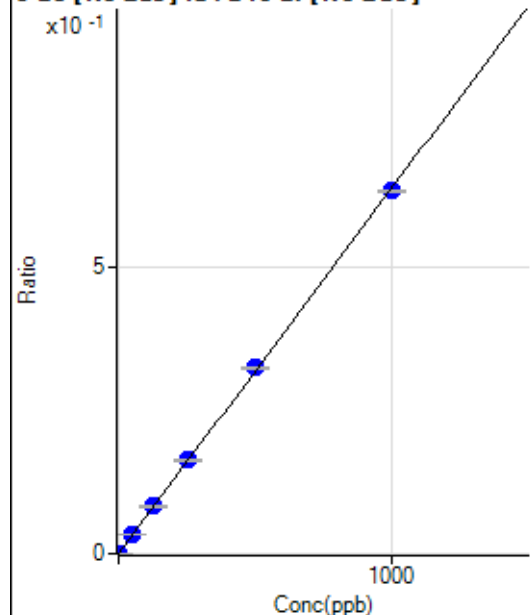


Batch Folder: D:\ICP-MS Data\P71004\19-MS.b\
Analysis File: 19-MS.batch.bin
DA Date-Time: 2019-10-06 22:38:14
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	S00	2019-10-04 10:13:45
2	003CALS.d	S02	2019-10-04 10:17:21
3	004CALS.d	S03	2019-10-04 10:22:05
4	005CALS.d	S04	2019-10-04 10:26:17
5	006CALS.d	S05	2019-10-04 10:30:07
6	007CALS.d	S06	2019-10-04 10:33:56
7	008CALS.d	S07	2019-10-04 10:37:44
8	009CALS.d	S08	2019-10-04 10:41:30

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	74.44	0.0000	P	11.4
2	☐	1.000	0.962	1926.82	0.0006	P	1.4
3	☐	50.000	52.057	97919.46	0.0332	P	0.2
4	☐	125.000	129.149	225432.45	0.0823	P	1.0
5	☐	250.000	255.551	393719.65	0.1629	P	0.8
6	☐	500.000	508.566	730630.75	0.3241	P	0.2
7	☐	1000.000	993.708	1378833.21	0.6332	P	0.4
8	☐			291.12	0.0001	P	16.4

$$y = 6.3716\text{E-}004 * x + 2.4830\text{E-}005$$

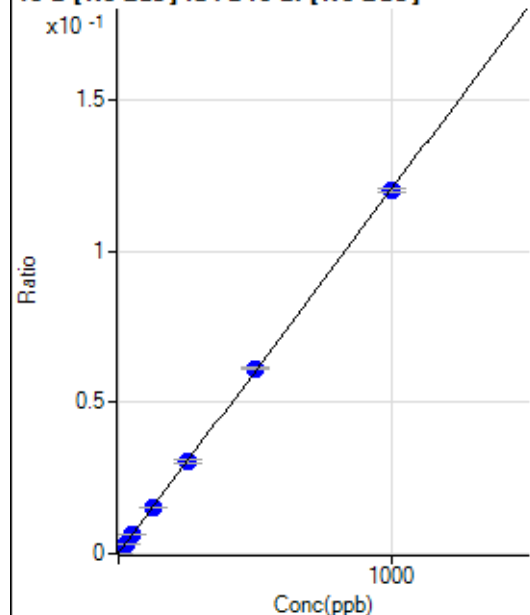
$$R = 0.9999$$

$$DL = 0.01335$$

$$BEC = 0.03897$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	597.26	0.0002	P	11.7
2	☐	25.000	23.598	9180.89	0.0030	P	7.4
3	☐	50.000	51.484	18865.11	0.0064	P	2.5
4	☐	125.000	124.284	41505.01	0.0152	P	1.9
5	☐	250.000	253.351	74174.06	0.0307	P	3.7
6	☐	500.000	508.073	138302.07	0.0613	P	1.2
7	☐	1000.000	995.176	261248.14	0.1200	P	1.0
8	☐			11910.67	0.0051	P	4.5

$$y = 1.2035\text{E-}004 * x + 1.9917\text{E-}004$$

$$R = 0.9999$$

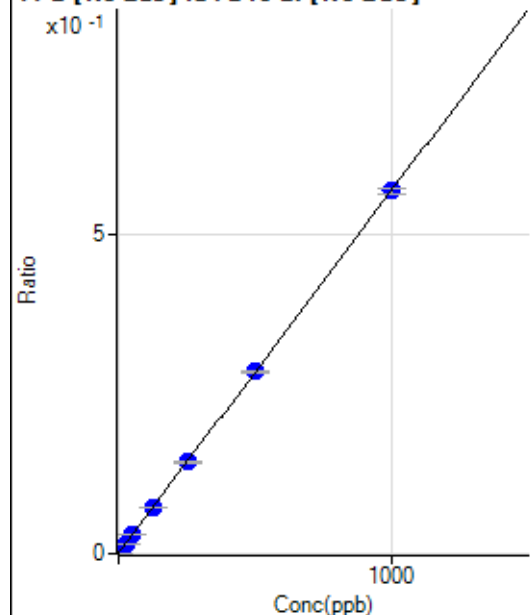
$$DL = 0.5833$$

$$BEC = 1.655$$

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	2958.74	0.0010	P	3.8
2	☐	25.000	23.973	44162.53	0.0146	P	2.1
3	☐	50.000	50.291	87273.71	0.0296	P	0.2
4	☐	125.000	124.346	196337.58	0.0717	P	0.8
5	☐	250.000	250.996	347404.80	0.1437	P	2.3
6	☐	500.000	501.065	644562.38	0.2859	P	1.5
7	☐	1000.000	999.311	1239557.74	0.5692	P	1.6
8	☐			55689.72	0.0237	P	7.9

$$y = 5.6864\text{E-}004 * x + 9.8678\text{E-}004$$

$$R = 1.0000$$

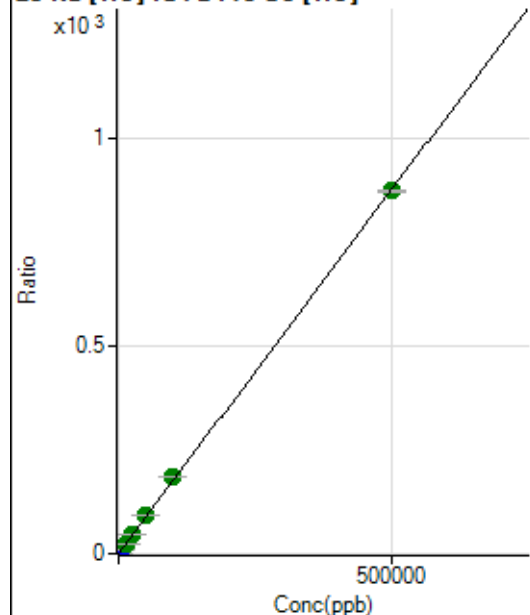
$$DL = 0.1985$$

$$BEC = 1.735$$

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	10948.84	0.0481	P	1.8
2	☐	500.000	518.079	219311.60	0.9570	P	0.9
3	☐	5000.000	5356.291	2038646.60	9.4449	P	0.9
4	☐	12500.000	13271.972	4612691.81	23.3318	A	0.6
5	☐	25000.000	26882.497	8247984.73	47.2094	A	2.0
6	☐	50000.000	53268.670	15846401.05	93.5000	A	1.0
7	☐	100000.00	104800.38	30784201.73	183.9047	A	0.7
8	☐	500000.00	498596.05	179493888.7	874.7606	A	0.5

$$y = 0.0018 * x + 0.0481$$

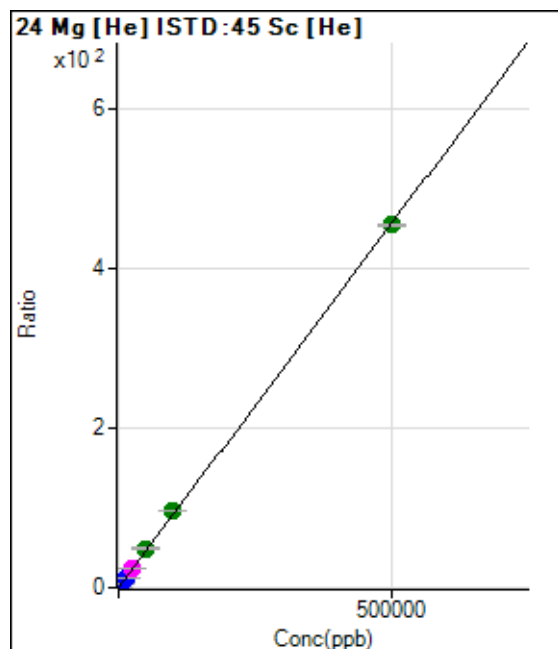
$$R = 0.9999$$

$$DL = 1.461$$

$$BEC = 27.4$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	205.57	0.0009	P	25.4
2	☐	500.000	544.594	114011.77	0.4975	P	0.9
3	☐	5000.000	5455.012	1073737.73	4.9746	P	0.4
4	☐	12500.000	13535.812	2440067.50	12.3425	P	0.7
5	☐	25000.000	27322.558	4352408.91	24.9129	M	2.4
6	☐	50000.000	54097.400	8359625.88	49.3255	A	0.5
7	☐	100000.00	105905.65	16164058.17	96.5629	A	0.5
8	☐	500000.00	498262.51	93217144.45	454.3036	A	0.4

$$y = 9.1177\text{E-}004 * x + 9.0351\text{E-}004$$

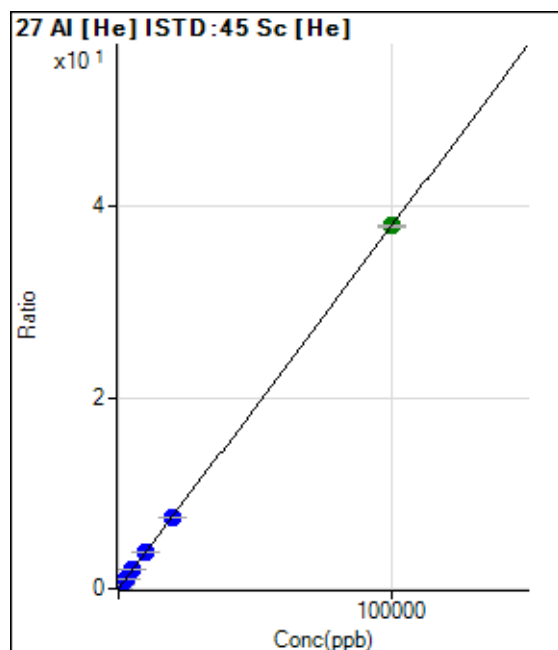
$$R = 0.9999$$

$$DL = 0.7555$$

$$BEC = 0.9909$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	27.78	0.0001	P	17.4
2	☐	20.000	19.775	1750.18	0.0076	P	5.5
3	☐	1000.000	1032.279	84675.19	0.3923	P	1.2
4	☐	2500.000	2525.126	189687.97	0.9595	P	0.6
5	☐	5000.000	5141.861	341306.95	1.9536	P	2.4
6	☐	10000.000	10071.755	648524.89	3.8266	P	0.3
7	☐	20000.000	19783.102	1258170.44	7.5161	P	0.3
8	☐	100000.00	100028.16	7797682.38	38.0029	A	0.2

$$y = 3.7992\text{E-}004 * x + 1.2194\text{E-}004$$

$$R = 1.0000$$

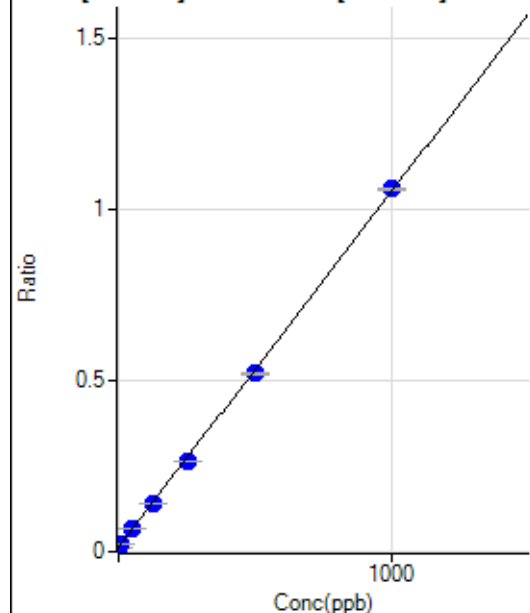
$$DL = 0.1671$$

$$BEC = 0.321$$

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	73670.39	0.0136	P	0.3
2	☐	10.000	8.270	123021.53	0.0221	P	0.3
3	☐	50.000	49.802	350796.92	0.0652	P	0.4
4	☐	125.000	123.523	710603.39	0.1417	P	0.3
5	☐	250.000	242.944	1169465.96	0.2656	P	0.8
6	☐	500.000	488.391	2158108.64	0.5202	P	0.7
7	☐	1000.000	1007.780	4300111.73	1.0590	P	0.8
8	☐			258723.27	0.0576	P	0.9

$$y = 0.0010 * x + 0.0136$$

$$R = 0.9999$$

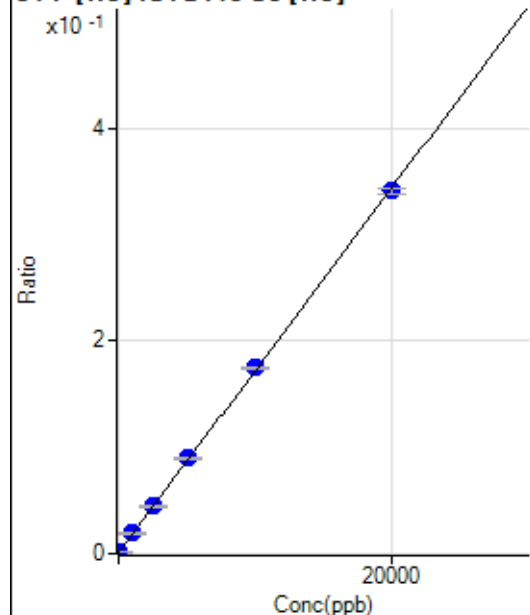
$$DL = 0.1246$$

$$BEC = 13.08$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-27.110	80.56	0.0004	P	49.6
2	☐	0.000	27.110	294.46	0.0013	P	3.4
3	☐	1000.000	1068.646	4134.09	0.0192	P	7.1
4	☐	2500.000	2557.159	8833.55	0.0447	P	2.1
5	☐	5000.000	5189.244	15697.64	0.0898	P	1.0
6	☐	10000.000	10172.799	29713.79	0.1753	P	1.2
7	☐	20000.000	19855.712	57149.70	0.3414	P	1.3
8	☐			102.78	0.0005	P	29.1

