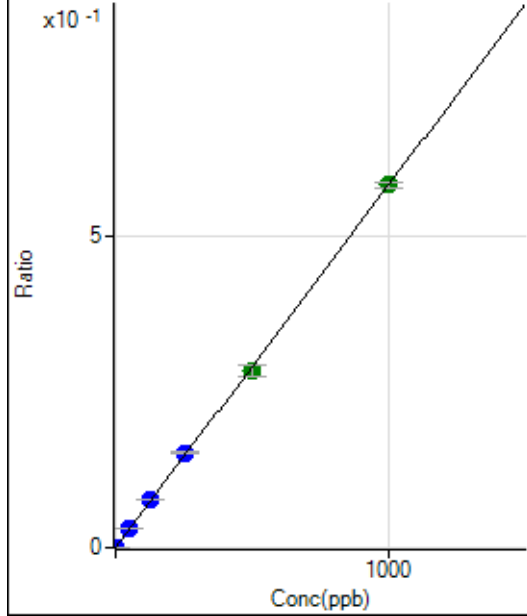


Batch Folder: D:\Agilent\ICPMH\1\DATA\P8011323 MS.b\
Analysis File: P8011323 MS.batch.bin
DA Date-Time: 2023-01-21 00:23:33
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2023-01-13 10:51:42
2	005CALS.d	S02	2023-01-13 10:54:52
3	006CALS.d	S03	2023-01-13 10:58:03
4	007CALS.d	S04	2023-01-13 11:01:09
5	008CALS.d	S05	2023-01-13 11:04:17
6	009CALS.d	S06	2023-01-13 11:07:23
7	010CALS.d	S07	2023-01-13 11:10:32
8	011CALS.d	S08	2023-01-13 11:13:38

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44.16	0.0000	P	8.0
2	☐	1.000	1.029	3661.67	0.0006	P	7.4
3	☐	50.000	53.499	180756.70	0.0312	P	2.2
4	☐	125.000	133.034	452391.11	0.0775	P	0.4
5	☐	250.000	262.490	880077.61	0.1529	P	0.6
6	☐	500.000	489.610	1701909.74	0.2852	A	6.9
7	☐	1000.000	1000.893	3391775.28	0.5830	A	1.4
8	☐			1315.73	0.0002	P	6.7

$$y = 5.8244\text{E-}004 * x + 7.6339\text{E-}006$$

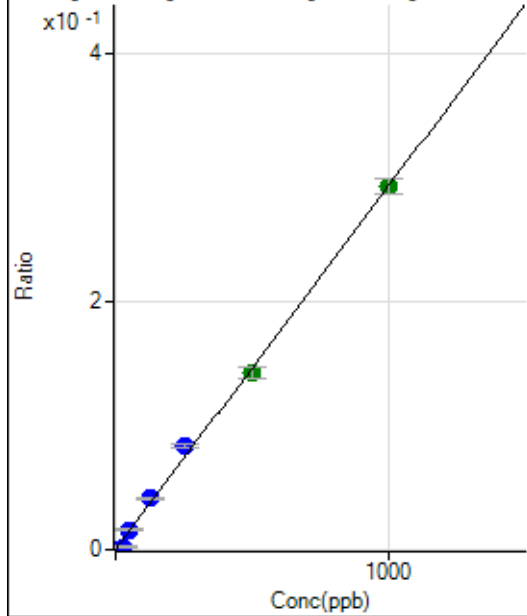
$$R = 0.9998$$

$$DL = 0.003134$$

$$BEC = 0.01311$$

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	855.19	0.0001	P	1.3
2	☐	25.000	7.299	13781.07	0.0023	P	13.0
3	☐	50.000	54.940	94395.78	0.0163	P	0.7
4	☐	125.000	139.814	240408.00	0.0412	P	3.1
5	☐	250.000	283.152	479154.79	0.0833	P	3.6
6	☐	500.000	484.503	849693.43	0.1424	A	6.6
7	☐	1000.000	997.804	1704799.42	0.2930	A	4.2
8	☐			77441.00	0.0141	P	8.7

$$y = 2.9352\text{E-}004 * x + 1.4785\text{E-}004$$

$$R = 0.9988$$

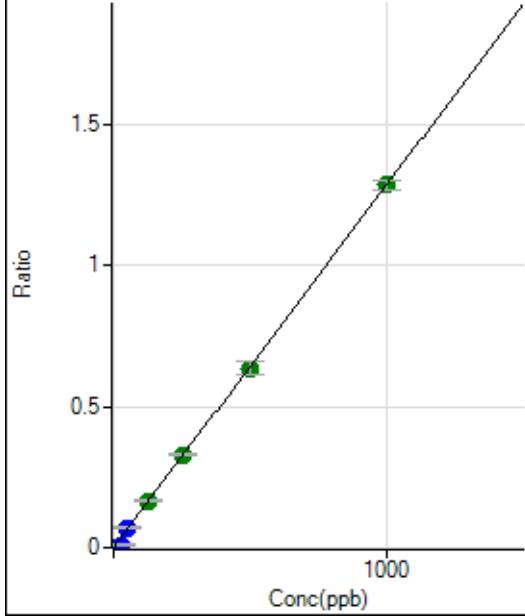
$$DL = 0.019$$

$$BEC = 0.5037$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	3762.42	0.0007	P	2.5
2	☐	25.000	7.216	59852.98	0.0099	P	9.7
3	☐	50.000	54.939	413604.69	0.0713	P	2.8
4	☐	125.000	127.723	962608.69	0.1649	A	3.4
5	☐	250.000	256.730	1904176.22	0.3308	A	1.7
6	☐	500.000	495.504	3806662.92	0.6379	A	7.1
7	☐	1000.000	1000.423	7489434.70	1.2873	A	2.7
8	☐			339106.60	0.0618	P	7.8

$$y = 0.0013 * x + 6.5055E-004$$

$$R = 0.9997$$

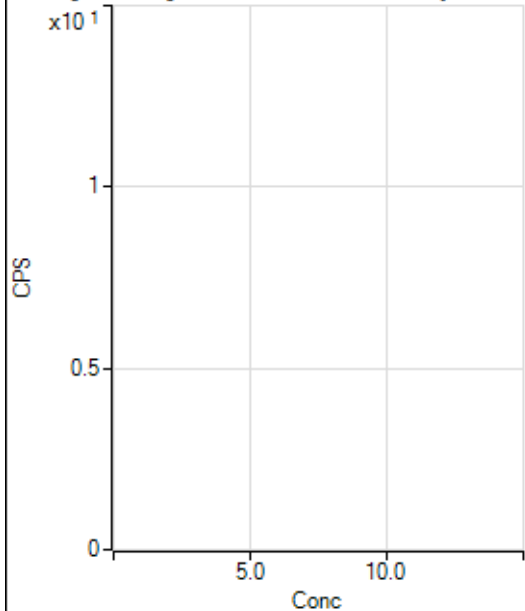
$$DL = 0.03841$$

$$BEC = 0.5058$$

Weight: <None>

Min Conc: 0

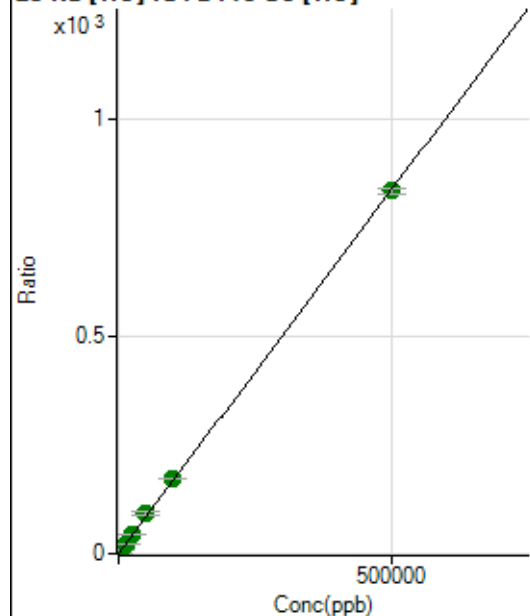
12 C [No Gas] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6689915.51		A	0.2
2	☐			7228830.37		A	0.3
3	☐			7471814.84		A	2.0
4	☐			7656910.41		A	1.5
5	☐			7672799.30		A	1.4
6	☐			7995285.42		A	2.1
7	☐			8022752.27		A	2.4
8	☐			8087585.17		A	3.2

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			80274.78		P	1.3
2	☐			87549.87		P	1.5
3	☐			91615.87		P	0.4
4	☐			93452.81		P	0.7
5	☐			94909.08		P	0.9
6	☐			99382.77		P	0.7
7	☐			100799.83		P	0.7
8	☐			108890.79		P	1.1

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	18868.20	0.0829	P	2.6
2	☐	500.000	478.974	203524.49	0.8864	P	1.9
3	☐	5000.000	5262.880	2047345.38	8.9114	A	2.0
4	☐	12500.000	13268.524	5105138.65	22.3408	A	2.6
5	☐	25000.000	26307.046	9870959.86	44.2129	A	2.5
6	☐	50000.000	55138.551	20076632.91	92.5775	A	6.1
7	☐	100000.00	103839.21	40423996.74	174.2726	A	0.6
8	☐	500000.00	498631.12	197114083.5	836.5338	A	1.7

$$y = 0.0017 * x + 0.0829$$

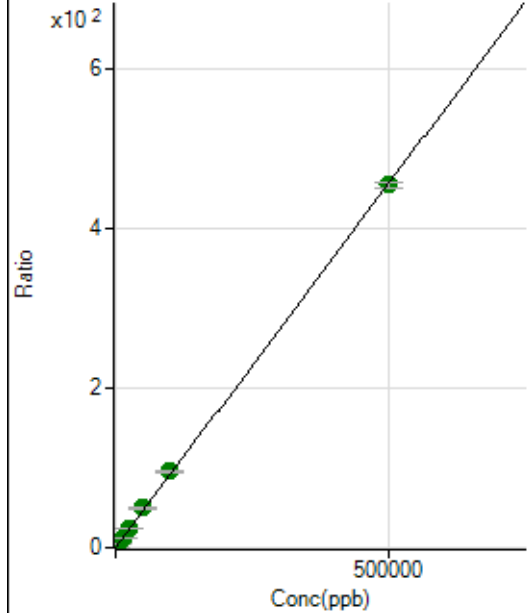
$$R = 0.9999$$

$$DL = 3.787$$

$$BEC = 49.44$$

Weight: <None>

Min Conc: 0

24 Mg [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	447.24	0.0020	P	21.8
2	☐	500.000	491.820	103513.80	0.4508	P	1.4
3	☐	5000.000	5316.787	1115208.64	4.8542	A	3.2
4	☐	12500.000	13691.280	2855644.66	12.4970	A	3.0
5	☐	25000.000	26712.562	5442774.65	24.3805	A	2.2
6	☐	50000.000	54929.335	10872023.07	50.1319	A	6.1
7	☐	100000.00	104475.41	22116205.53	95.3489	A	1.0
8	☐	500000.00	498493.41	107204396.8	454.9396	A	1.2

$$y = 9.1263\text{E-}004 * x + 0.0020$$

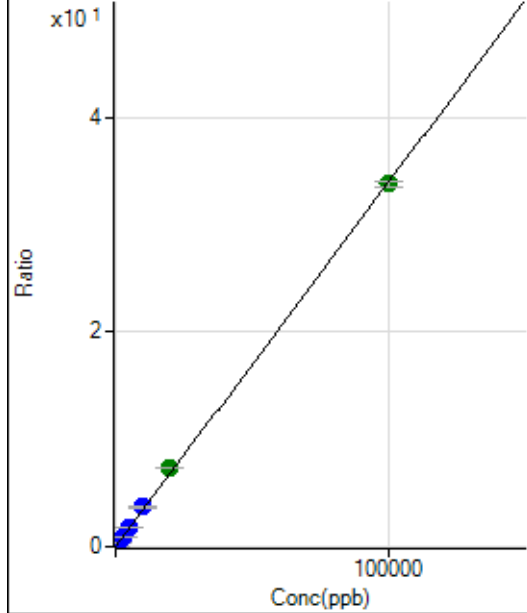
$$R = 0.9999$$

$$DL = 1.411$$

$$BEC = 2.157$$

Weight: <None>

Min Conc: 0

27 Al [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	65.82	0.0003	P	12.5
2	☐	20.000	20.724	1683.22	0.0073	P	2.5
3	☐	1000.000	1050.912	82093.70	0.3573	P	2.1
4	☐	2500.000	2690.854	208974.56	0.9145	P	1.8
5	☐	5000.000	5278.290	400436.59	1.7936	P	2.0
6	☐	10000.000	10939.145	806141.06	3.7168	P	5.5
7	☐	20000.000	21619.887	1703899.44	7.3455	A	1.0
8	☐	100000.00	99562.913	7970946.56	33.8261	A	1.3

