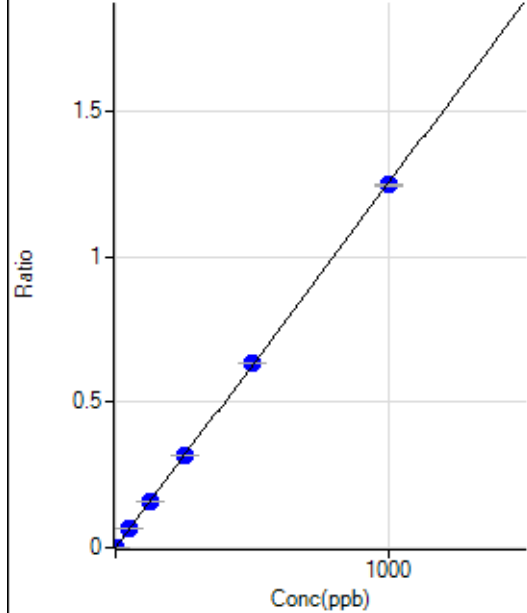


Batch Folder: D:\ICP-MS Data\P7100517-MS .b\
Analysis File: P7100517-MS .batch.bin
DA Date-Time: 2017-10-06 11:09:15
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB P7100517-MS.D	S00	2017-10-05 10:47:24
2			
3	005CALS P7100517-MS.D	S02	2017-10-05 10:54:49
4	006CALS P7100517-MS.D	S03	2017-10-05 10:58:40
5	007CALS P7100517-MS.D	S04	2017-10-05 11:02:32
6	008CALS P7100517-MS.D	S05	2017-10-05 11:06:23
7	009CALS P7100517-MS.D	S06	2017-10-05 11:10:12
8	010CALS P7100517-MS.D	S07	2017-10-05 11:13:59
9	011CALS P7100517-MS.D	S08	2017-10-05 11:17:42

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	20.37	0.0001	P	31.5
2	☐	0.100					
3	☐	1.000	0.959	418.53	0.0013	P	13.3
4	☐	50.000	51.444	21489.72	0.0645	P	1.2
5	☐	125.000	126.803	53645.43	0.1590	P	0.6
6	☐	250.000	251.829	103584.24	0.3157	P	0.7
7	☐	500.000	508.370	199409.92	0.6372	P	0.0
8	☐	1000.000	995.060	399201.49	1.2472	P	0.4
9	☐			164.82	0.0005	P	15.2

$$y = 0.0013 * x + 6.0053E-005$$

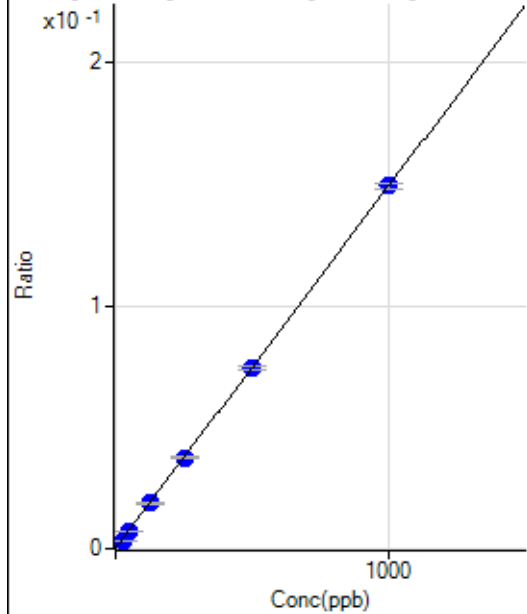
$$R = 0.9999$$

$$DL = 0.04534$$

$$BEC = 0.04792$$

Weight: <None>

Min Conc: 0

10 B [No Gas] ISTD:6 Li [No Gas]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	63.89	0.0002	P	45.8
2	☐	2.500					
3	☐	25.000	20.069	1052.86	0.0032	P	0.8
4	☐	50.000	47.682	2425.30	0.0073	P	5.8
5	☐	125.000	124.685	6326.60	0.0187	P	4.9
6	☐	250.000	250.347	12288.84	0.0375	P	1.0
7	☐	500.000	498.739	23291.01	0.0744	P	2.3
8	☐	1000.000	1000.823	47740.84	0.1492	P	1.8
9	☐			661.16	0.0022	P	11.5

$$y = 1.4884E-004 * x + 1.8830E-004$$

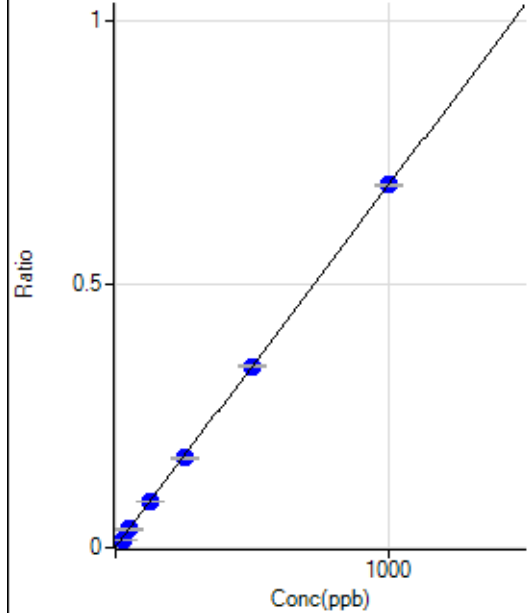
$$R = 1.0000$$

$$DL = 1.74$$

$$BEC = 1.265$$

Weight: <None>

Min Conc: 0

11 B [No Gas] ISTD:6 Li [No Gas]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	388.91	0.0011	P	21.6
2	☐	2.500					
3	☐	25.000	20.549	5059.40	0.0153	P	3.7
4	☐	50.000	49.783	11763.38	0.0353	P	4.7
5	☐	125.000	126.770	29763.98	0.0882	P	2.2
6	☐	250.000	246.669	55953.64	0.1705	P	2.3
7	☐	500.000	499.149	107631.02	0.3439	P	0.7
8	☐	1000.000	1001.159	220426.92	0.6887	P	0.6
9	☐			3022.65	0.0099	P	13.9

$$y = 6.8672E-004 * x + 0.0011$$

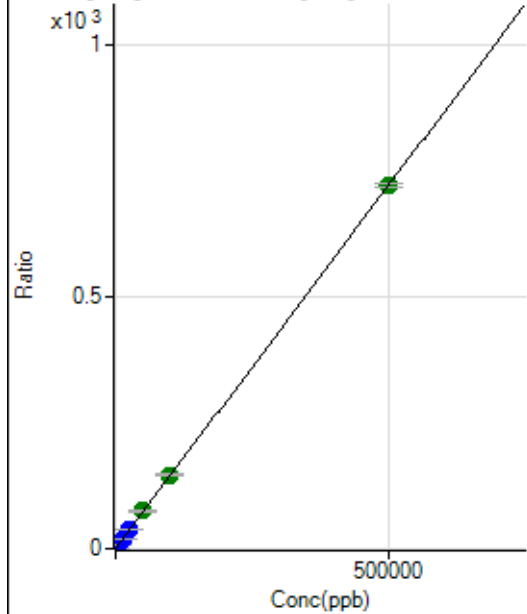
$$R = 1.0000$$

$$DL = 1.083$$

$$BEC = 1.669$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	18078.28	0.2594	P	2.3
2	☐	50.000					
3	☐	500.000	476.051	66269.74	0.9466	P	1.8
4	☐	5000.000	5364.636	559958.24	8.0036	P	1.3
5	☐	12500.000	13107.509	1373752.22	19.1808	P	0.6
6	☐	25000.000	26162.644	2768460.13	38.0267	P	0.8
7	☐	50000.000	51586.683	5530768.35	74.7278	A	1.2
8	☐	100000.00	101535.44	10902399.89	146.8317	A	1.3
9	☐	500000.00	499457.30	56206580.42	721.2549	A	1.0

$$y = 0.0014 * x + 0.2594$$

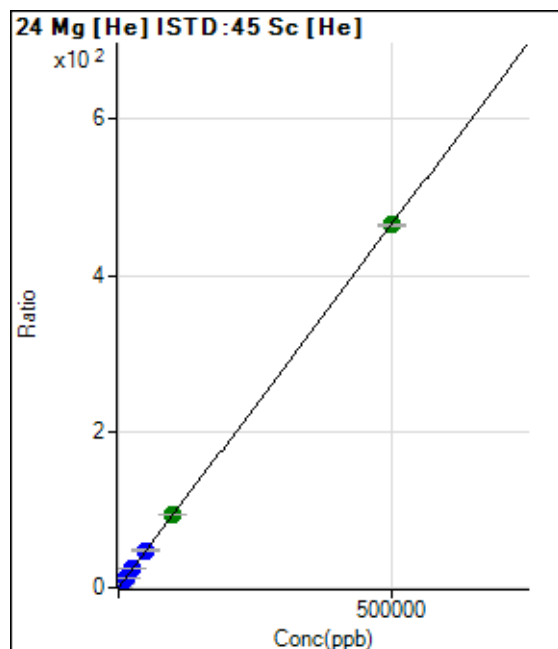
$$R = 1.0000$$

$$DL = 12.35$$

$$BEC = 179.7$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	55.56	0.0008	P	16.8
2	☐	50.000					
3	☐	500.000	471.885	30785.19	0.4397	P	1.2
4	☐	5000.000	5379.892	350139.02	5.0048	P	1.8
5	☐	12500.000	13158.161	876621.13	12.2395	P	0.4
6	☐	25000.000	26210.882	1774926.89	24.3801	P	1.0
7	☐	50000.000	51404.015	3538745.44	47.8128	P	1.1
8	☐	100000.00	101126.24	6984254.32	94.0605	A	0.8
9	☐	500000.00	499553.58	36209852.89	464.6465	A	0.8

$$y = 9.3012\text{E-}004 * x + 7.9665\text{E-}004$$

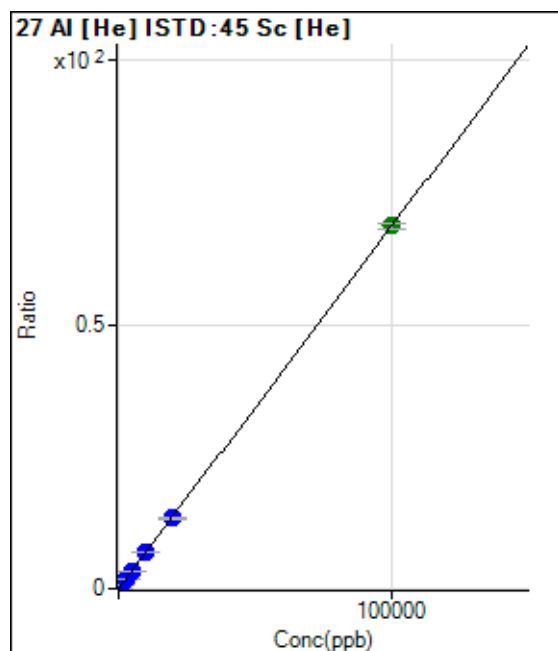
$$R = 1.0000$$

$$DL = 0.4306$$

$$BEC = 0.8565$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.33	0.0005	P	66.0
2	☐	2.000					
3	☐	20.000	19.836	986.18	0.0141	P	3.4
4	☐	1000.000	1018.615	48936.48	0.6994	P	0.9
5	☐	2500.000	2495.697	122676.28	1.7128	P	0.5
6	☐	5000.000	5004.593	250022.73	3.4342	P	0.5
7	☐	10000.000	9858.464	500661.70	6.7645	P	0.8
8	☐	20000.000	19399.097	988329.04	13.3105	P	0.5
9	☐	100000.00	100134.02	5354082.11	68.7041	A	1.3

$$y = 6.8612\text{E-}004 * x + 4.7720\text{E-}004$$

$$R = 1.0000$$

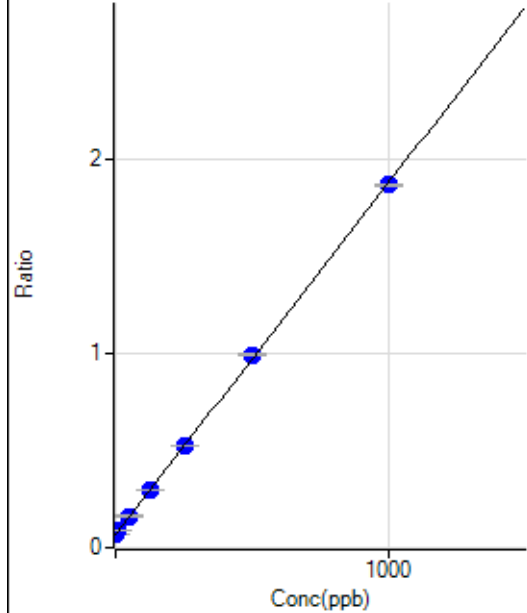
$$DL = 1.378$$

$$BEC = 0.6955$$

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	44782.40	0.0667	P	1.1
2	☐	1.000					
3	☐	10.000	12.898	58058.71	0.0900	P	0.2
4	☐	50.000	52.996	106759.74	0.1625	P	1.0
5	☐	125.000	127.623	199887.02	0.2974	P	0.5
6	☐	250.000	252.586	350291.68	0.5234	P	0.3
7	☐	500.000	509.740	642424.16	0.9883	P	1.0
8	☐	1000.000	993.977	1235345.67	1.8638	P	0.8
9	☐			61846.60	0.0887	P	1.5

$$y = 0.0018 * x + 0.0667$$

$$R = 0.9999$$

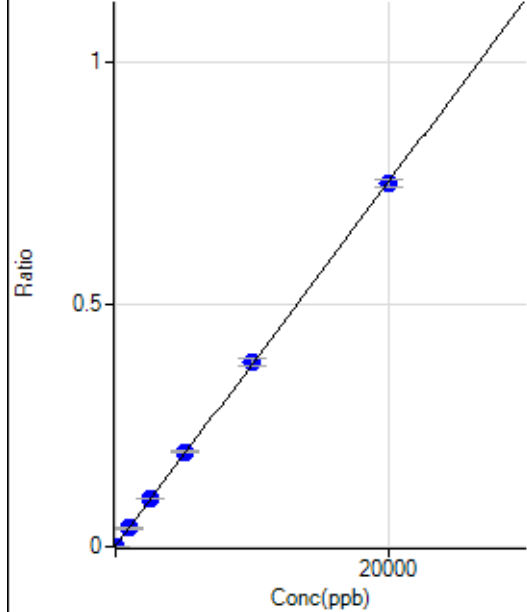
$$DL = 1.185$$

$$BEC = 36.89$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-1.515	58.34	0.0008	P	24.3
2	☐	0.000					
3	☐	0.000	1.515	66.67	0.0010	P	44.5
4	☐	1000.000	1007.180	2714.24	0.0388	P	8.4
5	☐	2500.000	2568.848	6982.46	0.0975	P	0.4
6	☐	5000.000	5168.960	14215.67	0.1953	P	2.0
7	☐	10000.000	10110.438	28199.76	0.3811	P	3.4
8	☐	20000.000	19893.576	55610.22	0.7489	P	2.2
9	☐			111.12	0.0014	P	5.2