$$y = 1.7154E-005 * x + 8.1948E-004$$

$$R = 0.9999$$

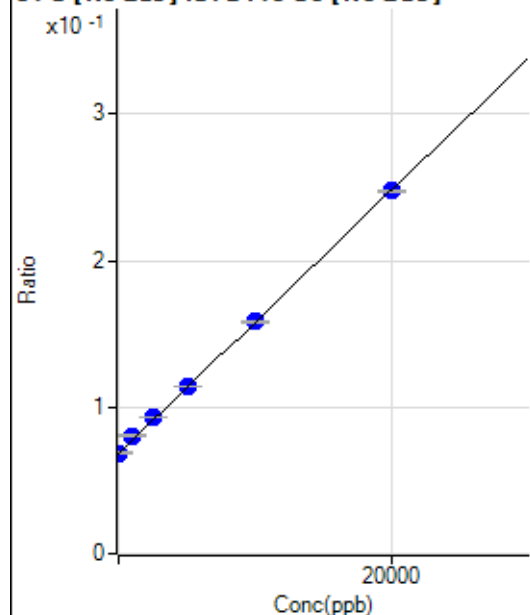
$$DL = 19.14$$

$$BEC = 47.77$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-39.975	368719.05	0.0679	P	0.7
2	☐	0.000	39.975	381196.91	0.0686	P	1.0
3	☐	1000.000	1361.531	433041.21	0.0805	P	0.7
4	☐	2500.000	2734.006	465749.00	0.0929	P	0.6
5	☐	5000.000	5082.150	502059.89	0.1140	P	0.4
6	☐	10000.000	10011.999	657106.34	0.1584	P	0.6
7	☐	20000.000	19926.136	1005562.89	0.2476	P	0.5
8	☐			335064.03	0.0746	P	0.6

$$y = 9.0020\text{E-}006 * x + 0.0683$$

R = 0.9998

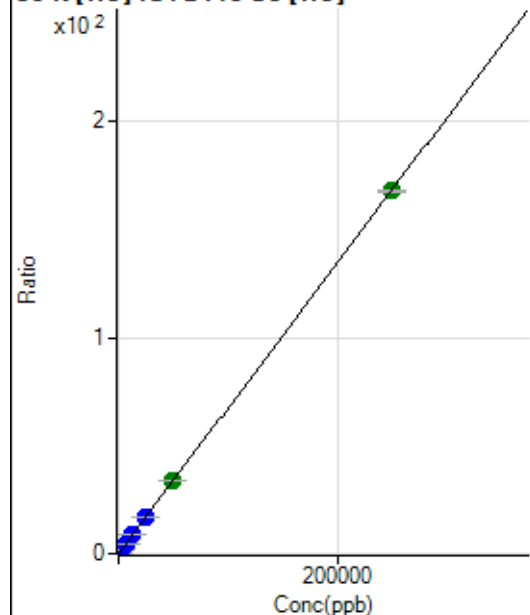
DL = 202.9

BEC = 7583

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	9545.14	0.0419	P	0.7
2	☐	500.000	518.239	89408.02	0.3901	P	1.7
3	☐	2500.000	2612.493	387965.19	1.7974	P	0.9
4	☐	6250.000	6441.169	863987.46	4.3702	P	0.5
5	☐	12500.000	12828.074	1513400.41	8.6621	P	1.8
6	☐	25000.000	25491.922	2910278.34	17.1720	P	0.3
7	☐	50000.000	50312.569	5666649.78	33.8510	A	0.4
8	☐	250000.00	249865.95	34460494.17	167.9469	A	0.3

$$y = 6.7198\text{E-}004 * x + 0.0419$$

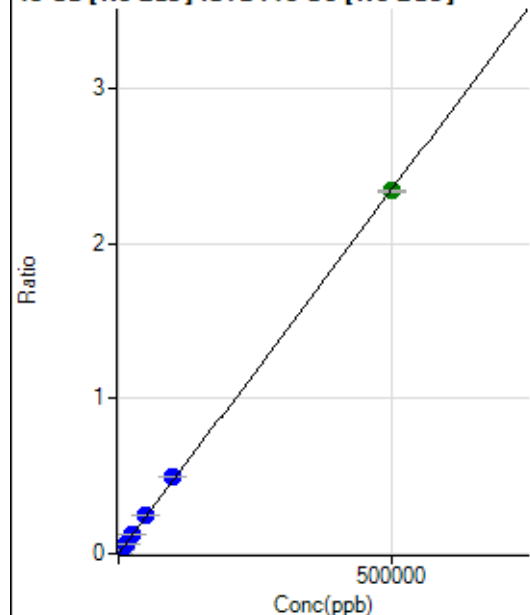
R = 1.0000

DL = 1.296

BEC = 62.36

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	77.78	0.0000	P	16.5
2	☐	500.000	504.200	13211.94	0.0024	P	3.5
3	☐	5000.000	5265.139	132839.05	0.0247	P	1.0
4	☐	12500.000	13085.522	307743.82	0.0614	P	0.8
5	☐	25000.000	26412.399	545372.51	0.1238	P	1.4
6	☐	50000.000	52379.610	1018877.45	0.2456	P	0.8
7	☐	100000.00	104548.68	1990470.01	0.4902	P	0.2
8	☐	500000.00	498764.38	10507126.54	2.3384	A	0.4

$$y = 4.6884\text{E-}006 * x + 1.4326\text{E-}005$$

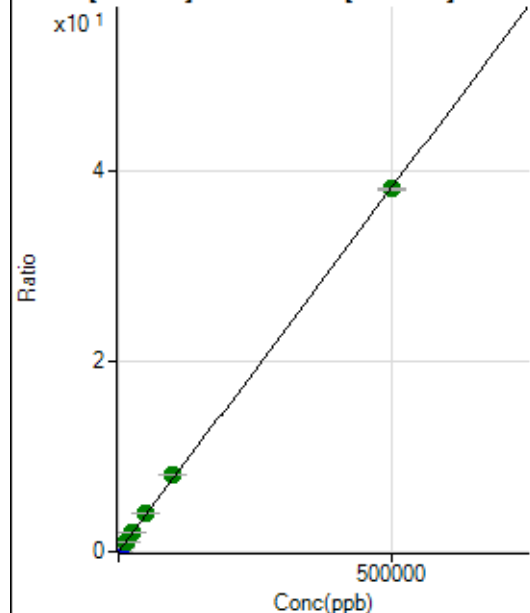
$$R = 1.0000$$

$$DL = 1.51$$

$$BEC = 3.055$$

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	4259.12	0.0008	P	2.0
2	☐	500.000	505.180	219157.62	0.0395	P	0.7
3	☐	5000.000	5242.617	2162269.93	0.4021	P	0.5
4	☐	12500.000	13091.346	5028977.85	1.0028	A	0.6
5	☐	25000.000	26361.998	8889249.15	2.0186	A	0.6
6	☐	50000.000	52396.191	16640974.33	4.0112	A	0.7
7	☐	100000.00	105094.52	32666965.31	8.0448	A	0.3
8	☐	500000.00	498656.16	171502695.5	38.1684	A	0.3

$$y = 7.6541\text{E-}005 * x + 7.8433\text{E-}004$$

$$R = 0.9999$$

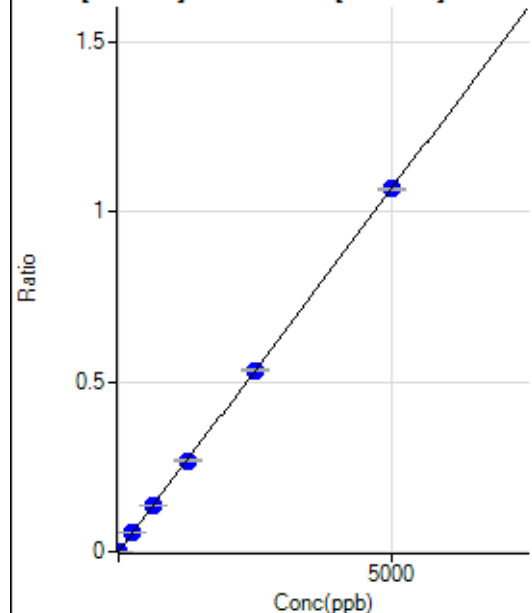
$$DL = 0.6221$$

$$BEC = 10.25$$

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	52.78	0.0000	P	71.3
2	☐	5.000	5.004	5982.00	0.0011	P	0.8
3	☐	250.000	252.982	290177.82	0.0540	P	0.6
4	☐	625.000	627.156	670729.45	0.1337	P	0.4
5	☐	1250.000	1258.356	1181695.65	0.2684	P	0.9
6	☐	2500.000	2497.672	2209722.44	0.5326	P	0.6
7	☐	5000.000	4998.656	4328457.74	1.0660	P	0.5
8	☐			1636.28	0.0004	P	3.4

$$y = 2.1325\text{E-}004 * x + 9.7224\text{E-}006$$

$$R = 1.0000$$

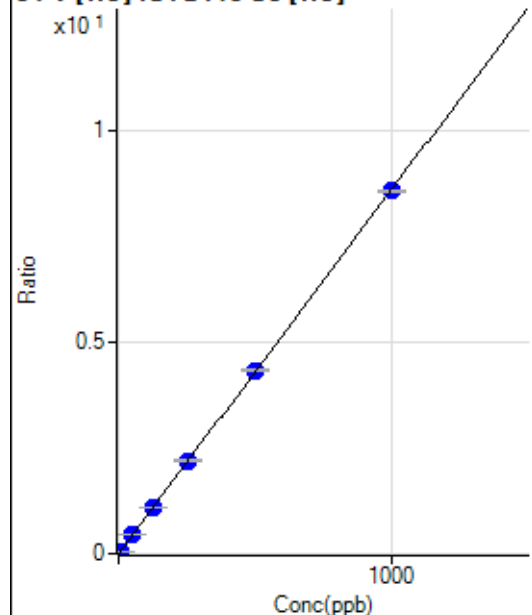
$$DL = 0.09753$$

$$BEC = 0.04559$$

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	0.00	0.0000	P	
2	☐	5.000	5.222	10279.29	0.0448	P	2.1
3	☐	50.000	51.831	96073.51	0.4451	P	0.7
4	☐	125.000	126.735	215158.47	1.0883	P	0.7
5	☐	250.000	254.508	381841.82	2.1856	P	1.9
6	☐	500.000	503.923	733401.60	4.3274	P	0.3
7	☐	1000.000	996.602	1432621.28	8.5582	P	0.3
8	☐			358.90	0.0017	P	13.8

$$y = 0.0086 * x + 0.0000\text{E}+000$$

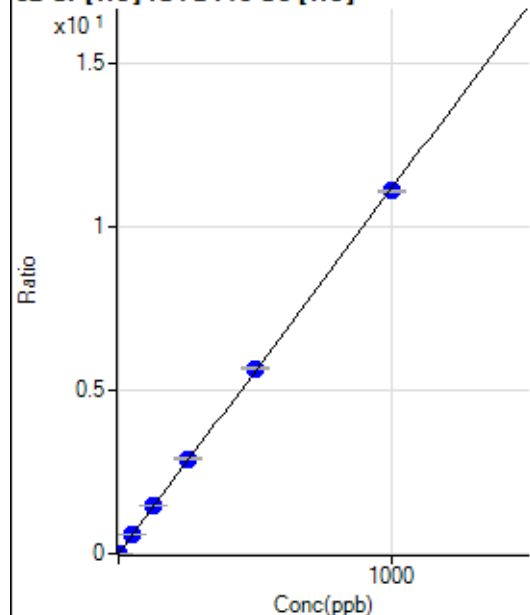
$$R = 1.0000$$

$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	483.35	0.0021	P	7.5
2	☐	2.000	1.981	5555.58	0.0242	P	1.3
3	☐	50.000	52.433	126822.93	0.5876	P	0.2
4	☐	125.000	129.643	286595.06	1.4497	P	0.7
5	☐	250.000	258.214	504086.90	2.8852	P	1.9
6	☐	500.000	507.046	959860.80	5.6636	P	0.5
7	☐	1000.000	993.721	1857668.06	11.0976	P	0.6
8	☐			72805.41	0.3548	P	0.3

$$y = 0.0112 * x + 0.0021$$

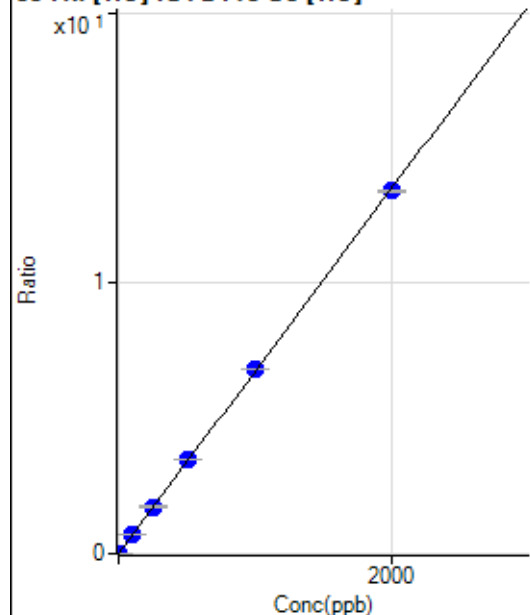
$$R = 0.9999$$

$$DL = 0.04274$$

$$BEC = 0.19$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	26.66	0.0001	P	21.7
2	☐	1.000	1.056	1657.90	0.0072	P	10.9
3	☐	100.000	104.085	151552.60	0.7021	P	0.5
4	☐	250.000	257.847	343847.77	1.7392	P	0.6
5	☐	500.000	515.994	608071.14	3.4804	P	1.6
6	☐	1000.000	1014.062	1159182.48	6.8397	P	0.3
7	☐	2000.000	1987.785	2244246.24	13.4072	P	0.8
8	☐			9361.99	0.0456	P	2.6