$$y = 3.3974\text{E-}004 * x + 2.8975\text{E-}004$$

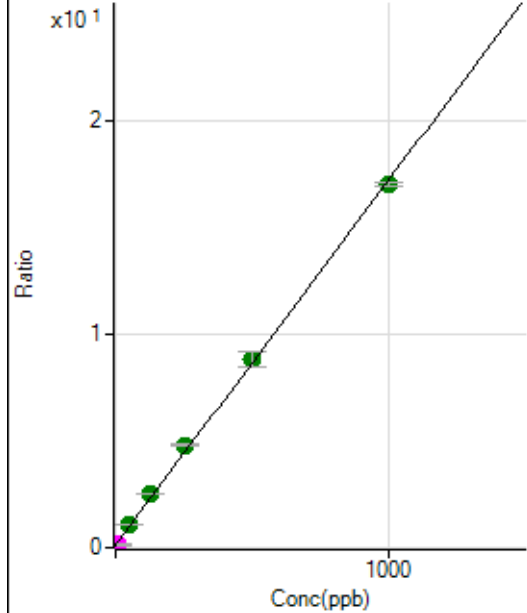
$$R = 0.9998$$

$$DL = 0.3198$$

$$BEC = 0.8528$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	809640.75	0.1292	P	1.4
2	☐	10.000	0.415	882692.28	0.1363	M	9.7
3	☐	50.000	56.202	6759491.39	1.0895	A	0.8
4	☐	125.000	139.101	15723546.88	2.5060	A	1.1
5	☐	250.000	274.528	30009924.28	4.8199	A	1.1
6	☐	500.000	508.960	57538572.12	8.8256	A	7.5
7	☐	1000.000	987.411	109987485.7	17.0007	A	0.9
8	☐			1951685.11	0.3112	A	3.3

$$y = 0.0171 * x + 0.1292$$

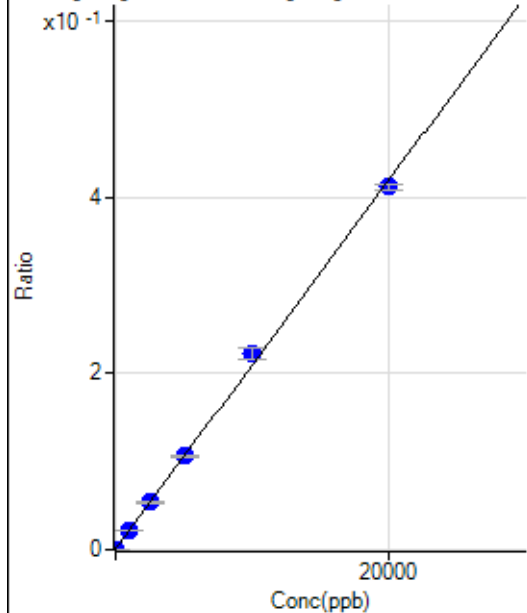
$$R = 0.9994$$

$$DL = 0.3074$$

$$BEC = 7.561$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-13.204	100.00	0.0004	P	20.6
2	☐	0.000	13.204	227.79	0.0010	P	16.8
3	☐	1000.000	1047.484	5192.72	0.0226	P	2.4
4	☐	2500.000	2543.845	12308.33	0.0539	P	4.5
5	☐	5000.000	5072.946	23822.97	0.1067	P	2.0
6	☐	10000.000	10628.695	48325.60	0.2228	P	5.2
7	☐	20000.000	19659.561	95435.71	0.4115	P	1.8
8	☐			233.34	0.0010	P	11.8

$$y = 2.0893E-005 * x + 7.1475E-004$$

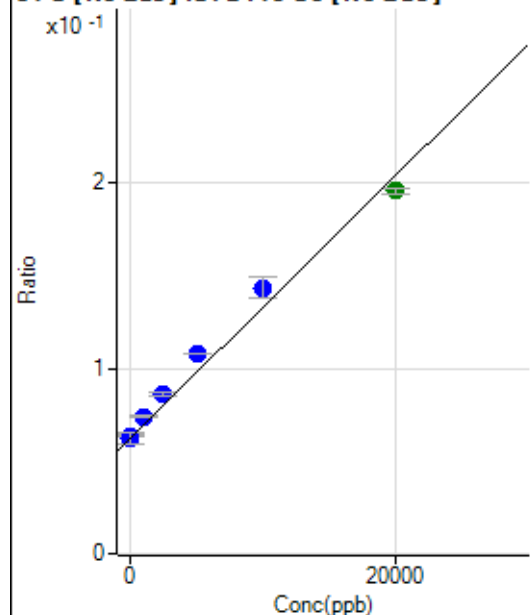
$$R = 0.9993$$

$$DL = 18.44$$

$$BEC = 34.21$$

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	120.151	399136.40	0.0637	P	2.6
2	☐	0.000	-120.151	401768.96	0.0620	P	9.0
3	☐	1000.000	1564.532	458348.04	0.0739	P	1.1
4	☐	2500.000	3295.215	540039.46	0.0861	P	1.8
5	☐	5000.000	6364.377	670729.89	0.1077	P	0.5
6	☐	10000.000	11405.757	933891.85	0.1433	P	7.9
7	☐	20000.000	18828.399	1265344.65	0.1956	A	1.9
8	☐			357376.87	0.0570	P	1.7

$$y = 7.0501E-006 * x + 0.0629$$

R = 0.9930

DL = 1537

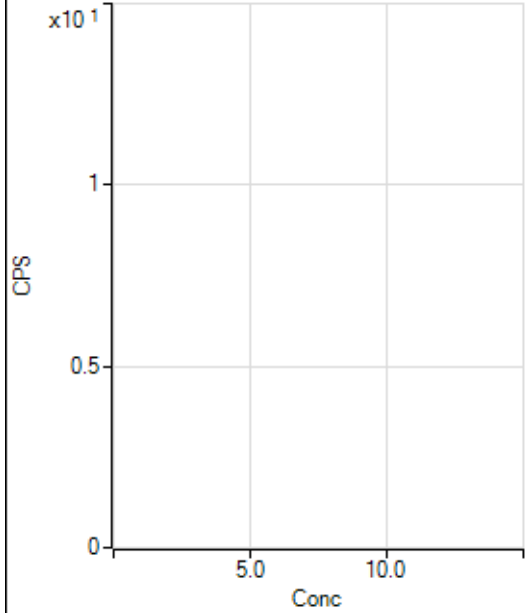
BEC = 8916

Weight: <None>

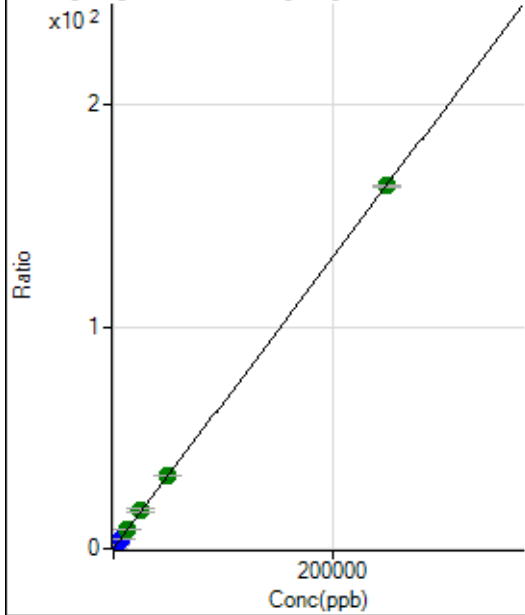
Min Conc: 0

35 Cl [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			136755.08		P	1.0
2	☐			175678.73		P	1.2
3	☐			176002.45		P	1.1
4	☐			174160.91		P	0.2
5	☐			173626.80		P	1.6
6	☐			175644.36		P	1.1
7	☐			185477.21		P	0.3
8	☐			170858.48		P	0.8

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1216.75		P	3.6
2	☐			1400.11		P	10.3
3	☐			1375.10		P	7.6
4	☐			1444.56		P	5.9
5	☐			1352.88		P	12.0
6	☐			1363.99		P	5.1
7	☐			1597.36		P	7.1
8	☐			1316.76		P	2.3

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	24540.79	0.1079	P	1.6
2	☐	500.000	463.484	94313.65	0.4107	P	1.5
3	☐	2500.000	2459.581	394000.56	1.7149	P	1.6
4	☐	6250.000	6351.631	973026.67	4.2579	P	2.0
5	☐	12500.000	12890.732	1904560.50	8.5304	A	1.1
6	☐	25000.000	26408.145	3765418.83	17.3622	A	5.9
7	☐	50000.000	49916.344	7590329.16	32.7218	A	1.3
8	☐	250000.00	249854.31	38493596.35	163.3556	A	0.9

$$y = 6.5337E-004 * x + 0.1079$$

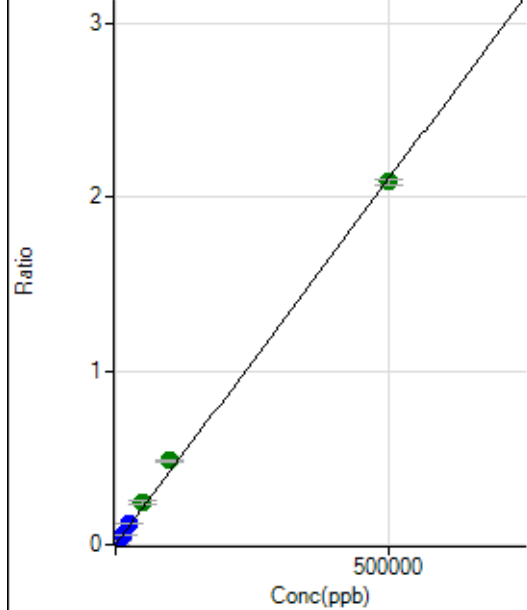
$$R = 1.0000$$

$$DL = 7.909$$

$$BEC = 165.2$$

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	138.73	0.0000	P	11.1
2	☐	500.000	459.503	12663.15	0.0020	P	8.6
3	☐	5000.000	5730.847	149584.81	0.0241	P	0.9
4	☐	12500.000	14352.020	378629.43	0.0604	P	1.0
5	☐	25000.000	28396.502	743376.12	0.1194	P	0.3
6	☐	50000.000	57091.334	1564695.70	0.2400	A	7.7
7	☐	100000.00	114591.15	3116385.35	0.4817	A	2.3
8	☐	500000.00	496149.24	13079066.18	2.0856	A	1.7

$$y = 4.2036\text{E-}006 * x + 2.2125\text{E-}005$$

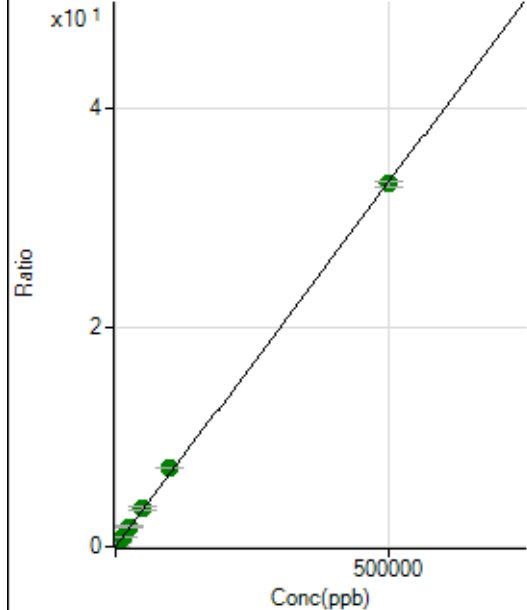
$$R = 0.9995$$

$$DL = 1.748$$

$$BEC = 5.263$$

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	12419.95	0.0020	P	2.5
2	☐	500.000	468.441	214551.22	0.0331	P	9.2
3	☐	5000.000	5625.773	2331800.06	0.3759	A	1.1
4	☐	12500.000	13996.233	5848912.02	0.9322	A	0.6
5	☐	25000.000	27621.119	11443888.80	1.8378	A	1.2
6	☐	50000.000	53272.207	23095269.38	3.5426	A	7.6
7	☐	100000.00	107900.87	46410275.87	7.1734	A	0.8
8	☐	500000.00	497917.91	207515420.9	33.0949	A	1.8

$$y = 6.6463\text{E-}005 * x + 0.0020$$

$$R = 0.9999$$

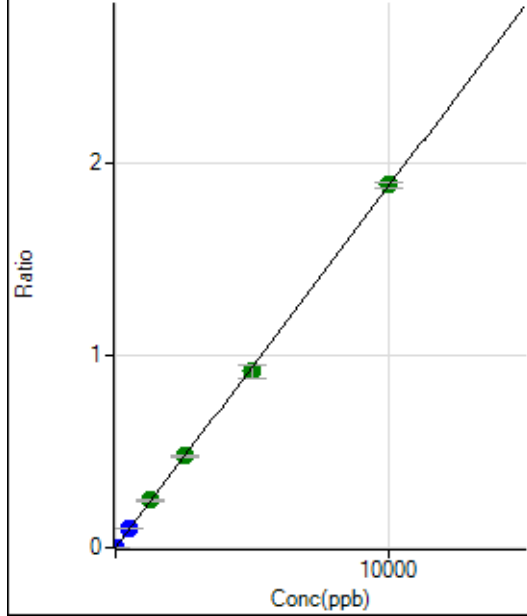
$$DL = 2.194$$

$$BEC = 29.82$$

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	266.67	0.0000	P	10.8
2	☐	5.000	4.822	6143.14	0.0009	P	8.6
3	☐	500.000	512.671	597033.00	0.0962	P	1.0
4	☐	1250.000	1309.244	1541499.94	0.2457	A	1.3
5	☐	2500.000	2546.492	2975588.41	0.4779	A	2.0
6	☐	5000.000	4885.768	5977917.62	0.9168	A	7.3
7	☐	10000.000	10037.454	12184792.81	1.8835	A	1.5
8	☐			5320.57	0.0008	P	10.4