$$y = 3.7602E-005 * x + 8.9321E-004$$

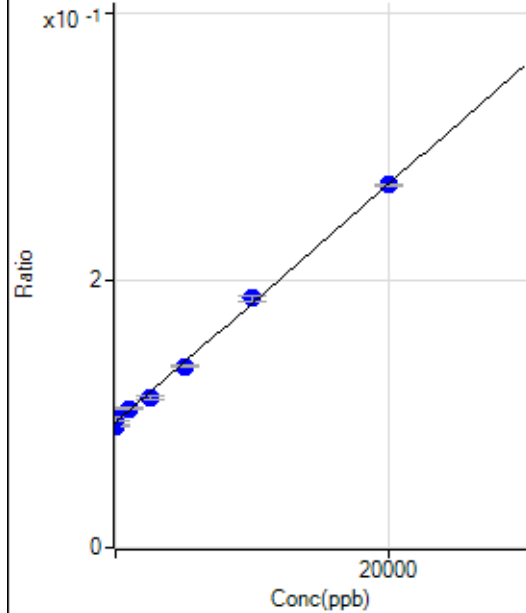
$$R = 0.9999$$

$$DL = 24.97$$

$$BEC = 23.75$$

Weight: <None>

Min Conc: 0

34 S [No Gas] ISTD:45 Sc [No Gas]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-265.743	61255.17	0.0912	P	1.7
2	☐	0.000					
3	☐	0.000	265.743	61882.72	0.0960	P	3.2
4	☐	1000.000	1161.973	68285.79	0.1040	P	2.0
5	☐	2500.000	2057.109	75216.18	0.1119	P	2.3
6	☐	5000.000	4722.312	90819.42	0.1357	P	0.9
7	☐	10000.000	10404.227	121123.59	0.1864	P	1.8
8	☐	20000.000	19914.571	179711.00	0.2711	P	0.2
9	☐			68517.62	0.0983	P	1.5

$$y = 8.9150E-006 * x + 0.0936$$

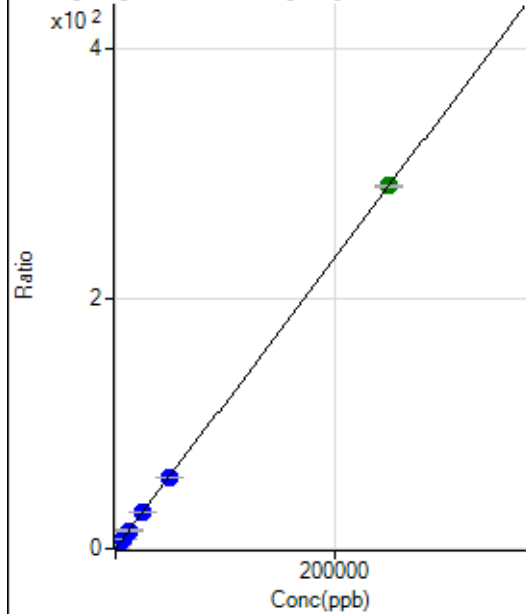
$$R = 0.9991$$

$$DL = 782.9$$

$$BEC = 1.05E+04$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13959.94	0.2003	P	1.2
2	☐	50.000					
3	☐	500.000	457.214	51069.36	0.7294	P	1.6
4	☐	2500.000	2528.505	218754.62	3.1266	P	1.1
5	☐	6250.000	6152.093	524284.17	7.3203	P	0.8
6	☐	12500.000	12416.870	1060794.50	14.5707	P	0.8
7	☐	25000.000	24749.513	2134792.88	28.8437	P	0.8
8	☐	50000.000	48401.255	4174246.45	56.2165	P	0.4
9	☐	250000.00	250351.20	22595143.39	289.9394	A	0.8

$$y = 0.0012 * x + 0.2003$$

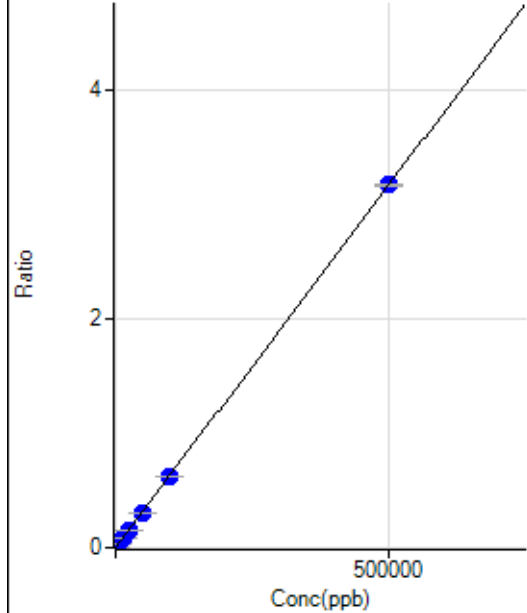
$$R = 1.0000$$

$$DL = 6.276$$

$$BEC = 173.1$$

Weight: <None>

Min Conc: 0

43 Ca [No Gas] ISTD:45 Sc [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44.45	0.0001	P	28.1
2	☐	50.000					
3	☐	500.000	418.929	1755.74	0.0027	P	3.6
4	☐	5000.000	5071.588	21169.01	0.0322	P	1.4
5	☐	12500.000	12202.042	52043.96	0.0774	P	0.4
6	☐	25000.000	24548.629	104240.20	0.1557	P	1.5
7	☐	50000.000	48809.994	201266.53	0.3096	P	0.7
8	☐	100000.00	97155.298	408398.07	0.6162	P	0.5
9	☐	500000.00	500717.32	2214060.75	3.1753	P	0.6

$$y = 6.3413\text{E-}006 * x + 6.6124\text{E-}005$$

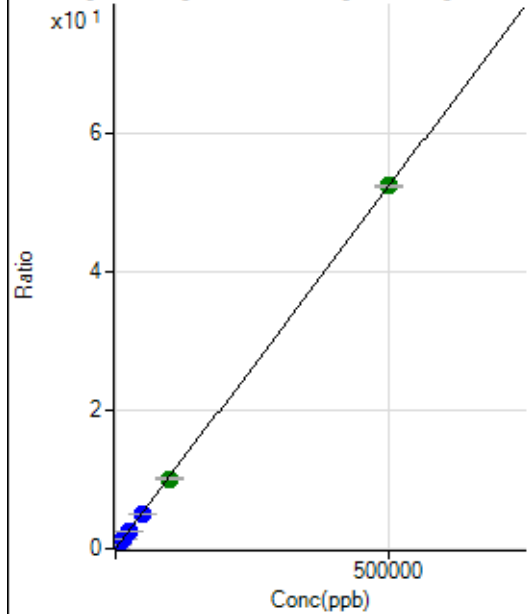
$$R = 1.0000$$

$$DL = 8.794$$

$$BEC = 10.43$$

Weight: <None>

Min Conc: 0

44 Ca [No Gas] ISTD:45 Sc [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3239.39	0.0048	P	8.9
2	☐	50.000					
3	☐	500.000	435.060	32501.13	0.0504	P	1.3
4	☐	5000.000	4941.392	343136.64	0.5224	P	0.4
5	☐	12500.000	12149.042	858343.91	1.2772	P	0.5
6	☐	25000.000	24115.643	1693714.36	2.5306	P	0.3
7	☐	50000.000	48296.093	3291256.82	5.0631	P	0.7
8	☐	100000.00	96704.802	6716356.88	10.1331	A	0.4
9	☐	500000.00	500883.07	36581849.78	52.4645	A	0.8

$$y = 1.0473\text{E-}004 * x + 0.0048$$

$$R = 1.0000$$

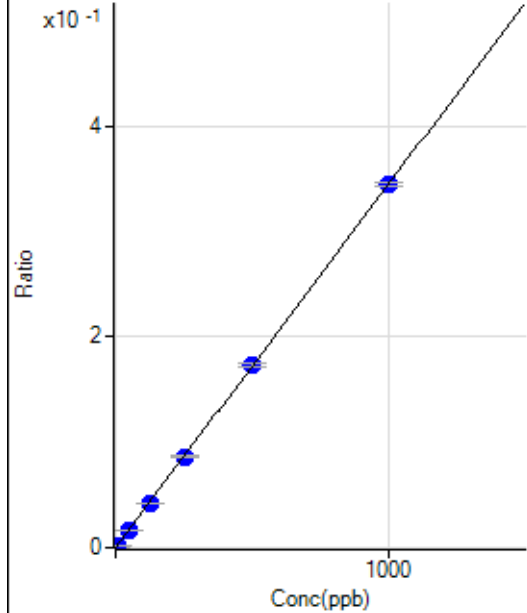
$$DL = 12.32$$

$$BEC = 46.08$$

Weight: <None>

Min Conc: 0

47 Ti [No Gas] ISTD:45 Sc [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	13.89	0.0000	P	35.0
2	☐	0.500					
3	☐	5.000	4.074	919.52	0.0014	P	5.5
4	☐	50.000	49.402	11207.53	0.0171	P	2.0
5	☐	125.000	123.040	28537.18	0.0425	P	0.2
6	☐	250.000	250.433	57831.69	0.0864	P	1.6
7	☐	500.000	503.624	112971.16	0.1738	P	1.4
8	☐	1000.000	998.359	228282.45	0.3444	P	1.2
9	☐			305.57	0.0004	P	18.6

$$y = 3.4496E-004 * x + 2.0707E-005$$

$$R = 1.0000$$

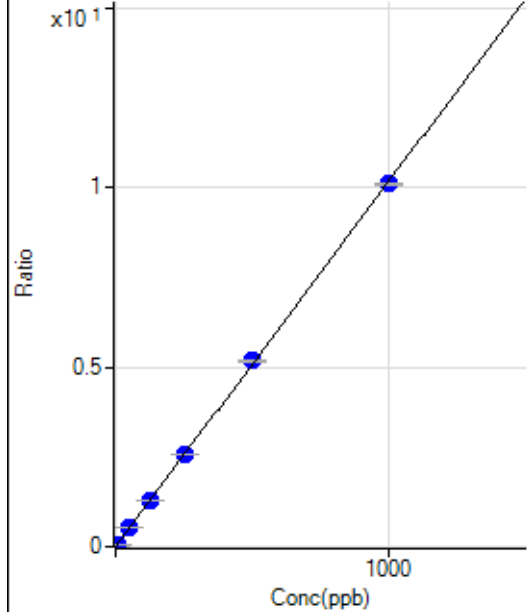
$$DL = 0.063$$

$$BEC = 0.06003$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	13.33	0.0002	P	42.7
2	☐	0.500					
3	☐	5.000	4.560	3257.09	0.0465	P	3.9
4	☐	50.000	51.477	36606.67	0.5232	P	1.5
5	☐	125.000	127.867	93062.08	1.2994	P	1.1
6	☐	250.000	254.062	187948.93	2.5816	P	0.9
7	☐	500.000	508.603	382515.84	5.1679	P	0.8
8	☐	1000.000	994.253	750121.20	10.1025	P	0.8
9	☐			230.01	0.0030	P	18.9

$$y = 0.0102 * x + 1.9102E-004$$

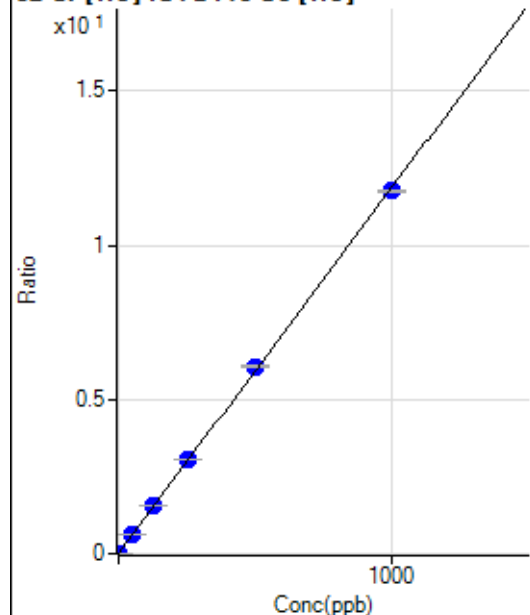
$$R = 0.9999$$

$$DL = 0.02409$$

$$BEC = 0.0188$$

Weight: <None>

Min Conc: 0

52 Cr [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	426.68	0.0061	P	4.9
2	☐	0.200					
3	☐	2.000	2.038	2119.08	0.0303	P	3.8
4	☐	50.000	52.952	44311.08	0.6334	P	2.2
5	☐	125.000	129.591	110391.73	1.5413	P	0.7
6	☐	250.000	258.551	223438.34	3.0691	P	0.7
7	☐	500.000	510.178	447778.83	6.0500	P	1.1
8	☐	1000.000	992.052	873092.49	11.7586	P	0.7
9	☐			9662.19	0.1240	P	0.5

$$y = 0.0118 * x + 0.0061$$

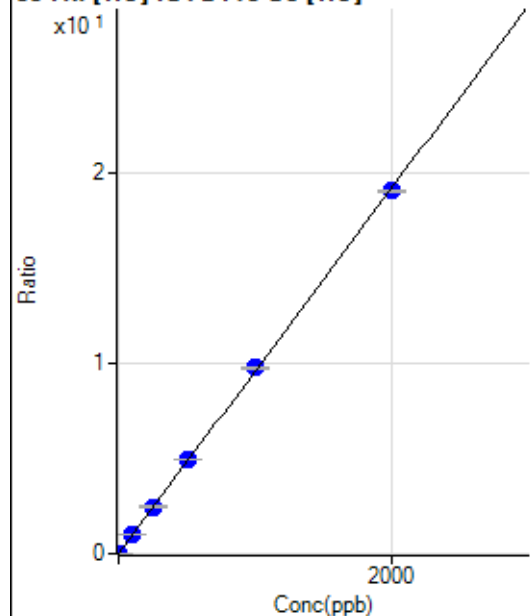
$$R = 0.9999$$

$$DL = 0.07582$$

$$BEC = 0.5168$$

Weight: <None>

Min Conc: 0

55 Mn [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44.44	0.0006	P	12.1
2	☐	0.100					
3	☐	1.000	0.957	686.69	0.0098	P	8.1
4	☐	100.000	105.074	70490.21	1.0076	P	1.7
5	☐	250.000	257.841	177012.57	2.4715	P	0.6
6	☐	500.000	513.982	358634.59	4.9261	P	1.2
7	☐	1000.000	1017.734	721882.51	9.7535	P	0.9
8	☐	2000.000	1986.403	1413489.58	19.0363	P	0.5
9	☐			6025.78	0.0773	P	1.8

