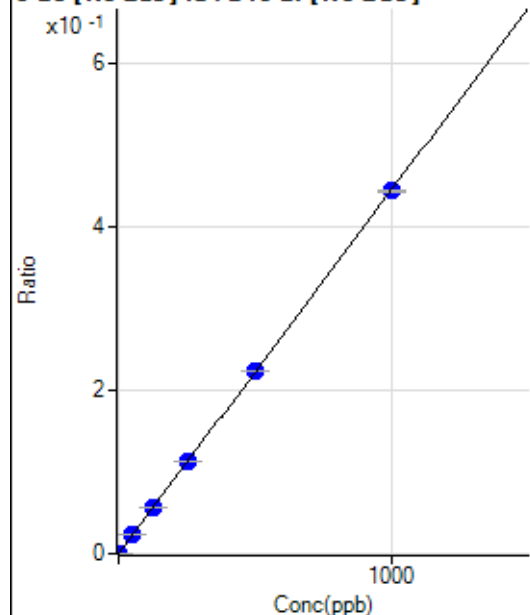


Batch Folder: D:\ICP-MS Data\P7060118-MS.b\
Analysis File: P7060118-MS.batch.bin
DA Date-Time: 2018-06-01 18:58:37
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2018-06-01 12:37:28
2			
3	005CALS.d	S02	2018-06-01 12:45:54
4	006CALS.d	S03	2018-06-01 12:49:47
5	007CALS.d	S04	2018-06-01 12:53:55
6	008CALS.d	S05	2018-06-01 12:57:43
7	009CALS.d	S06	2018-06-01 13:01:30
8	010CALS.d	S07	2018-06-01 13:05:15
9	011CALS.d	S08	2018-06-01 13:08:58

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	64.82	0.0000	P	42.5
2	☐	0.100					
3	☐	1.000	0.967	1689.03	0.0004	P	6.8
4	☐	50.000	52.251	89138.14	0.0233	P	1.4
5	☐	125.000	128.694	217765.91	0.0573	P	0.1
6	☐	250.000	254.091	400653.07	0.1131	P	0.4
7	☐	500.000	501.948	748709.62	0.2233	P	0.2
8	☐	1000.000	997.429	1465520.14	0.4438	P	0.2
9	☐			666.70	0.0002	P	8.5

$$y = 4.4488\text{E-}004 * x + 1.7404\text{E-}005$$

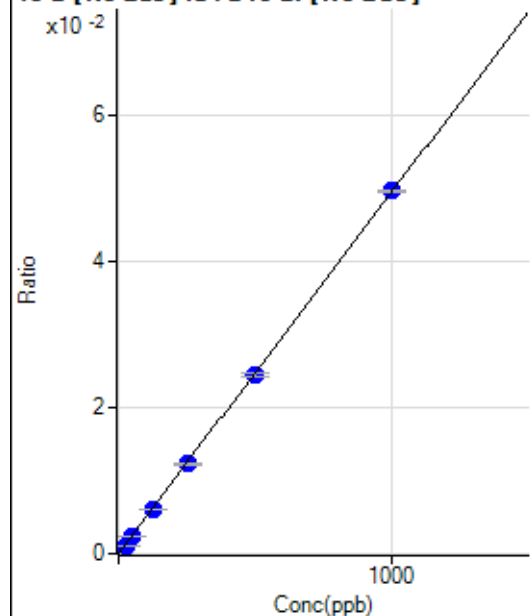
$$R = 1.0000$$

$$DL = 0.04984$$

$$BEC = 0.03912$$

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	102.78	0.0000	P	35.2
2	☐	2.500					
3	☐	25.000	22.661	4323.01	0.0011	P	4.9
4	☐	50.000	47.755	9133.67	0.0024	P	3.3
5	☐	125.000	120.534	22717.78	0.0060	P	1.4
6	☐	250.000	247.660	43393.69	0.0122	P	1.9
7	☐	500.000	494.581	81896.17	0.0244	P	1.4
8	☐	1000.000	1004.024	163678.35	0.0496	P	0.9
9	☐			8002.45	0.0024	P	9.6

$$y = 4.9336\text{E-}005 * x + 2.7747\text{E-}005$$

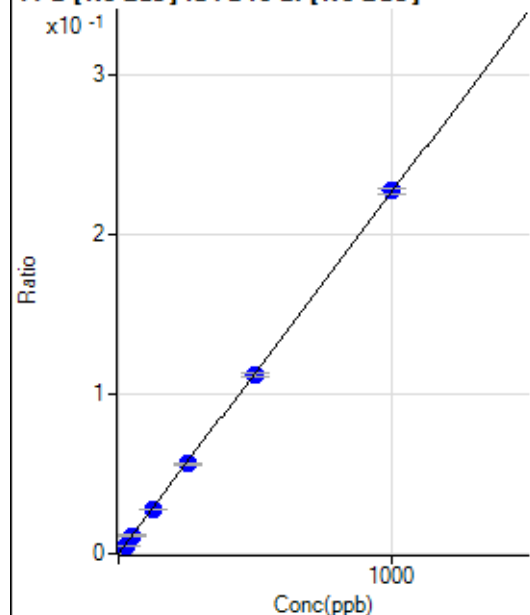
$$R = 1.0000$$

$$DL = 0.5936$$

$$BEC = 0.5624$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	525.03	0.0001	P	19.2
2	☐	2.500					
3	☐	25.000	23.002	20203.09	0.0054	P	1.7
4	☐	50.000	49.873	43839.51	0.0114	P	4.2
5	☐	125.000	122.139	105771.56	0.0278	P	2.0
6	☐	250.000	247.447	199192.95	0.0562	P	0.6
7	☐	500.000	494.366	376023.42	0.1122	P	2.0
8	☐	1000.000	1003.869	751687.06	0.2276	P	1.9
9	☐			35618.04	0.0106	P	8.0

$$y = 2.2660\text{E-}004 * x + 1.4064\text{E-}004$$

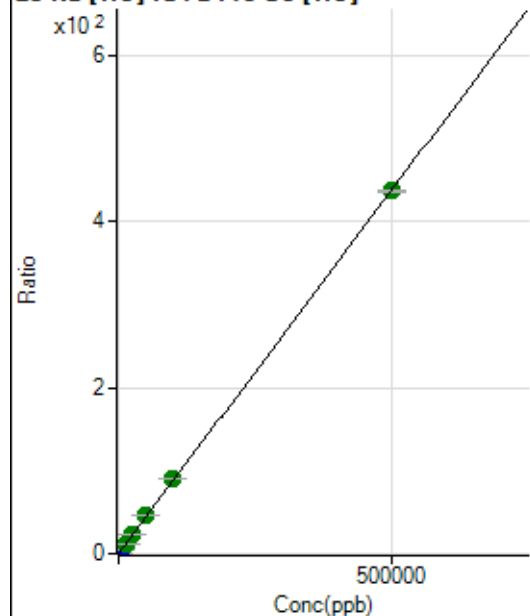
$$R = 1.0000$$

$$DL = 0.3568$$

$$BEC = 0.6207$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10759.91	0.0249	P	7.0
2	☐	50.000					
3	☐	500.000	460.311	186565.73	0.4281	P	0.0
4	☐	5000.000	5047.074	1895521.29	4.4462	P	0.5
5	☐	12500.000	12871.829	4606384.69	11.3007	A	0.2
6	☐	25000.000	26024.467	8799267.47	22.8225	A	0.6
7	☐	50000.000	52011.778	17201283.72	45.5875	A	0.2
8	☐	100000.00	102433.20	34134937.22	89.7570	A	0.4
9	☐	500000.00	499251.23	170371498.2	437.3719	A	0.4

$$y = 8.7601\text{E-}004 * x + 0.0249$$

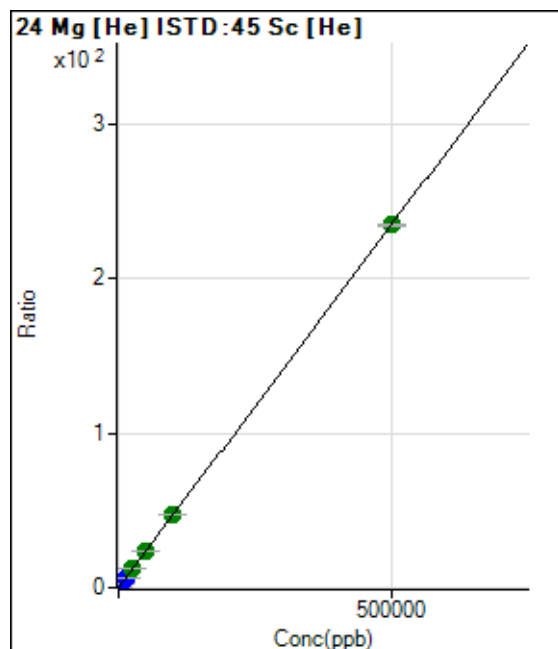
$$R = 1.0000$$

$$DL = 5.936$$

$$BEC = 28.41$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	544.48	0.0013	P	7.2
2	☐	50.000					
3	☐	500.000	455.503	93817.58	0.2153	P	1.4
4	☐	5000.000	4999.211	1002019.08	2.3504	P	1.0
5	☐	12500.000	12753.563	2443295.39	5.9941	P	0.3
6	☐	25000.000	25676.906	4652335.17	12.0667	A	0.3
7	☐	50000.000	50923.071	9029281.63	23.9298	A	0.3
8	☐	100000.00	99981.527	17867471.41	46.9822	A	0.1
9	☐	500000.00	499871.25	91497313.85	234.8887	A	0.6

$$y = 4.6990\text{E-}004 * x + 0.0013$$

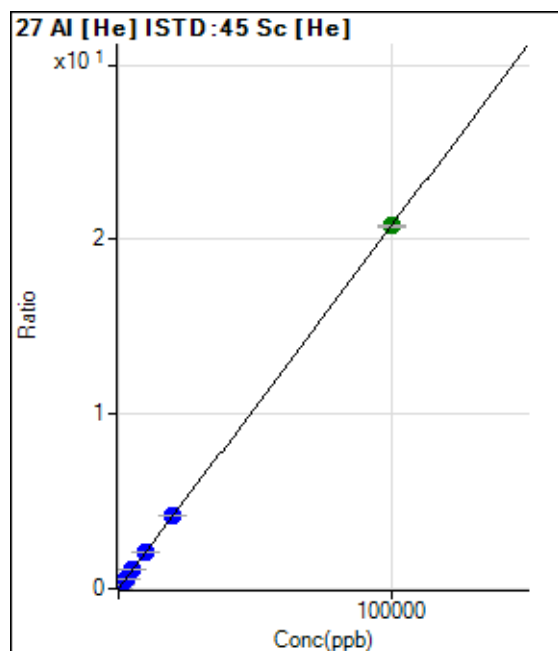
$$R = 1.0000$$

$$DL = 0.5781$$

$$BEC = 2.679$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22.22	0.0001	P	43.8
2	☐	2.000					
3	☐	20.000	17.963	1650.16	0.0038	P	5.8
4	☐	1000.000	990.840	87840.63	0.2061	P	1.9
5	☐	2500.000	2528.950	214341.12	0.5258	P	0.6
6	☐	5000.000	5068.302	406287.89	1.0538	P	0.6
7	☐	10000.000	10120.408	793958.08	2.1042	P	0.5
8	☐	20000.000	20012.729	1582378.02	4.1609	P	0.7
9	☐	100000.00	99981.367	8097263.12	20.7870	A	0.7

$$y = 2.0791\text{E-}004 * x + 5.1458\text{E-}005$$

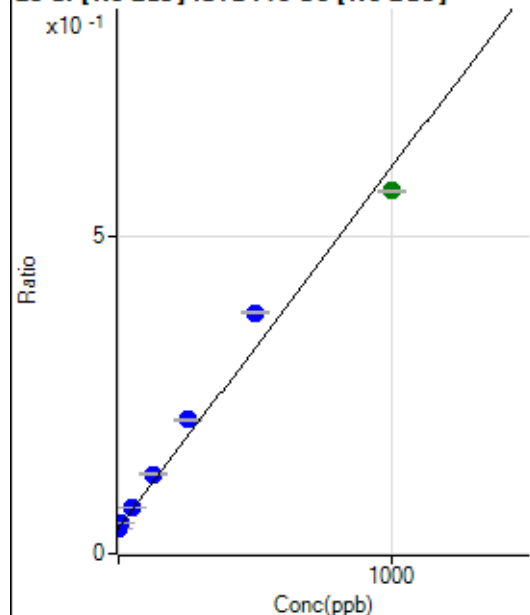
$$R = 1.0000$$

$$DL = 0.3254$$

$$BEC = 0.2475$$

Weight: <None>

Min Conc: 0

28 Si [No Gas] ISTD : 45 Sc [No Gas]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	344951.94	0.0406	P	0.3
2	☐	1.000					
3	☐	10.000	11.573	422016.30	0.0472	P	0.3
4	☐	50.000	57.169	647583.46	0.0730	P	0.2
5	☐	125.000	149.624	1081599.35	0.1254	P	0.6
6	☐	250.000	299.525	1707387.93	0.2103	P	0.4
7	☐	500.000	597.580	2968153.73	0.3791	P	0.7
8	☐	1000.000	935.377	4452115.25	0.5704	A	0.3
9	☐			661394.19	0.0827	P	0.8

$$y = 5.6637\text{E-}004 * x + 0.0406$$

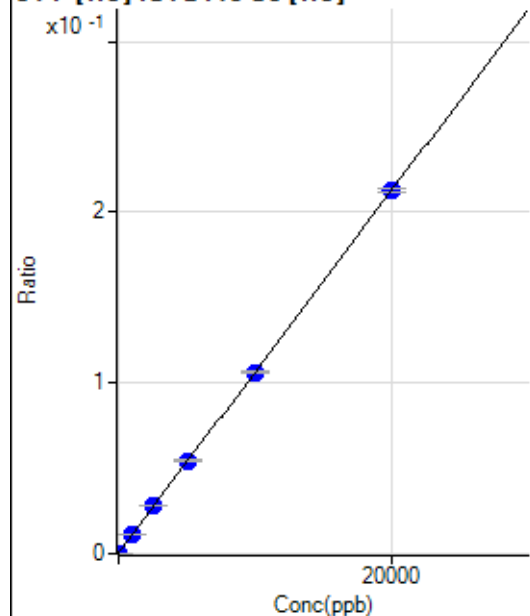
$$R = 0.9908$$

$$DL = 0.6519$$

$$BEC = 71.75$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-2.571	169.45	0.0004	P	28.5
2	☐	0.000					
3	☐	0.000	2.571	194.46	0.0004	P	34.5
4	☐	1000.000	1050.257	4931.58	0.0116	P	3.9
5	☐	2500.000	2606.461	11446.56	0.0281	P	0.6
6	☐	5000.000	5070.883	20909.78	0.0542	P	1.9
7	☐	10000.000	9962.899	40054.67	0.1062	P	0.9
8	☐	20000.000	19985.009	80821.45	0.2125	P	1.2
9	☐			180.57	0.0005	P	14.8