$$y = 0.0067 * x + 1.1706E-004$$

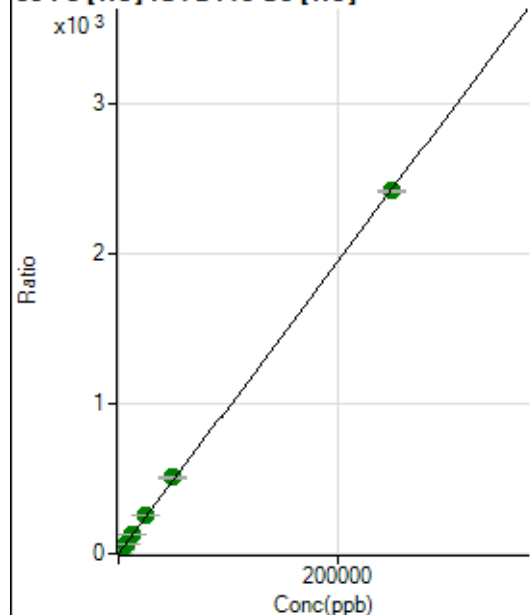
$$R = 0.9999$$

$$DL = 0.01129$$

$$BEC = 0.01736$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1633.47	0.0072	P	8.6
2	☐	50.000	55.152	124293.81	0.5423	P	0.7
3	☐	2500.000	2718.070	5694168.12	26.3813	A	0.6
4	☐	6250.000	6756.364	12962157.46	65.5658	A	0.6
5	☐	12500.000	13525.728	22931107.22	131.2506	A	1.9
6	☐	25000.000	26596.477	43738898.66	258.0793	A	0.4
7	☐	50000.000	52204.065	84793116.71	506.5560	A	0.8
8	☐	250000.00	249333.41	496413092.5	2,419.350	A	0.2

$$y = 0.0097 * x + 0.0072$$

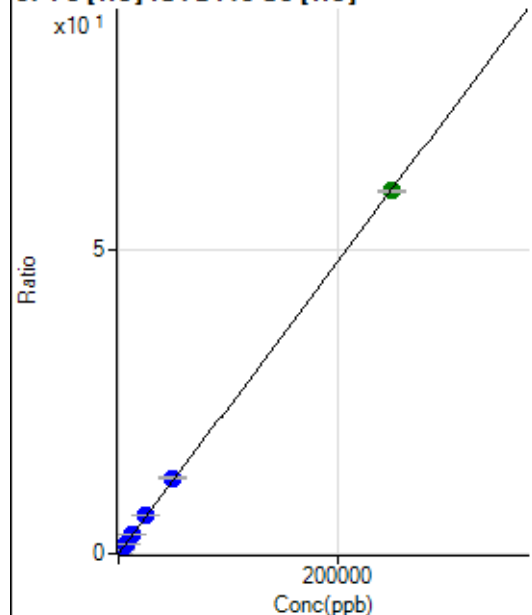
$$R = 0.9999$$

$$DL = 0.191$$

$$BEC = 0.739$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	55.56	0.0002	P	52.0
2	☐	50.000	56.044	3124.50	0.0136	P	1.6
3	☐	2500.000	2730.706	140871.11	0.6526	P	1.1
4	☐	6250.000	6767.437	319681.66	1.6171	P	1.0
5	☐	12500.000	13509.594	563955.17	3.2278	P	1.5
6	☐	25000.000	26542.513	1074759.34	6.3415	P	0.6
7	☐	50000.000	52033.597	2080917.19	12.4316	P	0.9
8	☐	250000.00	249373.30	12224403.51	59.5782	A	0.6

$$y = 2.3891E-004 * x + 2.4392E-004$$

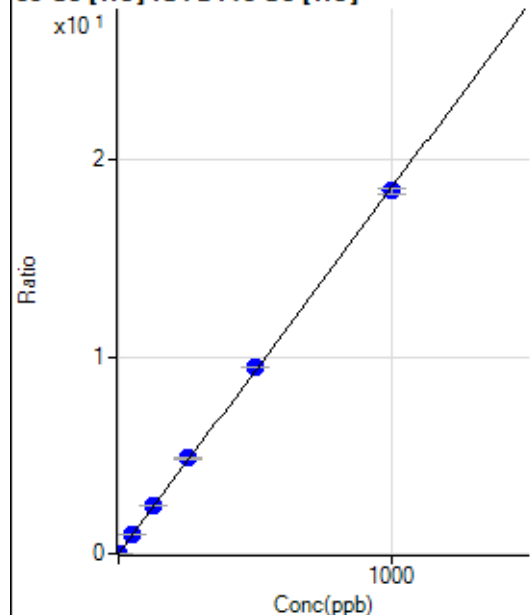
$$R = 1.0000$$

$$DL = 1.592$$

$$BEC = 1.021$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	37.78	0.0002	P	27.6
2	☐	1.000	1.058	4543.00	0.0198	P	0.9
3	☐	50.000	53.727	215420.49	0.9980	P	0.7
4	☐	125.000	131.773	483867.65	2.4475	P	0.8
5	☐	250.000	260.511	845364.01	4.8385	P	1.6
6	☐	500.000	508.852	1601732.58	9.4509	P	0.5
7	☐	1000.000	991.913	3083617.91	18.4226	P	1.5
8	☐			44839.61	0.2185	P	1.4

$$y = 0.0186 * x + 1.6562E-004$$

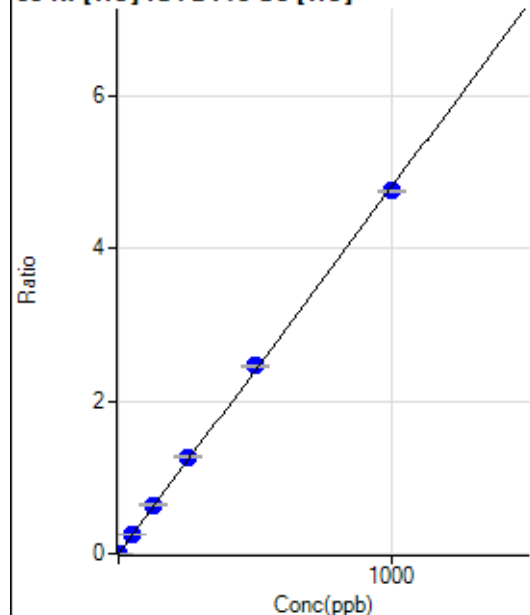
$$R = 0.9999$$

$$DL = 0.007394$$

$$BEC = 0.008918$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	147.78	0.0006	P	20.0
2	☐	1.000	1.135	1396.76	0.0061	P	11.0
3	☐	50.000	54.503	56581.01	0.2621	P	0.6
4	☐	125.000	133.229	126490.00	0.6398	P	1.1
5	☐	250.000	263.116	220660.42	1.2630	P	1.7
6	☐	500.000	511.425	415949.98	2.4543	P	0.8
7	☐	1000.000	989.755	794969.17	4.7491	P	0.7
8	☐			28570.25	0.1393	P	0.8

$$y = 0.0048 * x + 6.4827E-004$$

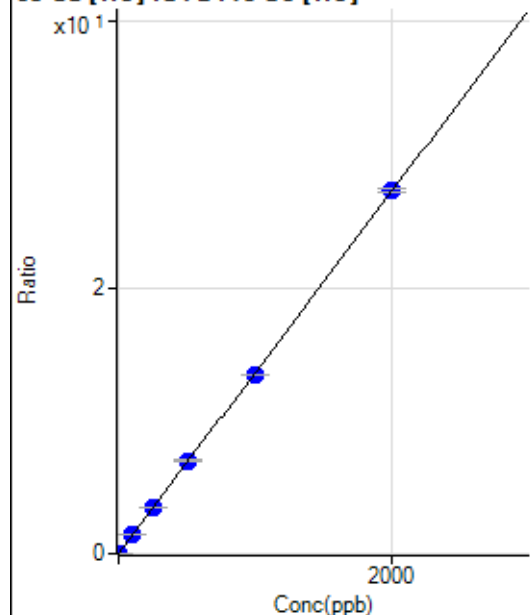
$$R = 0.9998$$

$$DL = 0.08119$$

$$BEC = 0.1351$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	600.02	0.0026	P	6.0
2	☐	2.000	1.981	6778.35	0.0296	P	1.6
3	☐	100.000	105.226	309498.21	1.4339	P	1.1
4	☐	250.000	257.687	693440.35	3.5075	P	0.3
5	☐	500.000	510.833	1214369.86	6.9507	P	1.8
6	☐	1000.000	983.791	2268224.71	13.3836	P	0.1
7	☐	2000.000	2004.174	4563300.00	27.2622	P	1.2
8	☐			9427.62	0.0459	P	3.7

$$y = 0.0136 * x + 0.0026$$

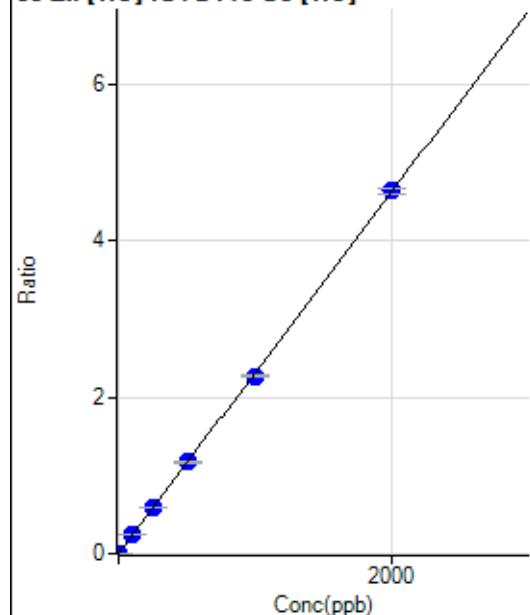
$$R = 0.9999$$

$$DL = 0.03457$$

$$BEC = 0.1937$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	167.78	0.0007	P	26.2
2	☐	2.000	2.180	1323.41	0.0058	P	3.1
3	☐	100.000	102.243	51152.67	0.2370	P	1.3
4	☐	250.000	252.330	115408.28	0.5838	P	1.1
5	☐	500.000	505.965	204387.93	1.1698	P	1.5
6	☐	1000.000	982.763	384977.65	2.2715	P	0.6
7	☐	2000.000	2006.724	776247.79	4.6375	P	1.3
8	☐			10414.95	0.0508	P	1.4

$$y = 0.0023 * x + 7.3695E-004$$

$$R = 0.9999$$

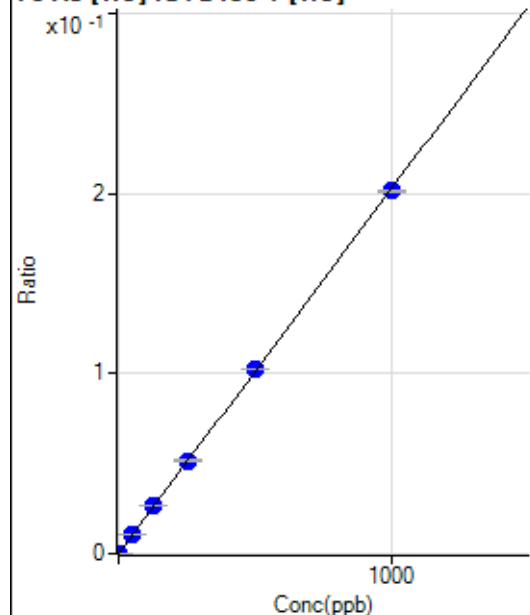
$$DL = 0.2511$$

$$BEC = 0.3189$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4.94	0.0000	P	79.0
2	☐	1.000	0.896	228.40	0.0002	P	5.7
3	☐	50.000	53.756	12665.48	0.0109	P	1.5
4	☐	125.000	130.825	28338.06	0.0265	P	0.8
5	☐	250.000	254.654	49630.56	0.0516	P	1.1
6	☐	500.000	507.567	95609.59	0.1029	P	0.1
7	☐	1000.000	994.137	183940.11	0.2016	P	0.6
8	☐			324.08	0.0003	P	4.6

$$y = 2.0277\text{E-}004 * x + 4.0756\text{E-}006$$

$$R = 0.9999$$

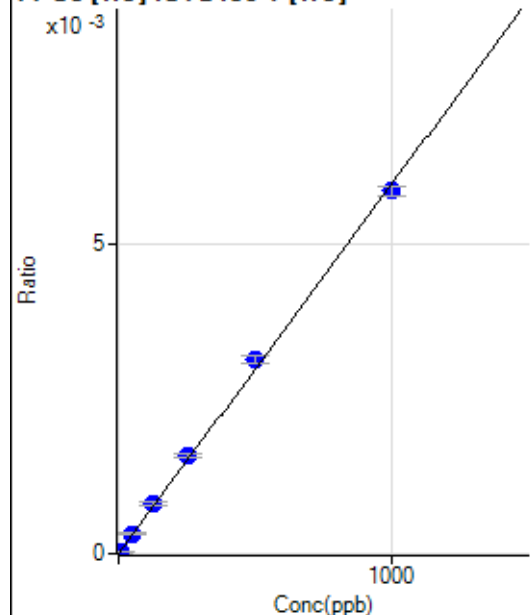
$$DL = 0.04762$$

$$BEC = 0.0201$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1.11	0.0000	P	173.2
2	☐	5.000	6.660	50.00	0.0000	P	11.8
3	☐	50.000	53.201	370.01	0.0003	P	12.2
4	☐	125.000	133.893	854.49	0.0008	P	6.4
5	☐	250.000	265.651	1524.55	0.0016	P	4.4
6	☐	500.000	524.432	2908.12	0.0031	P	4.0
7	☐	1000.000	982.591	5351.07	0.0059	P	2.6
8	☐			3.33	0.0000	P	1.4

$$y = 5.9676\text{E-}006 * x + 9.0772\text{E-}007$$

$$R = 0.9994$$

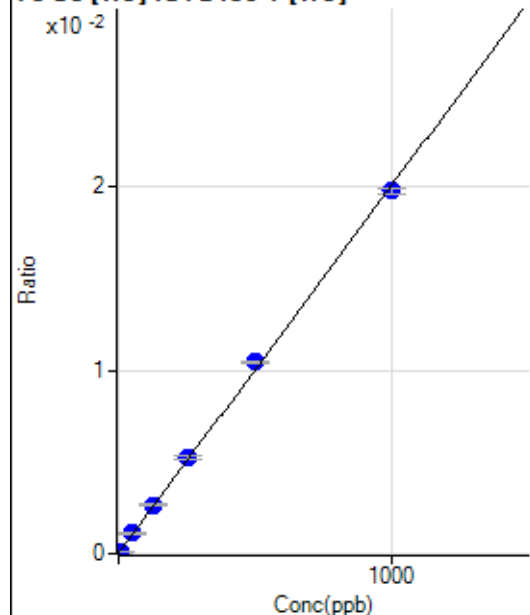
$$DL = 0.7904$$

$$BEC = 0.1521$$

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	19.75	0.0000	P	45.3
2	☐	5.000	5.589	158.03	0.0001	P	3.4
3	☐	50.000	54.903	1298.83	0.0011	P	4.2
4	☐	125.000	132.465	2857.10	0.0027	P	2.6
5	☐	250.000	261.343	5057.09	0.0053	P	3.5
6	☐	500.000	520.073	9711.95	0.0105	P	0.6
7	☐	1000.000	985.947	18071.84	0.0198	P	1.3
8	☐			20.37	0.0000	P	48.6