$$y = 0.0096 * x + 6.3798E-004$$

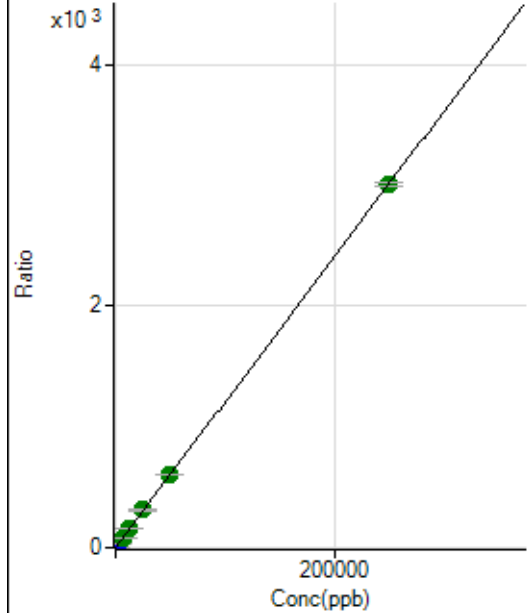
$$R = 0.9999$$

$$DL = 0.02416$$

$$BEC = 0.06657$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1277.87	0.0183	P	3.5
2	☐	5.000					
3	☐	50.000	48.976	42480.67	0.6068	P	1.2
4	☐	2500.000	2713.150	2281836.03	32.6159	P	1.5
5	☐	6250.000	6657.070	5729780.16	80.0008	A	0.5
6	☐	12500.000	13185.118	11534036.25	158.4332	A	1.8
7	☐	25000.000	25924.794	23054685.47	311.4962	A	0.9
8	☐	50000.000	50474.144	45029658.41	606.4485	A	0.7
9	☐	250000.00	249766.12	233850827.4	3,000.876	A	1.1

$$y = 0.0120 * x + 0.0183$$

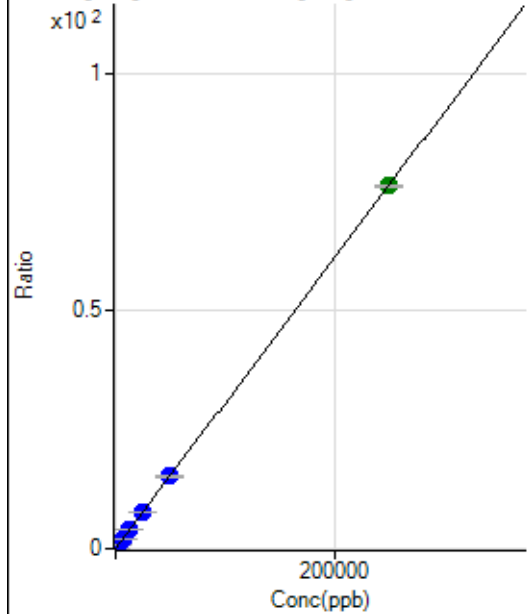
$$R = 1.0000$$

$$DL = 0.1616$$

$$BEC = 1.526$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	75.93	0.0011	P	15.1
2	☐	5.000					
3	☐	50.000	45.845	1055.62	0.0151	P	8.1
4	☐	2500.000	2680.264	57315.70	0.8192	P	1.5
5	☐	6250.000	6527.439	142778.17	1.9935	P	0.9
6	☐	12500.000	13038.528	289823.74	3.9810	P	1.1
7	☐	25000.000	25444.246	574931.44	7.7677	P	0.6
8	☐	50000.000	49714.098	1126847.78	15.1759	P	0.5
9	☐	250000.00	249977.09	5946472.65	76.3044	A	0.9

$$y = 3.0524E-004 * x + 0.0011$$

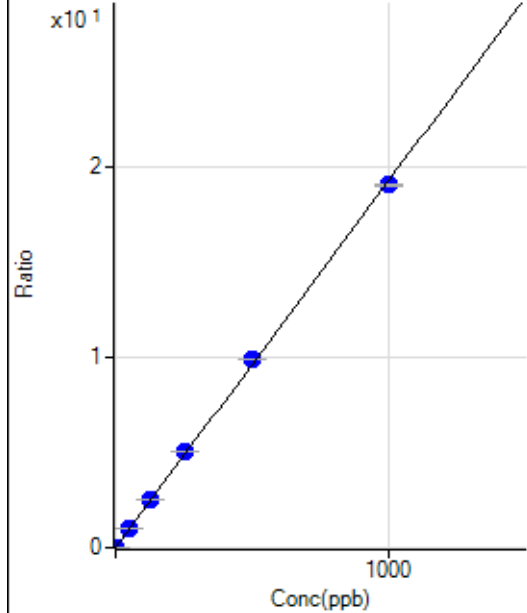
$$R = 1.0000$$

$$DL = 1.614$$

$$BEC = 3.568$$

Weight: <None>

Min Conc: 0

59 Co [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	40.00	0.0006	P	29.3
2	☐	0.100					
3	☐	1.000	0.988	1375.64	0.0197	P	5.3
4	☐	50.000	53.489	72287.12	1.0331	P	0.4
5	☐	125.000	132.365	183043.75	2.5558	P	1.0
6	☐	250.000	261.887	368096.56	5.0561	P	1.1
7	☐	500.000	512.834	732790.52	9.9005	P	0.6
8	☐	1000.000	989.516	1418400.74	19.1025	P	0.5
9	☐			1862.37	0.0239	P	3.3

$$y = 0.0193 * x + 5.7455E-004$$

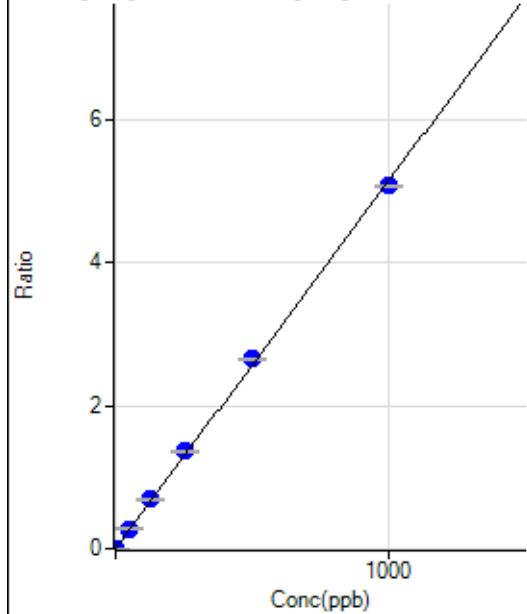
$$R = 0.9998$$

$$DL = 0.02614$$

$$BEC = 0.02976$$

Weight: <None>

Min Conc: 0

60 Ni [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27.78	0.0004	P	30.0
2	☐	0.100					
3	☐	1.000	0.972	377.79	0.0054	P	10.1
4	☐	50.000	54.627	19668.96	0.2811	P	1.2
5	☐	125.000	133.575	49192.41	0.6869	P	1.0
6	☐	250.000	264.571	99013.74	1.3601	P	1.5
7	☐	500.000	515.771	196210.15	2.6510	P	0.8
8	☐	1000.000	987.169	376722.48	5.0736	P	0.4
9	☐			1896.83	0.0244	P	7.9

$$y = 0.0051 * x + 3.9836E-004$$

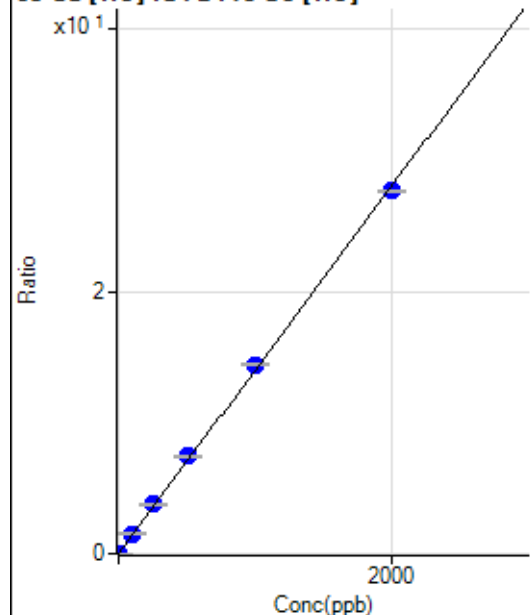
$$R = 0.9997$$

$$DL = 0.06978$$

$$BEC = 0.07751$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	137.78	0.0020	P	5.6
2	☐	0.200					
3	☐	2.000	1.882	1984.61	0.0283	P	2.2
4	☐	100.000	109.459	107454.36	1.5358	P	0.9
5	☐	250.000	267.727	268840.86	3.7537	P	0.8
6	☐	500.000	530.156	541009.61	7.4311	P	0.8
7	☐	1000.000	1028.485	1066857.94	14.4143	P	0.7
8	☐	2000.000	1975.530	2055708.77	27.6853	P	0.4
9	☐			2894.78	0.0372	P	7.0

$$y = 0.0140 * x + 0.0020$$

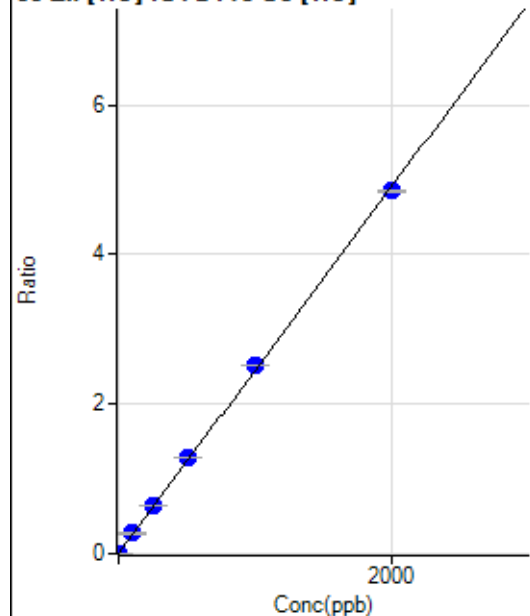
$$R = 0.9997$$

$$DL = 0.02383$$

$$BEC = 0.1411$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	168.89	0.0024	P	19.0
2	☐	0.200					
3	☐	2.000	2.127	534.47	0.0076	P	11.4
4	☐	100.000	109.707	18980.33	0.2713	P	1.5
5	☐	250.000	264.498	46602.14	0.6507	P	0.5
6	☐	500.000	524.974	93844.79	1.2890	P	0.9
7	☐	1000.000	1027.610	186581.41	2.5209	P	0.7
8	☐	2000.000	1977.654	360069.31	4.8492	P	0.7
9	☐			1081.17	0.0139	P	7.2

$$y = 0.0025 * x + 0.0024$$

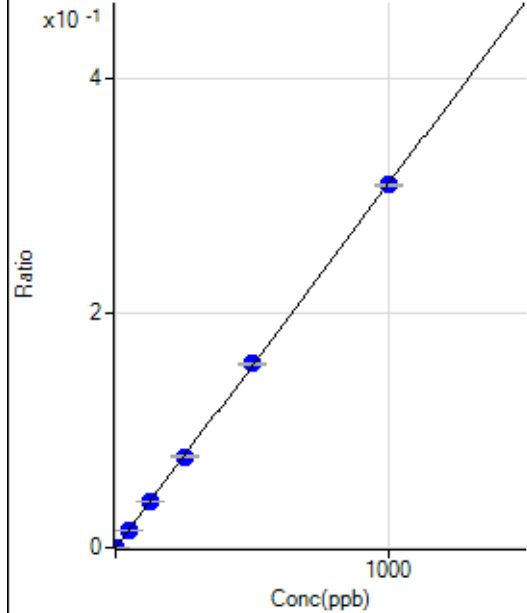
$$R = 0.9998$$

$$DL = 0.5645$$

$$BEC = 0.9893$$

Weight: <None>

Min Conc: 0

75 As [He] ISTD:89 Y [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7.41	0.0000	P	50.3
2	☐	0.100					
3	☐	1.000	0.818	119.76	0.0003	P	4.7
4	☐	50.000	49.318	6795.46	0.0153	P	0.6
5	☐	125.000	126.464	17666.97	0.0392	P	1.3
6	☐	250.000	250.838	35602.75	0.0778	P	1.5
7	☐	500.000	505.089	72291.97	0.1566	P	0.3
8	☐	1000.000	997.097	140540.55	0.3091	P	0.5
9	☐			117.90	0.0002	P	7.9

$$y = 3.0997\text{E-}004 * x + 1.6789\text{E-}005$$

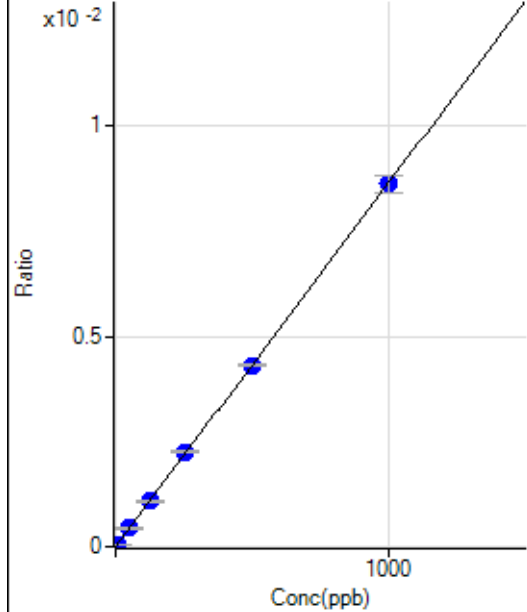
$$R = 1.0000$$

$$DL = 0.08167$$

$$BEC = 0.05416$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	0.500					
3	☐	5.000	6.080	23.33	0.0001	P	27.9
4	☐	50.000	51.770	198.89	0.0004	P	7.1
5	☐	125.000	125.107	487.79	0.0011	P	5.7
6	☐	250.000	261.141	1034.50	0.0023	P	3.4
7	☐	500.000	498.676	1992.39	0.0043	P	1.7
8	☐	1000.000	997.769	3925.05	0.0086	P	4.5
9	☐			0.00	0.0000	P	

$$y = 8.6536\text{E-}006 * x + 0.0000\text{E+}000$$

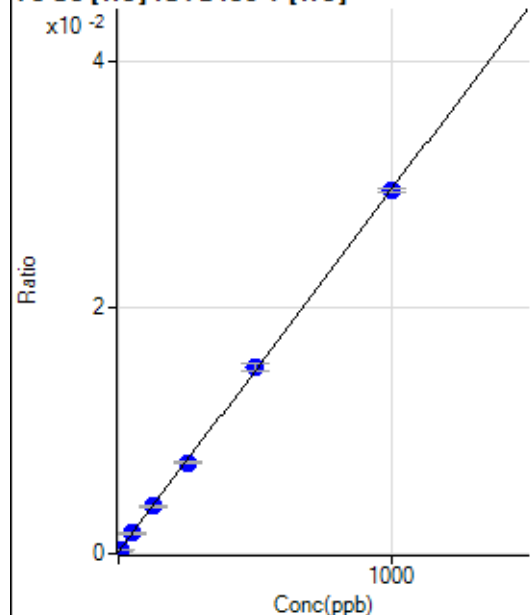
$$R = 0.9999$$

$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	77.16	0.0002	P	7.4
2	☐	0.500					
3	☐	5.000	4.297	133.34	0.0003	P	12.0
4	☐	50.000	50.757	739.53	0.0017	P	8.1
5	☐	125.000	124.626	1727.28	0.0038	P	1.3
6	☐	250.000	246.128	3388.70	0.0074	P	3.1
7	☐	500.000	509.762	6991.24	0.0151	P	3.5
8	☐	1000.000	996.099	13379.08	0.0294	P	0.9
9	☐			170.37	0.0003	P	19.2