$$y = 1.0613\text{E-}005 * x + 4.1892\text{E-}004$$

$$R = 1.0000$$

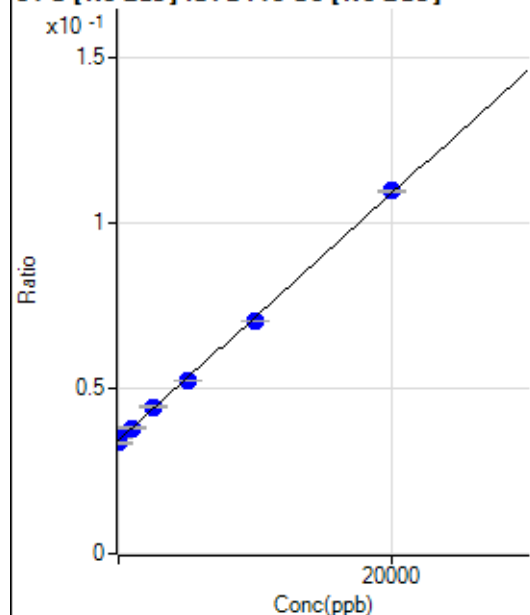
$$DL = 37.54$$

$$BEC = 39.47$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	200.134	298161.75	0.0351	P	0.4
2	☐	0.000					
3	☐	0.000	-200.134	300742.32	0.0336	P	1.0
4	☐	1000.000	976.260	337224.27	0.0380	P	0.8
5	☐	2500.000	2686.424	383120.80	0.0444	P	0.6
6	☐	5000.000	4834.270	425744.47	0.0524	P	0.9
7	☐	10000.000	9654.642	551483.96	0.0704	P	0.4
8	☐	20000.000	20191.995	856900.42	0.1098	P	0.2
9	☐			243494.53	0.0304	P	1.1

$$y = 3.7346\text{E-}006 * x + 0.0344$$

$$R = 0.9995$$

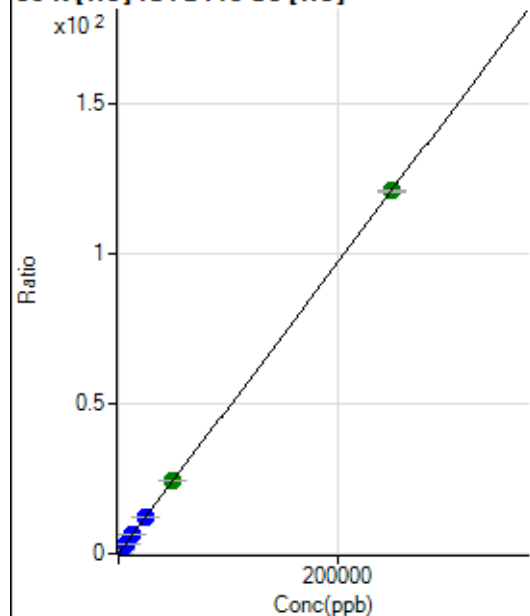
$$DL = 196$$

$$BEC = 9205$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	31991.13	0.0740	P	1.3
2	☐	50.000					
3	☐	500.000	473.588	131979.60	0.3029	P	1.4
4	☐	2500.000	2551.457	557312.42	1.3072	P	0.5
5	☐	6250.000	6341.312	1279559.26	3.1391	P	0.2
6	☐	12500.000	12726.083	2400169.35	6.2252	P	0.9
7	☐	25000.000	25552.783	4688307.66	12.4251	P	0.2
8	☐	50000.000	49961.341	9212147.52	24.2232	A	0.1
9	☐	250000.00	249938.40	47088314.94	120.8836	A	0.7

$$y = 4.8336\text{E-}004 * x + 0.0740$$

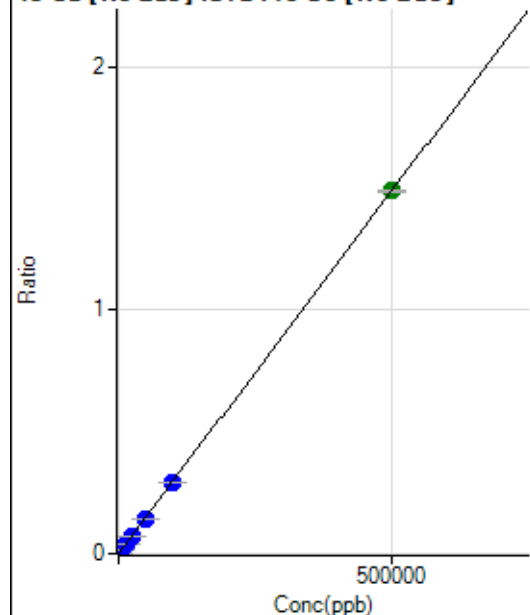
$$R = 1.0000$$

$$DL = 5.942$$

$$BEC = 153$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	133.34	0.0000	P	28.7
2	☐	50.000					
3	☐	500.000	444.440	11963.66	0.0013	P	0.2
4	☐	5000.000	4888.448	129114.73	0.0146	P	0.7
5	☐	12500.000	12182.529	312749.04	0.0363	P	1.4
6	☐	25000.000	24493.334	591735.90	0.0729	P	0.5
7	☐	50000.000	48856.239	1138068.82	0.1453	P	0.4
8	☐	100000.00	98070.796	2277177.53	0.2917	P	0.3
9	☐	500000.00	500534.65	11914326.04	1.4890	A	0.3

$$y = 2.9747\text{E-}006 * x + 1.5710\text{E-}005$$

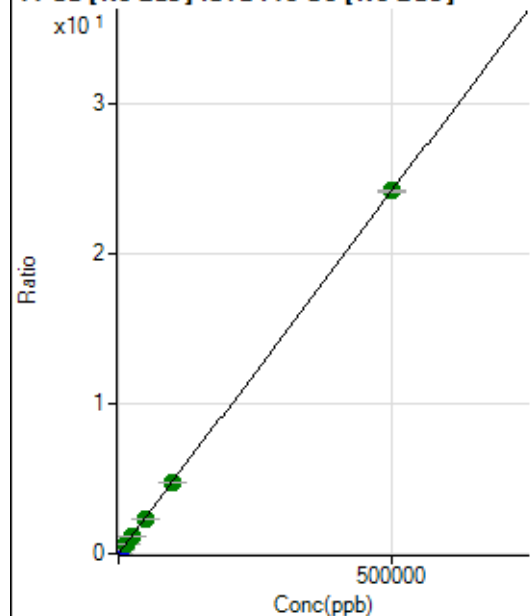
$$R = 1.0000$$

$$DL = 4.55$$

$$BEC = 5.281$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6935.28	0.0008	P	4.2
2	☐	50.000					
3	☐	500.000	435.781	195228.86	0.0218	P	0.6
4	☐	5000.000	4849.462	2081277.19	0.2347	P	0.2
5	☐	12500.000	12171.427	5070113.22	0.5877	A	1.0
6	☐	25000.000	24444.581	9577802.47	1.1796	A	0.2
7	☐	50000.000	48691.347	18390467.08	2.3488	A	0.4
8	☐	100000.00	97689.291	36774517.14	4.7115	A	0.2
9	☐	500000.00	500630.56	193175037.6	24.1417	A	0.3

$$y = 4.8221\text{E-}005 * x + 8.1700\text{E-}004$$

$$R = 1.0000$$

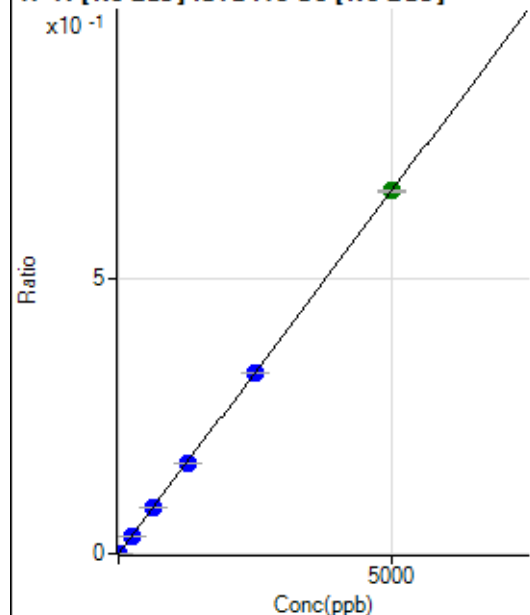
$$DL = 2.145$$

$$BEC = 16.94$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	155.56	0.0000	P	3.2
2	☐	0.500					
3	☐	5.000	4.563	5548.51	0.0006	P	2.4
4	☐	250.000	250.792	293654.96	0.0331	P	0.3
5	☐	625.000	625.945	712645.29	0.0826	P	0.7
6	☐	1250.000	1253.883	1343533.49	0.1655	P	0.3
7	☐	2500.000	2497.386	2580293.11	0.3295	P	0.4
8	☐	5000.000	5000.179	5149690.31	0.6598	A	0.4
9	☐			3303.29	0.0004	P	5.4

$$y = 1.3195E-004 * x + 1.8326E-005$$

$$R = 1.0000$$

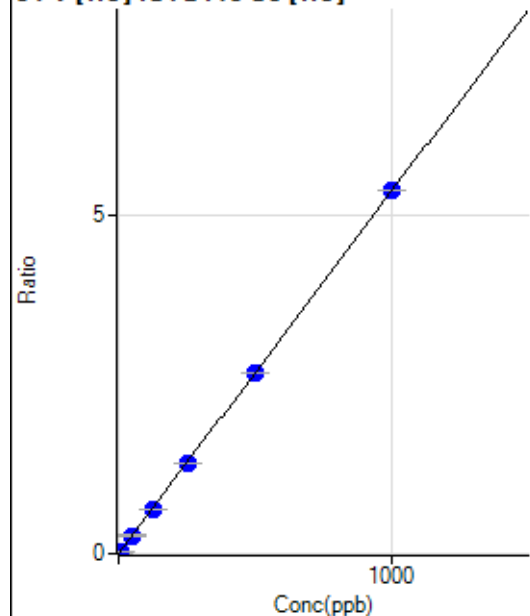
$$DL = 0.01335$$

$$BEC = 0.1389$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	8.89	0.0000	P	77.8
2	☐	0.500					
3	☐	5.000	4.612	10784.09	0.0247	P	1.5
4	☐	50.000	50.046	114376.65	0.2683	P	1.5
5	☐	125.000	124.570	272200.66	0.6678	P	0.2
6	☐	250.000	248.754	514117.82	1.3335	P	0.6
7	☐	500.000	498.065	1007434.14	2.6699	P	0.5
8	☐	1000.000	1001.332	2041357.76	5.3677	P	0.2
9	☐			1012.27	0.0026	P	5.8

$$y = 0.0054 * x + 2.0513E-005$$

$$R = 1.0000$$

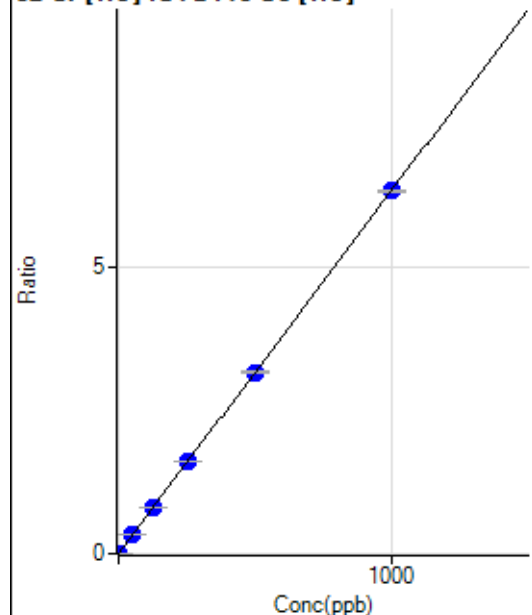
$$DL = 0.008931$$

$$BEC = 0.003827$$

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	293.34	0.0007	P	7.4
2	☐	0.200					
3	☐	2.000	1.956	5680.08	0.0130	P	1.6
4	☐	50.000	50.680	136795.20	0.3209	P	1.4
5	☐	125.000	125.870	324443.53	0.7959	P	0.2
6	☐	250.000	252.282	614808.33	1.5946	P	0.4
7	☐	500.000	499.824	1191836.58	3.1586	P	0.4
8	☐	1000.000	999.375	2401575.59	6.3149	P	0.5
9	☐			110848.18	0.2846	P	0.8

$$y = 0.0063 * x + 6.7811E-004$$

$$R = 1.0000$$

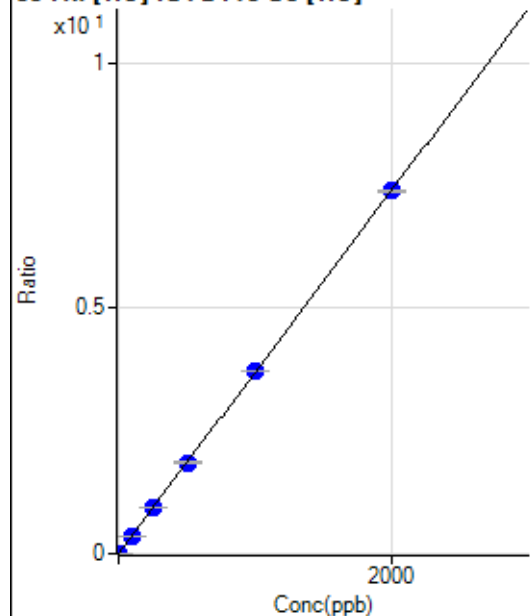
$$DL = 0.02388$$

$$BEC = 0.1073$$

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	76.67	0.0002	P	22.1
2	☐	0.100					
3	☐	1.000	1.015	1714.57	0.0039	P	2.9
4	☐	100.000	100.249	158247.86	0.3712	P	0.1
5	☐	250.000	251.626	379653.79	0.9314	P	0.1
6	☐	500.000	502.104	716484.38	1.8584	P	0.7
7	☐	1000.000	1002.334	1399730.40	3.7096	P	0.1
8	☐	2000.000	1998.091	2812212.49	7.3947	P	0.4
9	☐			15354.84	0.0394	P	1.8

