1.000		2154497.83		A	0.6
4	☐	1.000		2109659.10		A	1.0
5	☐	1.000		2153085.92		A	1.4
6	☐	1.000		2136322.41		A	0.8
7	☐	1.000		2046133.23		A	1.1
8	☐	1.000		2045731.65		A	1.2
9	☐	1.000		1949991.59		A	1.1

115 In(ISTD) [NoGas]

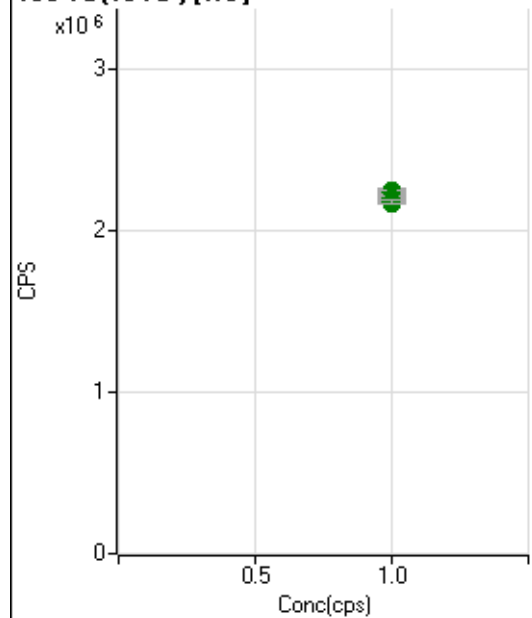
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8133436.40		A	1.5
2	☐	1.000					
3	☐	1.000		8155075.69		A	1.3
4	☐	1.000		8125765.07		A	1.3
5	☐	1.000		8177153.52		A	2.6
6	☐	1.000		8304873.07		A	1.0
7	☐	1.000		8172570.02		A	1.0
8	☐	1.000		8068021.91		A	1.4
9	☐	1.000		7779164.36		A	0.2

115 In(ISTD) [He]

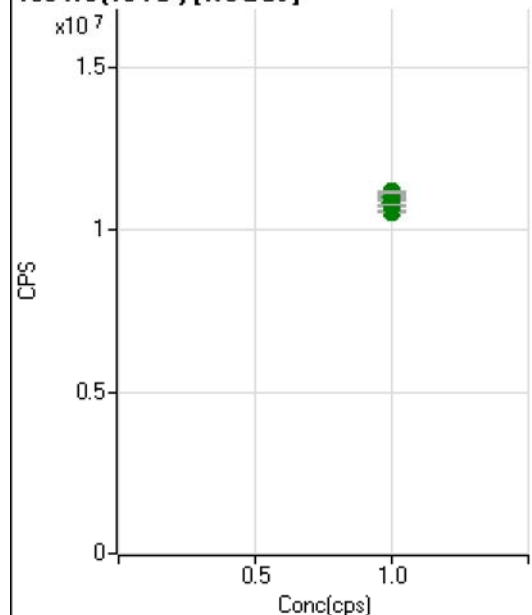
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		377874.47		P	0.1
2	☐	1.000					
3	☐	1.000		375685.02		P	1.1
4	☐	1.000		374751.10		P	1.0
5	☐	1.000		376628.99		P	1.9
6	☐	1.000		370777.10		P	0.6
7	☐	1.000		353102.41		P	0.5
8	☐	1.000		346944.45		P	0.6
9	☐	1.000		351245.81		P	0.6

159 Tb(ISTD) [No Gas]

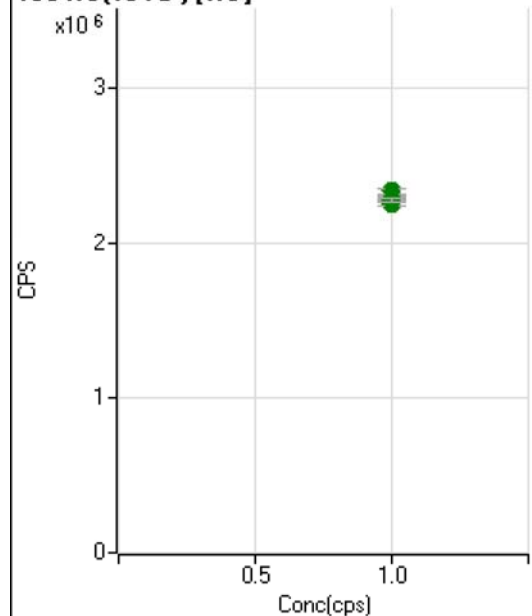
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10712240.40		A	1.0
2	☐	1.000					
3	☐	1.000		10908160.40		A	1.4
4	☐	1.000		10946472.20		A	0.6
5	☐	1.000		11004826.09		A	1.6
6	☐	1.000		11254554.00		A	1.4
7	☐	1.000		11276935.53		A	1.2
8	☐	1.000		11372238.72		A	0.7
9	☐	1.000		11031319.84		A	0.5