$$y = 2.9363\text{E-}005 * x + 1.7475\text{E-}004$$

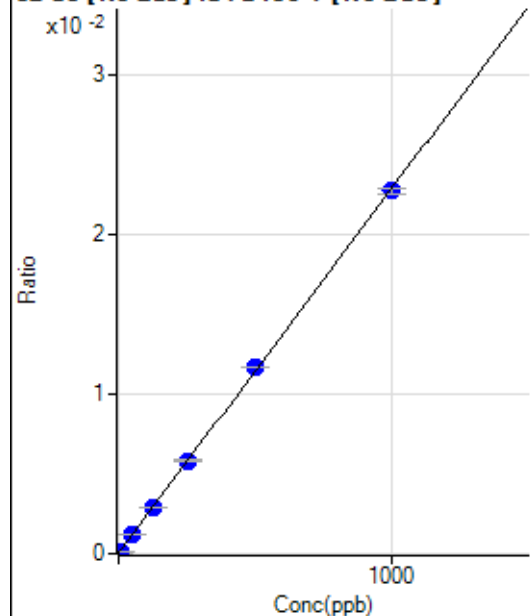
$$R = 0.9999$$

$$DL = 1.318$$

$$BEC = 5.951$$

Weight: <None>

Min Conc: 0

82 Se [No Gas] ISTD:89 Y [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	36.87	0.0000	P	34.3
2	☐	0.500					
3	☐	5.000	5.960	161.65	0.0002	P	2.2
4	☐	50.000	50.472	1133.76	0.0012	P	4.3
5	☐	125.000	124.256	2837.84	0.0029	P	1.1
6	☐	250.000	253.528	5641.54	0.0058	P	2.7
7	☐	500.000	509.947	10936.90	0.0117	P	0.9
8	☐	1000.000	994.209	21853.67	0.0227	P	1.5
9	☐			90.29	0.0001	P	13.3

$$y = 2.2820\text{E-}005 * x + 3.8129\text{E-}005$$

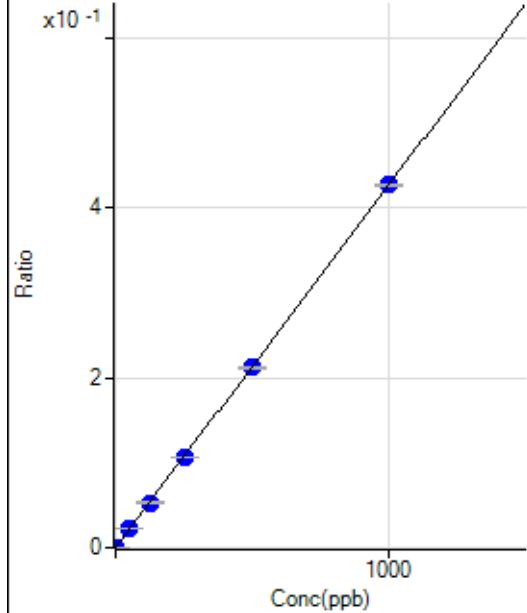
$$R = 0.9999$$

$$DL = 1.719$$

$$BEC = 1.671$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	119.45	0.0001	P	24.7
2	☐	0.100					
3	☐	1.000	0.960	494.48	0.0005	P	5.5
4	☐	50.000	51.053	20843.76	0.0219	P	1.1
5	☐	125.000	124.069	52321.88	0.0530	P	1.8
6	☐	250.000	249.344	103031.55	0.1064	P	0.6
7	☐	500.000	497.512	198675.78	0.2121	P	0.7
8	☐	1000.000	1001.472	410445.31	0.4268	P	0.4
9	☐			15139.27	0.0153	P	3.7

$$y = 4.2604\text{E-}004 * x + 1.2350\text{E-}004$$

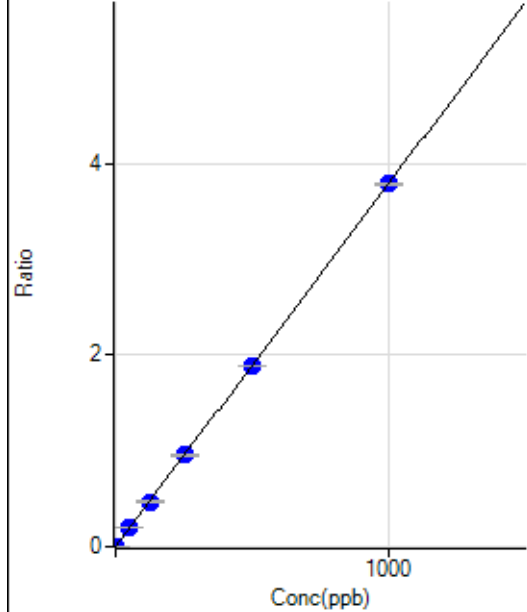
$$R = 1.0000$$

$$DL = 0.2146$$

$$BEC = 0.2899$$

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	52.78	0.0001	P	48.2
2	☐	0.100					
3	☐	1.000	0.906	3239.41	0.0035	P	10.1
4	☐	50.000	50.931	183931.52	0.1930	P	0.5
5	☐	125.000	124.523	465982.56	0.4719	P	0.7
6	☐	250.000	252.267	926007.75	0.9559	P	0.6
7	☐	500.000	499.029	1771210.40	1.8908	P	0.4
8	☐	1000.000	999.932	3643545.18	3.7887	P	0.5
9	☐			131877.05	0.1334	P	1.0

$$y = 0.0038 * x + 5.4531\text{E-}005$$

$$R = 1.0000$$

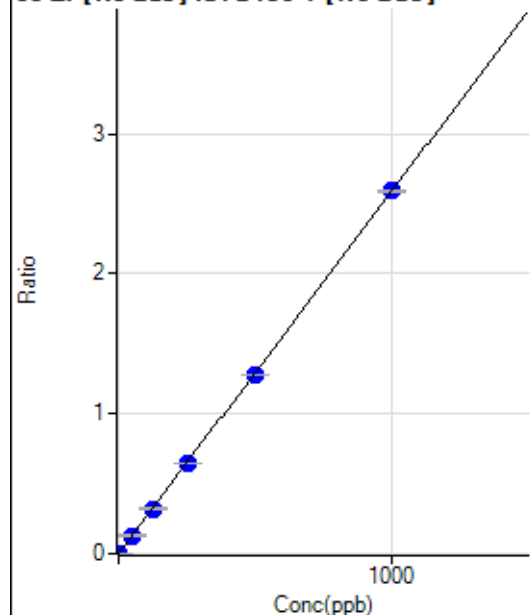
$$DL = 0.02081$$

$$BEC = 0.01439$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	97.22	0.0001	P	39.6
2	☐	0.100					
3	☐	1.000	0.929	2325.30	0.0025	P	10.3
4	☐	50.000	50.299	124074.35	0.1302	P	1.1
5	☐	125.000	124.706	318657.91	0.3227	P	1.1
6	☐	250.000	250.480	627777.12	0.6480	P	0.4
7	☐	500.000	496.023	1202004.25	1.2832	P	0.1
8	☐	1000.000	1001.890	2492460.36	2.5917	P	0.4
9	☐			1202.89	0.0012	P	5.1

$$y = 0.0026 * x + 1.0051E-004$$

$$R = 1.0000$$

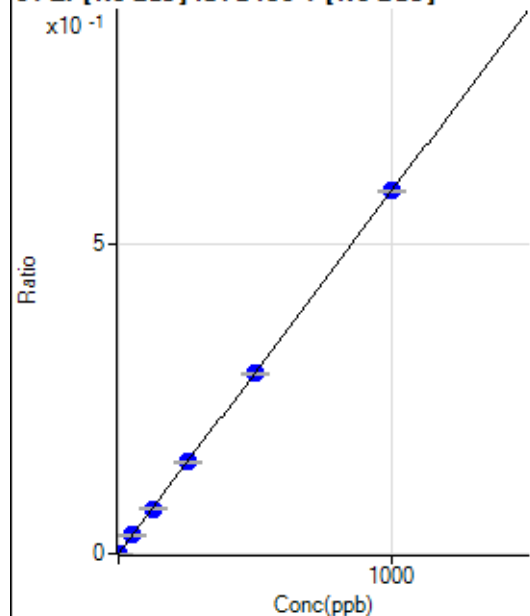
$$DL = 0.04622$$

$$BEC = 0.03886$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	19.44	0.0000	P	49.7
2	☐	0.100					
3	☐	1.000	0.922	519.48	0.0006	P	13.6
4	☐	50.000	50.654	28259.74	0.0297	P	2.0
5	☐	125.000	124.257	71813.06	0.0727	P	2.7
6	☐	250.000	252.486	143134.83	0.1478	P	0.7
7	☐	500.000	497.491	272676.67	0.2911	P	1.1
8	☐	1000.000	1000.693	563109.57	0.5855	P	0.6
9	☐			261.12	0.0003	P	26.1

$$y = 5.8511E-004 * x + 2.0118E-005$$

$$R = 1.0000$$

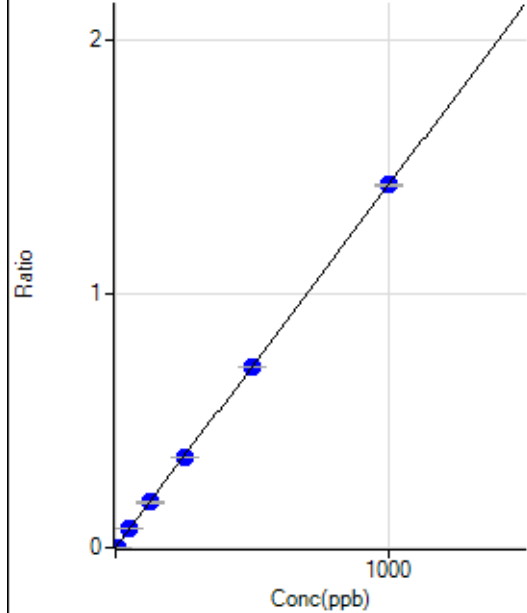
$$DL = 0.05122$$

$$BEC = 0.03438$$

Weight: <None>

Min Conc: 0

94 Mo [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	50.00	0.0001	P	50.2
2	☐	0.500					
3	☐	5.000	1.999	2700.39	0.0029	P	5.9
4	☐	50.000	51.098	69613.57	0.0731	P	1.1
5	☐	125.000	124.728	176028.47	0.1783	P	2.3
6	☐	250.000	250.802	347189.32	0.3584	P	0.3
7	☐	500.000	498.587	667345.54	0.7124	P	0.4
8	☐	1000.000	1000.500	1374778.16	1.4295	P	0.2
9	☐			1439.03	0.0015	P	3.5

$$y = 0.0014 * x + 5.1737E-005$$

$$R = 1.0000$$

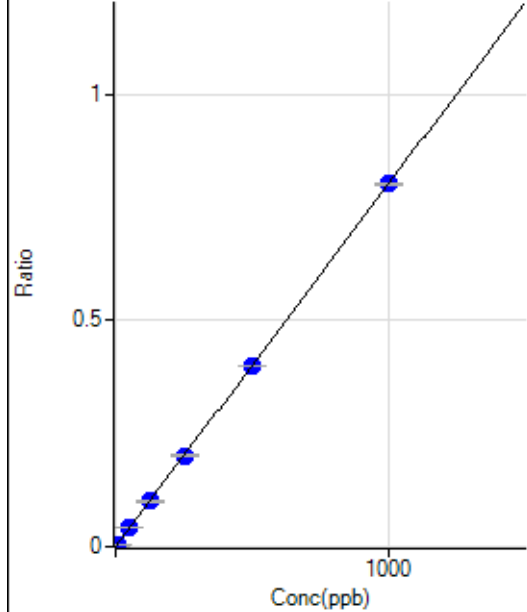
$$DL = 0.05457$$

$$BEC = 0.03621$$

Weight: <None>

Min Conc: 0

95 Mo [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.89	0.0000	P	91.7
2	☐	0.500					
3	☐	5.000	4.608	3442.25	0.0037	P	7.1
4	☐	50.000	50.976	38943.29	0.0409	P	0.1
5	☐	125.000	124.686	98696.06	0.0999	P	1.5
6	☐	250.000	251.416	195215.97	0.2015	P	0.3
7	☐	500.000	499.078	374702.07	0.4000	P	0.7
8	☐	1000.000	1000.099	770839.60	0.8015	P	0.3
9	☐			1902.99	0.0019	P	9.4

$$y = 8.0145E-004 * x + 1.4344E-005$$

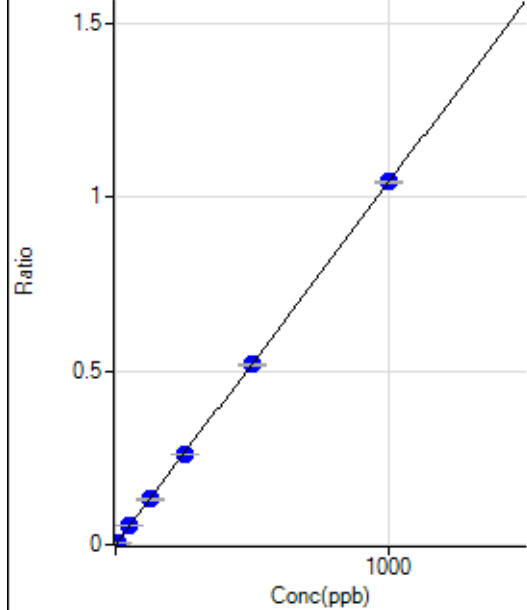
$$R = 1.0000$$

$$DL = 0.04926$$

$$BEC = 0.0179$$

Weight: <None>

Min Conc: 0

96 Mo [No Gas] ISTD:89 Y [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16.67	0.0000	P	50.0
2	☐	0.500					
3	☐	5.000	3.902	3792.35	0.0041	P	3.8
4	☐	50.000	50.895	50571.76	0.0531	P	0.8
5	☐	125.000	125.458	129162.58	0.1308	P	2.7
6	☐	250.000	249.040	251510.49	0.2596	P	1.1
7	☐	500.000	496.923	485262.48	0.5180	P	0.4
8	☐	1000.000	1001.682	1004208.88	1.0442	P	0.3
9	☐			2742.06	0.0028	P	4.8