$$y = 0.0037 * x + 1.7738E-004$$

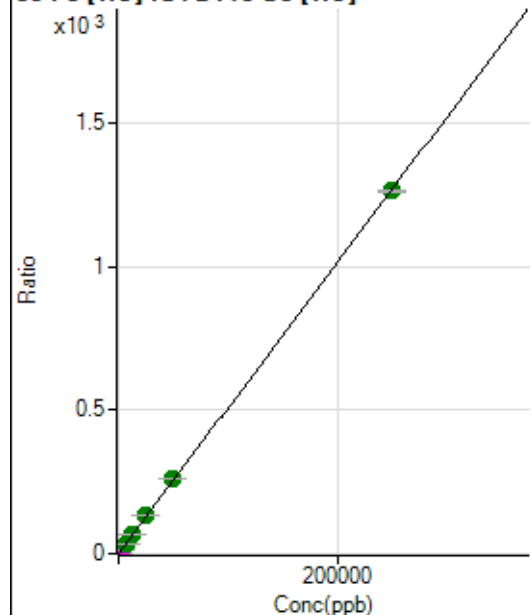
$$R = 1.0000$$

$$DL = 0.03184$$

$$BEC = 0.04793$$

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	3650.56	0.0084	P	2.4
2	☐	5.000					
3	☐	50.000	48.622	111102.22	0.2550	P	0.6
4	☐	2500.000	2617.746	5662105.91	13.2806	M	0.4
5	☐	6250.000	6549.803	13539665.00	33.2165	A	0.2
6	☐	12500.000	13135.814	25680813.54	66.6081	A	0.8
7	☐	25000.000	25965.859	49677446.48	131.6575	A	0.3
8	☐	50000.000	51654.202	99600767.04	261.8995	A	0.3
9	☐	250000.00	249532.11	492821311.0	1,265.156	A	0.3

$$y = 0.0051 * x + 0.0084$$

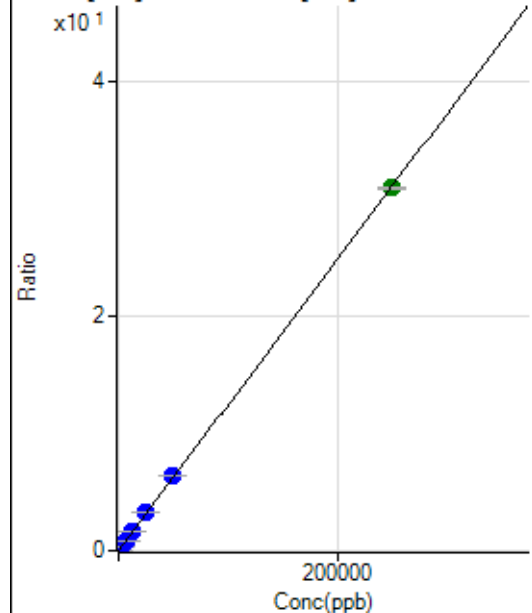
$$R = 1.0000$$

$$DL = 0.1208$$

$$BEC = 1.665$$

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	453.72	0.0010	P	13.5
2	☐	5.000					
3	☐	50.000	50.121	3163.39	0.0073	P	5.5
4	☐	2500.000	2626.328	139132.19	0.3263	P	0.6
5	☐	6250.000	6553.814	331314.52	0.8128	P	0.4
6	☐	12500.000	13119.484	626905.52	1.6260	P	1.1
7	☐	25000.000	26097.579	1220083.89	3.2335	P	0.3
8	☐	50000.000	51829.439	2441801.91	6.4207	P	0.3
9	☐	250000.00	249484.52	12037563.35	30.9025	A	0.3

$$y = 1.2386E-004 * x + 0.0010$$

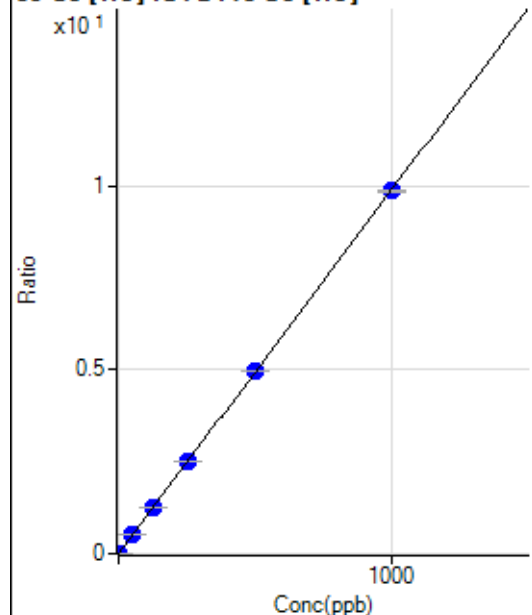
$$R = 1.0000$$

$$DL = 3.435$$

$$BEC = 8.473$$

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	152.22	0.0004	P	13.5
2	☐	0.100					
3	☐	1.000	0.977	4368.50	0.0100	P	2.0
4	☐	50.000	51.096	215751.41	0.5061	P	0.8
5	☐	125.000	127.625	515018.91	1.2635	P	1.3
6	☐	250.000	253.319	966784.06	2.5076	P	0.7
7	☐	500.000	502.108	1875288.20	4.9700	P	0.2
8	☐	1000.000	997.734	3755658.76	9.8754	P	0.3
9	☐			6736.09	0.0173	P	0.9

$$y = 0.0099 * x + 3.5204E-004$$

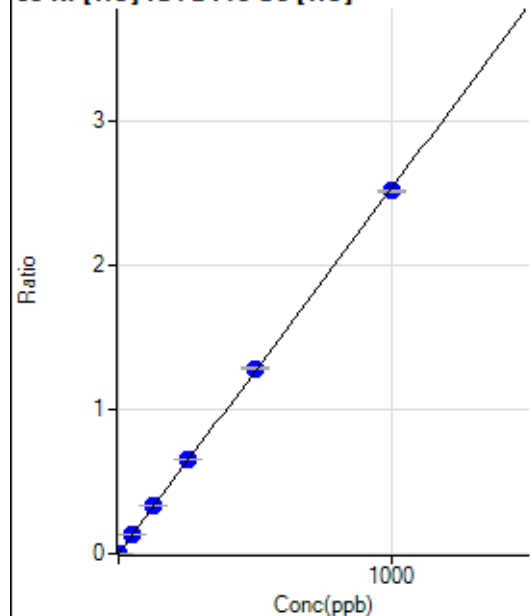
$$R = 1.0000$$

$$DL = 0.01443$$

$$BEC = 0.03557$$

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	94.45	0.0002	P	4.4
2	☐	0.100					
3	☐	1.000	1.042	1245.63	0.0029	P	8.6
4	☐	50.000	52.700	57027.18	0.1338	P	1.5
5	☐	125.000	130.003	134373.05	0.3297	P	0.6
6	☐	250.000	258.039	252191.40	0.6541	P	0.7
7	☐	500.000	507.649	485487.49	1.2866	P	0.4
8	☐	1000.000	993.405	957462.14	2.5176	P	0.5
9	☐			27802.11	0.0714	P	1.1

$$y = 0.0025 * x + 2.1841E-004$$

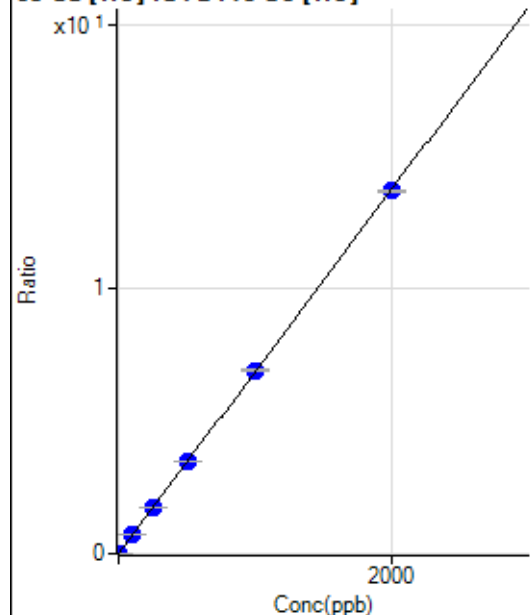
$$R = 0.9999$$

$$DL = 0.01139$$

$$BEC = 0.08619$$

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	576.69	0.0013	P	8.6
2	☐	0.200					
3	☐	2.000	1.939	6393.72	0.0147	P	1.6
4	☐	100.000	104.174	306157.60	0.7181	P	0.8
5	☐	250.000	257.629	723127.61	1.7740	P	0.6
6	☐	500.000	508.305	1348984.15	3.4989	P	0.8
7	☐	1000.000	1007.802	2617060.38	6.9359	P	0.4
8	☐	2000.000	1992.860	5215423.60	13.7139	P	0.3
9	☐			10012.45	0.0257	P	2.2

$$y = 0.0069 * x + 0.0013$$

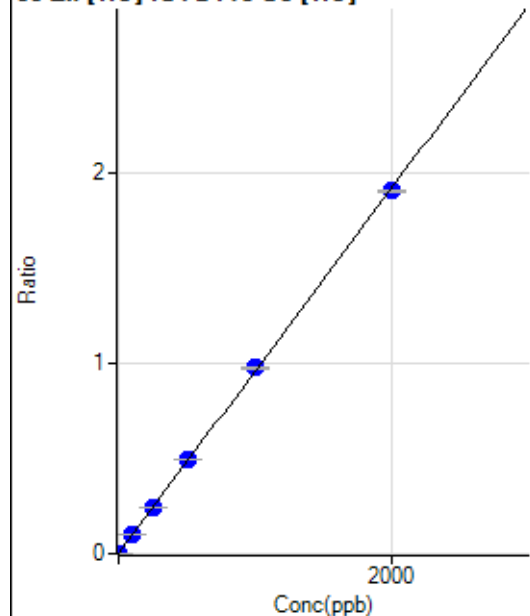
$$R = 1.0000$$

$$DL = 0.0501$$

$$BEC = 0.1937$$

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	500.02	0.0012	P	5.5
2	☐	0.200					
3	☐	2.000	2.159	1403.42	0.0032	P	4.9
4	☐	100.000	103.931	42887.42	0.1006	P	0.4
5	☐	250.000	255.063	99946.64	0.2452	P	0.6
6	☐	500.000	516.773	191079.53	0.4956	P	0.3
7	☐	1000.000	1017.403	367736.97	0.9746	P	0.7
8	☐	2000.000	1986.276	723184.12	1.9016	P	0.5
9	☐			3951.72	0.0101	P	2.7

$$y = 9.5680E-004 * x + 0.0012$$

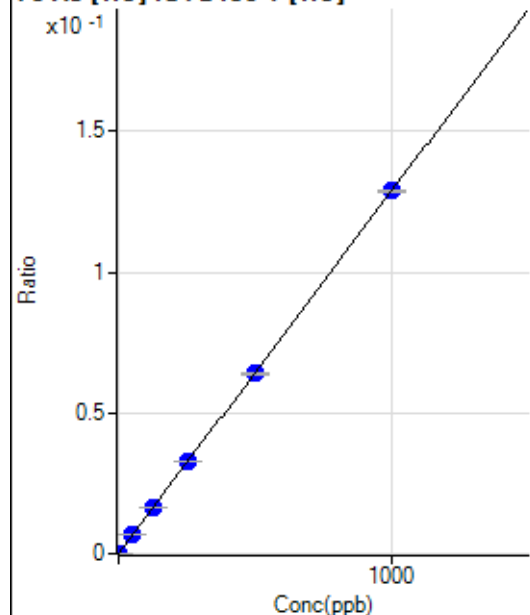
$$R = 0.9999$$

$$DL = 0.1978$$

$$BEC = 1.208$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2.47	0.0000	P	86.6
2	☐	0.100					
3	☐	1.000	1.022	322.23	0.0001	P	12.0
4	☐	50.000	50.990	15563.97	0.0066	P	1.1
5	☐	125.000	126.866	36989.49	0.0163	P	0.9
6	☐	250.000	253.551	70065.64	0.0327	P	0.3
7	☐	500.000	496.723	135773.28	0.0640	P	0.8
8	☐	1000.000	1000.468	273129.89	0.1289	P	0.3
9	☐			168.52	0.0001	P	24.9

$$y = 1.2886\text{E-}004 * x + 1.0277\text{E-}006$$

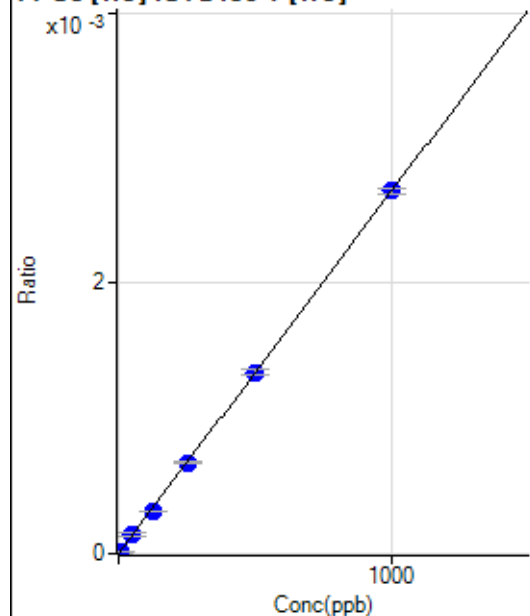
$$R = 1.0000$$

$$DL = 0.02072$$

$$BEC = 0.007975$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3.33	0.0000	P	99.9
2	☐	0.500					
3	☐	5.000	5.974	42.22	0.0000	P	8.3
4	☐	50.000	52.359	335.57	0.0001	P	12.4
5	☐	125.000	117.701	716.70	0.0003	P	1.5
6	☐	250.000	250.110	1440.10	0.0007	P	2.2
7	☐	500.000	499.807	2843.66	0.0013	P	3.6
8	☐	1000.000	1000.859	5684.54	0.0027	P	1.9
9	☐			3.33	0.0000	P	100.