$$y = 2.0072\text{E-}005 * x + 1.6277\text{E-}005$$

$$R = 0.9996$$

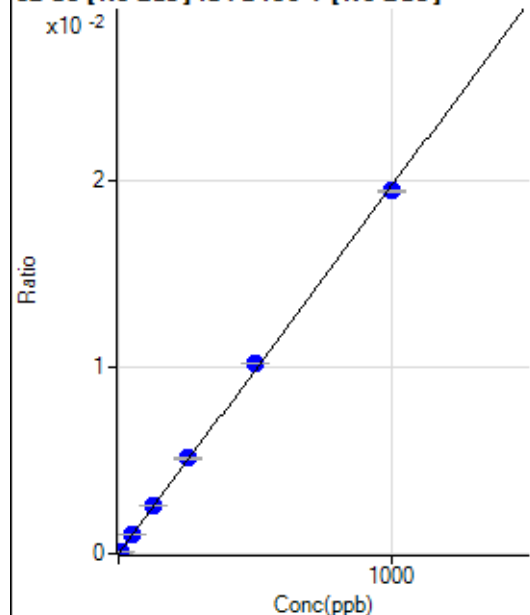
$$DL = 1.101$$

$$BEC = 0.8109$$

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	-1.38	0.0000	P	-9423.
2	☐	5.000	5.206	1051.32	0.0001	P	8.2
3	☐	50.000	53.632	10538.54	0.0011	P	1.1
4	☐	125.000	131.669	24383.31	0.0026	P	0.6
5	☐	250.000	259.929	43527.98	0.0051	P	0.7
6	☐	500.000	517.938	82741.20	0.0102	P	0.5
7	☐	1000.000	987.533	154895.02	0.0194	P	0.3
8	☐			-111.56	0.0000	P	-110.6

$$y = 1.9671\text{E-}005 * x - 1.8114\text{E-}007$$

$$R = 0.9997$$

$$DL = 2.603$$

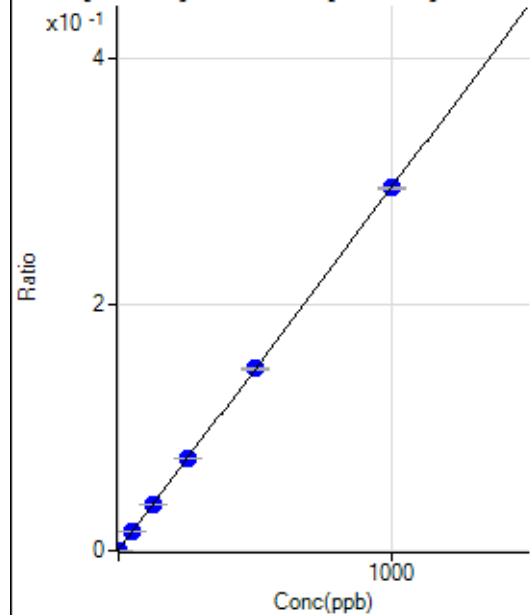
$$BEC = -0.009209$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			2043.51		P	8.3
2	☐			2023.51		P	4.8
3	☐			1900.16		P	5.0
4	☐			1786.80		P	3.2
5	☐			1745.69		P	3.2
6	☐			1595.67		P	4.2
7	☐			1490.10		P	3.4
8	☐			1811.26		P	4.8

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	3445.01	0.0003	P	3.9
2	☐	1.000	0.878	6171.06	0.0006	P	1.8
3	☐	50.000	50.435	151795.99	0.0152	P	0.9
4	☐	125.000	127.501	356699.63	0.0379	P	0.5
5	☐	250.000	252.205	635271.14	0.0746	P	0.9
6	☐	500.000	500.728	1200219.42	0.1478	P	1.3
7	☐	1000.000	998.750	2347872.93	0.2945	P	0.7
8	☐			12961.95	0.0015	P	2.8

$$y = 2.9448E-004 * x + 3.4143E-004$$

$$R = 1.0000$$

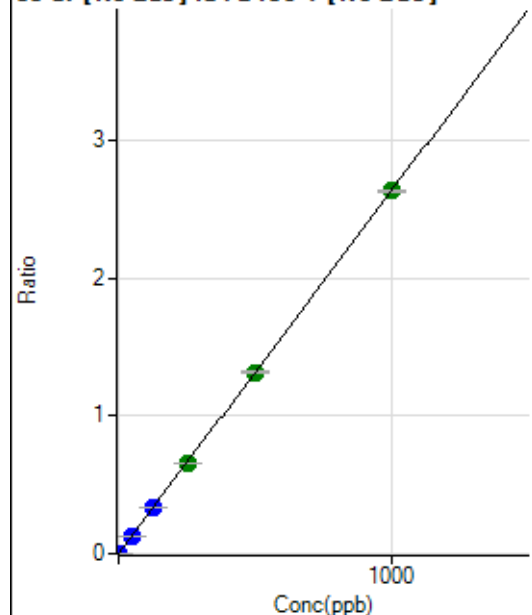
$$DL = 0.1341$$

$$BEC = 1.159$$

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	77.78	0.0000	P	22.0
2	☐	1.000	0.992	26926.10	0.0026	P	3.6
3	☐	50.000	50.023	1315285.17	0.1316	P	0.4
4	☐	125.000	125.429	3107423.68	0.3301	P	0.5
5	☐	250.000	250.729	5617352.47	0.6598	A	0.5
6	☐	500.000	500.229	10689992.95	1.3164	A	0.8
7	☐	1000.000	999.648	20975389.01	2.6306	A	0.5
8	☐			90423.61	0.0106	P	0.7

$$y = 0.0026 * x + 7.7042E-006$$

$$R = 1.0000$$

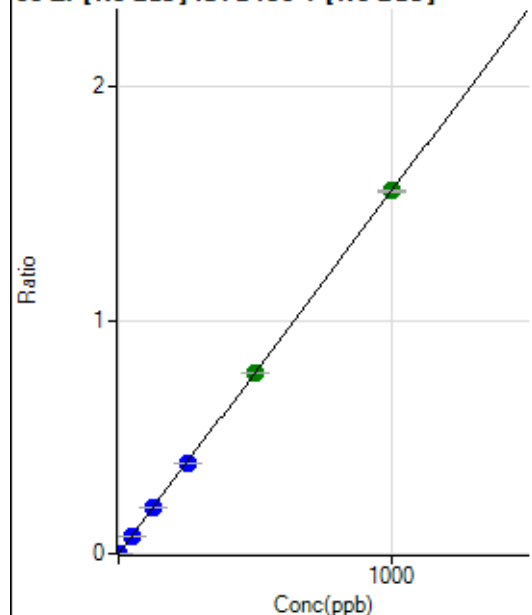
$$DL = 0.001931$$

$$BEC = 0.002928$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	886.17	0.0001	P	9.7
2	☐	1.000	0.873	14852.71	0.0014	P	1.1
3	☐	50.000	49.874	775431.40	0.0776	P	0.3
4	☐	125.000	125.424	1836242.84	0.1950	P	0.7
5	☐	250.000	247.810	3280207.56	0.3853	P	0.2
6	☐	500.000	500.157	6314321.06	0.7775	A	0.3
7	☐	1000.000	1000.422	12400072.32	1.5551	A	0.7
8	☐			3859.01	0.0005	P	5.4

$$y = 0.0016 * x + 8.7840E-005$$

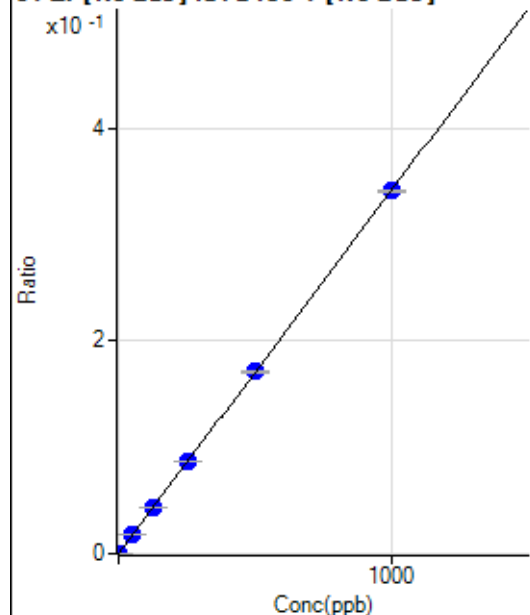
$$R = 1.0000$$

$$DL = 0.01642$$

$$BEC = 0.05651$$

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	216.68	0.0000	P	19.2
2	☐	1.000	0.887	3339.44	0.0003	P	5.3
3	☐	50.000	51.009	174452.54	0.0175	P	0.4
4	☐	125.000	126.903	408651.90	0.0434	P	0.3
5	☐	250.000	253.488	737983.81	0.0867	P	0.7
6	☐	500.000	500.558	1389911.20	0.1712	P	0.8
7	☐	1000.000	998.561	2722295.09	0.3414	P	0.5
8	☐			736.16	0.0001	P	6.9

$$y = 3.4188\text{E-}004 * x + 2.1454\text{E-}005$$

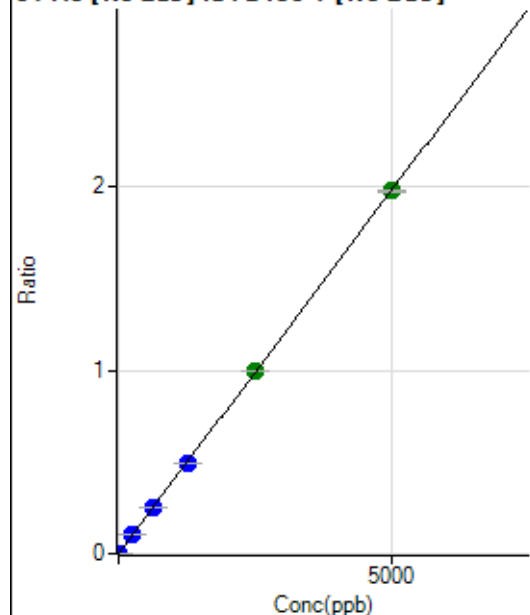
$$R = 1.0000$$

$$DL = 0.03611$$

$$BEC = 0.06275$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	383.35	0.0000	P	4.0
2	☐	5.000	4.660	19369.35	0.0019	P	1.8
3	☐	250.000	253.860	1004793.93	0.1006	P	0.4
4	☐	625.000	634.374	2365468.91	0.2513	P	0.2
5	☐	1250.000	1250.511	4216342.89	0.4953	P	0.6
6	☐	2500.000	2507.139	8063491.07	0.9929	A	0.3
7	☐	5000.000	4994.938	15772670.32	1.9781	A	0.5
8	☐			13348.39	0.0016	P	1.3

$$y = 3.9601\text{E-}004 * x + 3.7996\text{E-}005$$

$$R = 1.0000$$

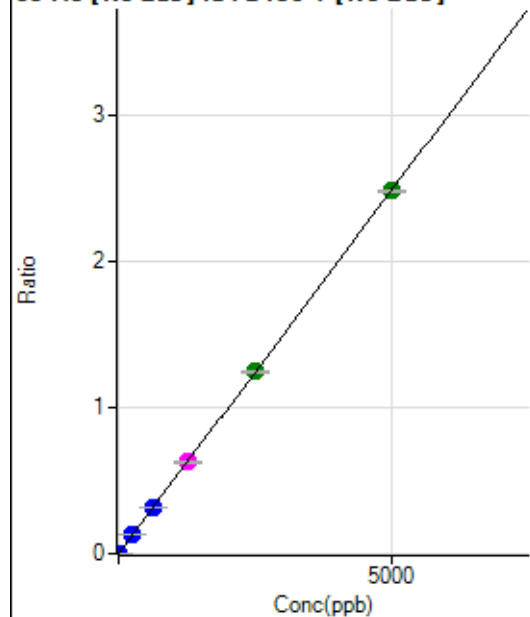
$$DL = 0.01151$$

$$BEC = 0.09595$$

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	69.45	0.0000	P	25.6
2	☐	5.000	4.972	25437.41	0.0025	P	1.6
3	☐	250.000	254.665	1262316.61	0.1263	P	0.3
4	☐	625.000	637.135	2975838.80	0.3161	P	0.7
5	☐	1250.000	1258.810	5316802.55	0.6245	M	0.9
6	☐	2500.000	2504.740	10091198.40	1.2426	A	0.4
7	☐	5000.000	4993.677	19753216.41	2.4774	A	0.8
8	☐			21678.45	0.0025	P	3.2

$$y = 4.9610E-004 * x + 6.8918E-006$$

$$R = 1.0000$$

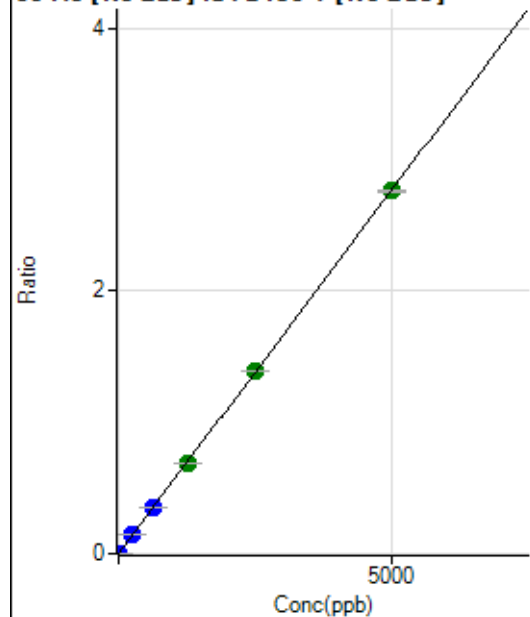
$$DL = 0.01069$$

$$BEC = 0.01389$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	144.45	0.0000	P	18.3
2	☐	5.000	4.820	27552.39	0.0027	P	1.0
3	☐	250.000	252.323	1393924.76	0.1395	P	0.7
4	☐	625.000	631.205	3285557.15	0.3490	P	0.5
5	☐	1250.000	1254.091	5903200.00	0.6934	A	0.4
6	☐	2500.000	2509.015	11265404.16	1.3872	A	0.2
7	☐	5000.000	4993.578	22013906.57	2.7608	A	0.4
8	☐			22980.37	0.0027	P	1.8