$$y = 0.0010 * x + 1.7222E-005$$

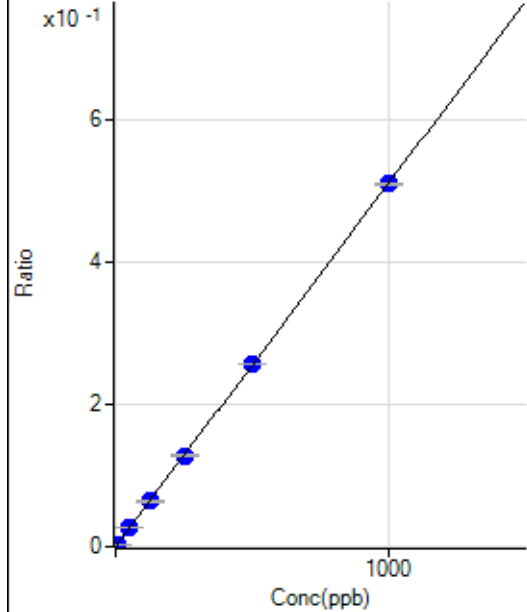
$$R = 1.0000$$

$$DL = 0.02478$$

$$BEC = 0.01652$$

Weight: <None>

Min Conc: 0

97 Mo [No Gas] ISTD:89 Y [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	0.500					
3	☐	5.000	4.238	2008.58	0.0022	P	13.0
4	☐	50.000	50.915	24764.37	0.0260	P	0.5
5	☐	125.000	124.472	62745.11	0.0635	P	0.4
6	☐	250.000	250.366	123805.03	0.1278	P	1.6
7	☐	500.000	502.322	240181.33	0.2564	P	0.4
8	☐	1000.000	998.772	490305.38	0.5098	P	0.5
9	☐			1169.55	0.0012	P	9.5

$$y = 5.1044E-004 * x + 0.0000E+000$$

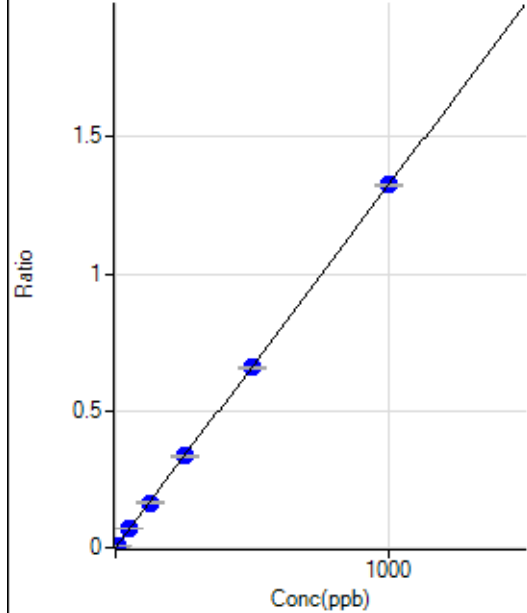
$$R = 1.0000$$

$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

98 Mo [No Gas] ISTD:89 Y [No Gas]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38.89	0.0000	P	62.1
2	☐	0.500					
3	☐	5.000	4.387	5429.07	0.0058	P	5.6
4	☐	50.000	51.300	64757.94	0.0680	P	1.1
5	☐	125.000	124.105	162302.95	0.1644	P	1.9
6	☐	250.000	252.603	324038.72	0.3345	P	0.6
7	☐	500.000	497.112	616598.61	0.6582	P	0.6
8	☐	1000.000	1000.843	1274416.55	1.3252	P	0.4
9	☐			2986.57	0.0030	P	5.0

$$y = 0.0013 * x + 4.0240E-005$$

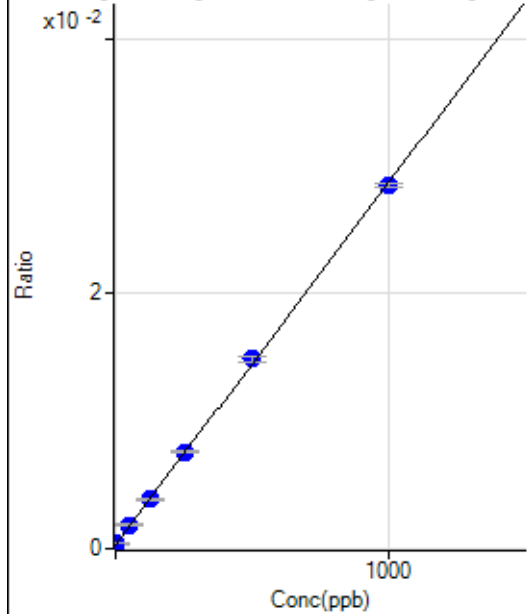
$$R = 1.0000$$

$$DL = 0.05664$$

$$BEC = 0.03039$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	463.92	0.0003	P	16.6
2	☐	0.100					
3	☐	1.000	2.448	538.92	0.0004	P	4.6
4	☐	50.000	54.218	2675.39	0.0019	P	7.5
5	☐	125.000	125.492	5806.98	0.0039	P	2.9
6	☐	250.000	255.936	11152.11	0.0076	P	2.5
7	☐	500.000	513.805	21127.75	0.0149	P	2.9
8	☐	1000.000	991.340	41620.56	0.0285	P	1.2
9	☐			541.70	0.0004	P	5.1

$$y = 2.8395E-005 * x + 3.1680E-004$$

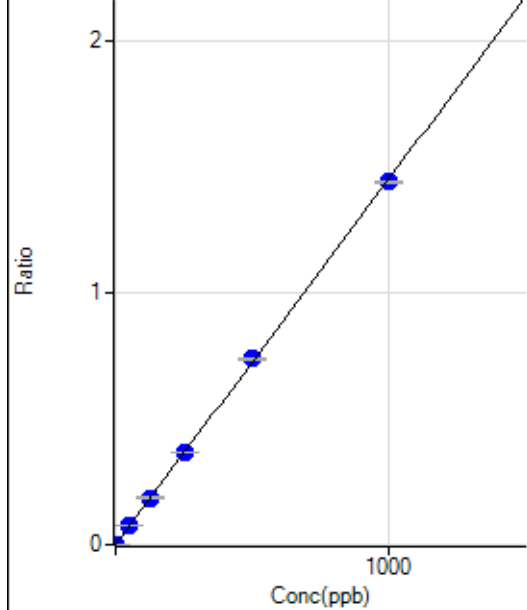
$$R = 0.9998$$

$$DL = 5.54$$

$$BEC = 11.16$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	19.45	0.0000	P	24.5
2	☐	0.100					
3	☐	1.000	1.001	2041.91	0.0015	P	8.7
4	☐	50.000	52.881	110532.25	0.0767	P	0.9
5	☐	125.000	128.932	279785.71	0.1870	P	0.5
6	☐	250.000	254.537	542670.30	0.3691	P	0.4
7	☐	500.000	509.789	1047764.53	0.7392	P	0.8
8	☐	1000.000	993.336	2105996.38	1.4403	P	0.4
9	☐			638.94	0.0004	P	8.4

$$y = 0.0014 * x + 1.3270E-005$$

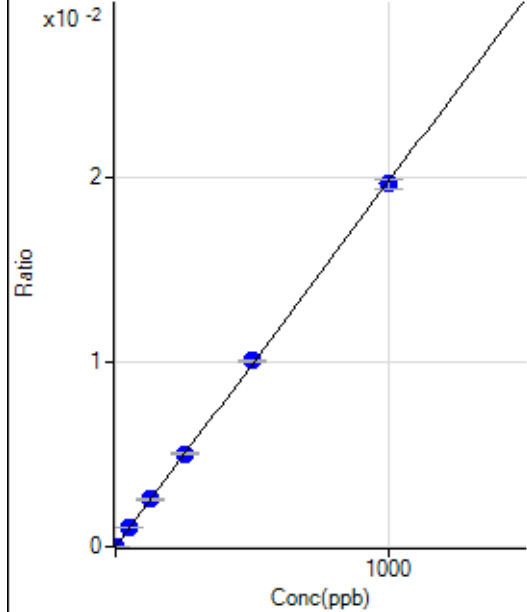
$$R = 0.9999$$

$$DL = 0.006727$$

$$BEC = 0.009152$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	0.100					
3	☐	1.000	0.808	22.22	0.0000	P	29.0
4	☐	50.000	52.686	1498.73	0.0010	P	6.0
5	☐	125.000	130.246	3846.44	0.0026	P	4.2
6	☐	250.000	253.305	7349.28	0.0050	P	1.9
7	☐	500.000	509.640	14254.63	0.0101	P	1.3
8	☐	1000.000	993.564	28666.99	0.0196	P	2.7
9	☐			6.95	0.0000	P	69.0

$$y = 1.9733E-005 * x + 0.0000E+000$$

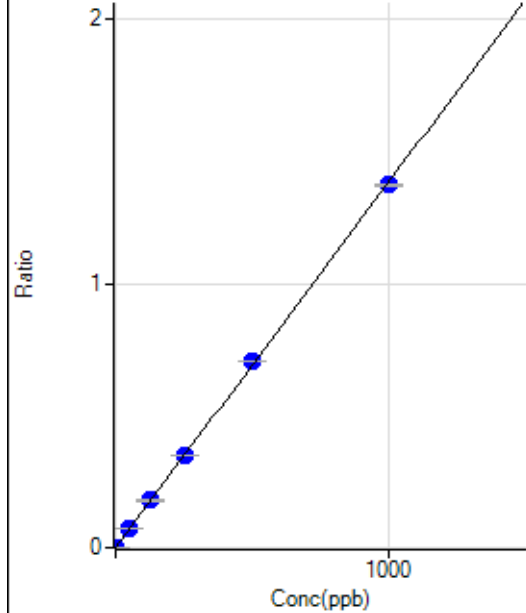
$$R = 0.9999$$

$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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

	R _{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	0.942	1822.44	0.0013	P	8.7
4	☐	50.000	52.779	105173.95	0.0730	P	1.6
5	☐	125.000	129.187	267279.24	0.1786	P	0.9
6	☐	250.000	254.617	517554.67	0.3520	P	0.5
7	☐	500.000	510.036	999434.70	0.7051	P	0.4
8	☐	1000.000	993.166	2007594.90	1.3730	P	0.4
9	☐			575.04	0.0004	P	6.4

$$y = 0.0014 * x + 3.7830E-006$$

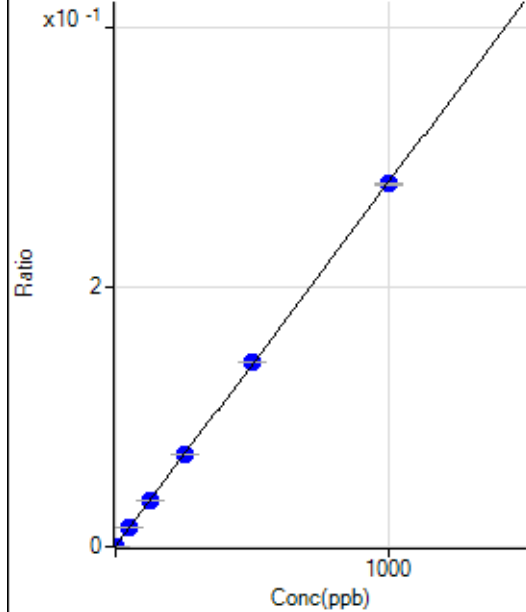
$$R = 0.9999$$

$$DL = 0.00711$$

$$BEC = 0.002736$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	327.52	0.0002	P	17.8
2	☐	0.100					
3	☐	1.000	1.003	704.76	0.0005	P	7.9
4	☐	50.000	52.089	21386.15	0.0148	P	2.9
5	☐	125.000	127.758	53975.81	0.0361	P	0.9
6	☐	250.000	252.056	104306.78	0.0709	P	0.2
7	☐	500.000	506.213	201623.87	0.1422	P	0.0
8	☐	1000.000	995.930	408895.38	0.2796	P	0.8
9	☐			488.21	0.0003	P	1.2

$$y = 2.8055E-004 * x + 2.2366E-004$$

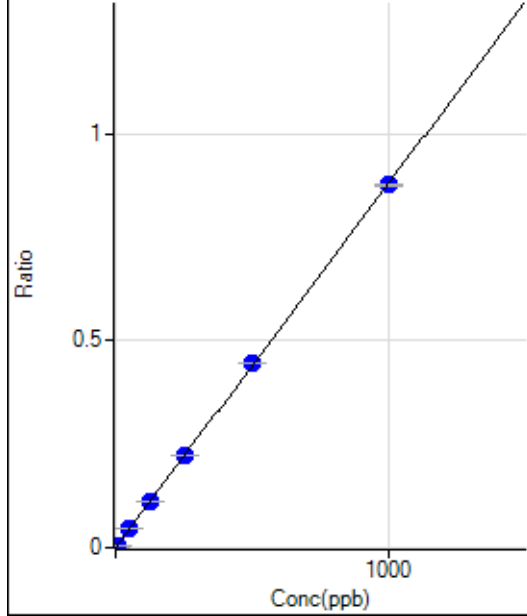
$$R = 1.0000$$

$$DL = 0.4246$$

$$BEC = 0.7972$$

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	186.12	0.0001	P	11.6
2	☐	0.500					
3	☐	5.000	4.860	6131.61	0.0044	P	20.7
4	☐	50.000	51.472	65370.70	0.0454	P	1.7
5	☐	125.000	125.728	165511.07	0.1106	P	1.4
6	☐	250.000	251.925	325653.07	0.2215	P	0.6
7	☐	500.000	505.857	630195.12	0.4446	P	0.4
8	☐	1000.000	996.426	1280321.01	0.8756	P	0.6
9	☐			1194.56	0.0008	P	6.3

$$y = 8.7864\text{E-}004 * x + 1.2708\text{E-}004$$

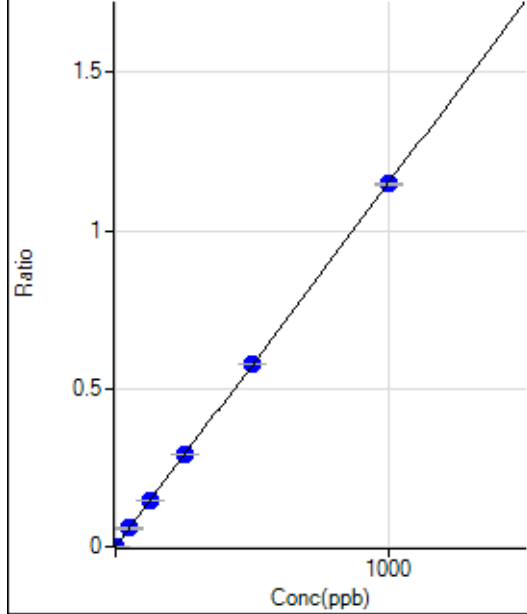
$$R = 1.0000$$

$$DL = 0.05035$$

$$BEC = 0.1446$$

Weight: <None>

Min Conc: 0

121 Sb [No Gas] ISTD :159 Tb [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	19.44	0.0000	P	65.8
2	☐	0.200					
3	☐	2.000	1.714	2769.84	0.0020	P	6.5
4	☐	50.000	50.400	83586.42	0.0580	P	0.9
5	☐	125.000	126.438	217696.18	0.1455	P	0.9
6	☐	250.000	252.121	426478.21	0.2900	P	0.6
7	☐	500.000	502.777	819842.07	0.5784	P	0.8
8	☐	1000.000	997.882	1678530.80	1.1479	P	0.7
9	☐			4448.12	0.0030	P	9.2