159 Tb(ISTD) [He]

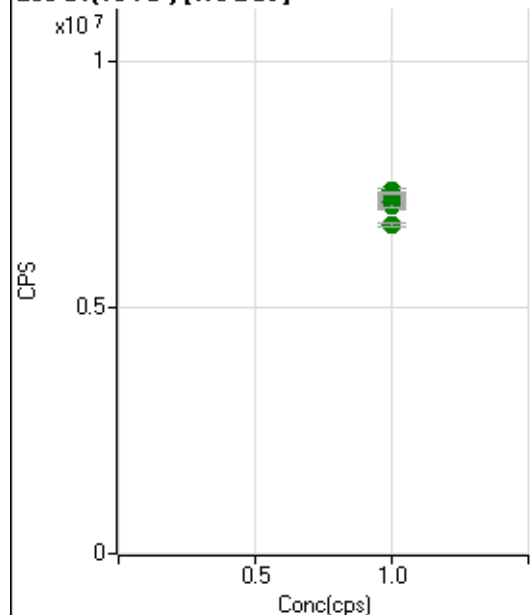
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2201803.25		A	0.3
2	☐	1.000					
3	☐	1.000		2210525.68		A	0.9
4	☐	1.000		2223631.46		A	0.6
5	☐	1.000		2241716.61		A	1.1
6	☐	1.000		2231770.04		A	1.6
7	☐	1.000		2168145.26		A	0.3
8	☐	1.000		2198763.35		A	1.0
9	☐	1.000		2173691.94		A	1.4

165 Ho(ISTD) [NoGas]

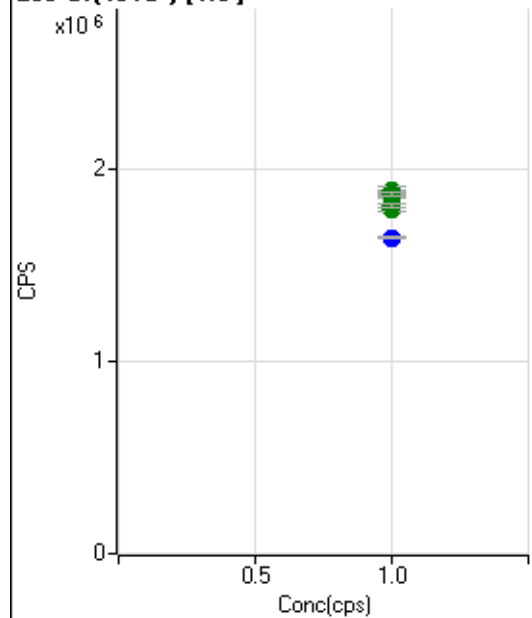
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10537623.85		A	0.1
2	☐	1.000					
3	☐	1.000		10556756.05		A	0.8
4	☐	1.000		10734358.14		A	0.6
5	☐	1.000		10836584.36		A	1.8
6	☐	1.000		11055826.81		A	1.0
7	☐	1.000		10988396.95		A	1.7
8	☐	1.000		11168727.77		A	0.4
9	☐	1.000		10782521.51		A	0.2

165 Ho(ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2287951.75		A	1.0
2	☐	1.000					
3	☐	1.000		2294442.43		A	0.9
4	☐	1.000		2285144.01		A	0.9
5	☐	1.000		2339026.44		A	1.8
6	☐	1.000		2305245.00		A	0.8
7	☐	1.000		2257293.04		A	1.2
8	☐	1.000		2312753.18		A	0.3
9	☐	1.000		2280972.62		A	0.9