$$y = 1.8764\text{E-}004 * x + 4.2498\text{E-}005$$

$$R = 0.9999$$

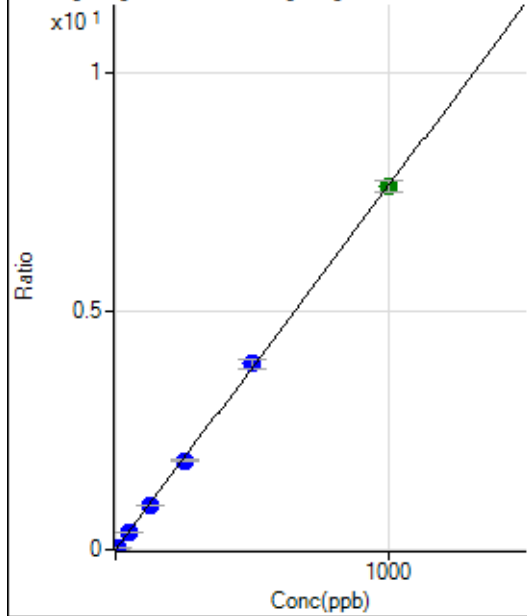
$$DL = 0.0734$$

$$BEC = 0.2265$$

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	4.44	0.0000	P	42.8
2	☐	5.000	4.696	8233.53	0.0359	P	2.9
3	☐	50.000	48.729	85463.52	0.3720	P	1.3
4	☐	125.000	122.350	213426.46	0.9340	P	2.0
5	☐	250.000	244.979	417504.65	1.8700	P	1.8
6	☐	500.000	509.844	844187.18	3.8918	P	5.1
7	☐	1000.000	996.730	1764827.65	7.6084	A	3.3
8	☐			987.82	0.0042	P	23.0

$$y = 0.0076 * x + 1.9509\text{E-}005$$

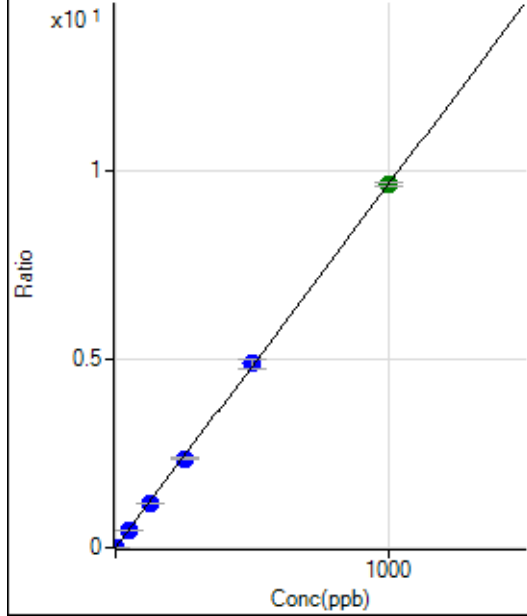
$$R = 0.9999$$

$$DL = 0.003282$$

$$BEC = 0.002556$$

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	671.13	0.0030	P	3.1
2	☐	2.000	1.843	4753.06	0.0207	P	1.7
3	☐	50.000	47.883	106626.60	0.4641	P	2.1
4	☐	125.000	123.223	271868.32	1.1897	P	1.0
5	☐	250.000	243.625	524486.86	2.3493	P	2.1
6	☐	500.000	506.393	1058455.76	4.8800	P	5.5
7	☐	1000.000	998.726	2231672.64	9.6217	A	0.9
8	☐			16851.16	0.0715	P	2.2

$$y = 0.0096 * x + 0.0030$$

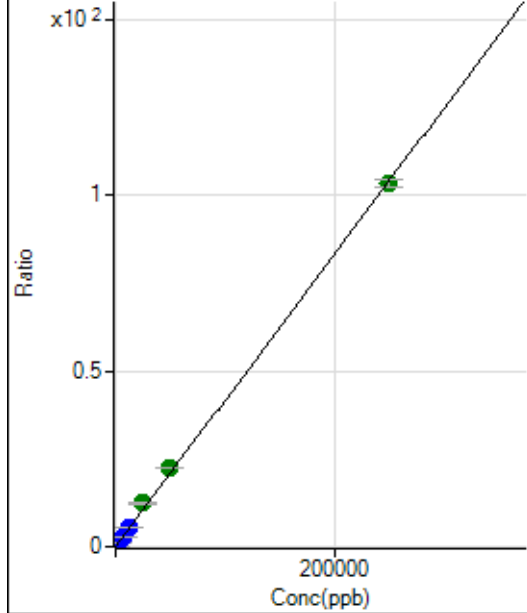
$$R = 0.9999$$

$$DL = 0.0283$$

$$BEC = 0.3065$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	892.64	0.0039	P	7.9
2	☐	50.000	50.431	5704.93	0.0248	P	0.6
3	☐	2500.000	2640.765	252526.44	1.0992	P	2.9
4	☐	6250.000	6689.167	634892.20	2.7783	P	1.4
5	☐	12500.000	13385.021	1240269.04	5.5555	P	2.6
6	☐	25000.000	30040.137	2703035.68	12.4634	A	5.8
7	☐	50000.000	54171.527	5212048.32	22.4721	A	1.8
8	☐	250000.00	248605.04	24296900.77	103.1152	A	2.1

$$y = 4.1476E-004 * x + 0.0039$$

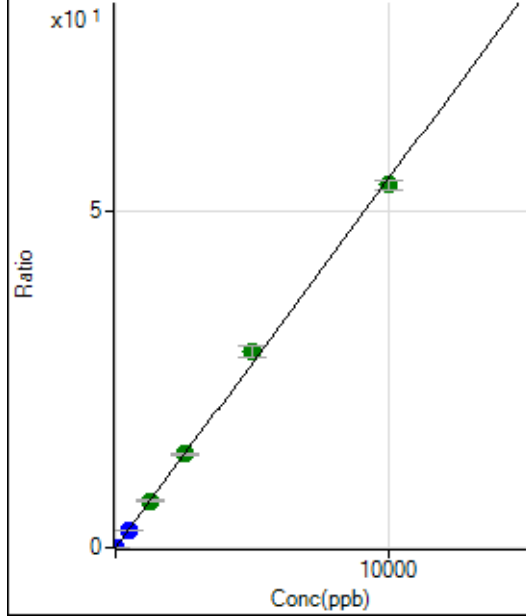
$$R = 0.9997$$

$$DL = 2.258$$

$$BEC = 9.468$$

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	98.89	0.0004	P	22.1
2	☐	1.000	0.977	1326.74	0.0058	P	3.9
3	☐	500.000	482.382	605917.15	2.6374	P	1.9
4	☐	1250.000	1268.684	1584947.46	6.9357	A	2.2
5	☐	2500.000	2548.962	3111186.38	13.9344	A	1.9
6	☐	5000.000	5303.988	6287832.34	28.9949	A	6.1
7	☐	10000.000	9834.311	12468870.37	53.7600	A	2.8
8	☐			15669.91	0.0665	P	4.7

$$y = 0.0055 * x + 4.3577E-004$$

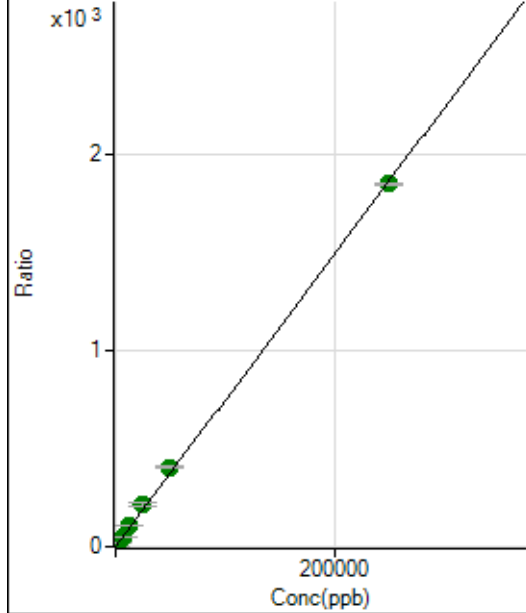
$$R = 0.9993$$

$$DL = 0.05282$$

$$BEC = 0.07972$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	5088.04	0.0224	P	2.7
2	☐	50.000	49.560	89885.54	0.3915	P	2.1
3	☐	2500.000	2775.359	4753582.98	20.6926	A	3.8
4	☐	6250.000	7006.708	11929959.53	52.2067	A	2.6
5	☐	12500.000	14006.856	23294984.32	104.3422	A	1.6
6	☐	25000.000	28921.119	46710490.86	215.4202	A	6.7
7	☐	50000.000	54539.264	94209953.96	406.2182	A	2.9
8	☐	250000.00	248603.02	436321435.6	1,851.560	A	0.4

$$y = 0.0074 * x + 0.0224$$

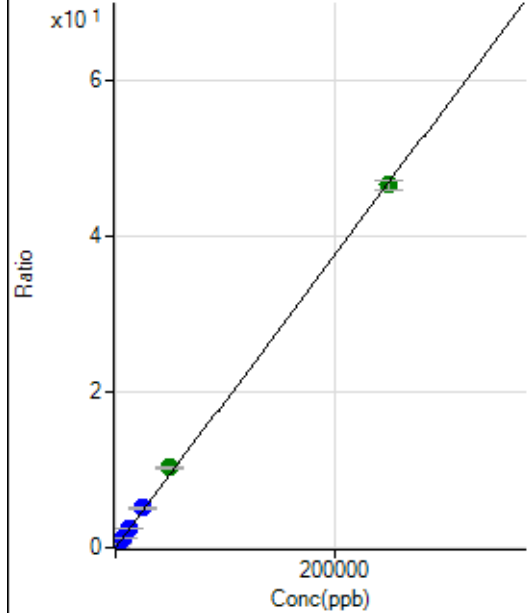
$$R = 0.9997$$

$$DL = 0.2433$$

$$BEC = 3.004$$

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	177.78	0.0008	P	12.0
2	☐	50.000	47.954	2240.95	0.0098	P	2.7
3	☐	2500.000	2627.441	113172.85	0.4926	P	2.3
4	☐	6250.000	6633.995	283955.16	1.2426	P	1.8
5	☐	12500.000	13230.902	553108.59	2.4775	P	1.7
6	☐	25000.000	27377.313	1111745.57	5.1256	P	5.3
7	☐	50000.000	55138.749	2394470.83	10.3223	A	1.9
8	☐	250000.00	248687.10	10968795.04	46.5529	A	2.8

$$y = 1.8719\text{E-}004 * x + 7.8223\text{E-}004$$

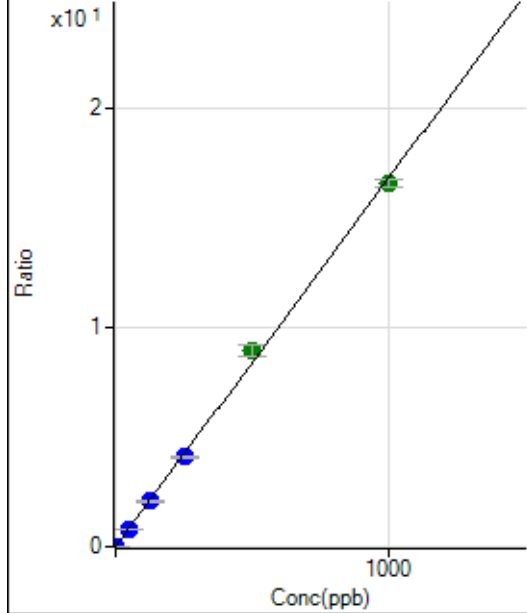
$$R = 0.9997$$

$$DL = 1.507$$

$$BEC = 4.179$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	60.00	0.0003	P	5.4
2	☐	1.000	0.963	3769.42	0.0164	P	3.7
3	☐	50.000	48.186	185699.54	0.8083	P	2.1
4	☐	125.000	122.944	471189.59	2.0619	P	1.2
5	☐	250.000	243.538	911853.56	4.0842	P	2.5
6	☐	500.000	533.838	1941524.59	8.9523	A	5.9
7	☐	1000.000	985.044	3831252.69	16.5187	A	2.1
8	☐			4049.51	0.0172	P	6.6