$$y = 0.0012 * x + 1.3293\text{E-}005$$

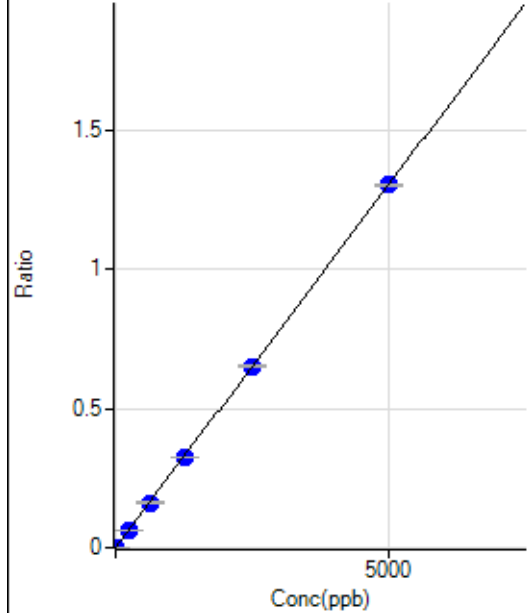
$$R = 1.0000$$

$$DL = 0.02282$$

$$BEC = 0.01156$$

Weight: <None>

Min Conc: 0

135 Ba [No Gas] ISTD :159 Tb [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	8.33	0.0000	P	0.4
2	☐	1.000					
3	☐	10.000	8.705	3178.28	0.0023	P	5.2
4	☐	250.000	250.458	94248.05	0.0654	P	1.0
5	☐	625.000	621.969	243003.23	0.1624	P	0.8
6	☐	1250.000	1243.449	477296.07	0.3246	P	0.8
7	☐	2500.000	2502.299	925934.12	0.6532	P	0.4
8	☐	5000.000	5000.847	1908890.02	1.3055	P	0.6
9	☐			977.86	0.0007	P	6.4

$$y = 2.6105E-004 * x + 5.6863E-006$$

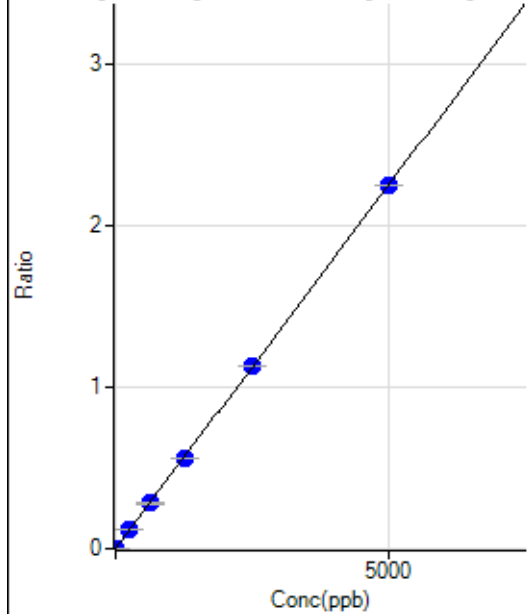
$$R = 1.0000$$

$$DL = 0.0002372$$

$$BEC = 0.02178$$

Weight: <None>

Min Conc: 0

137 Ba [No Gas] ISTD :159 Tb [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	22.22	0.0000	P	57.1
2	☐	1.000					
3	☐	10.000	8.750	5504.13	0.0039	P	5.1
4	☐	250.000	253.557	164219.88	0.1139	P	0.6
5	☐	625.000	623.228	419058.20	0.2800	P	1.4
6	☐	1250.000	1253.828	828282.73	0.5633	P	0.2
7	☐	2500.000	2516.433	1602535.98	1.1306	P	0.7
8	☐	5000.000	4990.872	3278606.74	2.2422	P	0.0
9	☐			1600.16	0.0011	P	5.4

$$y = 4.4927E-004 * x + 1.5149E-005$$

$$R = 1.0000$$

$$DL = 0.05779$$

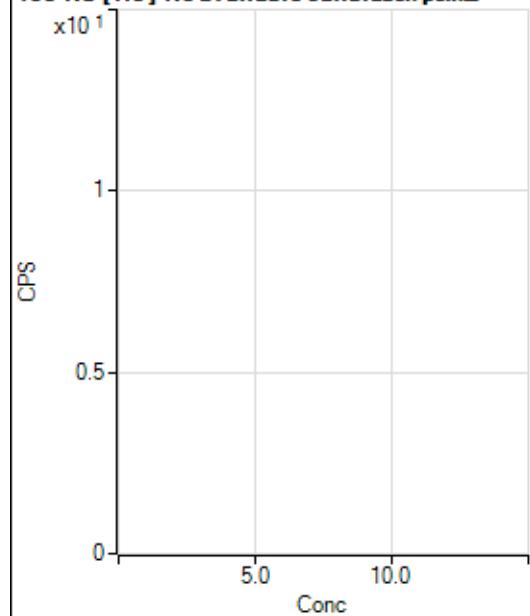
$$BEC = 0.03372$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.
2	☐						
3	☐			0.00		P	
4	☐			15.55		P	24.8
5	☐			28.89		P	48.0
6	☐			51.11		P	32.8
7	☐			77.78		P	21.6
8	☐			137.79		P	17.0
9	☐			20.00		P	33.4

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			1.11		P	173.
4	☐			2.22		P	173.
5	☐			3.33		P	100.
6	☐			16.67		P	40.0
7	☐			21.11		P	9.1
8	☐			48.89		P	23.9
9	☐			24.44		P	39.4

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			2.78		P	173.
4	☐			5.55		P	86.6
5	☐			8.33		P	100.
6	☐			8.33		P	100.
7	☐			22.22		P	21.6
8	☐			27.78		P	45.8
9	☐			11.11		P	86.6

156 Dy [He] No available calibration points

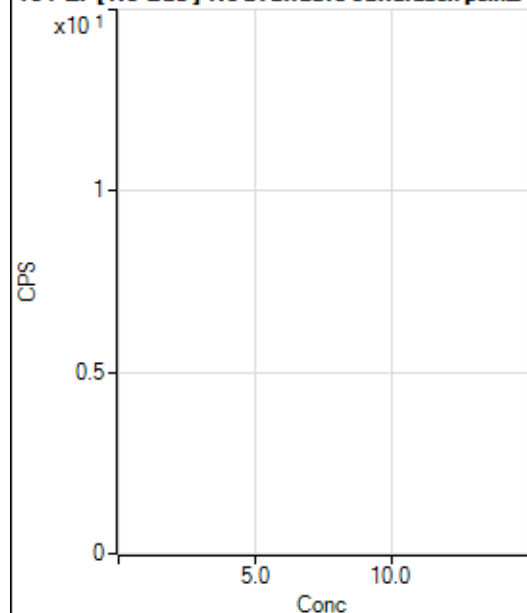
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.
2	☐						
3	☐			1.11		P	173.
4	☐			1.11		P	173.
5	☐			8.89		P	57.3
6	☐			13.34		P	86.6
7	☐			37.78		P	33.4
8	☐			55.55		P	12.5
9	☐			15.55		P	44.6

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

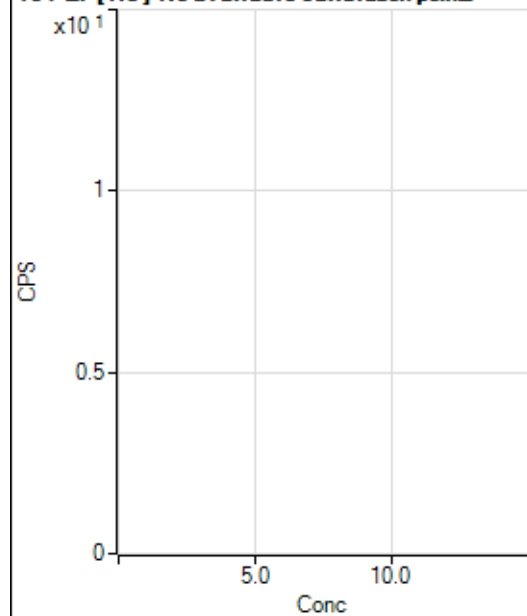
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			38.89		P	32.7
2	☐						
3	☐			38.89		P	65.5
4	☐			41.67		P	20.0
5	☐			30.56		P	41.7
6	☐			47.22		P	27.0
7	☐			55.56		P	90.4
8	☐			63.89		P	19.9
9	☐			55.56		P	37.8

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			181.11		P	7.7
2	☐						
3	☐			170.01		P	9.0
4	☐			181.11		P	10.6
5	☐			180.01		P	19.6
6	☐			207.78		P	24.6
7	☐			197.78		P	4.2
8	☐			186.67		P	1.8
9	☐			212.23		P	4.0

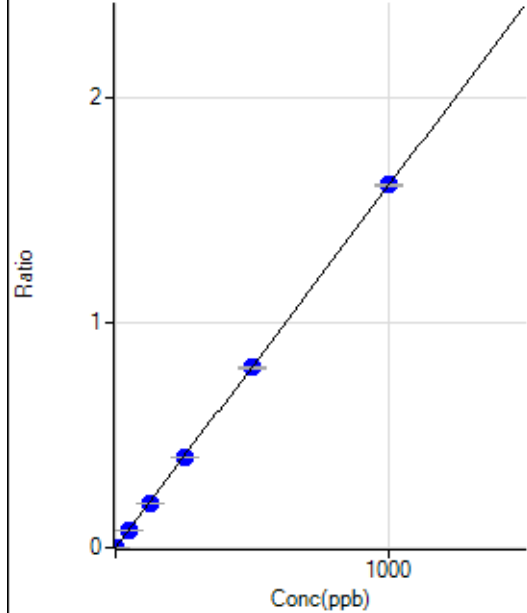
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			30.55		P	126.
2	☐						
3	☐			27.78		P	75.5
4	☐			25.00		P	33.3
5	☐			36.11		P	35.2
6	☐			19.44		P	65.5
7	☐			25.00		P	33.3
8	☐			27.78		P	34.6
9	☐			8.33		P	100.

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.56		P	34.7
2	☐						
3	☐			11.11		P	62.5
4	☐			5.56		P	34.7
5	☐			6.67		P	50.0
6	☐			8.89		P	57.3
7	☐			11.11		P	17.3
8	☐			7.78		P	99.0
9	☐			20.00		P	0.0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38.89	0.0000	P	32.6
2	☐	0.100					
3	☐	1.000	0.894	1733.54	0.0015	P	3.9
4	☐	50.000	49.528	96726.07	0.0798	P	0.7
5	☐	125.000	123.296	248039.35	0.1986	P	0.8
6	☐	250.000	248.362	487906.02	0.4000	P	0.3
7	☐	500.000	497.240	933721.51	0.8007	P	0.3
8	☐	1000.000	1002.026	1918527.15	1.6136	P	0.4
9	☐			1358.46	0.0012	P	8.5

$$y = 0.0016 * x + 3.1654E-005$$

$$R = 1.0000$$

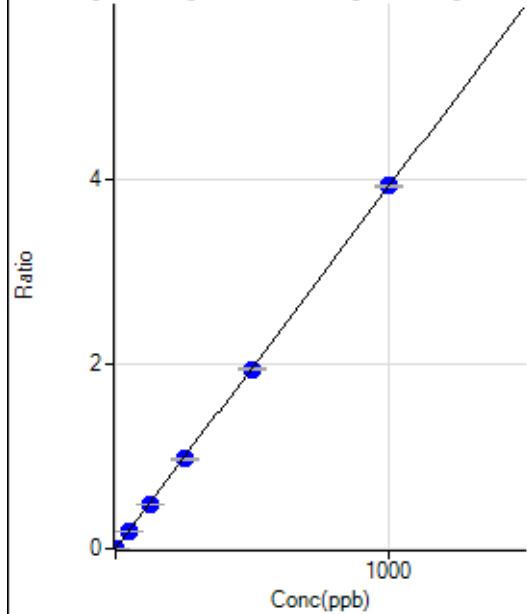
$$DL = 0.01921$$

$$BEC = 0.01966$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	55.56	0.0000	P	61.0
2	☐	0.100					
3	☐	1.000	0.904	4231.43	0.0036	P	5.8
4	☐	50.000	49.833	237096.51	0.1956	P	0.6
5	☐	125.000	123.069	603242.13	0.4829	P	0.5
6	☐	250.000	247.127	1182898.31	0.9697	P	0.6
7	☐	500.000	496.783	2273053.76	1.9493	P	0.2
8	☐	1000.000	1002.576	4677307.40	3.9339	P	0.6
9	☐			3047.71	0.0027	P	5.8

$$y = 0.0039 * x + 4.5296E-005$$

$$R = 1.0000$$

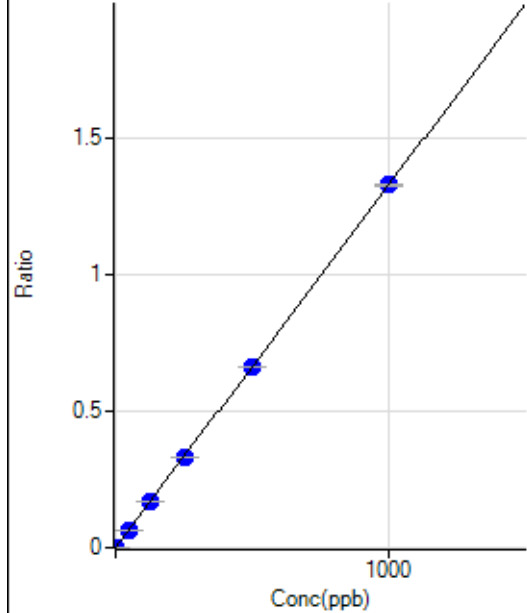
$$DL = 0.02113$$

$$BEC = 0.01154$$

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	209.27	0.0002	P	17.2
2	☐	0.100					
3	☐	1.000	0.942	1670.53	0.0014	P	4.5
4	☐	50.000	49.973	80418.40	0.0663	P	1.0
5	☐	125.000	125.078	207079.14	0.1658	P	0.3
6	☐	250.000	248.275	401198.45	0.3289	P	1.1
7	☐	500.000	498.065	769193.95	0.6596	P	0.2
8	☐	1000.000	1001.391	1576648.31	1.3261	P	0.2
9	☐			2218.77	0.0019	P	1.3

$$y = 0.0013 * x + 1.7047E-004$$

$$R = 1.0000$$

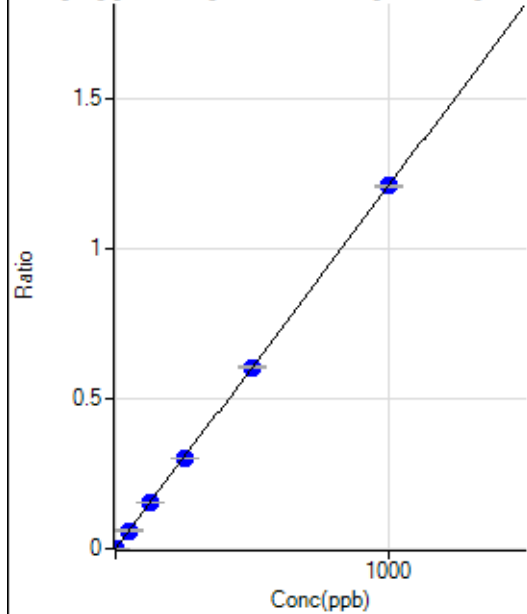
$$DL = 0.06652$$

$$BEC = 0.1287$$

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	187.04	0.0002	P	15.8
2	☐	0.100					
3	☐	1.000	0.904	1464.94	0.0012	P	9.7
4	☐	50.000	50.216	73681.36	0.0608	P	0.1
5	☐	125.000	125.397	189299.72	0.1515	P	0.4
6	☐	250.000	248.839	366662.30	0.3006	P	0.3
7	☐	500.000	500.405	704656.80	0.6043	P	0.4
8	☐	1000.000	1000.028	1435699.90	1.2075	P	0.4
9	☐			1965.02	0.0017	P	3.7