$$y = 5.5287E-004 * x + 1.4330E-005$$

$$R = 1.0000$$

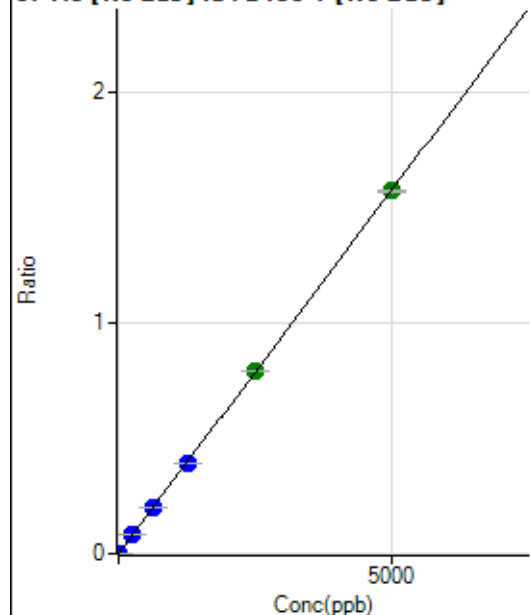
$$DL = 0.01426$$

$$BEC = 0.02592$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	61.11	0.0000	P	68.2
2	☐	5.000	4.887	15867.78	0.0015	P	3.2
3	☐	250.000	252.265	792676.47	0.0793	P	0.3
4	☐	625.000	631.652	1870141.49	0.1986	P	1.0
5	☐	1250.000	1244.853	3333046.23	0.3915	P	0.4
6	☐	2500.000	2514.547	6422036.82	0.7908	A	0.1
7	☐	5000.000	4993.069	12520258.01	1.5702	A	0.8
8	☐			13312.27	0.0016	P	6.1

$$y = 3.1448\text{E-}004 * x + 6.0445\text{E-}006$$

$$R = 1.0000$$

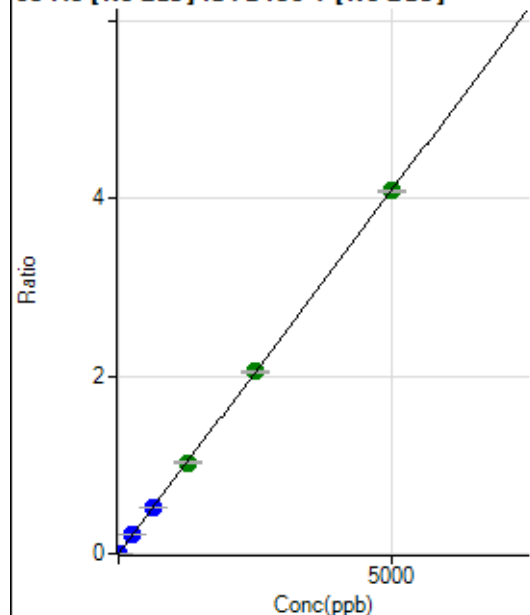
$$DL = 0.0393$$

$$BEC = 0.01922$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	102.78	0.0000	P	8.8
2	☐	5.000	4.878	41141.14	0.0040	P	1.1
3	☐	250.000	252.967	2067348.16	0.2069	P	0.5
4	☐	625.000	630.556	4855663.43	0.5158	P	0.3
5	☐	1250.000	1256.416	8749314.00	1.0277	A	0.4
6	☐	2500.000	2503.379	16628951.59	2.0476	A	0.3
7	☐	5000.000	4995.864	32582966.35	4.0863	A	0.4
8	☐			33958.08	0.0040	P	2.1

$$y = 8.1794\text{E-}004 * x + 1.0183\text{E-}005$$

$$R = 1.0000$$

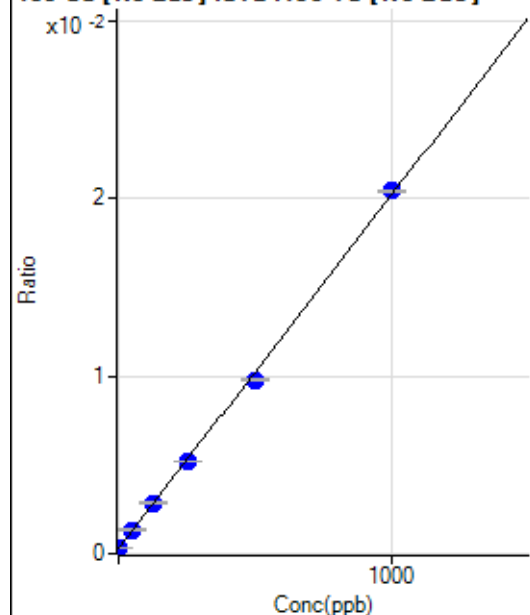
$$DL = 0.003302$$

$$BEC = 0.01245$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4770.47	0.0003	P	1.9
2	☐	1.000	1.572	5381.84	0.0003	P	2.0
3	☐	50.000	53.723	22897.04	0.0013	P	0.7
4	☐	125.000	129.540	46873.09	0.0029	P	1.8
5	☐	250.000	247.655	80467.58	0.0052	P	1.1
6	☐	500.000	476.859	147791.00	0.0098	P	1.0
7	☐	1000.000	1011.402	304694.82	0.0204	P	0.8
8	☐			4386.97	0.0003	P	3.4

$$y = 1.9890\text{E-}005 * x + 2.8068\text{E-}004$$

$$R = 0.9996$$

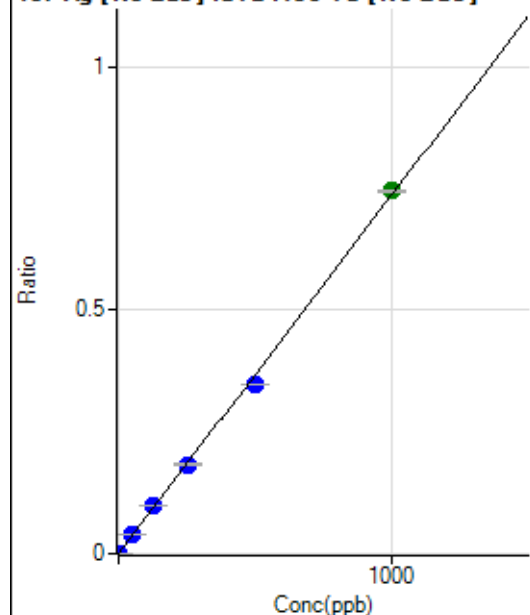
$$DL = 0.8033$$

$$BEC = 14.11$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	108.34	0.0000	P	23.6
2	☐	1.000	1.162	14877.78	0.0009	P	0.8
3	☐	50.000	55.236	690356.45	0.0407	P	1.4
4	☐	125.000	133.114	1608214.92	0.0980	P	1.1
5	☐	250.000	249.195	2836358.18	0.1835	P	0.5
6	☐	500.000	473.528	5277697.95	0.3487	P	0.3
7	☐	1000.000	1012.161	11134271.52	0.7453	A	0.2
8	☐			1847.42	0.0001	P	13.0

$$y = 7.3639\text{E-}004 * x + 6.3795\text{E-}006$$

$$R = 0.9994$$

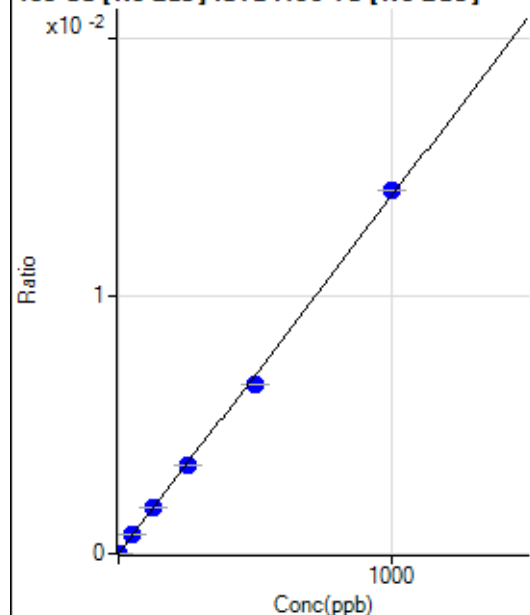
$$DL = 0.006142$$

$$BEC = 0.008663$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	15.28	0.0000	P	129.3
2	☐	1.000	1.019	259.73	0.0000	P	9.3
3	☐	50.000	53.348	12586.36	0.0007	P	1.6
4	☐	125.000	128.170	29210.98	0.0018	P	0.9
5	☐	250.000	245.908	52788.44	0.0034	P	0.7
6	☐	500.000	471.565	99108.67	0.0065	P	0.2
7	☐	1000.000	1014.677	210468.17	0.0141	P	0.1
8	☐			62.50	0.0000	P	8.0

$$y = 1.3884\text{E-}005 * x + 9.0268\text{E-}007$$

$$R = 0.9994$$

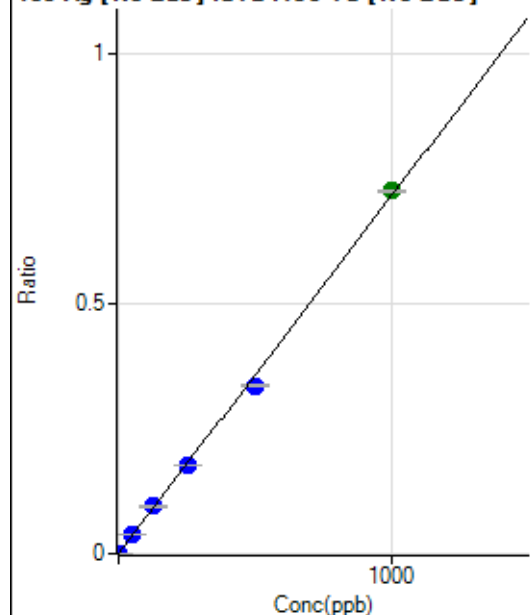
$$DL = 0.2521$$

$$BEC = 0.06501$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	61.11	0.0000	P	20.5
2	☐	1.000	1.171	14524.68	0.0008	P	1.5
3	☐	50.000	54.944	667515.46	0.0393	P	1.1
4	☐	125.000	132.253	1553202.43	0.0947	P	1.2
5	☐	250.000	249.334	2758879.16	0.1785	P	0.4
6	☐	500.000	470.021	5092306.45	0.3365	P	0.7
7	☐	1000.000	1014.002	10843390.61	0.7259	A	0.2
8	☐			1825.20	0.0001	P	4.0

$$y = 7.1585\text{E-}004 * x + 3.5942\text{E-}006$$

$$R = 0.9993$$

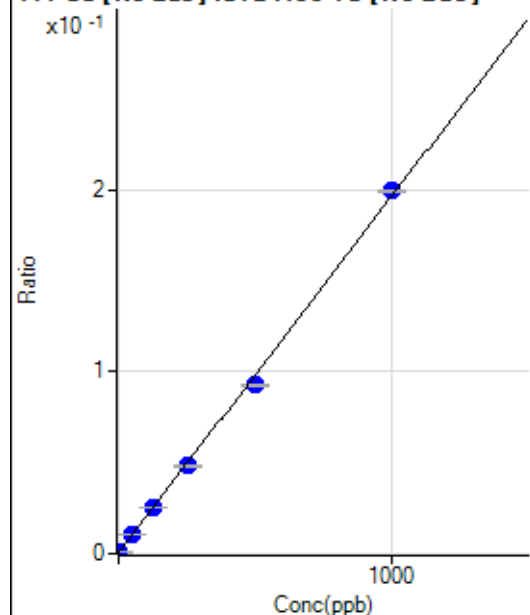
$$DL = 0.003089$$

$$BEC = 0.005021$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	7164.46	0.0004	P	1.6
2	☐	1.000	1.103	10996.91	0.0006	P	1.4
3	☐	50.000	52.097	180229.46	0.0106	P	0.8
4	☐	125.000	126.796	414133.85	0.0252	P	1.1
5	☐	250.000	243.947	744648.24	0.0482	P	0.6
6	☐	500.000	470.354	1399915.34	0.0925	P	1.1
7	☐	1000.000	1016.006	2977502.25	0.1993	P	0.3
8	☐			6983.94	0.0005	P	2.8

$$y = 1.9577\text{E-}004 * x + 4.2153\text{E-}004$$

$$R = 0.9993$$

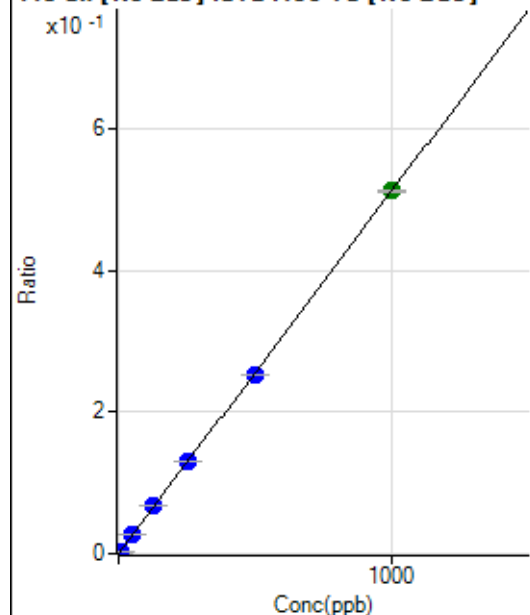
$$DL = 0.1005$$

$$BEC = 2.153$$

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	961.19	0.0001	P	11.3
2	☐	5.000	5.278	47590.24	0.0028	P	0.2
3	☐	50.000	53.403	464900.25	0.0274	P	1.4
4	☐	125.000	131.736	1107329.80	0.0675	P	0.6
5	☐	250.000	253.301	2005130.99	0.1297	P	0.8
6	☐	500.000	494.248	3830333.90	0.2531	P	0.3
7	☐	1000.000	1001.037	7656257.64	0.5125	A	0.3
8	☐			4020.19	0.0003	P	2.9

$$y = 5.1194\text{E-}004 * x + 5.6537\text{E-}005$$

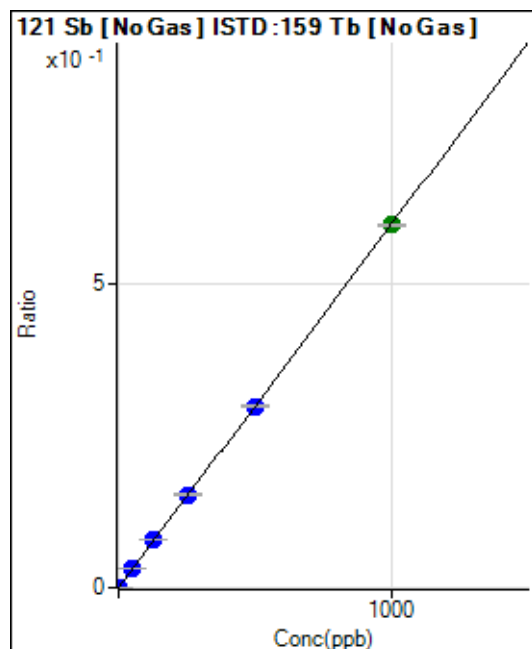
$$R = 0.9999$$

$$DL = 0.03736$$

$$BEC = 0.1104$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	155.56	0.0000	P	15.0
2	☐	2.000	1.967	20435.03	0.0012	P	0.6
3	☐	50.000	53.264	540316.37	0.0318	P	1.0
4	☐	125.000	131.704	1291327.62	0.0787	P	1.0
5	☐	250.000	255.995	2364586.47	0.1530	P	1.1
6	☐	500.000	499.092	4514030.00	0.2983	P	0.9
7	☐	1000.000	997.954	8909002.46	0.5964	A	0.2
8	☐			13626.62	0.0009	P	5.9