$$y = 2.6796\text{E-}006 * x + 1.3874\text{E-}006$$

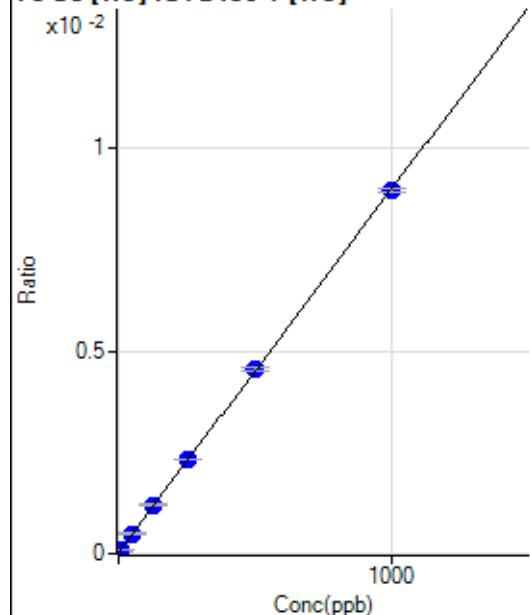
$$R = 1.0000$$

$$DL = 1.552$$

$$BEC = 0.5178$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	79.63	0.0000	P	15.5
2	☐	0.500					
3	☐	5.000	5.120	191.98	0.0001	P	2.2
4	☐	50.000	51.124	1164.25	0.0005	P	5.3
5	☐	125.000	130.651	2726.20	0.0012	P	1.3
6	☐	250.000	255.975	4994.11	0.0023	P	1.1
7	☐	500.000	504.844	9674.29	0.0046	P	1.7
8	☐	1000.000	995.321	18981.02	0.0090	P	1.0
9	☐			83.33	0.0000	P	7.5

$$y = 8.9685\text{E-}006 * x + 3.3211\text{E-}005$$

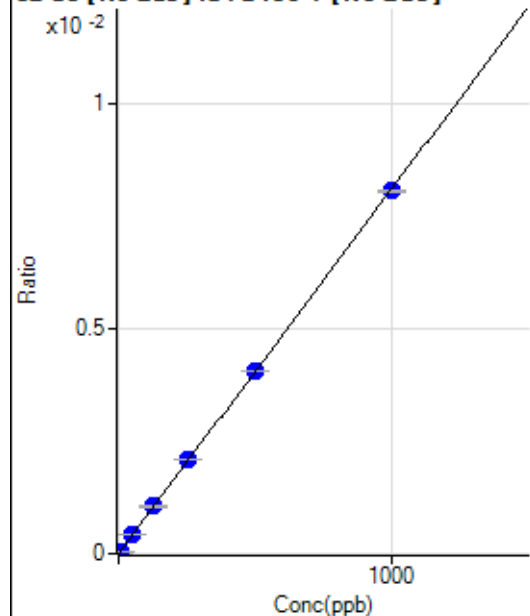
$$R = 1.0000$$

$$DL = 1.72$$

$$BEC = 3.703$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	26.62	0.0000	P	62.7
2	☐	0.500					
3	☐	5.000	4.524	563.56	0.0000	P	2.0
4	☐	50.000	51.535	6074.73	0.0004	P	2.8
5	☐	125.000	129.397	14903.08	0.0011	P	1.6
6	☐	250.000	259.171	28513.86	0.0021	P	0.6
7	☐	500.000	503.102	54588.61	0.0041	P	0.2
8	☐	1000.000	995.532	107796.66	0.0081	P	0.2
9	☐			123.13	0.0000	P	43.6

$$y = 8.1092\text{E-}006 * x + 1.9372\text{E-}006$$

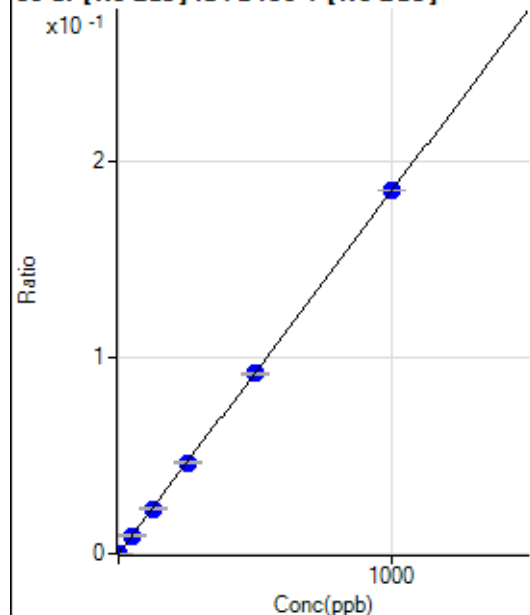
$$R = 0.9999$$

$$DL = 0.4494$$

$$BEC = 0.2389$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	397.24	0.0000	P	5.4
2	☐	0.100					
3	☐	1.000	0.933	2930.97	0.0002	P	5.3
4	☐	50.000	50.183	134283.31	0.0093	P	0.8
5	☐	125.000	124.355	325445.35	0.0230	P	1.2
6	☐	250.000	251.673	629337.32	0.0464	P	0.4
7	☐	500.000	496.838	1225435.92	0.0916	P	0.5
8	☐	1000.000	1001.234	2464609.58	0.1846	P	0.2
9	☐			82916.83	0.0063	P	0.9

$$y = 1.8436E-004 * x + 2.8933E-005$$

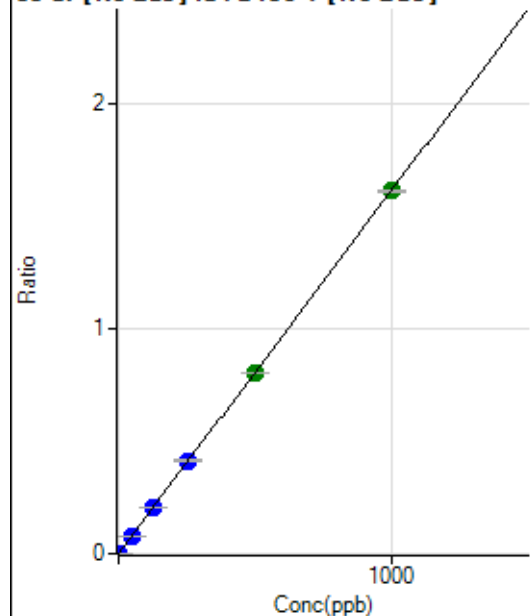
$$R = 1.0000$$

$$DL = 0.02529$$

$$BEC = 0.1569$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	127.78	0.0000	P	20.7
2	☐	0.100					
3	☐	1.000	0.953	22560.04	0.0015	P	2.5
4	☐	50.000	49.941	1165982.84	0.0806	P	0.3
5	☐	125.000	125.872	2879256.57	0.2031	P	1.1
6	☐	250.000	256.706	5614329.42	0.4142	P	0.4
7	☐	500.000	498.438	10755478.28	0.8042	A	0.1
8	☐	1000.000	998.999	21517286.76	1.6118	A	0.2
9	☐			731491.58	0.0558	P	0.1

$$y = 0.0016 * x + 9.3030E-006$$

$$R = 1.0000$$

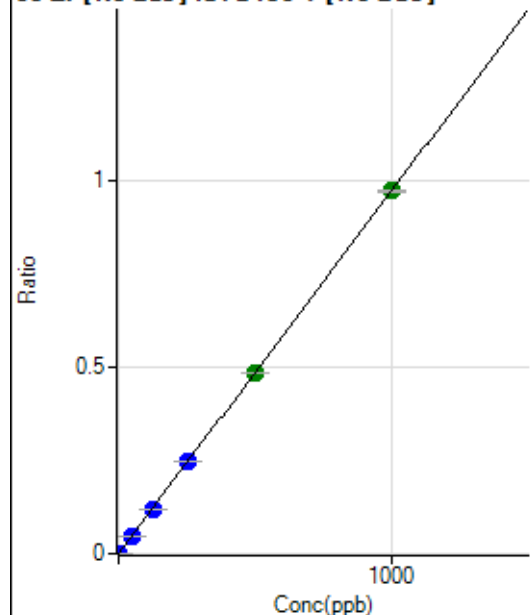
$$DL = 0.003573$$

$$BEC = 0.005766$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1022.30	0.0001	P	10.5
2	☐	0.100					
3	☐	1.000	0.938	14396.68	0.0010	P	1.9
4	☐	50.000	49.101	691994.67	0.0478	P	0.5
5	☐	125.000	123.834	1708490.36	0.1205	P	0.5
6	☐	250.000	252.658	3331732.15	0.2458	P	0.2
7	☐	500.000	498.608	6486243.51	0.4850	A	0.3
8	☐	1000.000	1000.222	12986801.07	0.9728	A	0.4
9	☐			5087.22	0.0004	P	7.9

$$y = 9.7254\text{E-}004 * x + 7.4466\text{E-}005$$

$$R = 1.0000$$

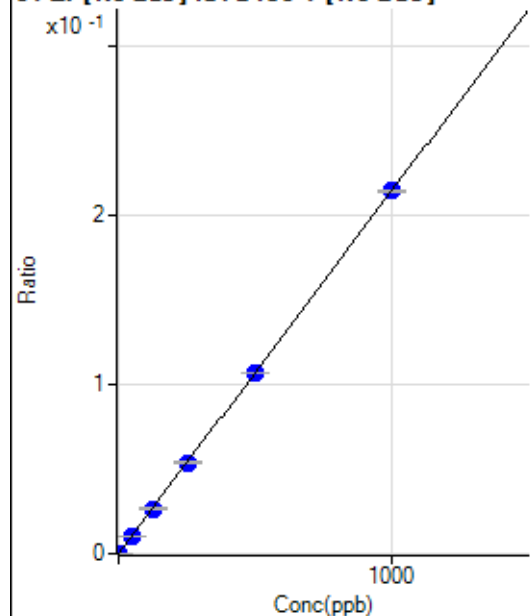
$$DL = 0.0242$$

$$BEC = 0.07657$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	241.68	0.0000	P	28.0
2	☐	0.100					
3	☐	1.000	0.979	3319.99	0.0002	P	5.1
4	☐	50.000	49.403	153596.42	0.0106	P	0.4
5	☐	125.000	124.375	378509.96	0.0267	P	0.7
6	☐	250.000	251.328	731059.59	0.0539	P	0.8
7	☐	500.000	498.337	1429973.75	0.1069	P	0.8
8	☐	1000.000	1000.608	2865739.39	0.2147	P	0.5
9	☐			1202.89	0.0001	P	3.7

$$y = 2.1452\text{E-}004 * x + 1.7593\text{E-}005$$

$$R = 1.0000$$

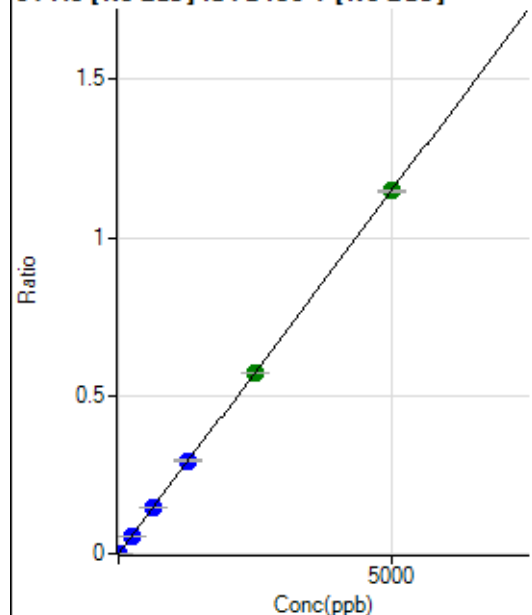
$$DL = 0.06883$$

$$BEC = 0.08201$$

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	330.58	0.0000	P	12.7
2	☐	0.500					
3	☐	5.000	4.811	16457.35	0.0011	P	2.6
4	☐	250.000	249.105	827414.49	0.0572	P	0.4
5	☐	625.000	629.796	2049214.35	0.1445	P	0.9
6	☐	1250.000	1281.365	3985978.26	0.2941	P	0.8
7	☐	2500.000	2486.007	7629688.88	0.5705	A	0.3
8	☐	5000.000	4998.601	15312601.21	1.1471	A	0.3
9	☐			21444.59	0.0016	P	1.6

$$y = 2.2947\text{E-}004 * x + 2.4082\text{E-}005$$

$$R = 1.0000$$

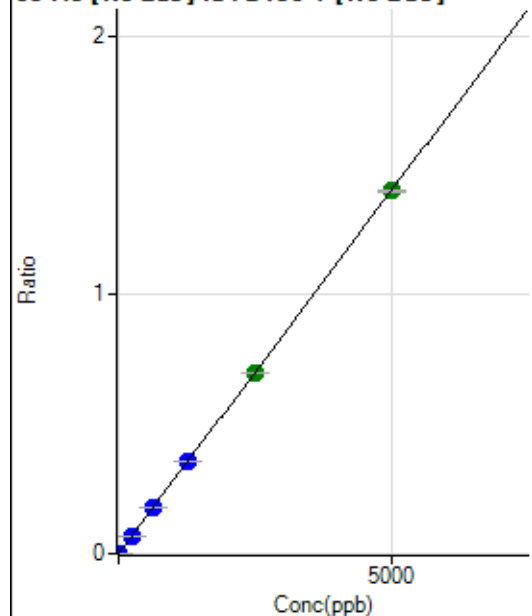
$$DL = 0.03999$$

$$BEC = 0.1049$$

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	22.22	0.0000	P	57.5
2	☐	0.500					
3	☐	5.000	4.721	19341.59	0.0013	P	2.6
4	☐	250.000	248.520	1008552.63	0.0697	P	0.9
5	☐	625.000	628.967	2501018.24	0.1764	P	0.7
6	☐	1250.000	1281.130	4870657.22	0.3593	P	0.2
7	☐	2500.000	2494.176	9355858.63	0.6996	A	0.1
8	☐	5000.000	4994.708	18701323.85	1.4009	A	0.3
9	☐			34472.99	0.0026	P	1.0

$$y = 2.8048\text{E-}004 * x + 1.6202\text{E-}006$$

$$R = 1.0000$$

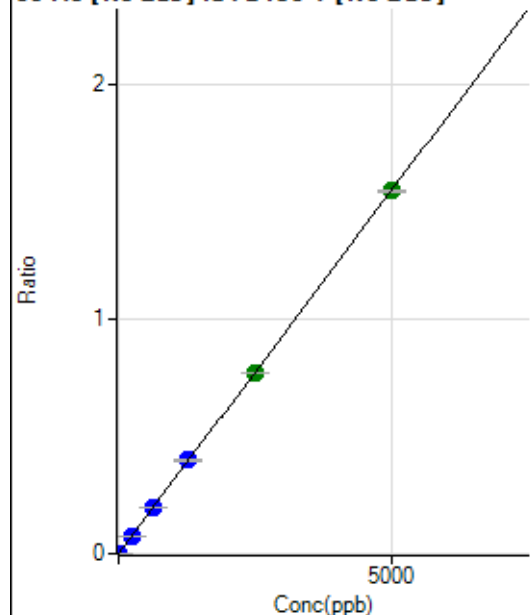
$$DL = 0.00996$$

$$BEC = 0.005777$$

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	116.67	0.0000	P	21.6
2	☐	0.500					
3	☐	5.000	4.648	21105.26	0.0014	P	0.4
4	☐	250.000	249.950	1119142.93	0.0773	P	0.3
5	☐	625.000	629.802	2762942.34	0.1949	P	0.6
6	☐	1250.000	1284.106	5385867.26	0.3973	P	0.4
7	☐	2500.000	2494.290	10321995.46	0.7718	A	0.3
8	☐	5000.000	4993.731	20627588.83	1.5452	A	0.2
9	☐			41004.29	0.0031	P	1.8