$$y = 0.0168 * x + 2.6381\text{E-}004$$

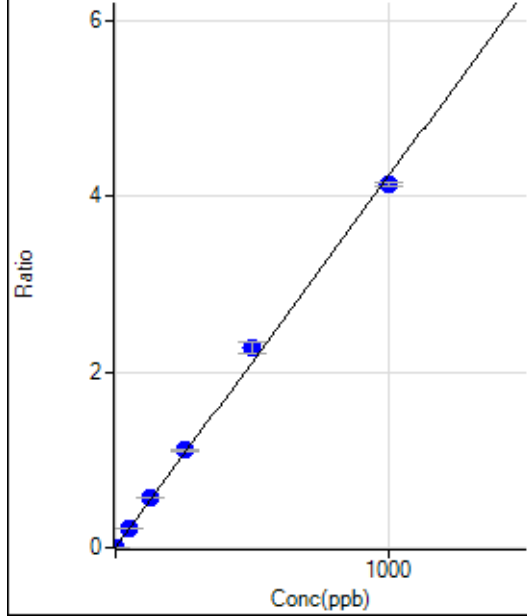
$$R = 0.9991$$

$$DL = 0.002556$$

$$BEC = 0.01573$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	45.56	0.0002	P	34.6
2	☐	1.000	1.021	1036.72	0.0045	P	0.5
3	☐	50.000	52.466	50945.51	0.2218	P	2.3
4	☐	125.000	133.148	128528.99	0.5624	P	0.7
5	☐	250.000	261.457	246537.07	1.1043	P	2.7
6	☐	500.000	538.450	493212.12	2.2739	P	5.5
7	☐	1000.000	976.769	956730.51	4.1248	P	1.1
8	☐			3504.91	0.0149	P	1.8

$$y = 0.0042 * x + 2.0105E-004$$

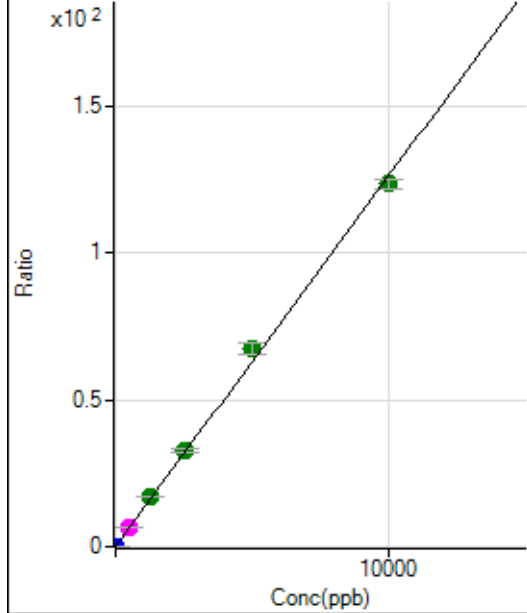
$$R = 0.9988$$

$$DL = 0.04937$$

$$BEC = 0.04761$$

Weight: <None>

Min Conc: 0

63 Cu [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1176.73	0.0052	P	5.8
2	☐	2.000	1.943	6809.47	0.0297	P	1.5
3	☐	500.000	511.752	1482801.32	6.4541	M	2.6
4	☐	1250.000	1344.815	3873895.29	16.9520	A	0.5
5	☐	2500.000	2603.157	7324840.17	32.8092	A	4.7
6	☐	5000.000	5340.863	14601190.89	67.3088	A	5.2
7	☐	10000.000	9791.339	28621996.79	123.3920	A	2.4
8	☐			15585.65	0.0661	P	13.9

$$y = 0.0126 * x + 0.0052$$

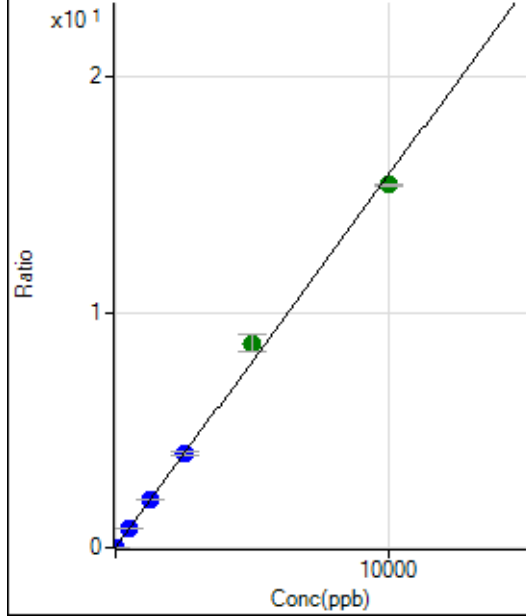
$$R = 0.9990$$

$$DL = 0.07131$$

$$BEC = 0.4107$$

Weight: <None>

Min Conc: 0

66 Zn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	152.22	0.0007	P	18.2
2	☐	2.000	2.257	974.49	0.0042	P	7.5
3	☐	500.000	520.631	189645.40	0.8255	P	1.4
4	☐	1250.000	1295.430	469129.62	2.0529	P	1.7
5	☐	2500.000	2538.536	898040.55	4.0222	P	3.4
6	☐	5000.000	5493.621	1886726.46	8.7036	A	8.0
7	☐	10000.000	9736.845	3577931.09	15.4258	A	0.7
8	☐			3531.59	0.0150	P	5.9

$$y = 0.0016 * x + 6.6986E-004$$

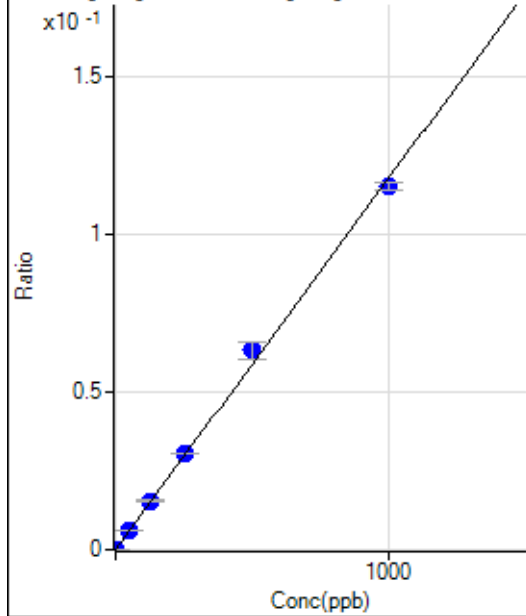
$$R = 0.9982$$

$$DL = 0.2307$$

$$BEC = 0.4228$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	3.00	0.0000	P	89.6
2	☐	1.000	1.151	230.36	0.0001	P	9.4
3	☐	50.000	51.203	10395.88	0.0060	P	3.1
4	☐	125.000	131.720	26263.32	0.0155	P	4.1
5	☐	250.000	259.241	50882.56	0.0305	P	1.7
6	☐	500.000	538.717	102496.03	0.0633	P	8.7
7	☐	1000.000	977.431	200312.28	0.1148	P	2.0
8	☐			105.68	0.0001	P	12.2

$$y = 1.1746E-004 * x + 1.7807E-006$$

$$R = 0.9988$$

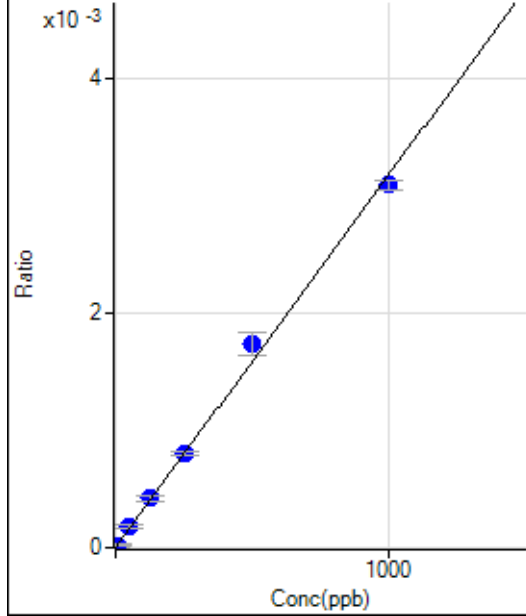
$$DL = 0.04074$$

$$BEC = 0.01516$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1.11	0.0000	P	173.2
2	☐	5.000	7.060	38.89	0.0000	P	41.5
3	☐	50.000	55.426	304.45	0.0002	P	16.0
4	☐	125.000	132.541	713.36	0.0004	P	11.0
5	☐	250.000	253.708	1344.52	0.0008	P	4.6
6	☐	500.000	547.350	2809.20	0.0017	P	10.7
7	☐	1000.000	974.174	5387.75	0.0031	P	2.3
8	☐			4.44	0.0000	P	43.2

$$y = 3.1697\text{E-}006 * x + 6.5476\text{E-}007$$

$$R = 0.9983$$

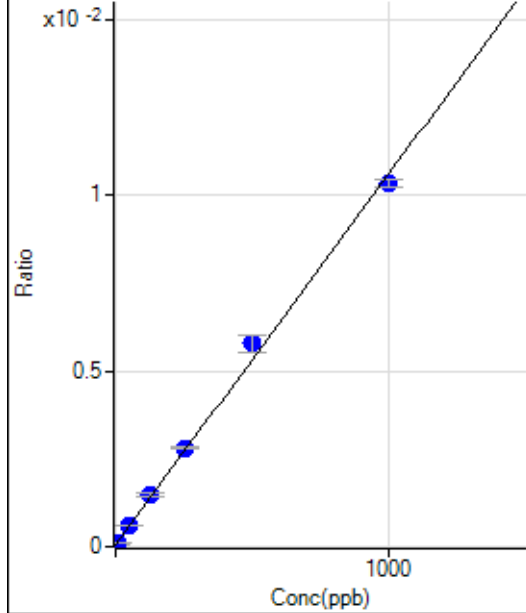
$$DL = 1.073$$

$$BEC = 0.2066$$

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	88.01	0.0001	P	5.7
2	☐	5.000	5.088	177.35	0.0001	P	11.4
3	☐	50.000	52.615	1047.15	0.0006	P	3.7
4	☐	125.000	135.849	2516.48	0.0015	P	5.5
5	☐	250.000	261.185	4682.92	0.0028	P	2.3
6	☐	500.000	542.963	9351.71	0.0058	P	8.0
7	☐	1000.000	974.235	17996.27	0.0103	P	2.3
8	☐			99.01	0.0001	P	10.1

$$y = 1.0534\text{E-}005 * x + 5.1899\text{E-}005$$

$$R = 0.9985$$

$$DL = 0.8399$$

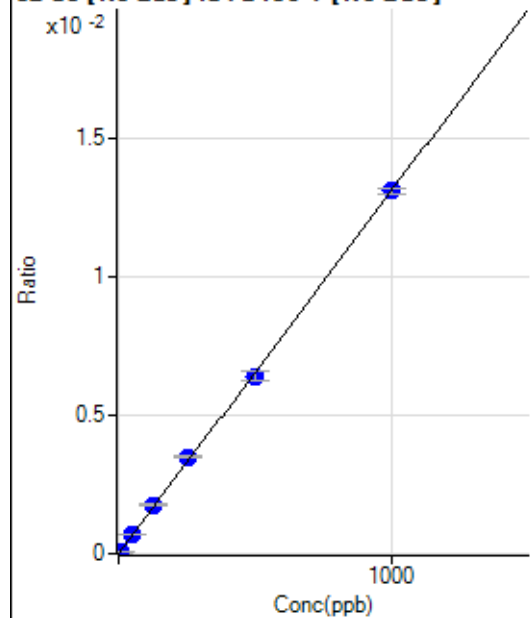
$$BEC = 4.927$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			56218.48		P	3.3
2	☐			55775.85		P	1.5
3	☐			55408.97		P	1.4
4	☐			55464.31		P	3.6
5	☐			53260.87		P	3.2
6	☐			52231.71		P	2.8
7	☐			53789.66		P	0.6
8	☐			52242.08		P	1.9