$$y = 5.9760\text{E-}004 * x + 9.1484\text{E-}006$$

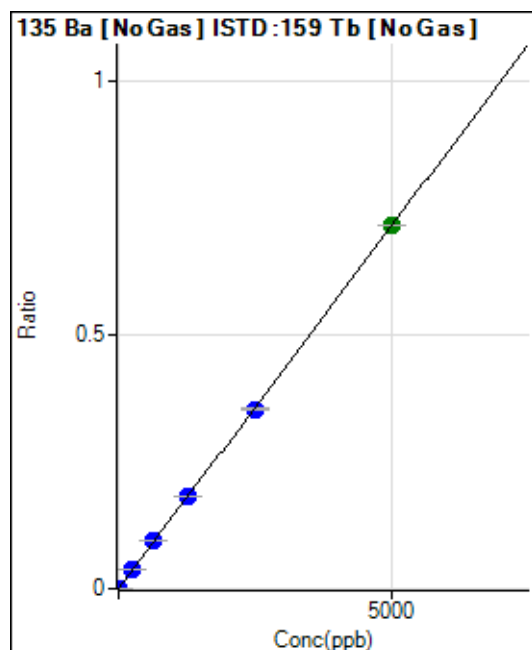
$$R = 1.0000$$

$$DL = 0.006899$$

$$BEC = 0.01531$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	97.23	0.0000	P	17.5
2	☐	10.000	10.820	26779.40	0.0016	P	0.8
3	☐	250.000	267.517	649024.56	0.0382	P	1.0
4	☐	625.000	654.193	1534171.84	0.0935	P	1.3
5	☐	1250.000	1275.263	2817658.33	0.1823	P	0.2
6	☐	2500.000	2477.273	5359400.73	0.3541	P	0.4
7	☐	5000.000	5000.521	10677819.86	0.7148	A	0.1
8	☐			1669.62	0.0001	P	4.7

$$y = 1.4294\text{E-}004 * x + 5.7181\text{E-}006$$

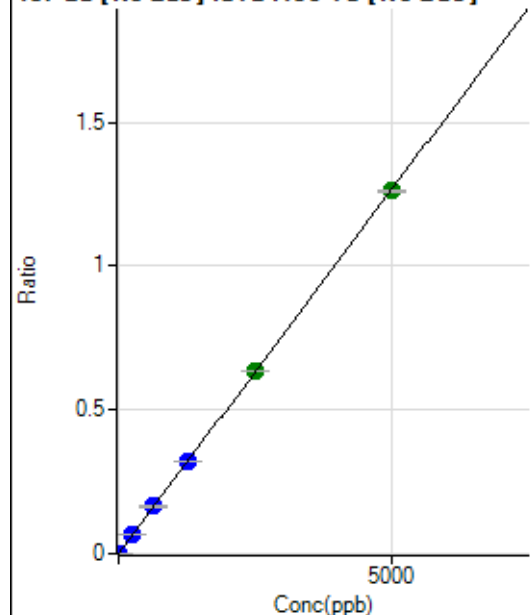
$$R = 1.0000$$

$$DL = 0.02099$$

$$BEC = 0.04$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	33.33	0.0000	P	24.5
2	☐	10.000	10.450	45639.74	0.0026	P	0.8
3	☐	250.000	266.215	1142900.23	0.0673	P	0.4
4	☐	625.000	649.005	2693381.59	0.1642	P	1.4
5	☐	1250.000	1262.601	4936771.29	0.3194	P	0.9
6	☐	2500.000	2515.583	9631282.16	0.6364	A	0.4
7	☐	5000.000	4985.246	18839096.60	1.2611	A	0.3
8	☐			3092.14	0.0002	P	8.3

$$y = 2.5297E-004 * x + 1.9593E-006$$

$$R = 1.0000$$

$$DL = 0.00569$$

$$BEC = 0.007745$$

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
2	☐			11.11		P	91.7
3	☐			73.34		P	15.7
4	☐			173.34		P	21.4
5	☐			244.46		P	19.2
6	☐			462.25		P	12.1
7	☐			926.73		P	10.6
8	☐			135.56		P	23.2

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	43.4
2	☐			10.00		P	57.7
3	☐			7.78		P	65.5
4	☐			12.22		P	56.8
5	☐			30.00		P	38.5
6	☐			37.78		P	18.4
7	☐			67.78		P	15.0
8	☐			42.22		P	31.9

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			25.00		P	33.3
2	☐			25.00		P	0.0
3	☐			52.78		P	39.7
4	☐			47.22		P	10.2
5	☐			88.89		P	47.2
6	☐			102.78		P	4.7
7	☐			200.01		P	18.2
8	☐			50.00		P	44.1

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			18.89		P	36.7
2	☐			12.22		P	41.7
3	☐			21.11		P	18.2
4	☐			51.11		P	13.6
5	☐			60.00		P	9.6
6	☐			93.33		P	22.3
7	☐			153.34		P	28.3
8	☐			40.00		P	22.0

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			86.12		P	34.0
2	☐			72.23		P	46.6
3	☐			105.56		P	16.4
4	☐			86.12		P	20.1
5	☐			108.34		P	13.3
6	☐			130.56		P	3.7
7	☐			122.23		P	19.7
8	☐			125.01		P	29.1

160 Gd [He] No available calibration points

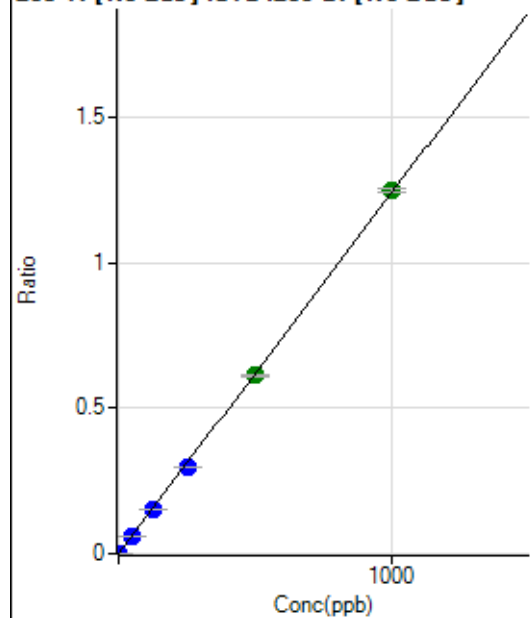
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			158.89		P	19.9
2	☐			163.34		P	12.7
3	☐			163.34		P	6.1
4	☐			135.56		P	17.3
5	☐			143.34		P	12.3
6	☐			148.89		P	25.9
7	☐			144.45		P	10.4
8	☐			158.89		P	8.7

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			66.67		P	50.0
2	☐			69.45		P	42.1
3	☐			66.67		P	33.1
4	☐			91.67		P	32.8
5	☐			58.34		P	28.6
6	☐			69.44		P	48.5
7	☐			105.56		P	12.1
8	☐			86.12		P	24.4

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			57.78		P	43.7
2	☐			51.11		P	7.5
3	☐			53.33		P	22.5
4	☐			61.11		P	12.6
5	☐			52.22		P	9.7
6	☐			48.89		P	33.6
7	☐			76.67		P	17.4
8	☐			53.34		P	28.6

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	591.70	0.0000	P	12.8
2	☐	1.000	0.947	15209.24	0.0012	P	1.3
3	☐	50.000	48.362	735520.76	0.0599	P	0.6
4	☐	125.000	121.862	1780525.71	0.1510	P	0.2
5	☐	250.000	241.976	3363127.59	0.2997	P	0.1
6	☐	500.000	493.626	6635442.42	0.6114	A	0.5
7	☐	1000.000	1005.668	12975129.72	1.2456	A	1.0
8	☐			3900.73	0.0004	P	8.5

$$y = 0.0012 * x + 4.8279E-005$$

$$R = 0.9999$$

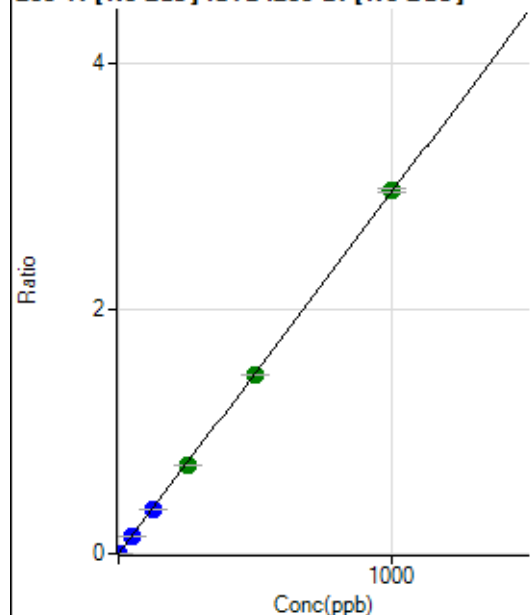
$$DL = 0.01494$$

$$BEC = 0.03898$$

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	1002.86	0.0001	P	6.4
2	☐	1.000	0.942	35612.58	0.0029	P	2.0
3	☐	50.000	49.195	1780482.94	0.1451	P	0.7
4	☐	125.000	122.582	4262871.32	0.3615	P	0.5
5	☐	250.000	245.720	8128471.62	0.7245	A	0.6
6	☐	500.000	494.796	15832025.18	1.4588	A	0.0
7	☐	1000.000	1004.015	30833807.28	2.9601	A	1.1
8	☐			8575.37	0.0009	P	10.0

$$y = 0.0029 * x + 8.1817E-005$$

$$R = 1.0000$$

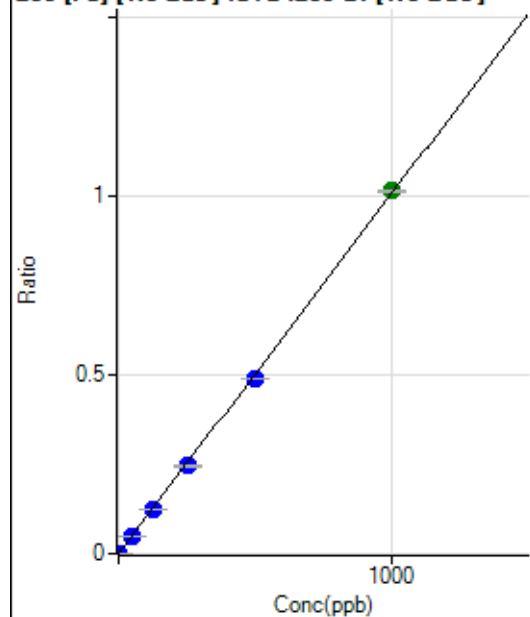
$$DL = 0.005357$$

$$BEC = 0.02775$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	985.25	0.0001	P	11.6
2	☐	1.000	0.962	13040.03	0.0010	P	2.0
3	☐	50.000	49.389	610288.71	0.0497	P	0.5
4	☐	125.000	123.288	1462819.49	0.1240	P	0.9
5	☐	250.000	243.983	2753181.40	0.2454	P	0.9
6	☐	500.000	486.781	5312545.89	0.4895	P	0.3
7	☐	1000.000	1008.359	10562107.29	1.0139	A	0.5
8	☐			10104.09	0.0010	P	2.2

$$y = 0.0010 * x + 8.0391E-005$$

$$R = 0.9998$$

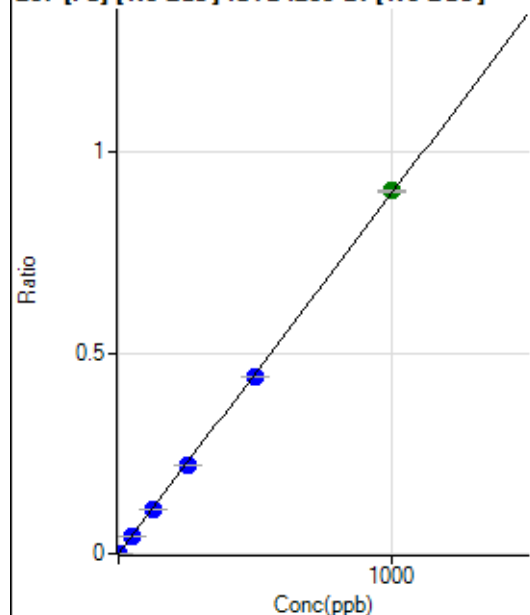
$$DL = 0.02784$$

$$BEC = 0.07995$$

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	987.11	0.0001	P	7.5
2	☐	1.000	0.931	11410.74	0.0009	P	1.5
3	☐	50.000	49.094	541889.14	0.0442	P	0.2
4	☐	125.000	122.626	1299522.67	0.1102	P	0.7
5	☐	250.000	244.149	2460729.80	0.2193	P	0.2
6	☐	500.000	489.217	4768380.37	0.4394	P	0.3
7	☐	1000.000	1007.197	9422143.04	0.9045	A	0.3
8	☐			8984.78	0.0009	P	1.6

$$y = 8.9797E-004 * x + 8.0517E-005$$

$$R = 0.9999$$

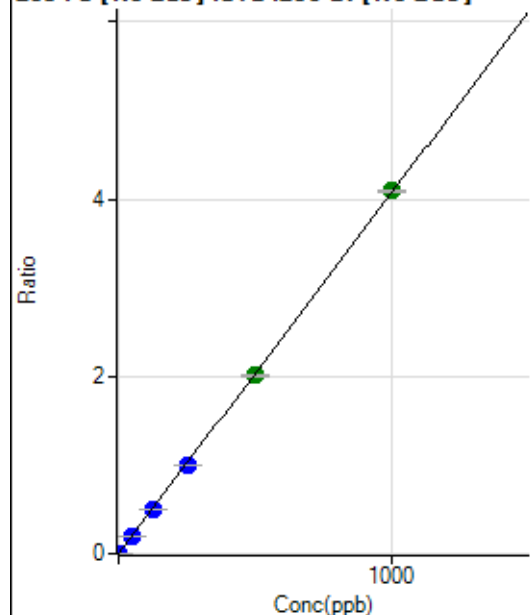
$$DL = 0.02015$$

$$BEC = 0.08967$$

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	3624.37	0.0003	P	1.3
2	☐	1.000	0.953	51978.06	0.0042	P	0.3
3	☐	50.000	49.280	2465674.15	0.2010	P	0.1
4	☐	125.000	123.117	5915551.32	0.5016	P	0.6
5	☐	250.000	244.842	11188903.29	0.9973	P	0.4
6	☐	500.000	492.792	21779695.16	2.0069	A	0.2
7	☐	1000.000	1005.165	42638030.93	4.0932	A	0.5
8	☐			39937.14	0.0041	P	1.6