$$y = 3.0942\text{E-}004 * x + 8.4987\text{E-}006$$

$$R = 1.0000$$

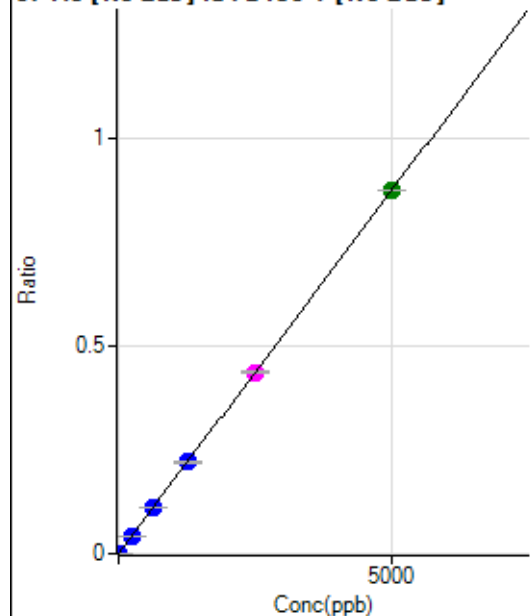
$$DL = 0.01777$$

$$BEC = 0.02747$$

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	22.22	0.0000	P	78.3
2	☐	0.500					
3	☐	5.000	4.748	12108.48	0.0008	P	2.1
4	☐	250.000	247.429	624564.98	0.0432	P	0.4
5	☐	625.000	624.545	1544675.19	0.1090	P	0.6
6	☐	1250.000	1260.719	2981195.72	0.2199	P	0.8
7	☐	2500.000	2499.166	5830833.20	0.4360	M	1.4
8	☐	5000.000	4997.923	11639469.44	0.8719	A	0.1
9	☐			21188.75	0.0016	P	1.5

$$y = 1.7445\text{E-}004 * x + 1.6201\text{E-}006$$

$$R = 1.0000$$

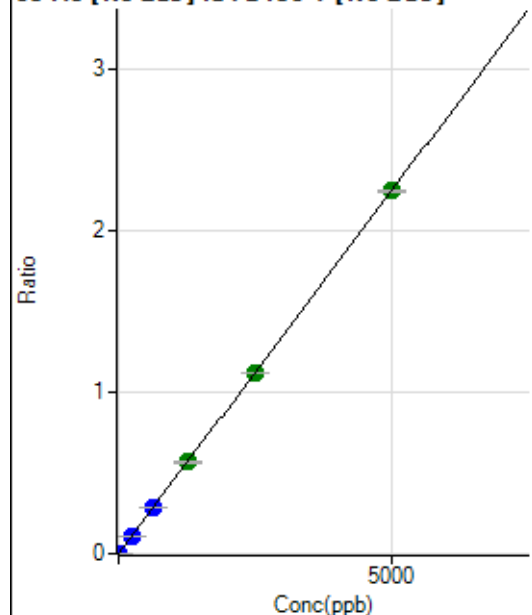
$$DL = 0.02182$$

$$BEC = 0.009287$$

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	44.45	0.0000	P	38.9
2	☐	0.500					
3	☐	5.000	4.608	30202.39	0.0021	P	0.5
4	☐	250.000	250.274	1624373.84	0.1123	P	0.5
5	☐	625.000	632.440	4021861.64	0.2837	P	1.0
6	☐	1250.000	1259.123	7655828.56	0.5648	A	0.5
7	☐	2500.000	2494.220	14962997.56	1.1188	A	0.7
8	☐	5000.000	4999.666	29938553.79	2.2427	A	0.4
9	☐			53626.89	0.0041	P	1.4

$$y = 4.4856E-004 * x + 3.2356E-006$$

$$R = 1.0000$$

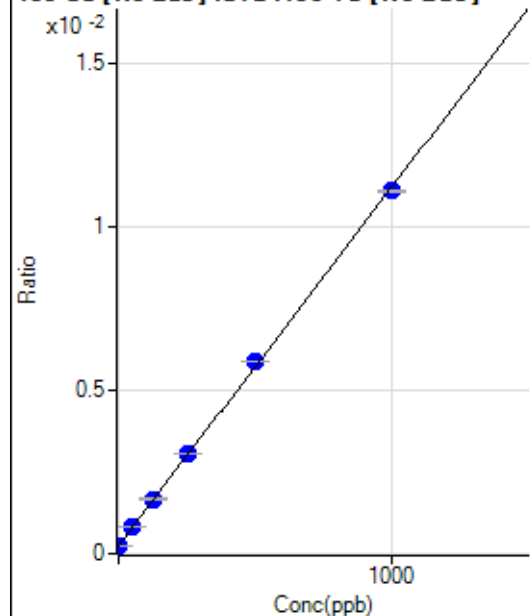
$$DL = 0.008426$$

$$BEC = 0.007213$$

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	4025.75	0.0002	P	6.6
2	☐	0.100					
3	☐	1.000	-0.551	4178.58	0.0002	P	8.1
4	☐	50.000	52.537	14268.84	0.0008	P	2.3
5	☐	125.000	129.624	28802.38	0.0017	P	2.1
6	☐	250.000	258.602	52160.72	0.0031	P	0.4
7	☐	500.000	512.937	98809.70	0.0059	P	0.2
8	☐	1000.000	990.678	187313.91	0.0111	P	0.6
9	☐			3758.99	0.0002	P	1.8

$$y = 1.0958E-005 * x + 2.4555E-004$$

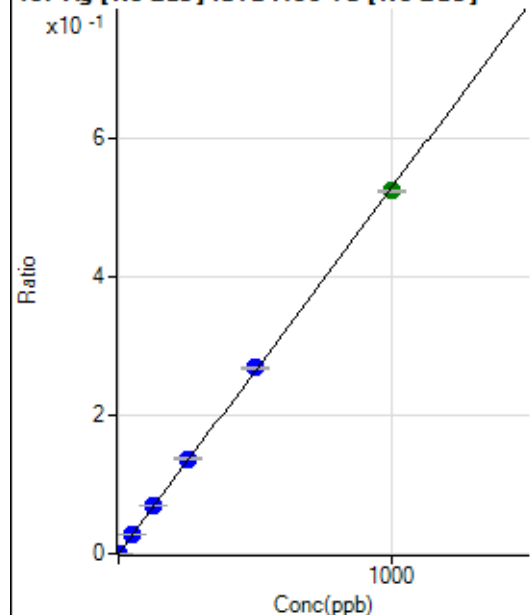
$$R = 0.9998$$

$$DL = 4.453$$

$$BEC = 22.41$$

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	100.00	0.0000	P	25.2
2	☐	0.100					
3	☐	1.000	1.003	9328.48	0.0005	P	0.6
4	☐	50.000	53.615	491108.31	0.0283	P	0.6
5	☐	125.000	131.353	1197073.40	0.0692	P	1.5
6	☐	250.000	259.505	2317111.08	0.1368	P	0.7
7	☐	500.000	508.246	4512409.17	0.2679	P	0.3
8	☐	1000.000	992.526	8827319.29	0.5231	A	0.8
9	☐			955.63	0.0001	P	11.1

$$y = 5.2708\text{E-}004 * x + 6.1009\text{E-}006$$

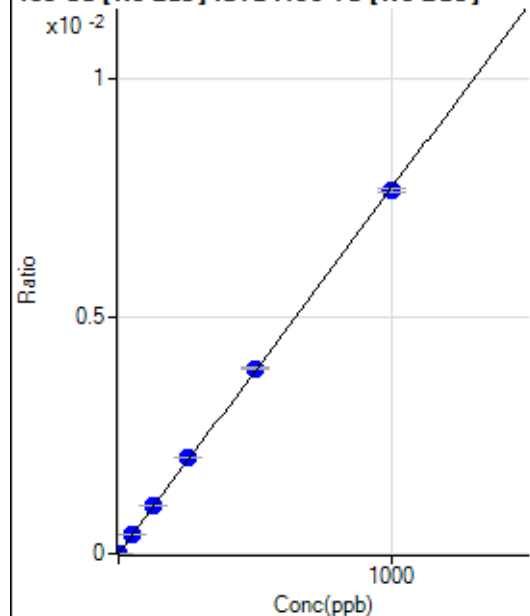
$$R = 0.9999$$

$$DL = 0.008742$$

$$BEC = 0.01157$$

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	8.33	0.0000	P	50.3
2	☐	0.100					
3	☐	1.000	1.020	145.84	0.0000	P	18.1
4	☐	50.000	53.960	7225.60	0.0004	P	2.0
5	☐	125.000	131.109	17455.42	0.0010	P	1.9
6	☐	250.000	261.949	34162.20	0.0020	P	0.6
7	☐	500.000	507.459	65800.71	0.0039	P	1.0
8	☐	1000.000	992.322	128884.78	0.0076	P	0.9
9	☐			56.94	0.0000	P	37.4

$$y = 7.6969\text{E-}006 * x + 5.0885\text{E-}007$$

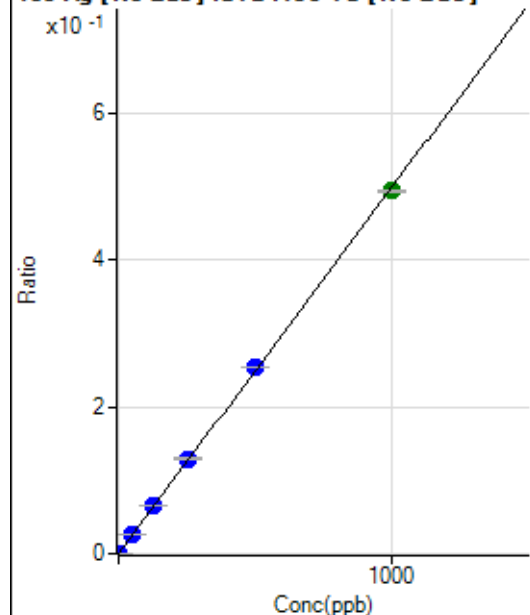
$$R = 0.9999$$

$$DL = 0.09973$$

$$BEC = 0.06611$$

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	38.89	0.0000	P	33.1
2	☐	0.100					
3	☐	1.000	1.021	8917.11	0.0005	P	5.6
4	☐	50.000	53.475	462871.56	0.0266	P	1.0
5	☐	125.000	131.309	1130941.57	0.0654	P	1.0
6	☐	250.000	259.969	2193729.78	0.1295	P	0.6
7	☐	500.000	509.790	4277518.67	0.2539	P	0.5
8	☐	1000.000	991.651	8335290.47	0.4940	A	0.2
9	☐			888.95	0.0001	P	17.3

$$y = 4.9814\text{E-}004 * x + 2.3737\text{E-}006$$

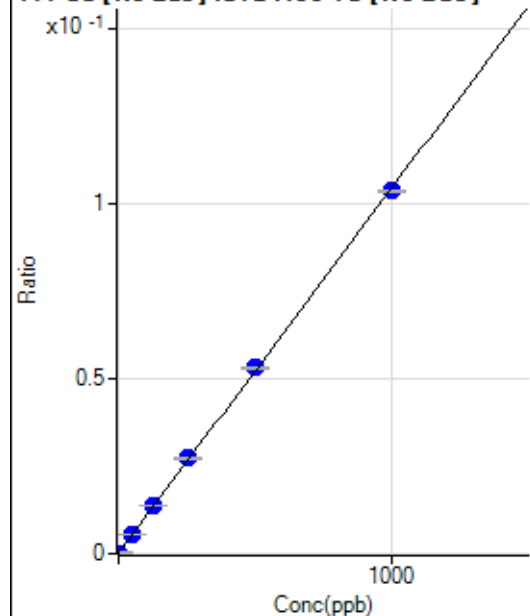
$$R = 0.9999$$

$$DL = 0.004725$$

$$BEC = 0.004765$$

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	2814.97	0.0002	P	6.7
2	☐	0.100					
3	☐	1.000	0.914	4657.81	0.0003	P	6.6
4	☐	50.000	53.000	98960.98	0.0057	P	0.8
5	☐	125.000	130.694	238476.38	0.0138	P	1.2
6	☐	250.000	260.064	462059.79	0.0273	P	0.6
7	☐	500.000	507.175	893279.10	0.0530	P	0.4
8	☐	1000.000	993.035	1749315.74	0.1037	P	0.4
9	☐			2915.06	0.0002	P	1.4

$$y = 1.0423\text{E-}004 * x + 1.7170\text{E-}004$$

$$R = 0.9999$$

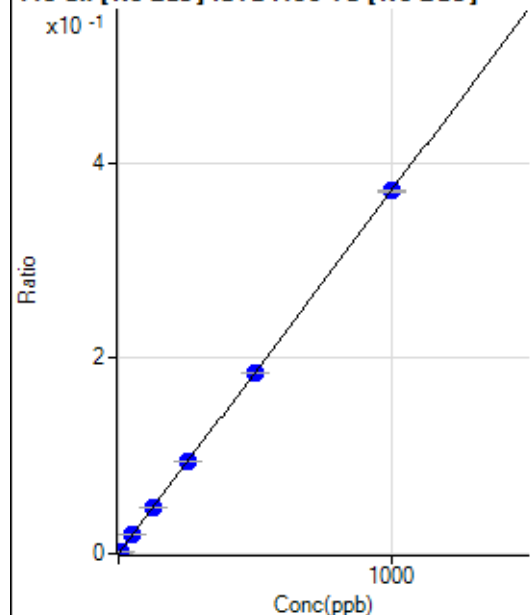
$$DL = 0.331$$

$$BEC = 1.647$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2411.71	0.0001	P	10.5
2	☐	0.500					
3	☐	5.000	4.731	33170.45	0.0019	P	1.7
4	☐	50.000	50.806	329949.73	0.0190	P	0.1
5	☐	125.000	126.330	812594.24	0.0470	P	0.9
6	☐	250.000	252.854	1591017.16	0.0939	P	0.3
7	☐	500.000	498.894	3119060.05	0.1852	P	0.4
8	☐	1000.000	999.634	6258094.80	0.3709	P	0.6
9	☐			19011.08	0.0012	P	2.9