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	-4.99	0.0000	P	-625.
2	☐	5.000	4.275	808.02	0.0001	P	12.5
3	☐	50.000	53.764	9871.34	0.0007	P	1.5
4	☐	125.000	134.360	24581.57	0.0018	P	2.7
5	☐	250.000	265.629	48304.69	0.0035	P	2.3
6	☐	500.000	489.940	95161.93	0.0064	P	5.6
7	☐	1000.000	999.768	188498.85	0.0131	P	1.8
8	☐			250.88	0.0000	P	8.7

$$y = 1.3086E-005 * x - 3.7730E-007$$

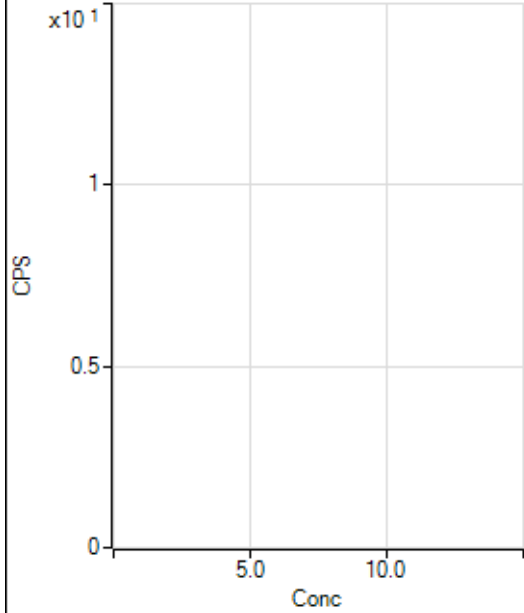
$$R = 0.9998$$

$$DL = 0.5406$$

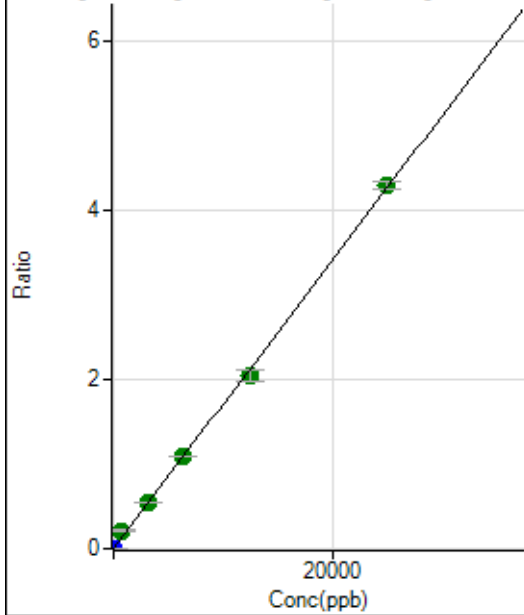
$$BEC = -0.02883$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			358.29		P	4.6
2	☐			338.71		P	3.3
3	☐			345.38		P	9.8
4	☐			324.13		P	4.8
5	☐			353.71		P	10.9
6	☐			360.38		P	3.9
7	☐			370.38		P	7.8
8	☐			397.88		P	6.0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	605.59	0.0000	P	20.1
2	☐	1.000	0.919	2922.61	0.0002	P	9.9
3	☐	625.000	1261.799	3013868.84	0.2147	A	2.2
4	☐	3125.000	3174.385	7552402.17	0.5400	A	1.2
5	☐	6250.000	6399.915	15133100.16	1.0887	A	1.6
6	☐	12500.000	11991.561	30270071.51	2.0399	A	7.0
7	☐	25000.000	25194.647	61758904.85	4.2859	A	2.2
8	☐			28518.90	0.0021	P	6.2

$$y = 1.7011\text{E-}004 * x + 4.4484\text{E-}005$$

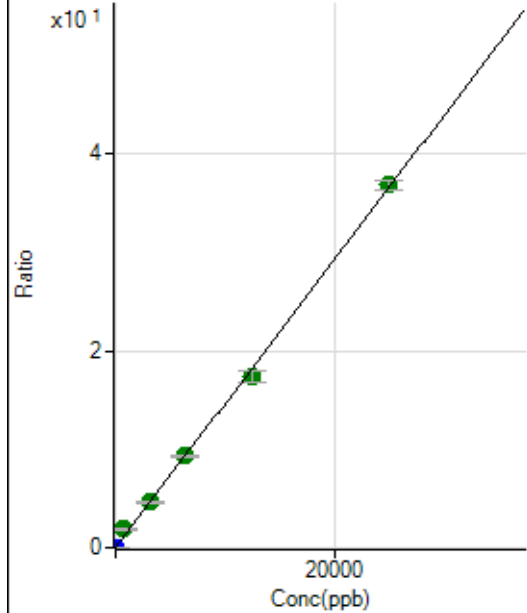
$$R = 0.9993$$

$$DL = 0.1578$$

$$BEC = 0.2615$$

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	277.79	0.0000	P	9.4
2	☐	1.000	0.913	19736.81	0.0014	P	7.1
3	☐	625.000	1270.651	26066401.11	1.8568	A	0.9
4	☐	3125.000	3155.475	64484148.66	4.6110	A	0.9
5	☐	6250.000	6400.836	130006743.1	9.3532	A	1.6
6	☐	12500.000	11929.427	258666672.4	17.4319	A	6.8
7	☐	25000.000	25227.627	531113772.9	36.8638	A	2.8
8	☐			243000.08	0.0177	P	4.6

$$y = 0.0015 * x + 2.0377E-005$$

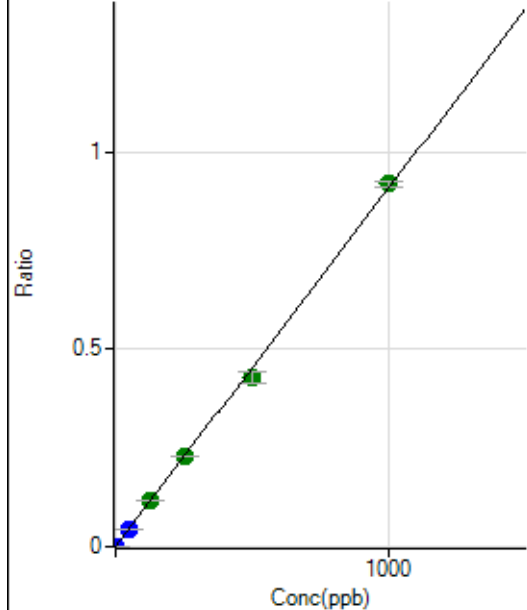
$$R = 0.9992$$

$$DL = 0.003926$$

$$BEC = 0.01394$$

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	527.80	0.0000	P	5.0
2	☐	1.000	0.859	11924.88	0.0008	P	5.2
3	☐	50.000	49.368	629068.78	0.0448	P	0.5
4	☐	125.000	128.295	1627700.11	0.1164	A	1.2
5	☐	250.000	251.921	3176129.54	0.2285	A	1.0
6	☐	500.000	473.612	6375186.43	0.4295	A	7.0
7	☐	1000.000	1012.334	13229024.25	0.9181	A	1.8
8	☐			5890.30	0.0004	P	7.7

$$y = 9.0688E-004 * x + 3.8724E-005$$

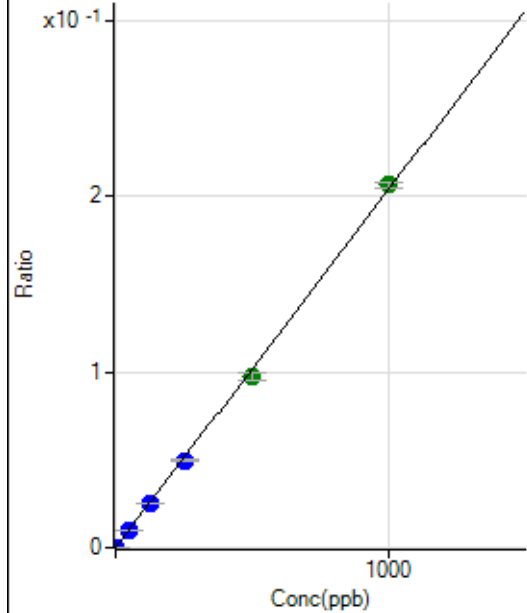
$$R = 0.9995$$

$$DL = 0.006402$$

$$BEC = 0.0427$$

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	105.56	0.0000	P	8.6
2	☐	1.000	0.883	2733.67	0.0002	P	8.8
3	☐	50.000	48.344	138385.73	0.0099	P	1.5
4	☐	125.000	122.915	350322.68	0.0251	P	1.9
5	☐	250.000	242.844	687852.33	0.0495	P	1.6
6	☐	500.000	477.374	1444444.91	0.0973	A	4.2
7	☐	1000.000	1013.446	2975970.73	0.2065	A	1.8
8	☐			1166.75	0.0001	P	4.6

$$y = 2.0374\text{E-}004 * x + 7.7416\text{E-}006$$

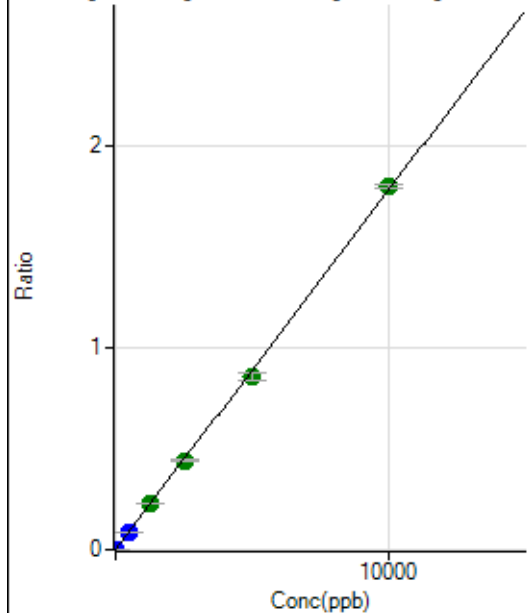
$$R = 0.9996$$

$$DL = 0.009754$$

$$BEC = 0.038$$

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	194.45	0.0000	P	16.8
2	☐	5.000	5.387	14204.80	0.0010	P	6.8
3	☐	500.000	493.404	1234390.40	0.0879	P	1.1
4	☐	1250.000	1276.444	3180832.97	0.2274	A	1.5
5	☐	2500.000	2486.313	6158203.56	0.4430	A	1.8
6	☐	5000.000	4816.140	12741338.39	0.8581	A	5.0
7	☐	10000.000	10092.376	25917033.74	1.7983	A	1.2
8	☐			12575.48	0.0009	P	3.6

$$y = 1.7818\text{E-}004 * x + 1.4274\text{E-}005$$

$$R = 0.9997$$

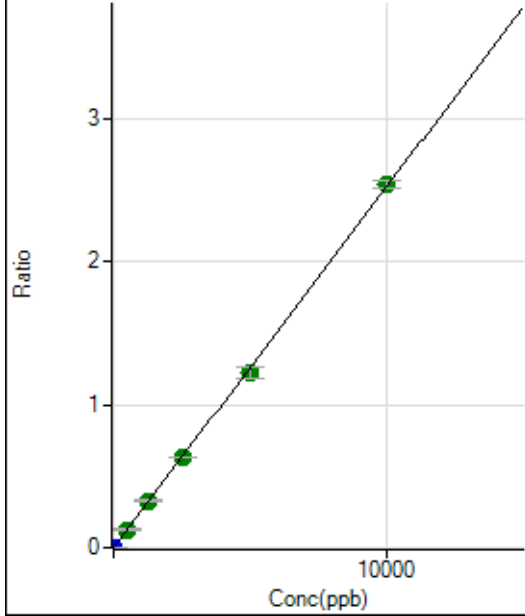
$$DL = 0.04027$$

$$BEC = 0.08011$$

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	11.11	0.0000	P	115.2
2	☐	5.000	4.592	16843.97	0.0012	P	7.9
3	☐	500.000	506.557	1789430.03	0.1275	A	1.0
4	☐	1250.000	1300.005	4574686.60	0.3271	A	2.0
5	☐	2500.000	2509.370	8777873.37	0.6314	A	0.7
6	☐	5000.000	4851.523	18115467.07	1.2208	A	6.6
7	☐	10000.000	10065.318	36504341.79	2.5327	A	2.1
8	☐			16182.07	0.0012	P	3.9

$$y = 2.5162\text{E-}004 * x + 8.2070\text{E-}007$$

$$R = 0.9998$$

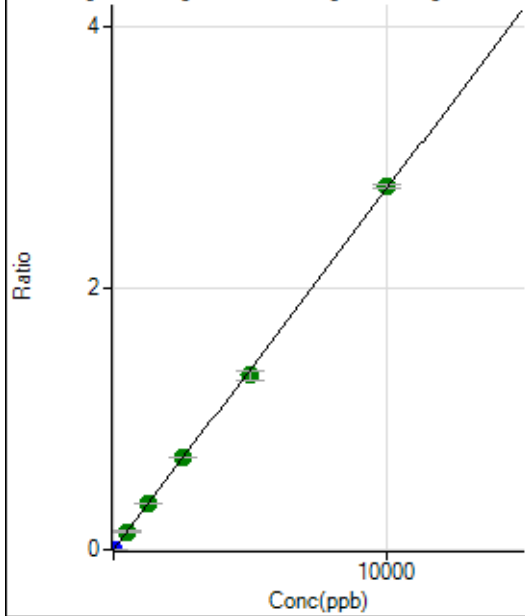
$$DL = 0.01128$$

$$BEC = 0.003262$$

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	138.89	0.0000	P	9.4
2	☐	5.000	4.738	19155.39	0.0013	P	11.2
3	☐	500.000	505.058	1955605.97	0.1393	A	2.9
4	☐	1250.000	1289.398	4973406.15	0.3556	A	1.8
5	☐	2500.000	2546.595	9762518.36	0.7023	A	1.0
6	☐	5000.000	4838.461	19810847.14	1.3344	A	5.3
7	☐	10000.000	10063.943	40001487.70	2.7756	A	1.1
8	☐			33483.22	0.0024	P	1.7

$$y = 2.7579\text{E-}004 * x + 1.0192\text{E-}005$$

$$R = 0.9998$$

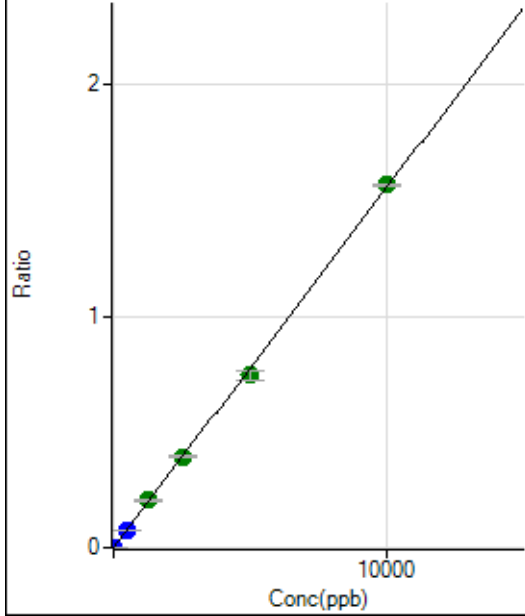
$$DL = 0.01046$$

$$BEC = 0.03695$$

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	13.89	0.0000	P	68.7
2	☐	5.000	4.603	10445.86	0.0007	P	8.3
3	☐	500.000	491.499	1073492.79	0.0765	P	1.0
4	☐	1250.000	1313.200	2857169.68	0.2043	A	1.9
5	☐	2500.000	2526.556	5463278.55	0.3931	A	2.0
6	☐	5000.000	4804.848	11096372.73	0.7475	A	5.5
7	☐	10000.000	10083.462	22606606.06	1.5688	A	0.3
8	☐			10198.51	0.0007	P	3.8