209 Bi(ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7061890.80		A	2.0
2	☐	1.000					
3	☐	1.000		7108655.59		A	1.6
4	☐	1.000		7122065.38		A	0.8
5	☐	1.000		7137935.38		A	2.9
6	☐	1.000		7358612.74		A	1.3
7	☐	1.000		7238739.68		A	1.0
8	☐	1.000		7297504.20		A	0.6
9	☐	1.000		6681062.68		A	1.2

209 Bi(ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1866594.24		A	0.2
2	☐	1.000					
3	☐	1.000		1874182.71		A	2.1
4	☐	1.000		1862234.59		A	0.7
5	☐	1.000		1886705.96		A	2.7
6	☐	1.000		1866750.22		A	0.9
7	☐	1.000		1789383.55		A	0.8
8	☐	1.000		1806556.15		A	1.1
9	☐	1.000		1642786.57		P	0.9

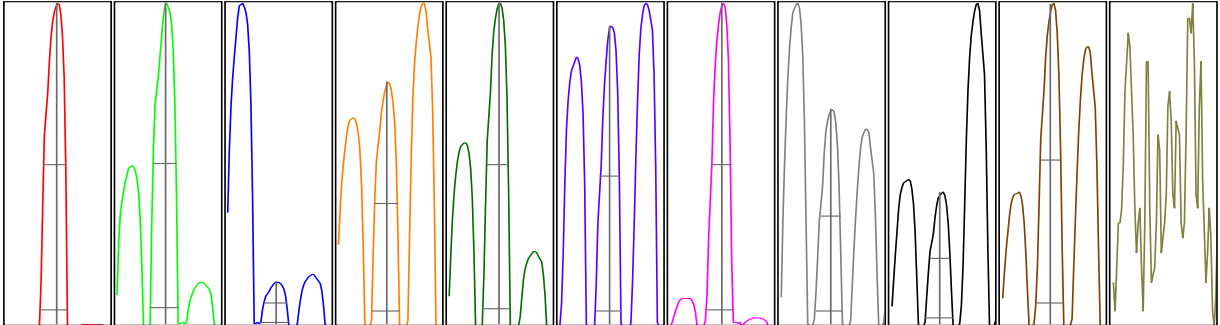
US EPA Tune Check Sample Report

Batch Folder D:\P8080818-MS.b
Report Comment
Instrument Name G8403A JP17141814

[No Gas]				
Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	6189	1.42	5.00	
24	102078	0.87	5.00	
25	13826	0.95	5.00	
26	16054	1.19	5.00	
59	63676	1.21	5.00	
113	8759	1.59	5.00	
115	109459	1.73	5.00	
206	27303	2.21	5.00	
207	25124	2.18	5.00	
208	60101	1.88	5.00	
220	1	28.09		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	6086	6155	6164	6218	6323
24	100718	102086	101934	103124	102528
25	13642	13800	13785	13972	13933
26	15836	16101	15908	16321	16107
59	62697	64097	63279	64705	63600
113	8570	8869	8720	8921	8716
115	106648	110251	109379	111858	109161
206	26334	27690	27384	27895	27211
207	24297	25491	24955	25720	25158
208	58229	60870	59879	60977	60552
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	10582	9.00	8.9 - 9.1		0.776	0.900	
24	168794	23.95	23.9 - 24.1		0.786	0.900	
25	22824	24.95	24.9 - 25.1		0.787	0.900	
26	26739	25.95	25.9 - 26.1		0.785	0.900	
59	110033	59.00	58.9 - 59.1		0.778	0.900	
113	16381	113.00	112.9 - 113.1		0.728	0.900	
115	203675	115.05	114.9 - 115.1		0.766	0.900	
206	49326	206.00	205.9 - 206.1		0.778	0.900	
207	44755	206.95	206.9 - 207.1		0.778	0.900	
208	108029	207.95	207.9 - 208.1		0.783	0.900	
220			-				

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

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
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	14.2	V
Extract 2	-240.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-90	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	180	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	8311	2.13	
89	8456	1.97	
205	11814	1.85	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	8436	8357	8363	7999	8401
89	8551	8500	8545	8160	8525
205	11989	11884	11973	11456	11771

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	1.4	V
Extract 2	-240.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-90	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			