$$y = 3.7087\text{E-}004 * x + 1.4708\text{E-}004$$

$$R = 1.0000$$

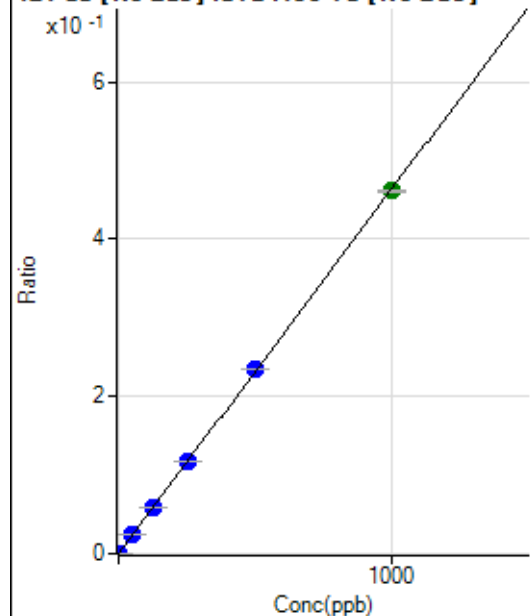
$$DL = 0.1248$$

$$BEC = 0.3966$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	36.11	0.0000	P	26.6
2	☐	0.200					
3	☐	2.000	1.917	15520.28	0.0009	P	1.9
4	☐	50.000	50.795	408729.34	0.0235	P	0.4
5	☐	125.000	126.998	1016868.14	0.0588	P	0.2
6	☐	250.000	254.371	1995349.96	0.1178	P	0.3
7	☐	500.000	505.607	3943704.56	0.2341	P	0.6
8	☐	1000.000	995.815	7780889.50	0.4611	A	0.4
9	☐			12836.93	0.0008	P	4.1

$$y = 4.6307\text{E-}004 * x + 2.2022\text{E-}006$$

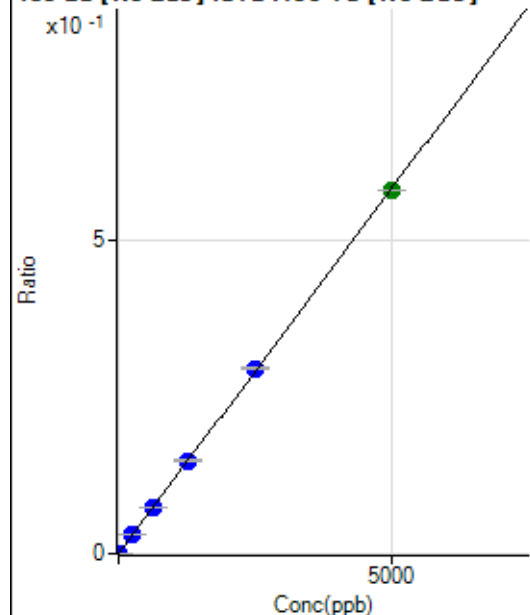
$$R = 1.0000$$

$$DL = 0.003798$$

$$BEC = 0.004756$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	75.01	0.0000	P	38.5
2	☐	1.000					
3	☐	10.000	9.248	18805.03	0.0011	P	2.6
4	☐	250.000	254.437	513223.89	0.0295	P	0.3
5	☐	625.000	633.139	1270698.44	0.0735	P	0.9
6	☐	1250.000	1274.393	2505827.34	0.1479	P	0.6
7	☐	2500.000	2541.680	4969474.16	0.2950	P	0.2
8	☐	5000.000	4971.824	9737803.43	0.5771	A	0.1
9	☐			3739.57	0.0002	P	2.5

$$y = 1.1607\text{E-}004 * x + 4.5747\text{E-}006$$

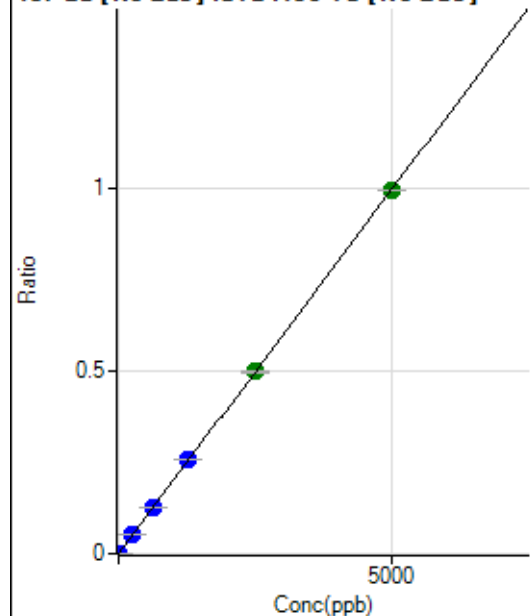
$$R = 0.9999$$

$$DL = 0.04556$$

$$BEC = 0.03941$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	152.79	0.0000	P	22.1
2	☐	1.000					
3	☐	10.000	9.542	33357.91	0.0019	P	2.1
4	☐	250.000	257.508	892470.68	0.0514	P	0.6
5	☐	625.000	641.077	2210613.85	0.1279	P	1.0
6	☐	1250.000	1295.819	4377765.59	0.2584	P	0.4
7	☐	2500.000	2498.506	8393223.36	0.4983	A	0.1
8	☐	5000.000	4986.908	16781681.97	0.9946	A	0.2
9	☐			5934.86	0.0004	P	6.3

$$y = 1.9943\text{E-}004 * x + 9.3182\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.03096$$

$$BEC = 0.04672$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.45		P	86.6
2	☐						
3	☐			6.67		P	173.
4	☐			24.44		P	56.8
5	☐			93.34		P	39.8
6	☐			146.67		P	4.5
7	☐			275.57		P	15.7
8	☐			731.16		P	1.4
9	☐			142.23		P	15.1

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐						
3	☐			0.00		P	
4	☐			4.44		P	114.
5	☐			7.78		P	49.5
6	☐			13.33		P	25.0
7	☐			26.67		P	12.5
8	☐			123.34		P	5.4
9	☐			54.45		P	24.7

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.89		P	124.
2	☐						
3	☐			11.11		P	114.
4	☐			25.00		P	66.7
5	☐			25.00		P	33.3
6	☐			66.67		P	33.1
7	☐			77.78		P	22.3
8	☐			208.34		P	34.9
9	☐			100.01		P	36.3

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	86.6
2	☐						
3	☐			4.44		P	114.
4	☐			12.22		P	95.8
5	☐			22.22		P	70.9
6	☐			54.44		P	25.5
7	☐			80.00		P	14.4
8	☐			172.23		P	17.5
9	☐			38.89		P	30.1

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			88.89		P	44.3
2	☐						
3	☐			86.12		P	5.6
4	☐			72.22		P	6.7
5	☐			94.45		P	43.5
6	☐			86.12		P	14.8
7	☐			105.56		P	27.7
8	☐			177.79		P	7.2
9	☐			122.23		P	25.8

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			181.12		P	19.7
2	☐						
3	☐			218.90		P	13.6
4	☐			201.12		P	13.9
5	☐			186.67		P	17.6
6	☐			173.34		P	15.7
7	☐			180.01		P	17.7
8	☐			234.45		P	9.5
9	☐			216.67		P	4.1

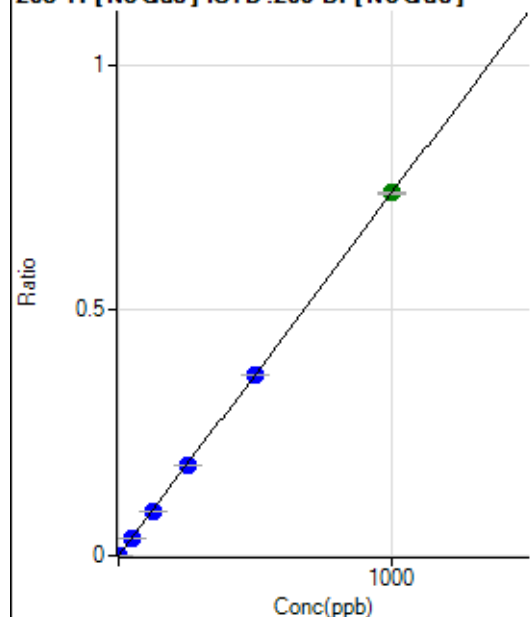
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			58.34		P	0.0
2	☐						
3	☐			63.89		P	32.8
4	☐			50.00		P	28.9
5	☐			63.89		P	41.9
6	☐			44.45		P	28.7
7	☐			50.00		P	33.3
8	☐			152.79		P	36.3
9	☐			72.22		P	6.7

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			25.56		P	7.5
2	☐						
3	☐			31.11		P	24.7
4	☐			21.11		P	39.7
5	☐			32.22		P	26.0
6	☐			20.00		P	0.0
7	☐			30.00		P	19.2
8	☐			52.22		P	18.4
9	☐			34.44		P	34.0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	50.00	0.0000	P	29.0
2	☐	0.100					
3	☐	1.000	0.934	7452.41	0.0007	P	0.9
4	☐	50.000	48.747	384827.84	0.0360	P	0.7
5	☐	125.000	122.964	966059.39	0.0907	P	1.1
6	☐	250.000	248.562	1931006.06	0.1834	P	0.6
7	☐	500.000	499.029	3860469.18	0.3682	P	0.5
8	☐	1000.000	1001.162	7601798.35	0.7388	A	0.4
9	☐			3853.47	0.0004	P	3.3

$$y = 7.3792\text{E-}004 * x + 5.0633\text{E-}006$$

$$R = 1.0000$$

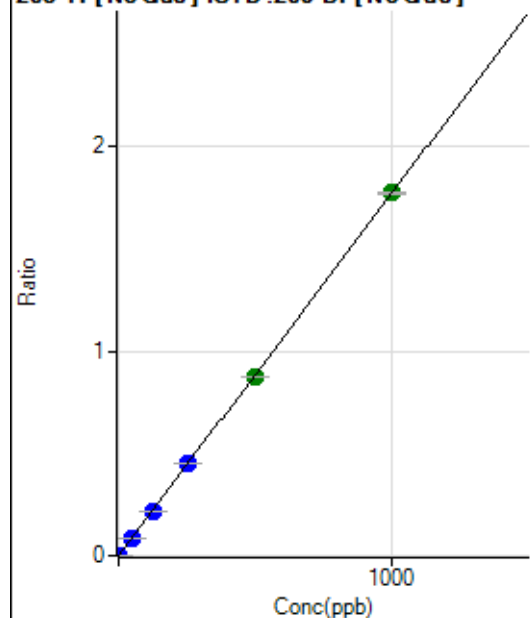
$$DL = 0.005962$$

$$BEC = 0.006862$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	91.67	0.0000	P	9.4
2	☐	0.100					
3	☐	1.000	0.909	17367.46	0.0016	P	0.9
4	☐	50.000	48.974	927868.02	0.0867	P	0.6
5	☐	125.000	124.262	2343099.75	0.2201	P	0.7
6	☐	250.000	253.347	4723786.65	0.4487	P	0.2
7	☐	500.000	494.746	9185857.84	0.8762	A	0.6
8	☐	1000.000	1001.934	18258884.78	1.7745	A	0.4
9	☐			9503.80	0.0010	P	5.7

$$y = 0.0018 * x + 9.2827\text{E-}006$$

$$R = 1.0000$$

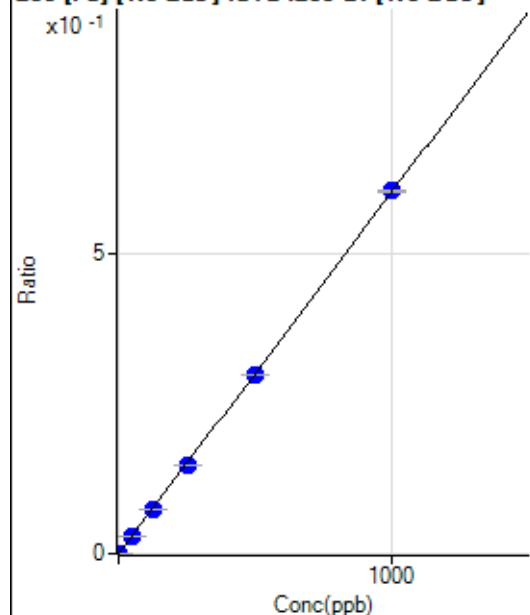
$$DL = 0.001476$$

$$BEC = 0.005241$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	275.94	0.0000	P	9.3
2	☐	0.100					
3	☐	1.000	0.913	6183.09	0.0006	P	1.7
4	☐	50.000	48.048	308919.72	0.0289	P	0.8
5	☐	125.000	121.441	776665.07	0.0730	P	0.8
6	☐	250.000	246.060	1555838.17	0.1478	P	0.5
7	☐	500.000	493.214	3105159.04	0.2962	P	0.1
8	☐	1000.000	1004.921	6209551.30	0.6035	P	0.3
9	☐			33008.36	0.0035	P	2.1

$$y = 6.0049\text{E-}004 * x + 2.7932\text{E-}005$$

$$R = 1.0000$$

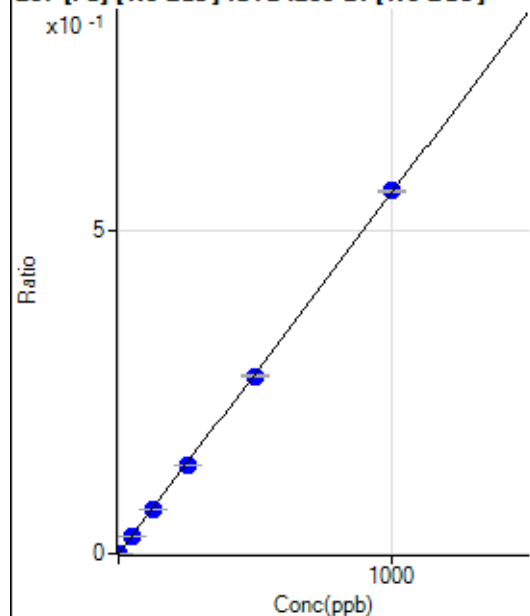
$$DL = 0.01298$$

$$BEC = 0.04652$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	242.60	0.0000	P	5.4
2	☐	0.100					
3	☐	1.000	0.887	5590.25	0.0005	P	3.6
4	☐	50.000	48.423	290260.00	0.0271	P	0.3
5	☐	125.000	121.295	723243.75	0.0679	P	0.7
6	☐	250.000	246.113	1450871.46	0.1378	P	0.4
7	☐	500.000	492.427	2890443.32	0.2757	P	0.4
8	☐	1000.000	1005.300	5791605.34	0.5629	P	0.2
9	☐			29299.45	0.0031	P	1.1