$$y = 1.5558\text{E-}004 * x + 1.0161\text{E-}006$$

$$R = 0.9997$$

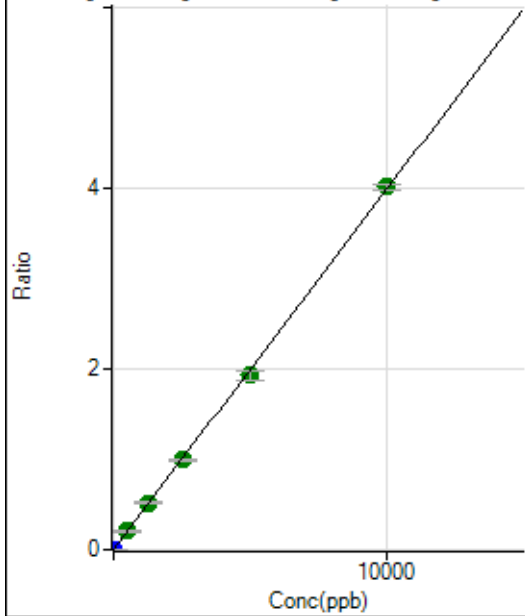
$$DL = 0.01346$$

$$BEC = 0.006531$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	19.45	0.0000	P	25.8
2	☐	5.000	4.740	27580.79	0.0019	P	7.0
3	☐	500.000	509.025	2851050.71	0.2031	A	1.4
4	☐	1250.000	1294.688	7223155.63	0.5165	A	4.6
5	☐	2500.000	2504.995	13892214.20	0.9994	A	1.8
6	☐	5000.000	4840.622	28663694.39	1.9313	A	6.0
7	☐	10000.000	10072.403	57904986.02	4.0186	A	1.5
8	☐			25671.89	0.0019	P	4.6

$$y = 3.9897\text{E-}004 * x + 1.4290\text{E-}006$$

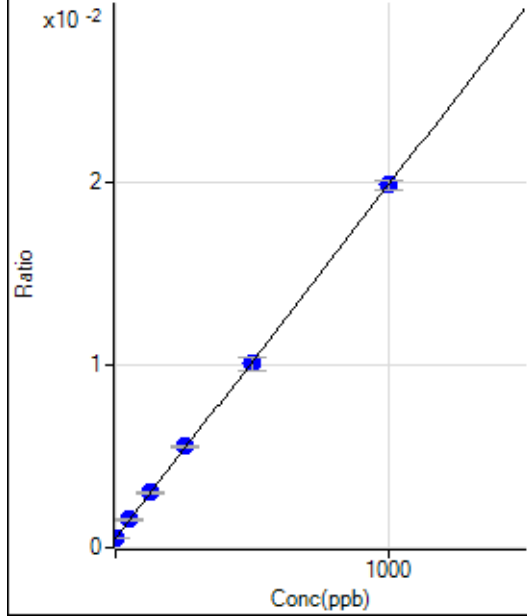
$$R = 0.9998$$

$$DL = 0.002774$$

$$BEC = 0.003582$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	5012.19	0.0005	P	3.1
2	☐	1.000	0.835	5390.10	0.0005	P	1.9
3	☐	50.000	53.143	15434.08	0.0015	P	4.1
4	☐	125.000	130.412	31269.50	0.0030	P	2.5
5	☐	250.000	259.761	57094.31	0.0055	P	1.8
6	☐	500.000	493.591	107111.61	0.0101	P	7.6
7	☐	1000.000	999.931	210991.55	0.0199	P	2.7
8	☐			4834.30	0.0005	P	2.2

$$y = 1.9372\text{E-}005 * x + 5.1000\text{E-}004$$

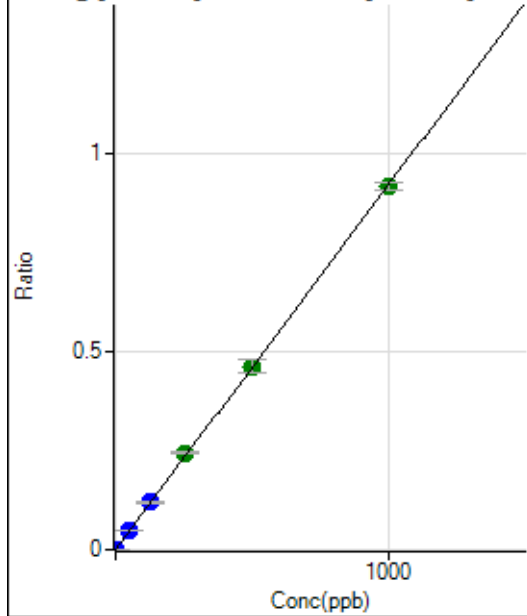
$$R = 0.9999$$

$$DL = 2.445$$

$$BEC = 26.33$$

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	341.68	0.0000	P	12.3
2	☐	1.000	0.971	9503.57	0.0009	P	8.9
3	☐	50.000	51.933	481254.67	0.0480	P	0.8
4	☐	125.000	129.696	1233366.31	0.1198	P	1.5
5	☐	250.000	265.995	2530384.80	0.2456	A	0.8
6	☐	500.000	502.028	4928907.97	0.4635	A	7.7
7	☐	1000.000	994.304	9743341.53	0.9180	A	2.1
8	☐			6287.71	0.0006	P	7.9

$$y = 9.2322\text{E-}004 * x + 3.4821\text{E-}005$$

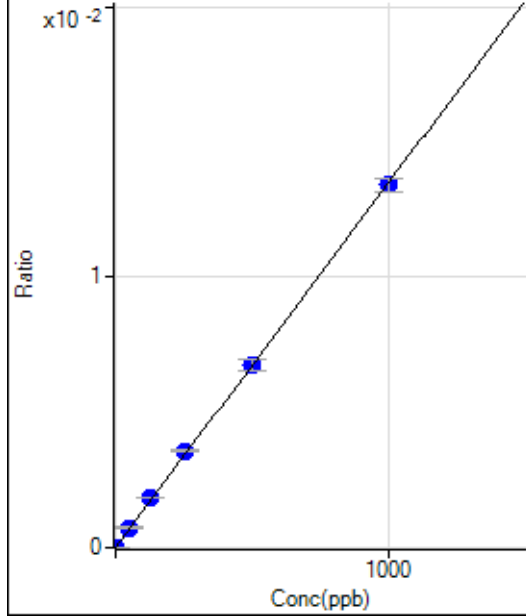
$$R = 0.9999$$

$$DL = 0.01391$$

$$BEC = 0.03772$$

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	29.17	0.0000	P	16.2
2	☐	1.000	0.844	147.22	0.0000	P	3.4
3	☐	50.000	55.038	7477.13	0.0007	P	0.8
4	☐	125.000	136.152	18943.73	0.0018	P	2.0
5	☐	250.000	265.506	36931.56	0.0036	P	0.8
6	☐	500.000	499.859	71801.44	0.0067	P	6.1
7	☐	1000.000	994.548	142411.12	0.0134	P	3.4
8	☐			145.84	0.0000	P	17.8

$$y = 1.3491\text{E-}005 * x + 2.9743\text{E-}006$$

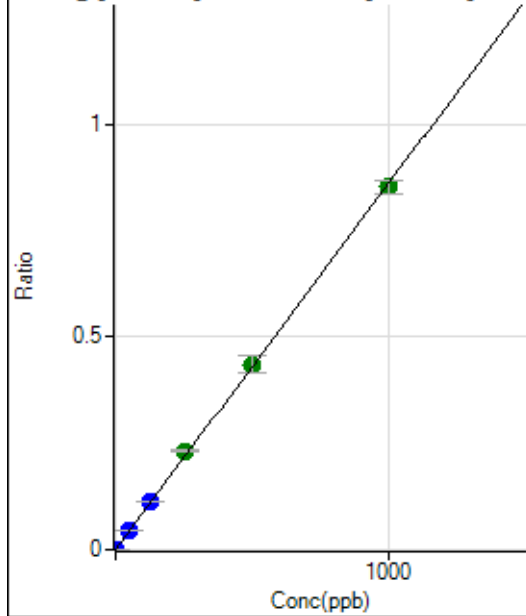
$$R = 0.9998$$

$$DL = 0.1073$$

$$BEC = 0.2205$$

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	336.13	0.0000	P	17.3
2	☐	1.000	1.028	9409.04	0.0009	P	3.7
3	☐	50.000	53.724	464154.71	0.0463	P	1.7
4	☐	125.000	132.199	1172352.81	0.1138	P	1.6
5	☐	250.000	269.095	2386712.29	0.2317	A	1.7
6	☐	500.000	506.299	4631640.51	0.4359	A	9.8
7	☐	1000.000	990.991	9053429.37	0.8532	A	3.8
8	☐			5934.78	0.0006	P	4.2

$$y = 8.6090\text{E-}004 * x + 3.4157\text{E-}005$$

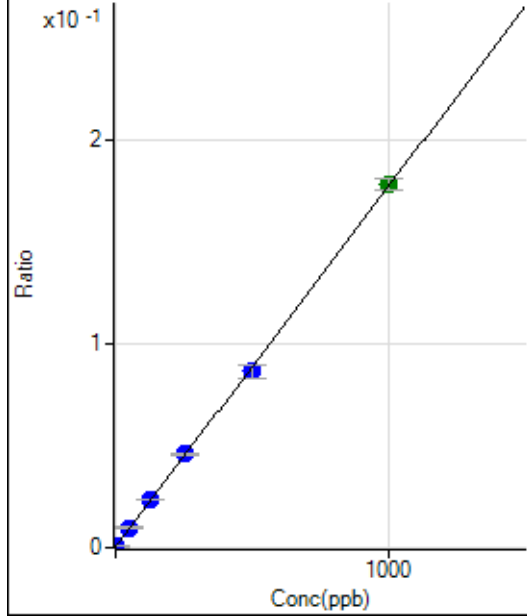
$$R = 0.9998$$

$$DL = 0.02055$$

$$BEC = 0.03968$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	3499.22	0.0004	P	3.1
2	☐	1.000	1.020	5493.77	0.0005	P	3.5
3	☐	50.000	53.865	99218.73	0.0099	P	2.9
4	☐	125.000	132.130	244651.53	0.0238	P	1.7
5	☐	250.000	257.448	473346.62	0.0460	P	1.3
6	☐	500.000	485.940	919091.59	0.0864	P	7.4
7	☐	1000.000	1004.084	1891004.43	0.1782	A	3.0
8	☐			4231.97	0.0004	P	0.9

$$y = 1.7710E-004 * x + 3.5605E-004$$

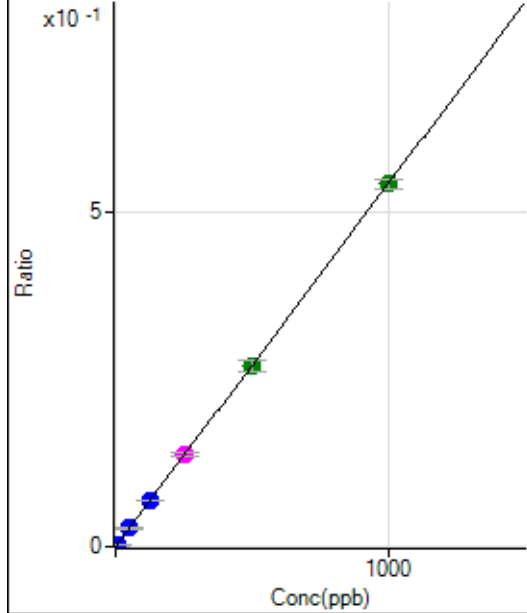
$$R = 0.9998$$

$$DL = 0.185$$

$$BEC = 2.01$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	758.38	0.0001	P	1.9
2	☐	5.000	5.011	28569.42	0.0028	P	7.3
3	☐	50.000	50.839	277471.19	0.0277	P	3.2
4	☐	125.000	126.450	707559.79	0.0687	P	2.5
5	☐	250.000	256.136	1432983.46	0.1391	M	4.4
6	☐	500.000	498.735	2881611.63	0.2708	A	6.2
7	☐	1000.000	998.875	5755818.32	0.5423	A	2.3
8	☐			7930.29	0.0008	P	2.2