$$y = 0.0041 * x + 2.9566E-004$$

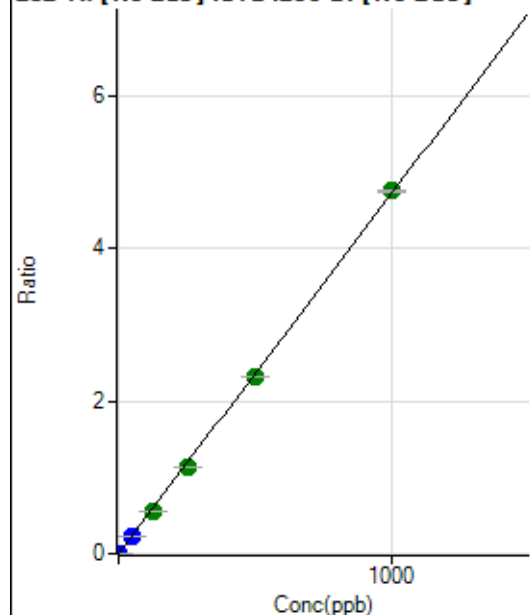
$$R = 0.9999$$

$$DL = 0.002733$$

$$BEC = 0.07261$$

Weight: <None>

Min Conc: 0

232 Th [No Gas] ISTD :209 Bi [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2783.71	0.0002	P	4.7
2	☐	1.000	0.794	49521.92	0.0040	P	3.1
3	☐	50.000	46.195	2680383.08	0.2185	P	0.2
4	☐	125.000	118.543	6606890.48	0.5602	A	0.4
5	☐	250.000	240.449	12746875.63	1.1361	A	0.5
6	☐	500.000	491.916	25221521.17	2.3241	A	0.7
7	☐	1000.000	1007.428	49578383.98	4.7594	A	0.3
8	☐			11034.60	0.0011	P	8.9

$$y = 0.0047 * x + 2.2711E-004$$

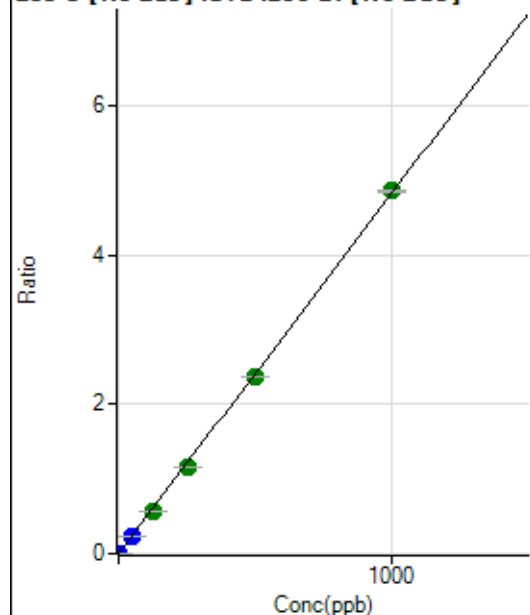
$$R = 0.9999$$

$$DL = 0.006743$$

$$BEC = 0.04807$$

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	3058.85	0.0002	P	2.7
2	☐	1.000	0.865	55033.95	0.0044	P	1.9
3	☐	50.000	46.657	2762050.35	0.2251	P	0.4
4	☐	125.000	118.843	6757572.81	0.5730	A	0.1
5	☐	250.000	240.894	13028799.60	1.1612	A	0.3
6	☐	500.000	491.007	25684583.04	2.3667	A	0.4
7	☐	1000.000	1007.710	50592680.30	4.8569	A	0.9
8	☐			7141.17	0.0007	P	10.0

$$y = 0.0048 * x + 2.4955E-004$$

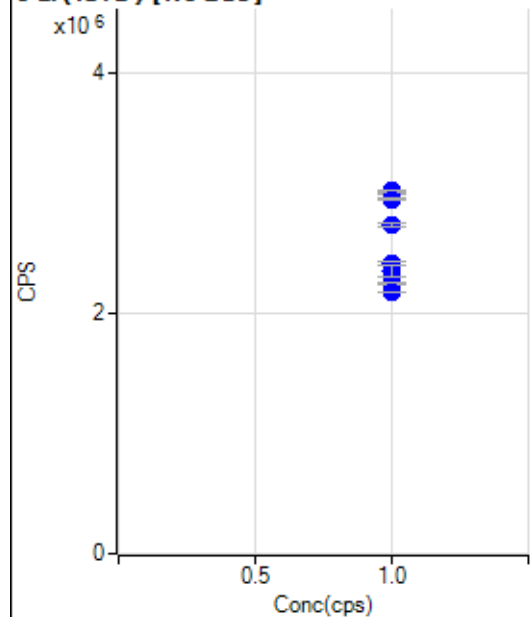
$$R = 0.9999$$

$$DL = 0.004136$$

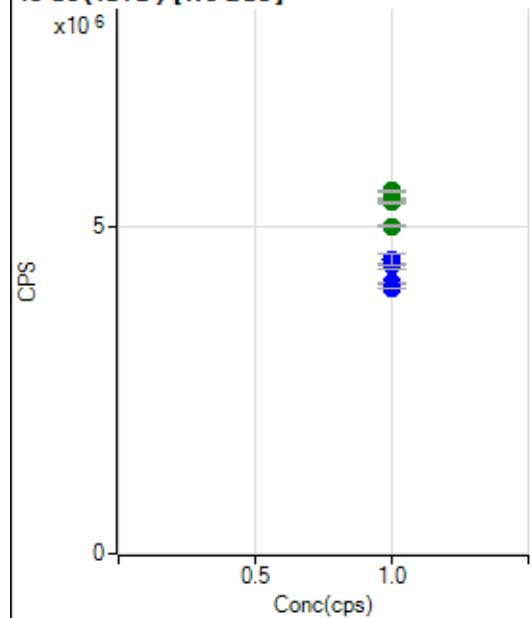
$$BEC = 0.05178$$

Weight: <None>

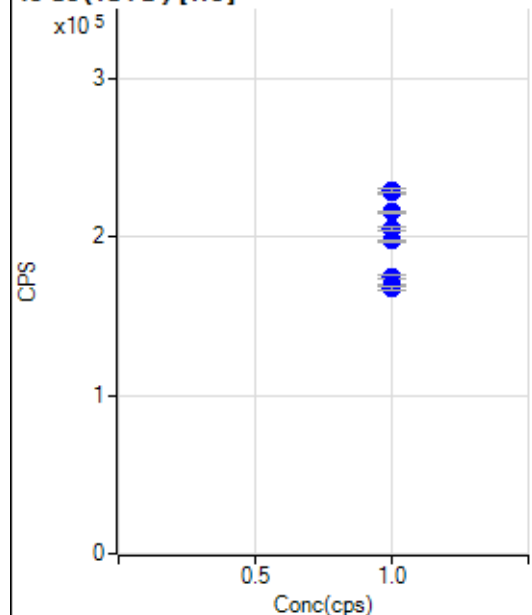
Min Conc: 0

6 Li (ISTD) [No Gas]

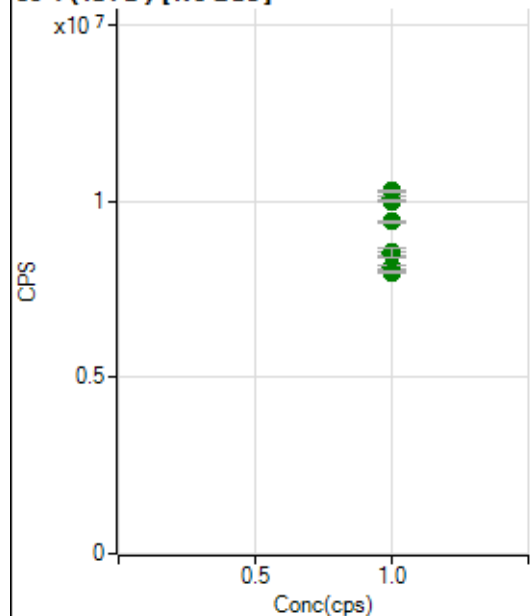
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		2998488.33		P	0.2
2	☐	1.000		3020991.88		P	0.3
3	☐	1.000		2949970.23		P	0.6
4	☐	1.000		2738575.20		P	0.7
5	☐	1.000		2417878.43		P	1.8
6	☐	1.000		2254576.81		P	0.8
7	☐	1.000		2177645.90		P	0.3
8	☐	1.000		2353655.74		P	3.5

45 Sc (ISTD) [No Gas]

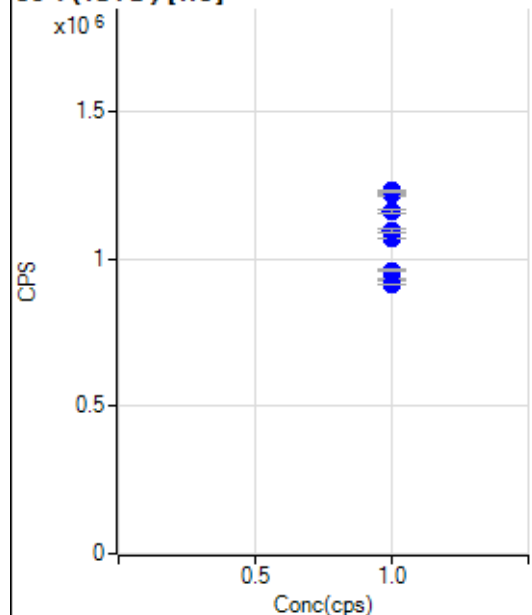
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		5430147.13		A	0.2
2	☐	1.000		5555080.25		A	0.4
3	☐	1.000		5377995.95		A	0.5
4	☐	1.000		5014725.07		A	0.9
5	☐	1.000		4403699.31		P	1.7
6	☐	1.000		4148747.23		P	0.8
7	☐	1.000		4060631.17		P	0.4
8	☐	1.000		4493528.83		P	3.8

45 Sc (ISTD) [He]

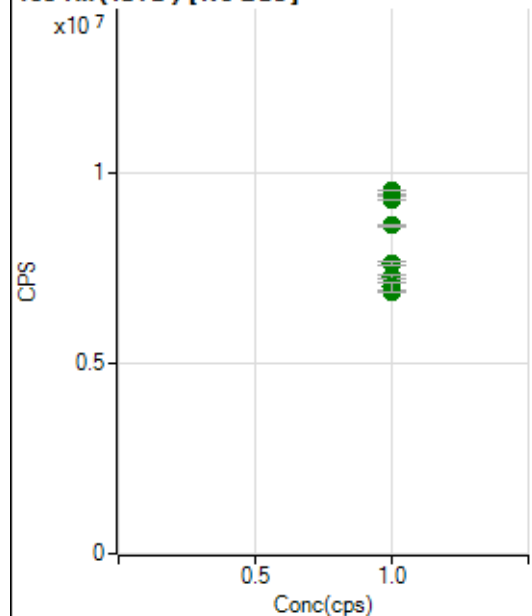
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		227800.23		P	0.7
2	☐	1.000		229186.90		P	1.0
3	☐	1.000		215844.45		P	0.4
4	☐	1.000		197702.51		P	0.7
5	☐	1.000		174733.91		P	1.0
6	☐	1.000		169477.89		P	0.2
7	☐	1.000		167400.23		P	1.1
8	☐	1.000		205184.28		P	1.2

89 Y (ISTD) [No Gas]

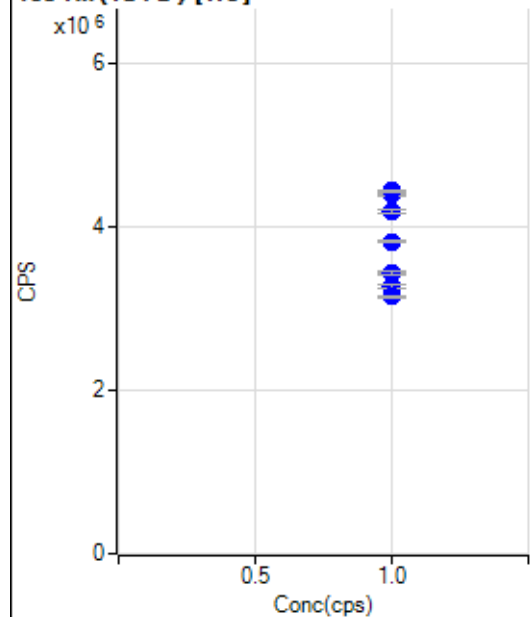
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		10090099.57		A	0.8
2	☐	1.000		10284662.07		A	0.3
3	☐	1.000		9991106.87		A	0.6
4	☐	1.000		9414431.32		A	0.7
5	☐	1.000		8513767.51		A	1.2
6	☐	1.000		8121071.96		A	0.7
7	☐	1.000		7973757.45		A	0.6
8	☐	1.000		8547178.07		A	3.2

89 Y (ISTD) [He]

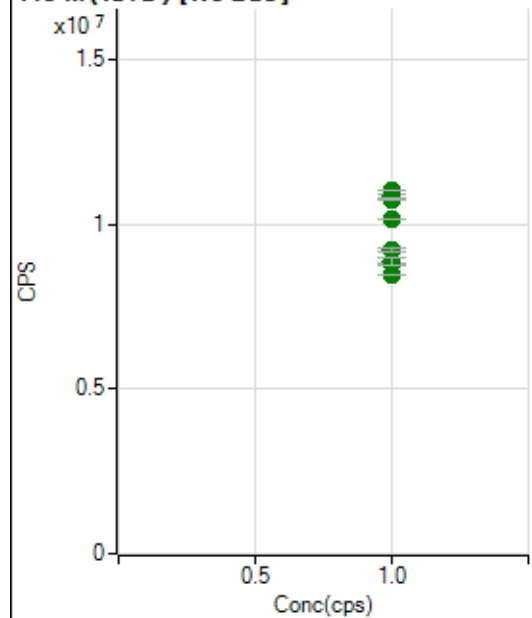
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		1216741.09		P	0.9
2	☐	1.000		1230349.10		P	0.5
3	☐	1.000		1161514.01		P	0.9
4	☐	1.000		1068084.84		P	0.3
5	☐	1.000		961117.86		P	0.5
6	☐	1.000		928947.78		P	0.8
7	☐	1.000		912489.06		P	0.6
8	☐	1.000		1097564.32		P	1.4