$$y = 0.0012 * x + 1.5226E-004$$

$$R = 1.0000$$

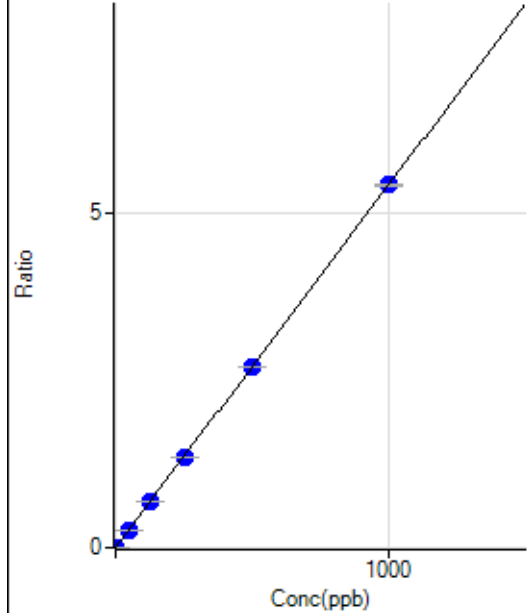
$$DL = 0.05994$$

$$BEC = 0.1261$$

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	966.71	0.0008	P	4.0
2	☐	0.100					
3	☐	1.000	0.885	6589.72	0.0056	P	6.1
4	☐	50.000	50.098	330794.45	0.2729	P	0.5
5	☐	125.000	125.041	849259.76	0.6799	P	0.2
6	☐	250.000	248.435	1646829.12	1.3500	P	0.3
7	☐	500.000	499.218	3162461.10	2.7121	P	0.1
8	☐	1000.000	1000.772	6463219.79	5.4360	P	0.2
9	☐			9281.22	0.0081	P	1.8

$$y = 0.0054 * x + 7.8721E-004$$

$$R = 1.0000$$

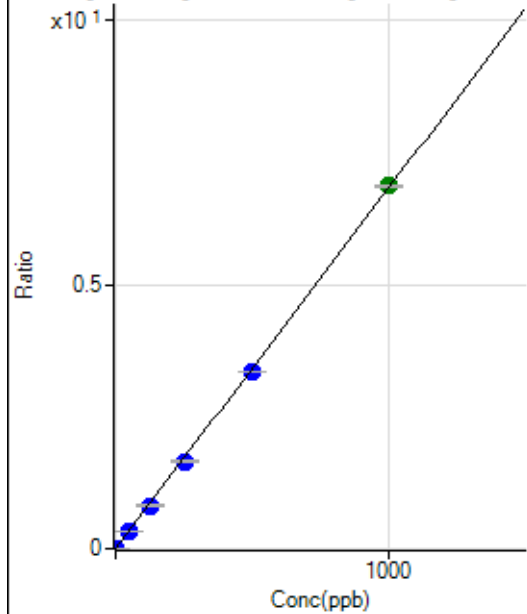
$$DL = 0.01727$$

$$BEC = 0.1449$$

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	155.57	0.0001	P	27.9
2	☐	0.100					
3	☐	1.000	0.817	6718.73	0.0057	P	0.9
4	☐	50.000	48.020	397335.87	0.3278	P	0.2
5	☐	125.000	119.880	1021847.20	0.8181	P	0.9
6	☐	250.000	242.758	2020608.62	1.6565	P	0.3
7	☐	500.000	491.607	3911406.03	3.3543	P	0.2
8	☐	1000.000	1006.746	8167141.94	6.8691	A	0.5
9	☐			2408.67	0.0021	P	2.8

$$y = 0.0068 * x + 1.2682E-004$$

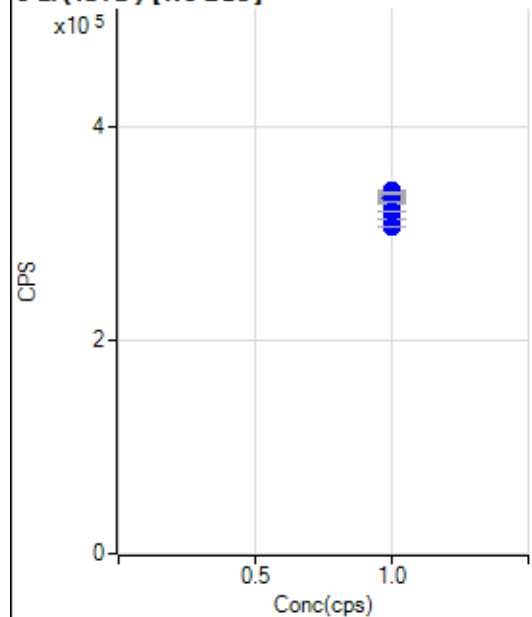
$$R = 0.9999$$

$$DL = 0.01558$$

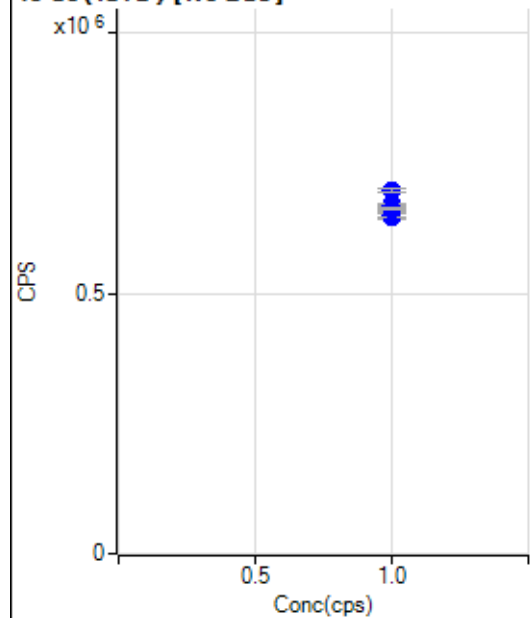
$$BEC = 0.01859$$

Weight: <None>

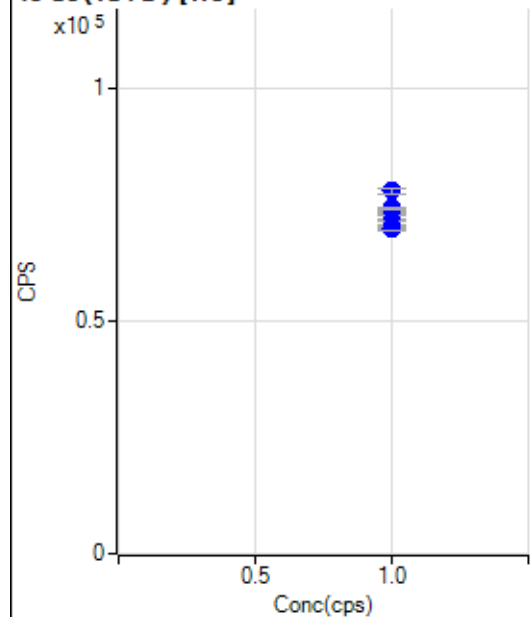
Min Conc: 0

6 Li (ISTD) [No Gas]

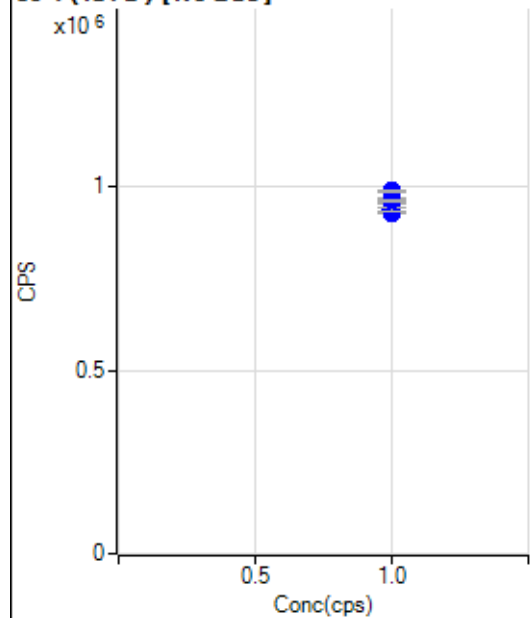
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		339291.01		P	0.1
2	☐	1.000					
3	☐	1.000		331556.93		P	0.5
4	☐	1.000		332986.89		P	0.8
5	☐	1.000		337427.97		P	0.6
6	☐	1.000		328121.47		P	0.7
7	☐	1.000		312946.70		P	0.3
8	☐	1.000		320083.72		P	0.4
9	☐	1.000		305570.18		P	0.2

45 Sc (ISTD) [No Gas]

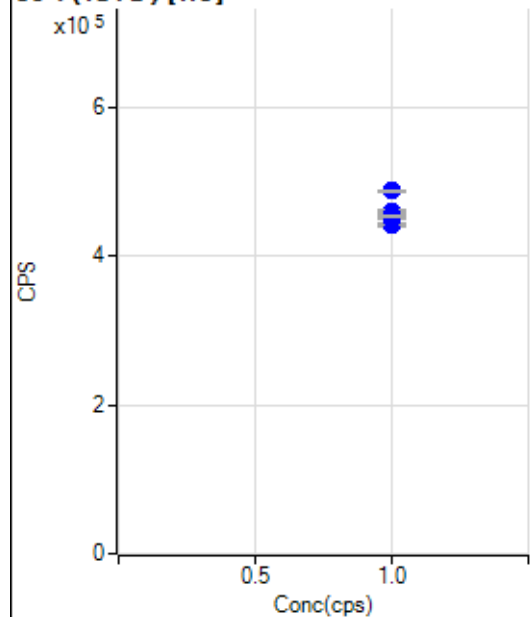
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		671469.72		P	0.6
2	☐	1.000					
3	☐	1.000		644978.08		P	1.0
4	☐	1.000		656908.87		P	0.7
5	☐	1.000		672013.86		P	0.6
6	☐	1.000		669311.05		P	0.8
7	☐	1.000		650095.22		P	1.5
8	☐	1.000		662806.29		P	0.4
9	☐	1.000		697310.54		P	1.2

45 Sc (ISTD) [He]

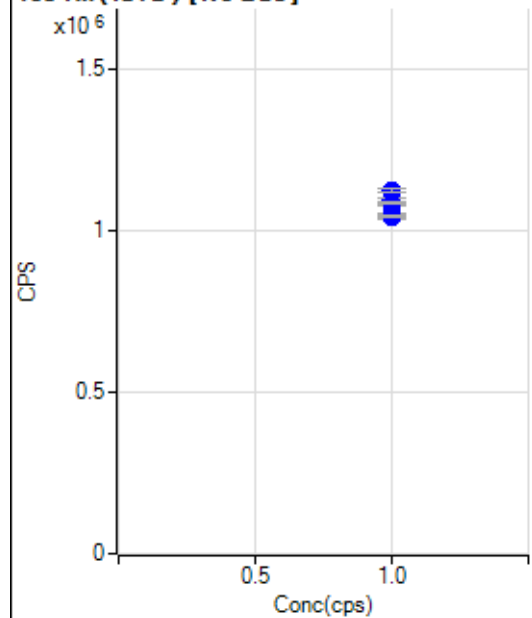
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		69697.48		P	0.6
2	☐	1.000					
3	☐	1.000		70013.49		P	0.8
4	☐	1.000		69971.13		P	1.5
5	☐	1.000		71623.26		P	0.8
6	☐	1.000		72804.50		P	0.5
7	☐	1.000		74017.28		P	1.2
8	☐	1.000		74252.92		P	0.6
9	☐	1.000		77937.15		P	1.7

89 Y (ISTD) [No Gas]

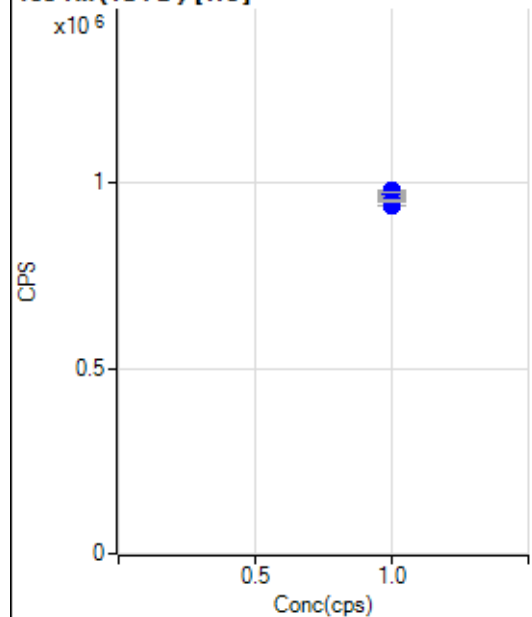
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		967406.31		P	0.3
2	☐	1.000					
3	☐	1.000		928323.89		P	0.5
4	☐	1.000		952879.13		P	0.4
5	☐	1.000		987570.12		P	0.6
6	☐	1.000		968756.68		P	0.1
7	☐	1.000		936743.49		P	0.8
8	☐	1.000		961710.61		P	0.9
9	☐	1.000		988305.22		P	0.6

89 Y(ISTD) [He]

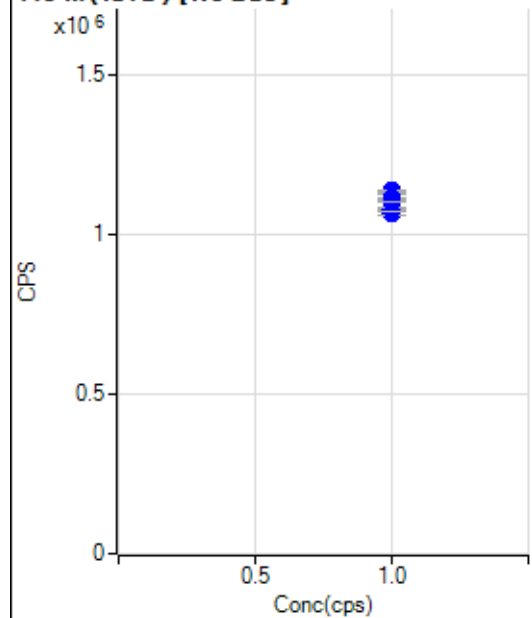
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		441568.63		P	0.3
2	☐	1.000					
3	☐	1.000		442992.51		P	0.7
4	☐	1.000		444039.34		P	0.6
5	☐	1.000		450486.58		P	0.5
6	☐	1.000		457801.64		P	0.2
7	☐	1.000		461690.98		P	0.5
8	☐	1.000		454703.82		P	0.8
9	☐	1.000		488194.80		P	0.8