$$y = 5.4284E-004 * x + 7.7150E-005$$

$$R = 1.0000$$

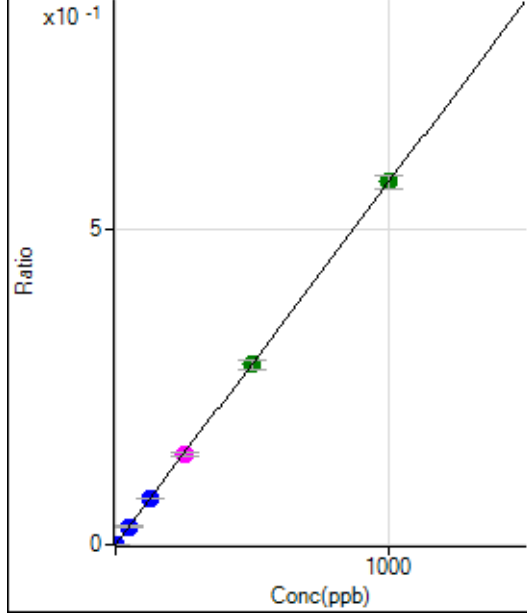
$$DL = 0.008287$$

$$BEC = 0.1421$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	22.22	0.0000	P	21.5
2	☐	2.000	1.923	11288.31	0.0011	P	9.3
3	☐	50.000	50.178	288902.21	0.0288	P	2.2
4	☐	125.000	125.536	742235.29	0.0721	P	1.1
5	☐	250.000	249.935	1477935.77	0.1435	M	4.8
6	☐	500.000	497.097	3037713.26	0.2854	A	5.4
7	☐	1000.000	1001.392	6101199.70	0.5749	A	3.7
8	☐			4742.64	0.0005	P	6.6

$$y = 5.7414\text{E-}004 * x + 2.2611\text{E-}006$$

$$R = 1.0000$$

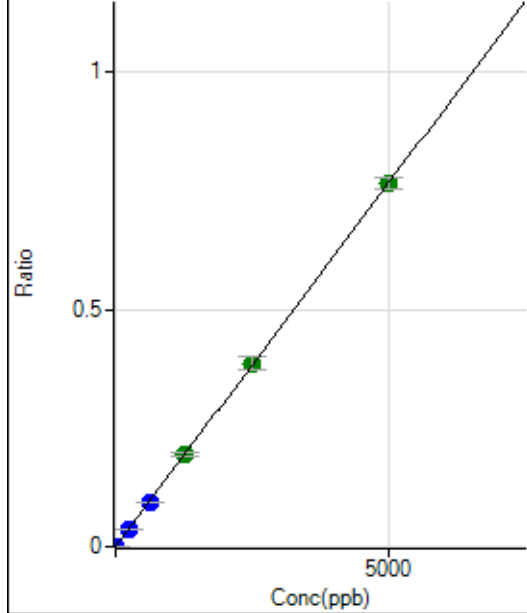
$$DL = 0.002545$$

$$BEC = 0.003938$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	13.89	0.0000	P	67.3
2	☐	10.000	9.187	14358.03	0.0014	P	10.3
3	☐	250.000	244.851	375931.90	0.0375	P	3.4
4	☐	625.000	615.148	970029.60	0.0942	P	0.7
5	☐	1250.000	1269.256	2002028.86	0.1944	A	2.7
6	☐	2500.000	2514.328	4095121.27	0.3850	A	7.2
7	☐	5000.000	4989.512	8108457.65	0.7641	A	3.0
8	☐			5806.99	0.0006	P	2.8

$$y = 1.5313\text{E-}004 * x + 1.4013\text{E-}006$$

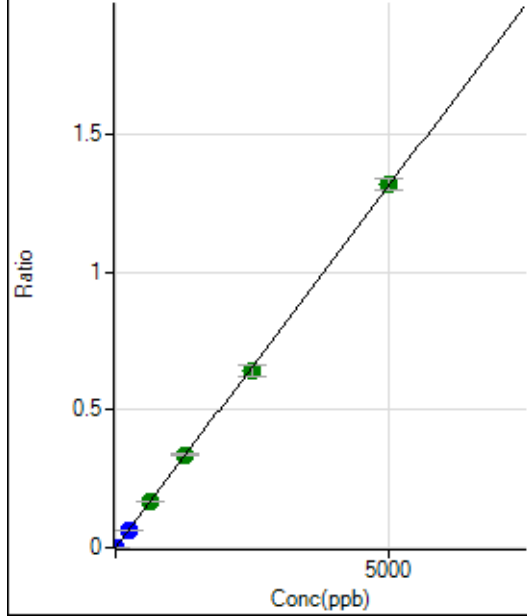
$$R = 1.0000$$

$$DL = 0.01847$$

$$BEC = 0.009151$$

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	24.6
2	☐	10.000	9.303	25004.35	0.0024	P	6.7
3	☐	250.000	247.936	653226.91	0.0651	P	1.8
4	☐	625.000	641.021	1734546.91	0.1684	A	2.0
5	☐	1250.000	1276.851	3455538.14	0.3355	A	2.1
6	☐	2500.000	2449.256	6846980.06	0.6435	A	6.2
7	☐	5000.000	5016.761	13988031.91	1.3180	A	3.2
8	☐			9906.68	0.0010	P	3.8

$$y = 2.6273E-004 * x + 3.3884E-006$$

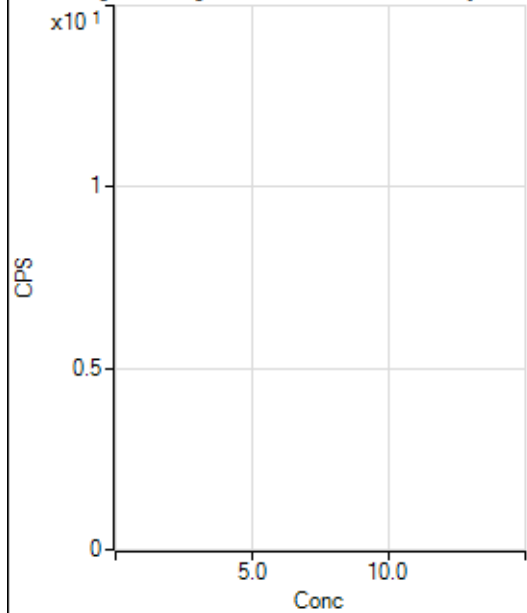
$$R = 0.9999$$

$$DL = 0.009515$$

$$BEC = 0.0129$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			15.56		P	65.5
2	☐			13.34		P	86.6
3	☐			53.34		P	25.0
4	☐			126.67		P	5.3
5	☐			226.68		P	7.8
6	☐			433.35		P	21.2
7	☐			851.16		P	8.6
8	☐			37.78		P	71.3

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.2
2	☐			3.33		P	0.0
3	☐			4.44		P	114.6
4	☐			15.56		P	32.7
5	☐			21.11		P	39.7
6	☐			46.67		P	37.8
7	☐			91.11		P	25.7
8	☐			15.55		P	24.8

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.33		P	100.0
2	☐			13.89		P	69.3
3	☐			27.78		P	62.5
4	☐			63.89		P	49.4
5	☐			147.23		P	36.8
6	☐			263.90		P	14.2
7	☐			488.91		P	14.5
8	☐			1469.58		P	6.5

156 Dy [He] No available calibration points

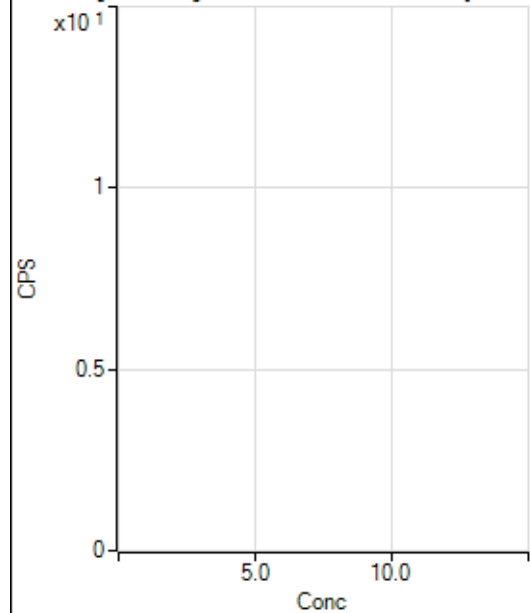
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	86.6
2	☐			3.33		P	100.1
3	☐			12.22		P	41.7
4	☐			18.89		P	10.2
5	☐			51.11		P	33.5
6	☐			92.22		P	31.6
7	☐			181.11		P	22.7
8	☐			575.57		P	3.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			88.89		P	32.9
2	☐			77.78		P	16.4
3	☐			122.23		P	21.9
4	☐			158.34		P	19.0
5	☐			186.12		P	29.8
6	☐			269.46		P	15.3
7	☐			472.24		P	11.5
8	☐			1530.69		P	6.5

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			104.45		P	3.7
2	☐			101.11		P	33.7
3	☐			108.89		P	9.4
4	☐			123.34		P	12.4
5	☐			143.33		P	39.7
6	☐			161.11		P	1.2
7	☐			300.01		P	4.0
8	☐			665.58		P	5.5

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			50.00		P	33.3
2	☐			58.34		P	49.5
3	☐			58.33		P	51.5
4	☐			94.45		P	36.7
5	☐			105.56		P	29.9
6	☐			105.56		P	12.1
7	☐			258.34		P	9.7
8	☐			138.89		P	28.4

164 Er [He] No available calibration points

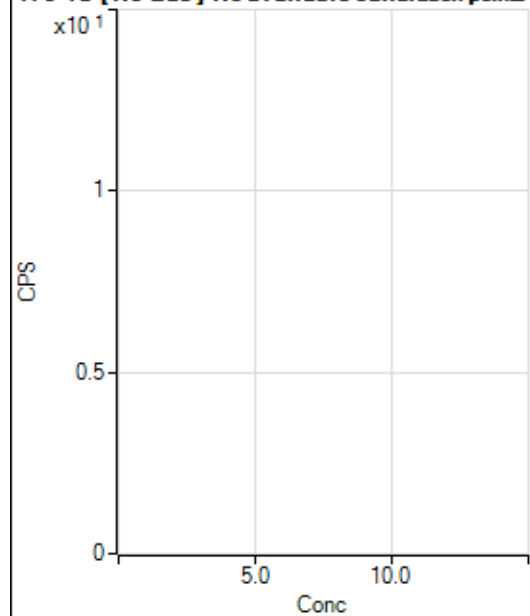
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			33.34		P	45.8
2	☐			18.89		P	53.9
3	☐			26.67		P	33.1
4	☐			31.11		P	40.6
5	☐			40.00		P	30.0
6	☐			42.22		P	12.1
7	☐			73.34		P	7.9
8	☐			72.22		P	23.2

172 Yb [No Gas] No available calibration points

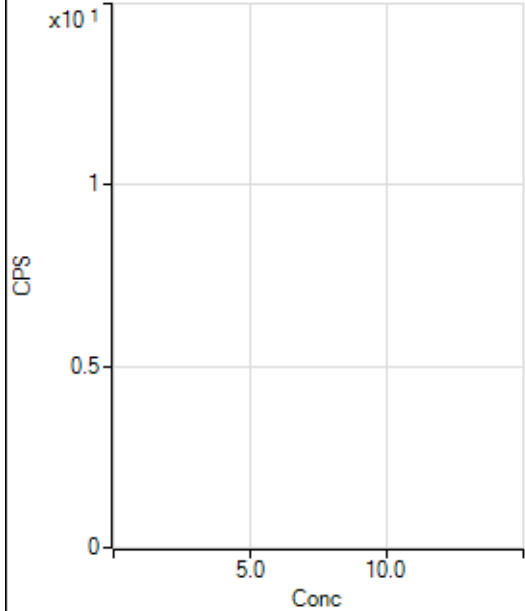
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			33.33		P	43.3
2	☐			75.00		P	29.4
3	☐			100.00		P	16.7
4	☐			113.89		P	29.6
5	☐			116.67		P	21.4
6	☐			150.01		P	29.4
7	☐			316.68		P	16.4
8	☐			502.80		P	10.1

172 Yb [He] No available calibration points

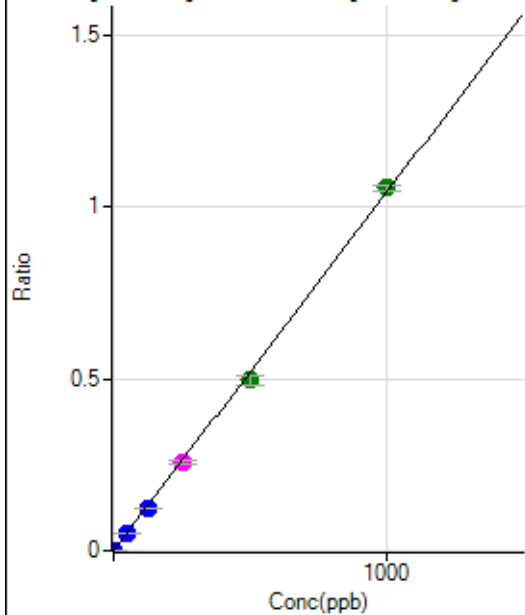
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			29.63		P	10.8
2	☐			24.08		P	70.5
3	☐			40.74		P	20.8
4	☐			33.33		P	16.7
5	☐			40.74		P	28.4
6	☐			72.22		P	26.6
7	☐			122.22		P	13.6
8	☐			277.78		P	10.6