$$y = 5.5986\text{E-}004 * x + 2.4567\text{E-}005$$

$$R = 0.9999$$

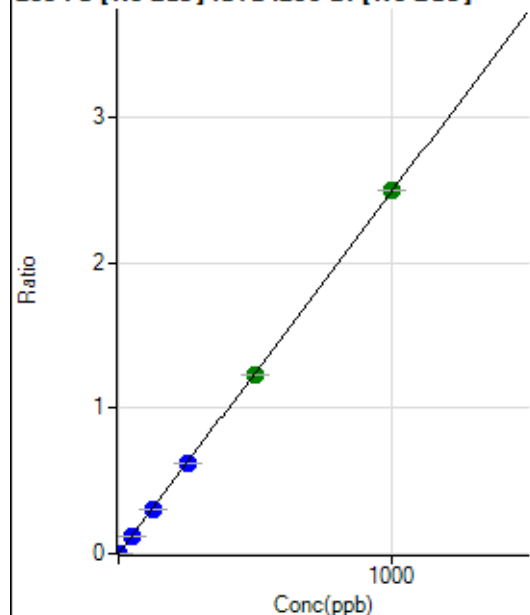
$$DL = 0.007153$$

$$BEC = 0.04388$$

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	1190.80	0.0001	P	8.1
2	☐	0.100					
3	☐	1.000	0.903	25401.05	0.0024	P	1.0
4	☐	50.000	48.514	1292110.79	0.1208	P	0.1
5	☐	125.000	122.636	3248819.81	0.3052	P	0.9
6	☐	250.000	248.995	6521544.95	0.6195	P	0.6
7	☐	500.000	494.633	12899273.53	1.2304	A	0.2
8	☐	1000.000	1003.305	25679940.39	2.4957	A	0.1
9	☐			133875.75	0.0143	P	0.1

$$y = 0.0025 * x + 1.2061E-004$$

$$R = 1.0000$$

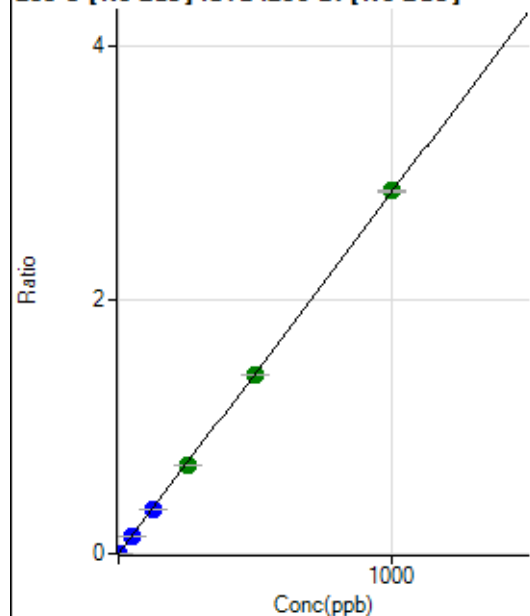
$$DL = 0.01176$$

$$BEC = 0.04849$$

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	19.45	0.0000	P	173.
2	☐	0.100					
3	☐	1.000	0.876	26742.35	0.0025	P	2.1
4	☐	50.000	47.013	1429491.46	0.1336	P	0.3
5	☐	125.000	121.524	3677372.61	0.3454	P	1.5
6	☐	250.000	244.677	7322107.11	0.6955	A	0.1
7	☐	500.000	493.806	14715098.77	1.4037	A	0.1
8	☐	1000.000	1005.012	29395448.92	2.8568	A	0.5
9	☐			3911.87	0.0004	P	7.6

$$y = 0.0028 * x + 1.9668E-006$$

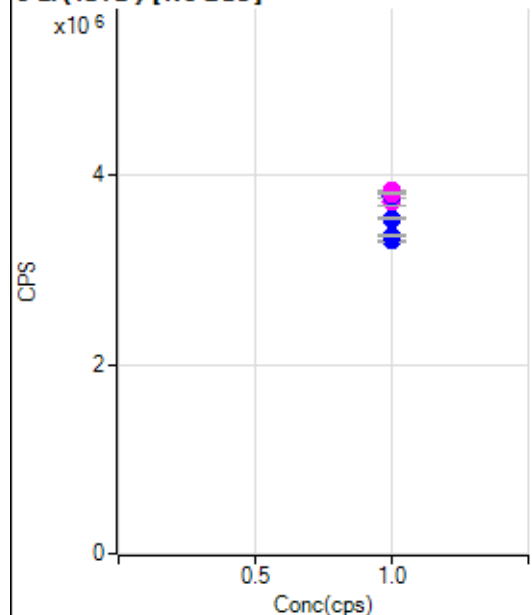
$$R = 1.0000$$

$$DL = 0.003595$$

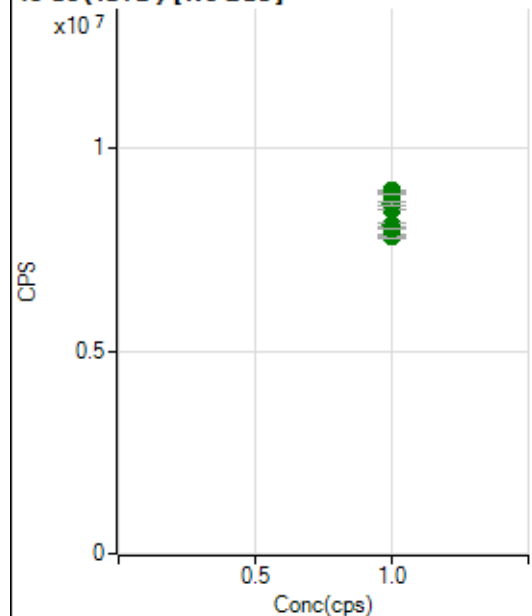
$$BEC = 0.0006919$$

Weight: <None>

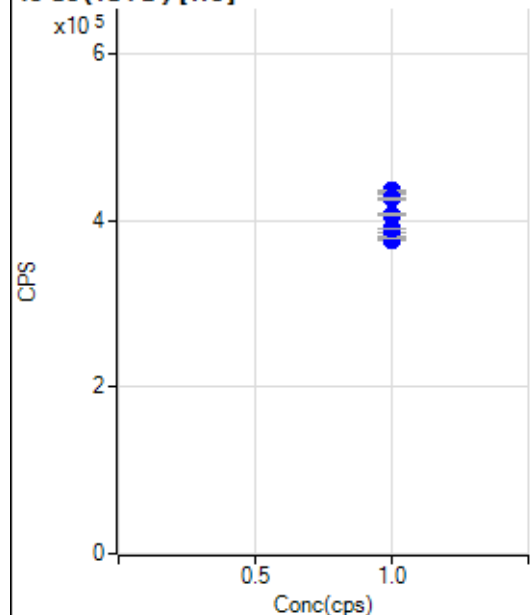
Min Conc: 0

6 Li (ISTD) [No Gas]

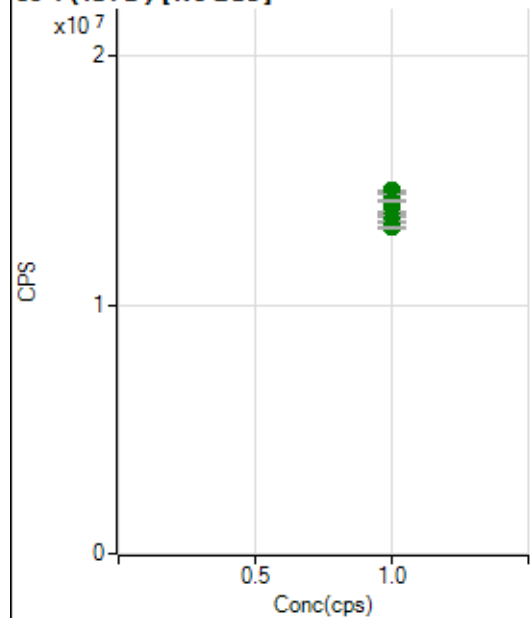
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3723072.44		M	2.1
2	☐	1.000					
3	☐	1.000		3774056.65		P	0.9
4	☐	1.000		3831893.80		M	0.4
5	☐	1.000		3802364.07		M	0.5
6	☐	1.000		3543727.38		P	0.8
7	☐	1.000		3352537.24		P	0.1
8	☐	1.000		3302511.65		P	0.2
9	☐	1.000		3361333.87		P	1.2

45 Sc (ISTD) [No Gas]

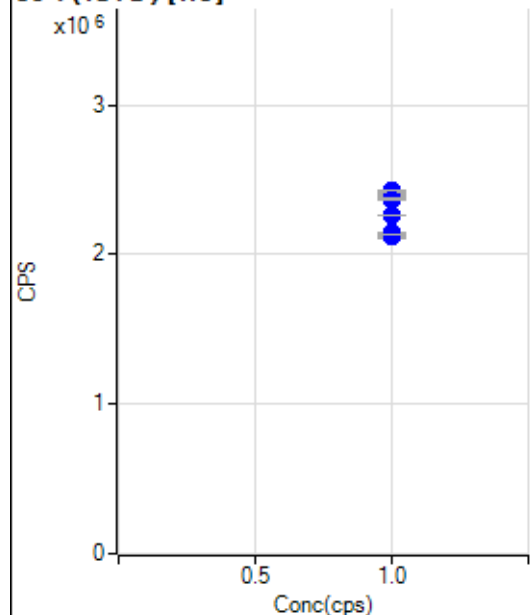
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8488868.42		A	0.1
2	☐	1.000					
3	☐	1.000		8942842.13		A	0.2
4	☐	1.000		8869209.75		A	0.2
5	☐	1.000		8627008.53		A	0.9
6	☐	1.000		8119927.01		A	1.0
7	☐	1.000		7829906.34		A	0.4
8	☐	1.000		7805252.95		A	0.2
9	☐	1.000		8001684.38		A	0.4

45 Sc (ISTD) [He]

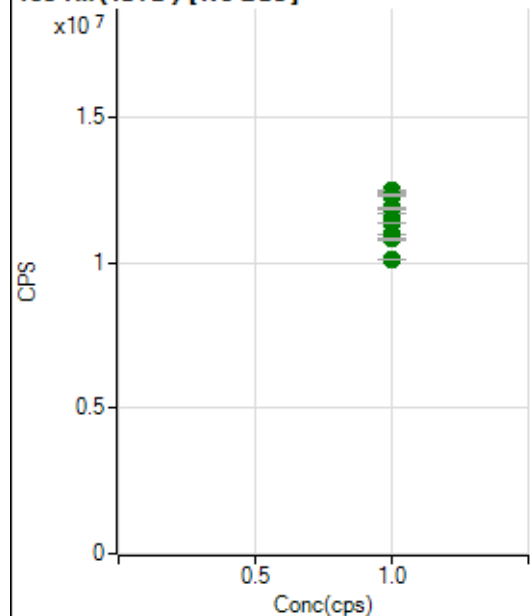
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		432481.59		P	0.5
2	☐	1.000					
3	☐	1.000		435778.99		P	0.8
4	☐	1.000		426336.77		P	0.8
5	☐	1.000		407619.47		P	0.4
6	☐	1.000		385553.74		P	0.5
7	☐	1.000		377325.85		P	0.4
8	☐	1.000		380303.94		P	0.3
9	☐	1.000		389533.17		P	0.1

89 Y (ISTD) [No Gas]

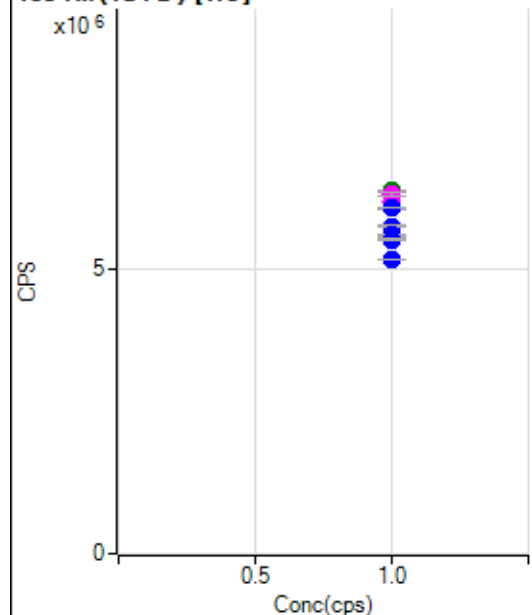
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13730272.16		A	0.3
2	☐	1.000					
3	☐	1.000		14590096.17		A	0.5
4	☐	1.000		14468872.84		A	0.3
5	☐	1.000		14177709.93		A	0.9
6	☐	1.000		13554879.66		A	0.4
7	☐	1.000		13373967.72		A	0.1
8	☐	1.000		13349584.66		A	0.2
9	☐	1.000		13117851.75		A	0.3

89 Y(ISTD) [He]

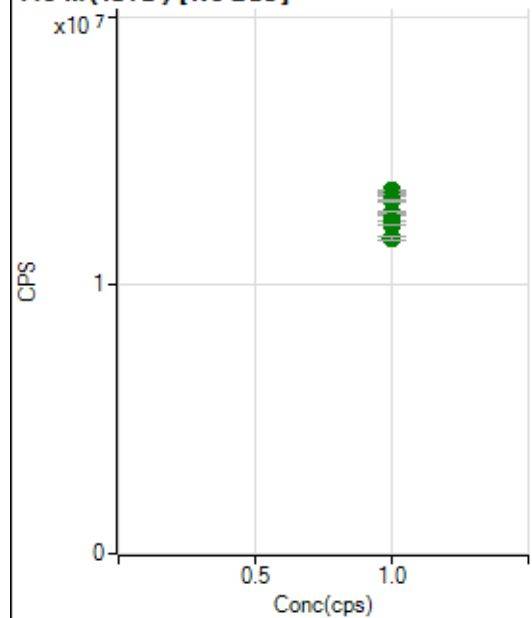
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2398349.69		P	0.3
2	☐	1.000					
3	☐	1.000		2426361.04		P	0.8
4	☐	1.000		2368242.91		P	0.7
5	☐	1.000		2262477.78		P	0.2
6	☐	1.000		2144381.15		P	0.1
7	☐	1.000		2121197.83		P	0.6
8	☐	1.000		2118529.20		P	0.4
9	☐	1.000		2138267.78		P	0.2

103 Rh(ISTD) [No Gas]

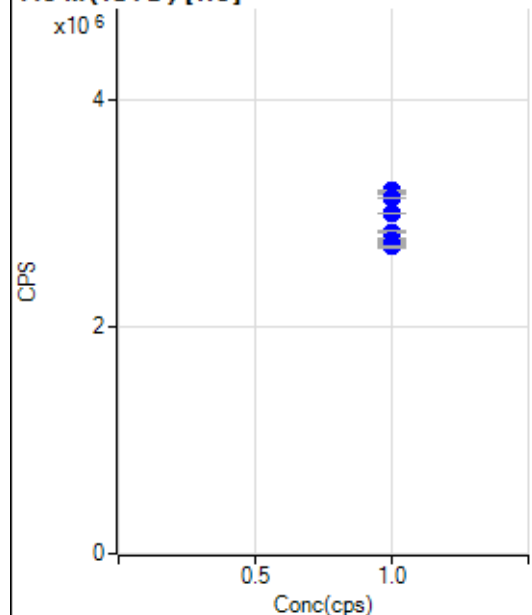
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11742805.82		A	0.2
2	☐	1.000					
3	☐	1.000		12493229.53		A	0.6
4	☐	1.000		12347860.43		A	0.5
5	☐	1.000		11914532.73		A	0.6
6	☐	1.000		11382206.16		A	0.2
7	☐	1.000		10998771.08		A	0.3
8	☐	1.000		10827590.26		A	0.5
9	☐	1.000		10146485.29		A	0.3