103 Rh(ISTD) [No Gas]

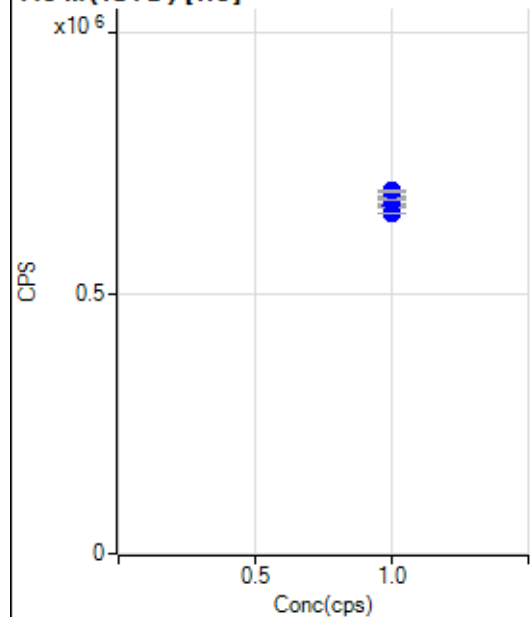
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1117337.72		P	0.2
2	☐	1.000					
3	☐	1.000		1074985.41		P	0.3
4	☐	1.000		1095820.23		P	0.9
5	☐	1.000		1121617.55		P	0.9
6	☐	1.000		1083680.89		P	0.5
7	☐	1.000		1039388.22		P	0.9
8	☐	1.000		1049482.43		P	0.6
9	☐	1.000		1043685.08		P	0.1

103 Rh (ISTD) [He]

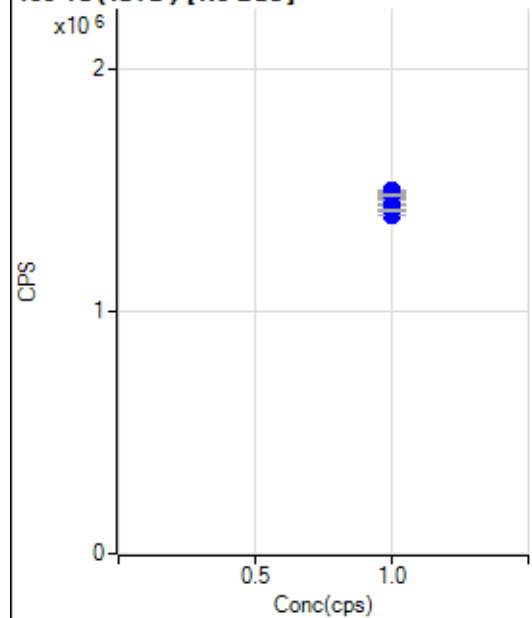
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		967066.27		P	0.5
2	☐	1.000					
3	☐	1.000		965976.16		P	0.5
4	☐	1.000		965533.36		P	1.1
5	☐	1.000		976653.08		P	0.1
6	☐	1.000		978472.63		P	0.4
7	☐	1.000		968352.53		P	1.1
8	☐	1.000		938826.48		P	0.3
9	☐	1.000		950238.65		P	0.7

115 In (ISTD) [No Gas]

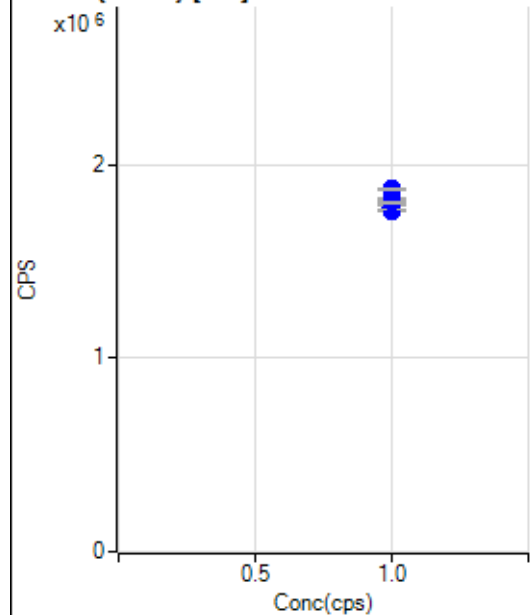
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1125227.87		P	0.1
2	☐	1.000					
3	☐	1.000		1082582.16		P	0.4
4	☐	1.000		1106613.71		P	0.4
5	☐	1.000		1136640.48		P	0.2
6	☐	1.000		1112272.85		P	0.8
7	☐	1.000		1066920.60		P	0.9
8	☐	1.000		1077243.43		P	1.0
9	☐	1.000		1102425.67		P	0.3

115 In (ISTD) [He]

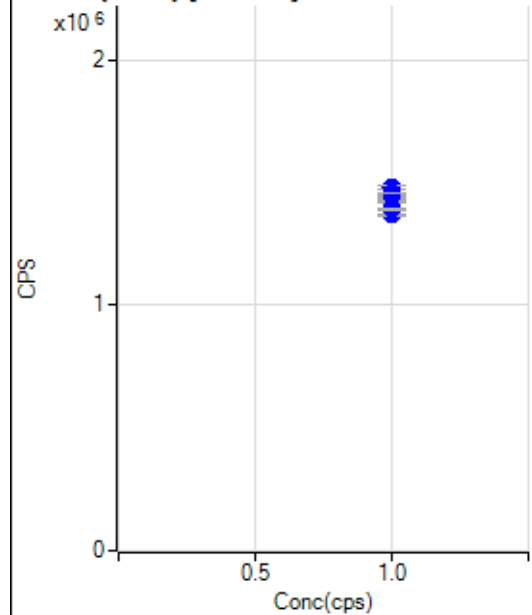
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		668348.42		P	0.5
2	☐	1.000					
3	☐	1.000		670556.24		P	0.4
4	☐	1.000		668697.28		P	1.3
5	☐	1.000		681360.25		P	0.3
6	☐	1.000		684454.02		P	0.6
7	☐	1.000		680730.98		P	0.8
8	☐	1.000		653745.05		P	0.5
9	☐	1.000		696974.83		P	0.6

159 Tb (ISTD) [No Gas]

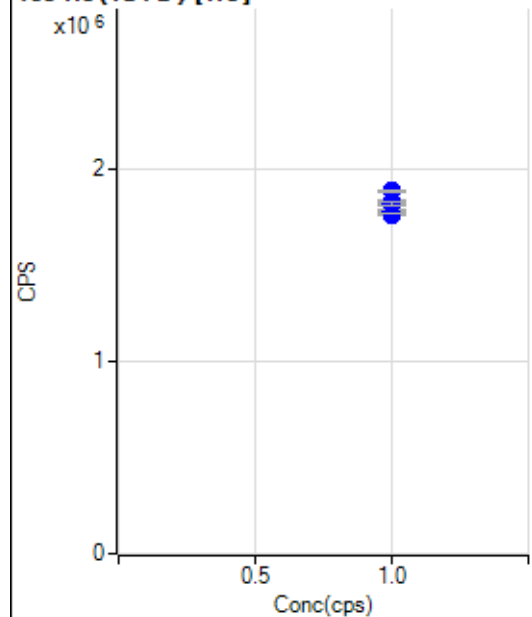
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1464931.51		P	0.4
2	☐	1.000					
3	☐	1.000		1395004.63		P	0.3
4	☐	1.000		1441394.95		P	0.5
5	☐	1.000		1496548.85		P	0.3
6	☐	1.000		1470370.83		P	0.5
7	☐	1.000		1417459.88		P	0.6
8	☐	1.000		1462199.61		P	0.7
9	☐	1.000		1480121.77		P	0.3

159 Tb (ISTD) [He]

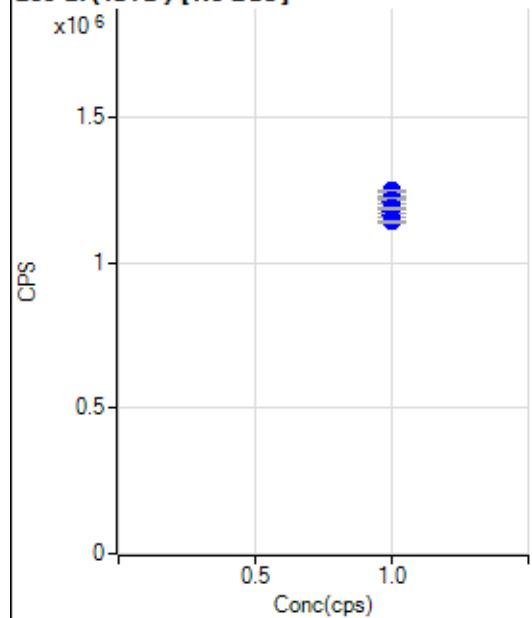
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1761502.18		P	0.3
2	☐	1.000					
3	☐	1.000		1763666.95		P	0.7
4	☐	1.000		1777686.05		P	1.4
5	☐	1.000		1815357.78		P	0.3
6	☐	1.000		1826469.80		P	0.3
7	☐	1.000		1824336.26		P	1.0
8	☐	1.000		1807527.72		P	0.6
9	☐	1.000		1875748.22		P	0.6

165 Ho (ISTD) [No Gas]

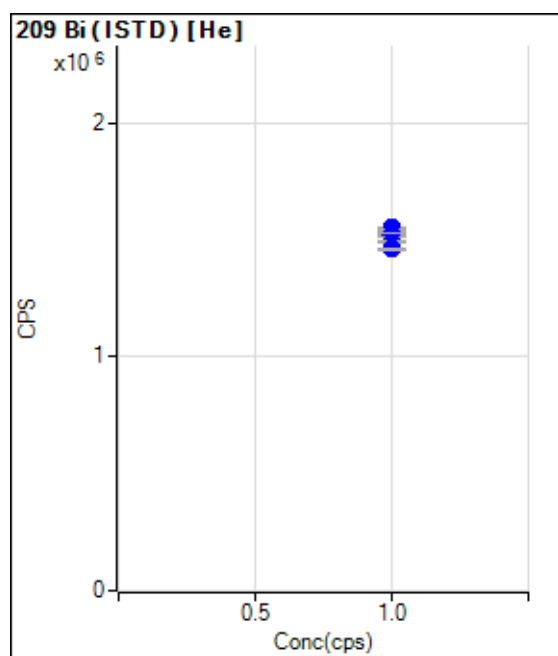
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1440740.92		P	0.4
2	☐	1.000					
3	☐	1.000		1370491.31		P	0.5
4	☐	1.000		1422337.78		P	0.6
5	☐	1.000		1479554.78		P	1.1
6	☐	1.000		1452823.75		P	0.7
7	☐	1.000		1392997.30		P	0.6
8	☐	1.000		1448323.77		P	0.3
9	☐	1.000		1457564.19		P	0.4

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1766095.39		P	0.3
2	☐	1.000					
3	☐	1.000		1771404.31		P	1.2
4	☐	1.000		1785108.34		P	0.9
5	☐	1.000		1825716.71		P	0.4
6	☐	1.000		1833312.51		P	0.4
7	☐	1.000		1830172.46		P	1.1
8	☐	1.000		1823182.02		P	0.9
9	☐	1.000		1889638.91		P	0.8

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1227851.99		P	0.5
2	☐	1.000					
3	☐	1.000		1178250.99		P	0.8
4	☐	1.000		1212263.21		P	0.8
5	☐	1.000		1249123.69		P	0.7
6	☐	1.000		1219839.58		P	0.3
7	☐	1.000		1166071.93		P	0.8
8	☐	1.000		1188954.34		P	0.4
9	☐	1.000		1142964.17		P	0.2



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1520210.13		P	0.3
2	☐	1.000					
3	☐	1.000		1516656.56		P	0.8
4	☐	1.000		1525476.32		P	1.1
5	☐	1.000		1549778.78		P	0.2
6	☐	1.000		1539460.50		P	0.5
7	☐	1.000		1519944.08		P	1.1
8	☐	1.000		1490613.19		P	0.7
9	☐	1.000		1459870.36		P	0.8

US EPA Tune Check Sample Report

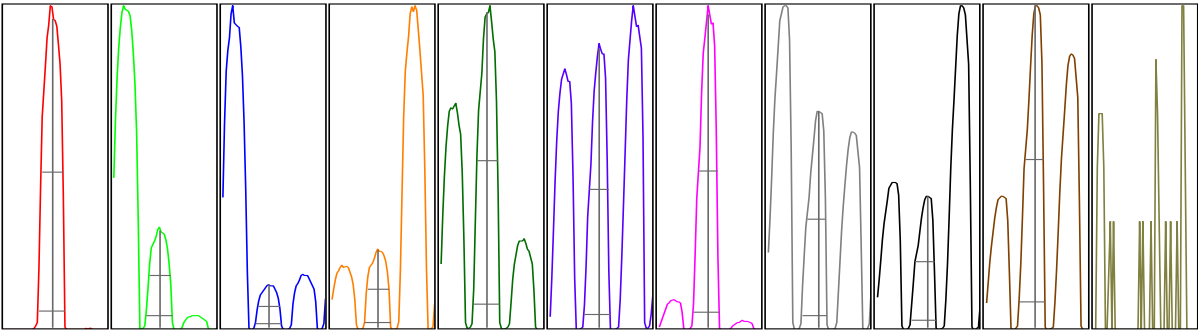
Batch Folder D:\ICP-MS Data\P7100517-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	1398	2.37	5.00	
24	5141	2.57	5.00	
25	742	2.14	5.00	
26	971	3.11	5.00	
59	9019	2.30	5.00	
113	1211	2.62	5.00	
115	14876	3.01	5.00	
206	4472	3.14	5.00	
207	4037	2.73	5.00	
208	9627	2.99	5.00	
220	0	108.65		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	1393	1342	1419	1415	1421
24	5100	4929	5193	5247	5237
25	743	715	746	751	756
26	967	921	983	984	999
59	8967	8677	9116	9159	9174
113	1202	1164	1206	1242	1239
115	14682	14194	14994	15236	15273
206	4369	4278	4545	4580	4589
207	3943	3895	4095	4112	4140
208	9397	9243	9786	9824	9887
220	0	0	0	0	0

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	2283	8.95	8.9 - 9.1		0.783	0.900	
24	8542	23.90	23.9 - 24.1		0.762	0.900	
25	1213	24.90	24.9 - 25.1		0.756	0.900	
26	1511	25.90	25.9 - 26.1		0.743	0.900	
59	15719	58.90	58.9 - 59.1		0.764	0.900	
113	2295	113.00	112.9 - 113.1		0.758	0.900	
115	28034	115.00	114.9 - 115.1		0.756	0.900	
206	8287	206.05	205.9 - 206.1		0.736	0.900	
207	7493	207.05	206.9 - 207.1		0.733	0.900	
208	18306	208.00	207.9 - 208.1		0.745	0.900	
220	0	220.25	-		0.175		

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

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	18.0	V	Deflect	20.0	V
Extract 2	-225.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-120	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	130	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	4625	0.49	
89	3206	0.84	
205	8008	0.56	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	4640	4605	4655	4621	4603
89	3231	3174	3229	3214	3181
205	8009	7982	8084	7970	7993

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	18.0	V	Deflect	4.8	V
Extract 2	-230.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-120	V	Cell Exit	-60	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	Yes		OctP Bias	-18.0	V	Energy Discrimination		5.0 V
He Flow	4.1	mL/min	OctP RF	200	V			