103 Rh (ISTD) [No Gas]

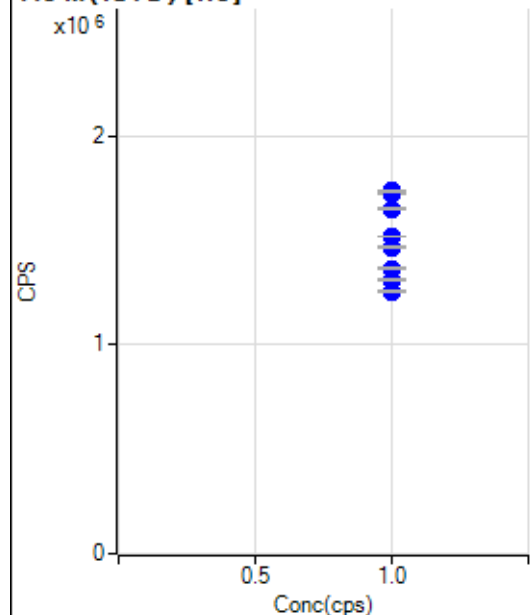
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		9422442.57		A	0.5
2	☐	1.000		9540261.59		A	0.1
3	☐	1.000		9295983.80		A	0.1
4	☐	1.000		8634933.01		A	0.6
5	☐	1.000		7653934.55		A	1.3
6	☐	1.000		7280874.90		A	1.0
7	☐	1.000		6900756.92		A	0.1
8	☐	1.000		7015361.27		A	3.2

103 Rh (ISTD) [He]

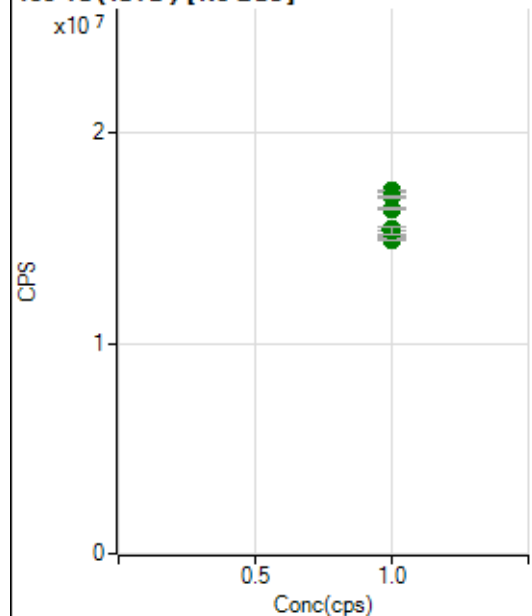
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		4387005.80		P	0.4
2	☐	1.000		4436798.26		P	0.3
3	☐	1.000		4179313.83		P	1.1
4	☐	1.000		3817709.11		P	0.7
5	☐	1.000		3426198.84		P	0.5
6	☐	1.000		3266233.04		P	1.3
7	☐	1.000		3142895.96		P	0.3
8	☐	1.000		3431996.58		P	0.9

115 In (ISTD) [No Gas]

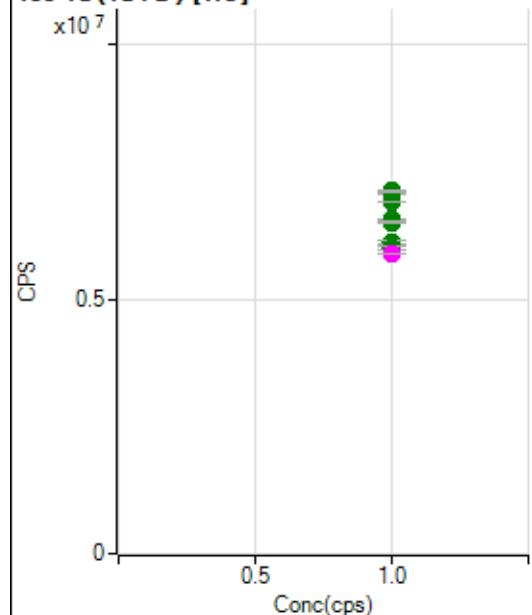
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		10853080.63		A	0.6
2	☐	1.000		11008102.74		A	0.1
3	☐	1.000		10742984.21		A	0.7
4	☐	1.000		10146562.09		A	0.5
5	☐	1.000		9221755.55		A	1.3
6	☐	1.000		8804878.58		A	0.6
7	☐	1.000		8473681.76		A	0.3
8	☐	1.000		8874777.83		A	2.8

115 In (ISTD) [He]

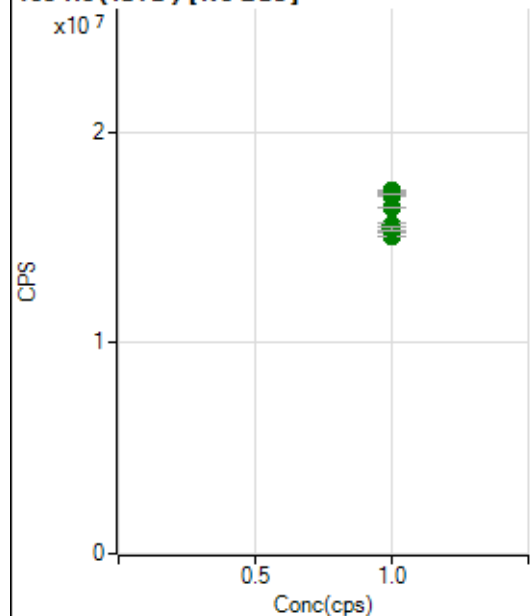
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1725711.66		P	0.7
2	☐	1.000		1737022.56		P	0.6
3	☐	1.000		1650491.72		P	0.8
4	☐	1.000		1517521.36		P	0.2
5	☐	1.000		1366289.60		P	0.3
6	☐	1.000		1309109.11		P	0.6
7	☐	1.000		1256606.06		P	0.2
8	☐	1.000		1467315.59		P	1.1

159 Tb (ISTD) [No Gas]

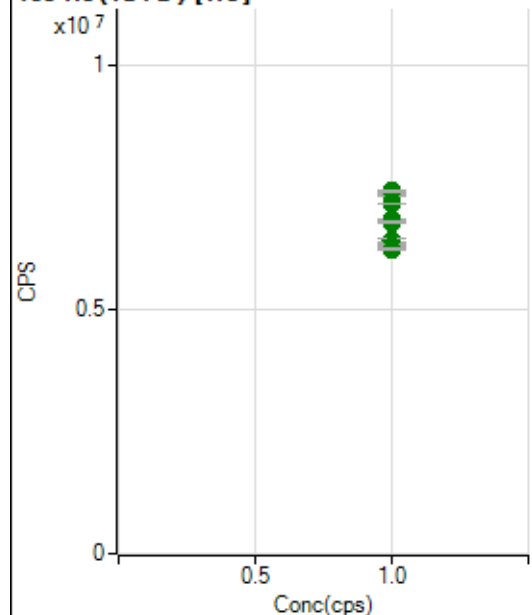
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16997476.97		A	0.6
2	☐	1.000		17251524.88		A	0.5
3	☐	1.000		16970731.97		A	0.6
4	☐	1.000		16405968.78		A	0.8
5	☐	1.000		15456747.13		A	1.3
6	☐	1.000		15135059.36		A	0.9
7	☐	1.000		14938380.19		A	0.3
8	☐	1.000		15352458.11		A	2.0

159 Tb (ISTD) [He]

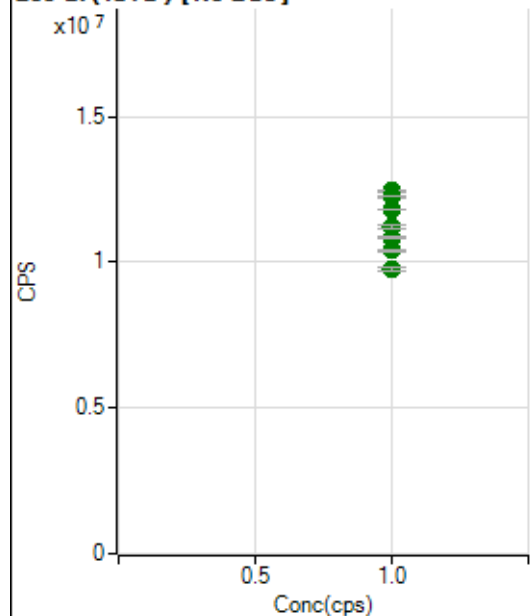
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7090701.14		A	0.5
2	☐	1.000		7124341.84		A	0.3
3	☐	1.000		6908940.32		A	0.2
4	☐	1.000		6579085.46		A	0.2
5	☐	1.000		6124385.53		A	1.0
6	☐	1.000		5997369.49		A	1.2
7	☐	1.000		5879024.43		M	0.0
8	☐	1.000		6507869.14		A	0.8

165 Ho (ISTD) [No Gas]

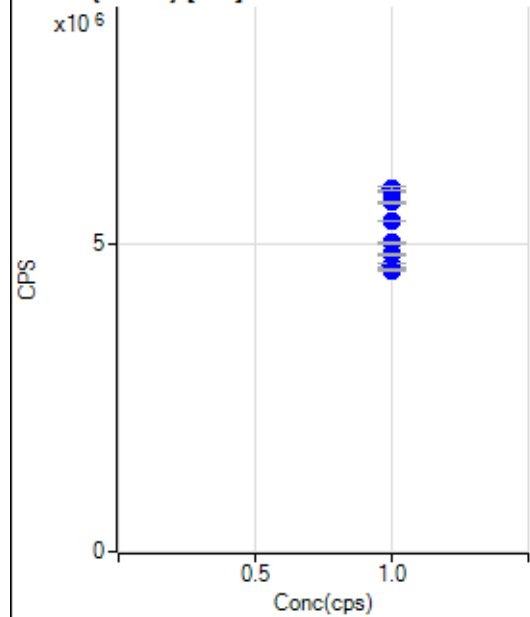
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16985702.29		A	0.3
2	☐	1.000		17223117.40		A	0.4
3	☐	1.000		17061256.11		A	0.2
4	☐	1.000		16424396.55		A	0.4
5	☐	1.000		15621222.22		A	1.2
6	☐	1.000		15324319.79		A	0.6
7	☐	1.000		15072557.97		A	0.4
8	☐	1.000		15425024.65		A	1.7

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		7333817.53		A	0.8
2	☐	1.000		7415806.07		A	0.4
3	☐	1.000		7162897.53		A	0.3
4	☐	1.000		6839778.51		A	0.1
5	☐	1.000		6396513.86		A	1.1
6	☐	1.000		6304569.70		A	0.5
7	☐	1.000		6212425.12		A	0.6
8	☐	1.000		6779106.15		A	0.8

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		12258335.37		A	0.3
2	☐	1.000		12451324.54		A	0.4
3	☐	1.000		12269581.06		A	0.4
4	☐	1.000		11793098.16		A	0.2
5	☐	1.000		11219845.94		A	1.1
6	☐	1.000		10852628.59		A	0.8
7	☐	1.000		10417020.40		A	0.7
8	☐	1.000		9791237.98		A	1.3

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		5843232.62		P	0.9
2	☐	1.000		5882642.76		P	0.9
3	☐	1.000		5664078.67		P	0.9
4	☐	1.000		5365503.12		P	0.3
5	☐	1.000		5013259.78		P	0.9
6	☐	1.000		4823930.35		P	1.0
7	☐	1.000		4654801.87		P	1.2
8	☐	1.000		4558407.64		P	0.8

US EPA Tune Check Sample Report

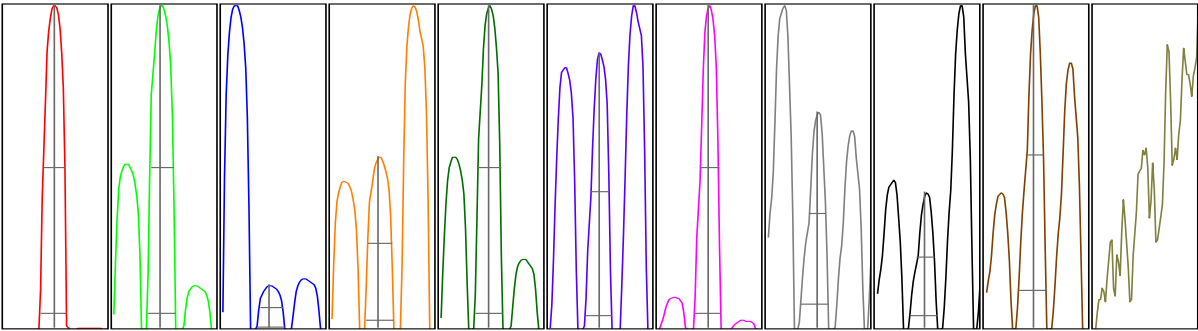
Batch Folder D:\ICP-MS Data\P71004\19-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	11551	1.41	5.00	
24	130411	1.56	5.00	
25	17530	1.46	5.00	
26	20642	1.52	5.00	
59	98324	1.41	5.00	
113	16349	1.41	5.00	
115	192794	1.69	5.00	
206	62239	0.61	5.00	
207	58474	0.48	5.00	
208	136477	0.37	5.00	
220	137	5.13		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	11761	11644	11539	11478	11332
24	133353	131310	130255	128943	128194
25	17852	17690	17554	17307	17247
26	21042	20846	20647	20409	20269
59	100325	98687	98381	97686	96539
113	16680	16405	16365	16238	16055
115	197197	194068	193366	190499	188839
206	62867	62274	61958	62148	61949
207	58935	58476	58447	58323	58190
208	137220	136768	136299	136093	136006
220	145	139	142	129	131

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	19062	9.00	8.9 - 9.1		0.776	0.900	
24	203623	23.90	23.9 - 24.1		0.828	0.900	
25	27333	24.90	24.9 - 25.1		0.808	0.900	
26	31864	25.90	25.9 - 26.1		0.833	0.900	
59	164566	58.95	58.9 - 59.1		0.816	0.900	
113	30500	113.00	112.9 - 113.1		0.769	0.900	
115	360218	115.00	114.9 - 115.1		0.766	0.900	
206	117890	206.00	205.9 - 206.1		0.793	0.900	
207	107872	206.95	206.9 - 207.1		0.786	0.900	
208	256270	207.95	207.9 - 208.1		0.797	0.900	
220			-				

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

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
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	6.6	V	Deflect	12.4	V
Extract 2	-125.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-65	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	150	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	25029	0.46	
89	32629	0.24	
205	48602	0.33	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	25131	25116	25082	24938	24878
89	32655	32749	32558	32613	32570
205	48725	48793	48520	48587	48384

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	6.6	V	Deflect	1.2	V
Extract 2	-125.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-65	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			