103 Rh (ISTD) [He]

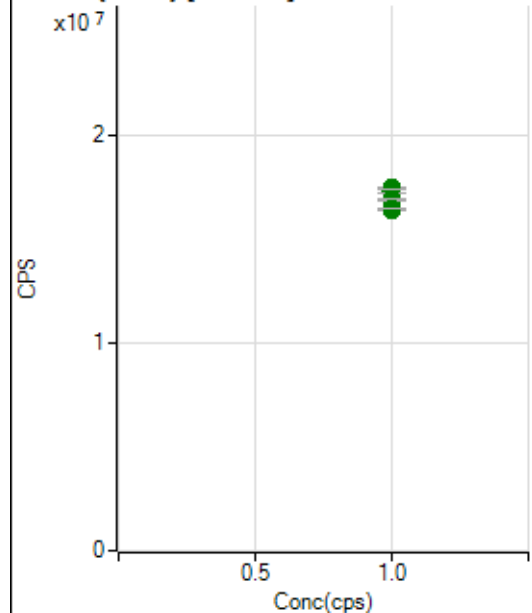
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6147612.69		M	3.6
2	☐	1.000					
3	☐	1.000		6352624.49		A	0.6
4	☐	1.000		6289580.88		M	1.0
5	☐	1.000		6051795.19		P	0.2
6	☐	1.000		5739982.35		P	0.3
7	☐	1.000		5573393.95		P	0.7
8	☐	1.000		5502206.86		P	0.7
9	☐	1.000		5161911.17		P	0.2

115 In (ISTD) [No Gas]

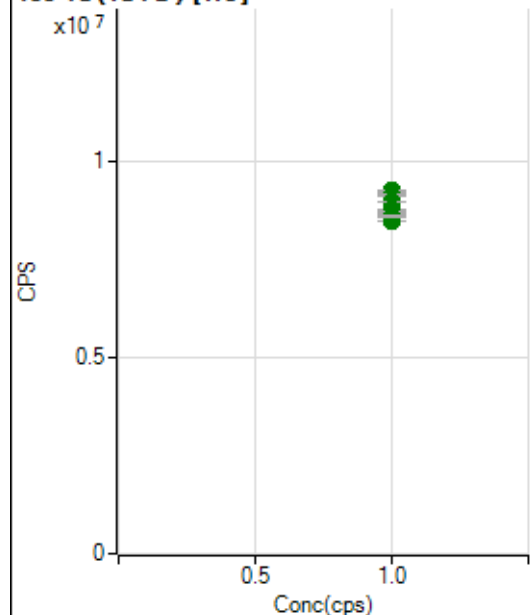
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12681304.90		A	0.6
2	☐	1.000					
3	☐	1.000		13524442.42		A	0.4
4	☐	1.000		13363641.93		A	0.3
5	☐	1.000		13154283.55		A	0.6
6	☐	1.000		12715485.64		A	0.4
7	☐	1.000		12415662.05		A	0.3
8	☐	1.000		12266667.09		A	0.2
9	☐	1.000		11753778.31		A	0.7

115 In (ISTD) [He]

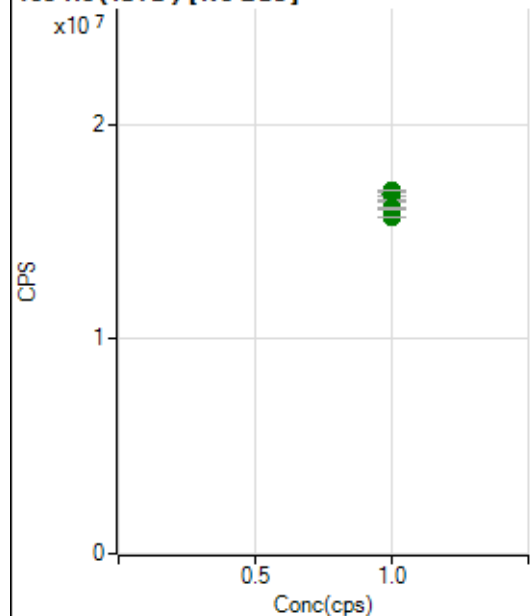
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3163515.89		P	0.3
2	☐	1.000					
3	☐	1.000		3192786.66		P	0.4
4	☐	1.000		3129488.51		P	0.2
5	☐	1.000		2989353.77		P	0.2
6	☐	1.000		2830001.16		P	0.4
7	☐	1.000		2765741.43		P	0.6
8	☐	1.000		2729525.24		P	0.6
9	☐	1.000		2699280.31		P	0.3

159 Tb (ISTD) [No Gas]

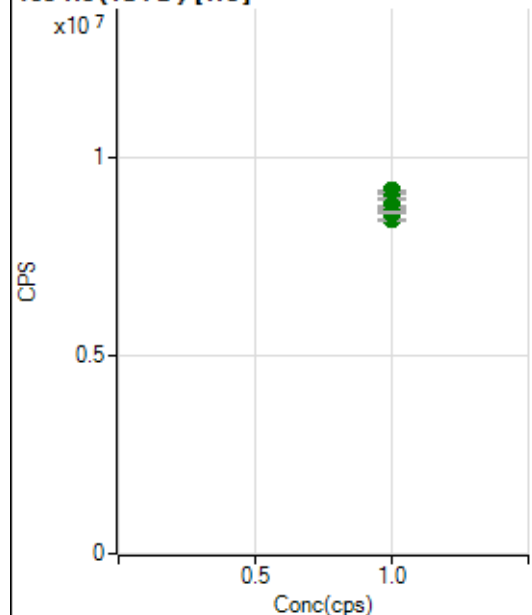
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16397690.73		A	0.4
2	☐	1.000					
3	☐	1.000		17443455.85		A	0.3
4	☐	1.000		17375195.99		A	0.4
5	☐	1.000		17290586.27		A	1.1
6	☐	1.000		16939438.50		A	0.3
7	☐	1.000		16844124.47		A	0.3
8	☐	1.000		16873619.05		A	0.2
9	☐	1.000		16447752.67		A	0.3

159 Tb (ISTD) [He]

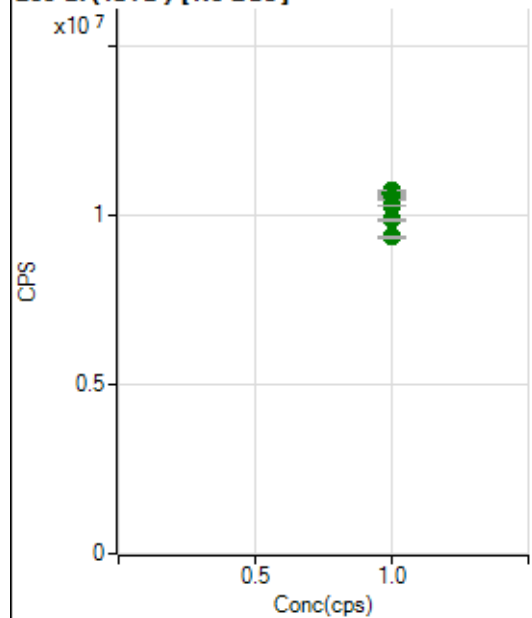
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8466303.90		A	0.5
2	☐	1.000					
3	☐	1.000		9234655.62		A	0.2
4	☐	1.000		9106732.50		A	0.5
5	☐	1.000		8953791.53		A	0.3
6	☐	1.000		8763940.01		A	0.2
7	☐	1.000		8650333.97		A	0.5
8	☐	1.000		8698749.87		A	0.4
9	☐	1.000		8580981.61		A	0.2

165 Ho (ISTD) [No Gas]

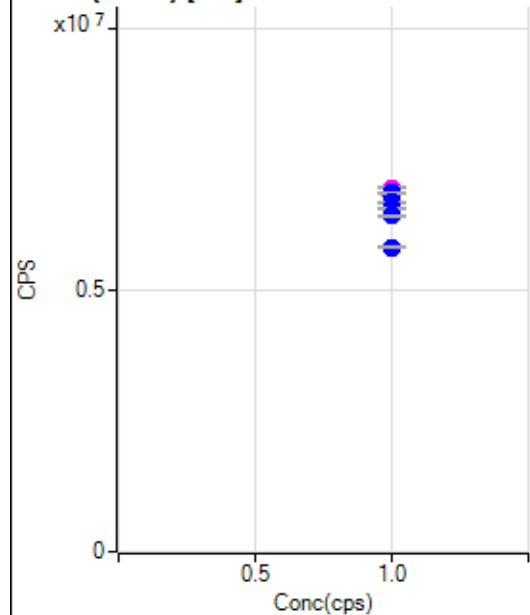
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		15664589.24		A	0.4
2	☐	1.000					
3	☐	1.000		16885184.75		A	0.4
4	☐	1.000		16849390.65		A	0.8
5	☐	1.000		16753835.96		A	1.4
6	☐	1.000		16470190.99		A	0.2
7	☐	1.000		16383010.09		A	0.1
8	☐	1.000		16401089.43		A	0.3
9	☐	1.000		16085401.58		A	0.6

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8413023.70		A	0.4
2	☐	1.000					
3	☐	1.000		9139022.57		A	0.3
4	☐	1.000		9100312.37		A	0.4
5	☐	1.000		8955932.30		A	0.6
6	☐	1.000		8747303.13		A	0.2
7	☐	1.000		8693861.95		A	0.1
8	☐	1.000		8731483.55		A	0.2
9	☐	1.000		8597957.51		A	0.3

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9877664.57		A	0.8
2	☐	1.000					
3	☐	1.000		10731840.60		A	0.6
4	☐	1.000		10696844.01		A	0.7
5	☐	1.000		10647051.37		A	1.4
6	☐	1.000		10527741.23		A	0.3
7	☐	1.000		10483378.24		A	0.1
8	☐	1.000		10289694.71		A	0.1
9	☐	1.000		9365573.82		A	0.4

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6807785.11		M	4.7
2	☐	1.000					
3	☐	1.000		6945969.06		M	1.4
4	☐	1.000		6899212.61		M	1.3
5	☐	1.000		6867102.19		P	0.2
6	☐	1.000		6682245.04		P	0.3
7	☐	1.000		6573180.04		P	0.6
8	☐	1.000		6438267.96		P	0.7
9	☐	1.000		5830772.69		P	0.7

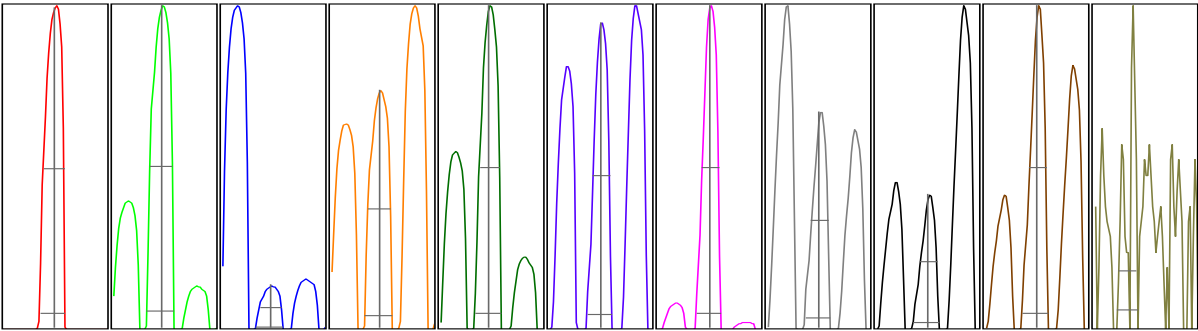
US EPA Tune Check Sample Report

Batch Folder D:\ICP-MS Data\P7060118-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]				
Mass	Count	RSD%	RSD%	RSD%
	(Mean)	(Actual)	(Required)	(Flag)
9	7411	0.48	5.00	
24	118986	0.39	5.00	
25	15659	0.29	5.00	
26	18491	0.47	5.00	
59	64207	0.63	5.00	
113	7458	0.17	5.00	
115	96832	0.54	5.00	
206	23159	0.42	5.00	
207	21012	0.50	5.00	
208	50597	0.58	5.00	
220	0	29.41		

Mass	Replicate 1	Replicate 2	Replicate 3	Replicate 4	Replicate 5
	Count	Count	Count	Count	Count
9	7361	7441	7386	7442	7424
24	118441	118702	119215	118937	119635
25	15600	15634	15659	15689	15713
26	18342	18549	18517	18494	18552
59	63812	64384	63768	64368	64703
113	7476	7463	7443	7456	7452
115	96131	96647	96849	97563	96972
206	23058	23157	23186	23085	23308
207	20949	20866	21132	21044	21071
208	50302	50380	50690	50565	51046
220	1	0	0	0	1

Integration Time [sec] = 0.1



Mass	Peak	Axis	Axis	Axis	Width-X%	Width-X%	Width-
	Height	(Actual)	(Required)	(Flag)	(Actual)	(Required)	X% (Flag)
9	12835	9.00	8.9 - 9.1		0.739	0.900	
24	193829	23.95	23.9 - 24.1		0.785	0.900	
25	25813	24.95	24.9 - 25.1		0.786	0.900	
26	30060	25.95	25.9 - 26.1		0.787	0.900	
59	113930	58.95	58.9 - 59.1		0.772	0.900	
113	15370	113.05	112.9 - 113.1		0.721	0.900	
115	200816	115.05	114.9 - 115.1		0.718	0.900	
206	48002	206.05	205.9 - 206.1		0.734	0.900	
207	44053	207.05	206.9 - 207.1		0.751	0.900	
208	105827	208.05	207.9 - 208.1		0.763	0.900	
220	0	219.55	-		0.523		

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	9.1	V	Deflect	15.4	V
Extract 2	-155.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-70	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination		5.0 V
He Flow	0.0	mL/min	OctP RF	200	V			

[He]

Mass	Count	RSD%	RSD%
	(Mean)	(Actual)	(Required)
59	17377	0.29	
89	42367	0.56	
205	21111	0.43	

Mass	Replicate 1	Replicate 2	Replicate 3	Replicate 4	Replicate 5
	Count	Count	Count	Count	Count
59	17317	17431	17370	17426	17340
89	42148	42479	42500	42083	42628
205	21086	21221	21154	20978	21119

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.4	V	Deflect	2.4	V
Extract 2	-130.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-60	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			