176 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1497.35		P	4.5
2	☐			1705.71		P	12.7
3	☐			2830.93		P	2.2
4	☐			4750.98		P	0.3
5	☐			7997.08		P	3.1
6	☐			14547.21		P	1.9
7	☐			27509.89		P	1.2
8	☐			1939.09		P	7.0

176 Yb [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7192.82		P	5.9
2	☐			7405.89		P	3.2
3	☐			8045.18		P	2.8
4	☐			8790.12		P	4.5
5	☐			9733.41		P	1.3
6	☐			12337.46		P	4.6
7	☐			18051.53		P	0.4
8	☐			7702.37		P	1.2

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	66.67	0.0000	P	31.5
2	☐	1.000	0.851	5857.04	0.0009	P	5.4
3	☐	50.000	46.928	300570.80	0.0489	P	2.9
4	☐	125.000	117.794	764415.45	0.1228	P	1.0
5	☐	250.000	249.309	1608151.81	0.2600	M	4.0
6	☐	500.000	476.441	3240565.70	0.4968	A	5.5
7	☐	1000.000	1013.006	6561011.65	1.0563	A	1.6
8	☐			2414.18	0.0005	P	5.0

$$y = 0.0010 * x + 1.0915E-005$$

$$R = 0.9996$$

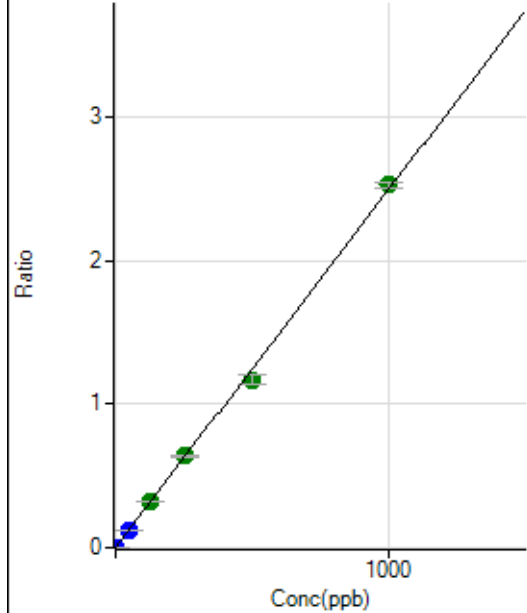
$$DL = 0.009883$$

$$BEC = 0.01047$$

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	183.34	0.0000	P	28.6
2	☐	1.000	0.872	14386.16	0.0022	P	5.7
3	☐	50.000	47.537	729076.20	0.1187	P	1.6
4	☐	125.000	128.369	1994023.92	0.3205	A	1.7
5	☐	250.000	257.397	3975180.25	0.6425	A	2.1
6	☐	500.000	468.263	7623665.54	1.1689	A	5.7
7	☐	1000.000	1013.722	15716933.86	2.5304	A	1.9
8	☐			5315.16	0.0010	P	11.3

$$y = 0.0025 * x + 3.0162E-005$$

$$R = 0.9992$$

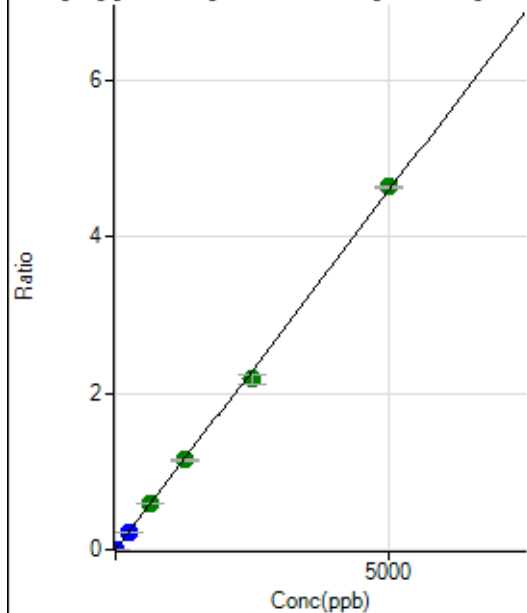
$$DL = 0.01038$$

$$BEC = 0.01208$$

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	540.76	0.0001	P	9.4
2	☐	1.000	0.788	5293.76	0.0008	P	1.2
3	☐	250.000	230.192	1296132.77	0.2110	P	1.2
4	☐	625.000	637.373	3634417.91	0.5841	A	2.2
5	☐	1250.000	1252.712	7102445.53	1.1479	A	1.8
6	☐	2500.000	2380.251	14226994.65	2.1811	A	5.5
7	☐	5000.000	5058.641	28791611.76	4.6353	A	0.8
8	☐			10463.69	0.0020	P	6.1

$$y = 9.1630E-004 * x + 8.8890E-005$$

$$R = 0.9996$$

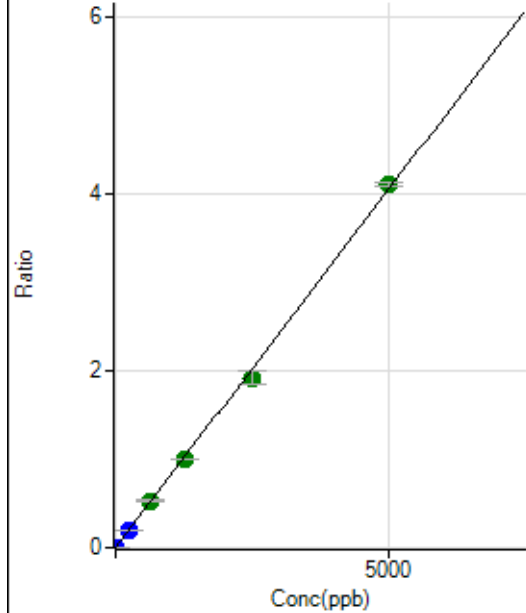
$$DL = 0.02744$$

$$BEC = 0.09701$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	509.28	0.0001	P	3.8
2	☐	1.000	0.788	4706.49	0.0007	P	5.6
3	☐	250.000	232.337	1157542.05	0.1885	P	2.0
4	☐	625.000	651.264	3286176.55	0.5281	A	2.3
5	☐	1250.000	1239.820	6219904.77	1.0053	A	1.3
6	☐	2500.000	2371.514	12534133.50	1.9229	A	7.2
7	☐	5000.000	5064.388	25504861.45	4.1064	A	1.0
8	☐			9257.24	0.0018	P	10.4

$$y = 8.1081\text{E-}004 * x + 8.3620\text{E-}005$$

$$R = 0.9995$$

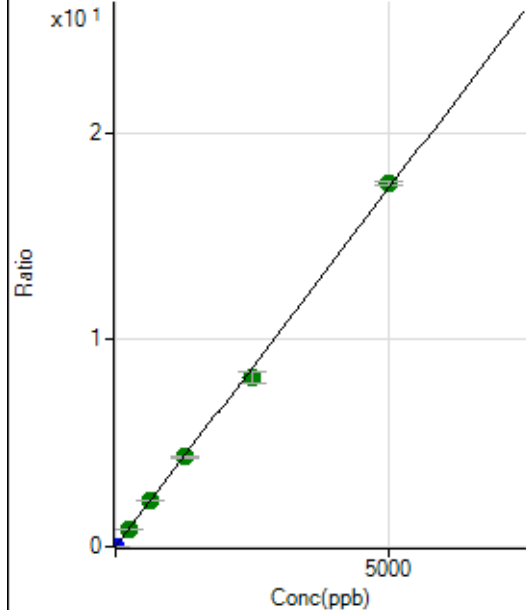
$$DL = 0.01188$$

$$BEC = 0.1031$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2183.81	0.0004	P	4.4
2	☐	1.000	0.835	21188.98	0.0033	P	4.7
3	☐	250.000	242.799	5168381.06	0.8415	A	2.4
4	☐	625.000	640.323	13807497.05	2.2187	A	1.0
5	☐	1250.000	1248.207	26757636.62	4.3247	A	0.6
6	☐	2500.000	2369.053	53516995.18	8.2078	A	6.4
7	☐	5000.000	5064.367	108980125.5	17.5456	A	1.0
8	☐			38801.93	0.0075	P	6.3

$$y = 0.0035 * x + 3.5895\text{E-}004$$

$$R = 0.9995$$

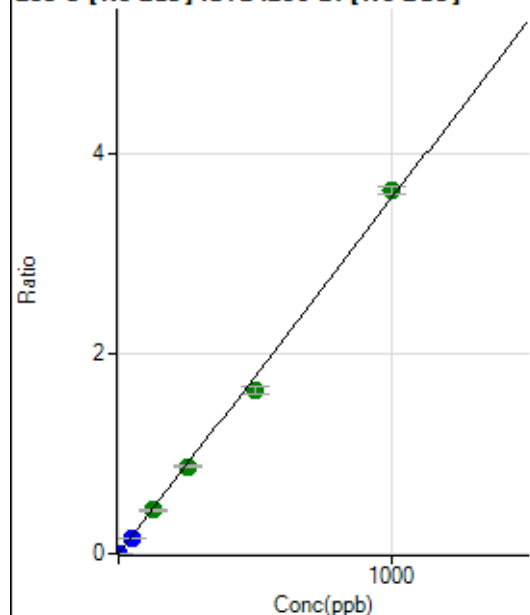
$$DL = 0.01367$$

$$BEC = 0.1036$$

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	33.33	0.0000	P	27.9
2	☐	1.000	0.819	19037.03	0.0029	P	6.2
3	☐	50.000	45.315	990628.68	0.1613	P	2.2
4	☐	125.000	122.426	2710911.93	0.4358	A	2.8
5	☐	250.000	245.184	5399973.99	0.8727	A	1.6
6	☐	500.000	461.221	10710521.94	1.6416	A	4.9
7	☐	1000.000	1021.150	22576605.19	3.6346	A	2.3
8	☐			5145.64	0.0010	P	12.3

$$y = 0.0036 * x + 5.5031E-006$$

$$R = 0.9989$$

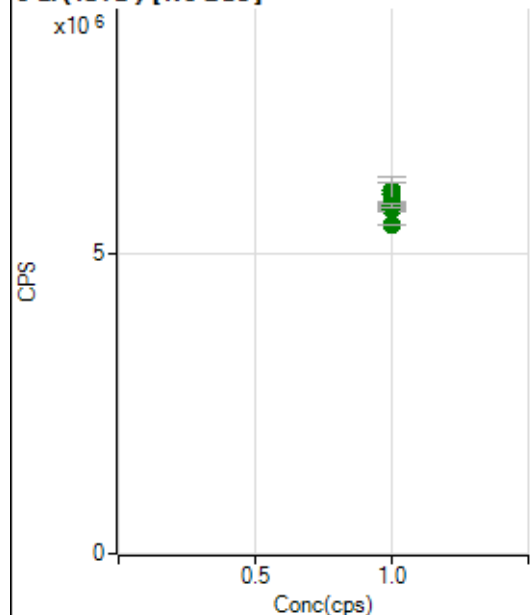
$$DL = 0.001295$$

$$BEC = 0.001546$$

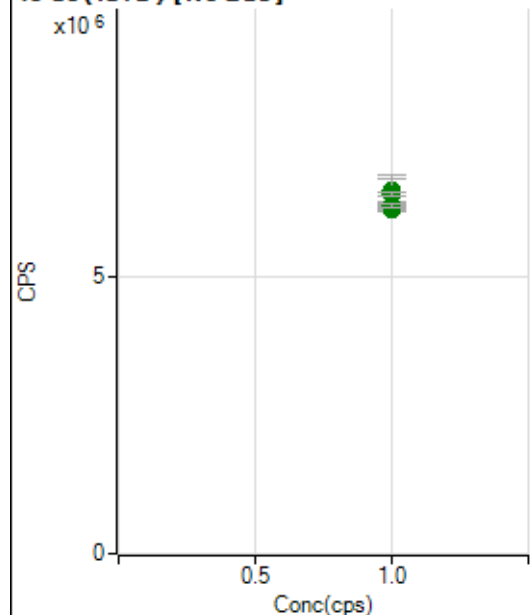
Weight: <None>

Min Conc: 0

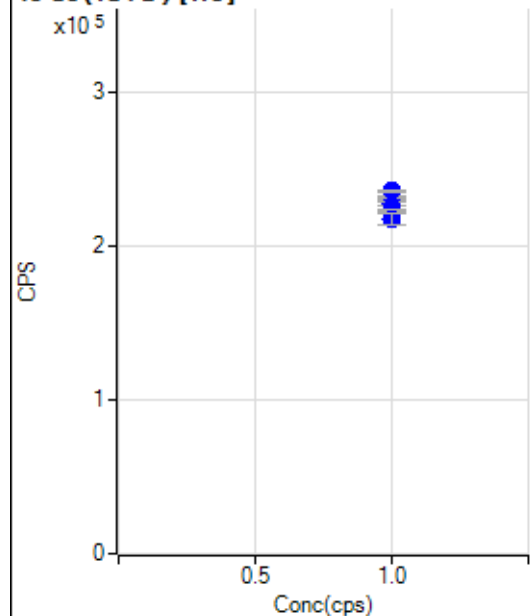
6 Li (ISTD) [No Gas]



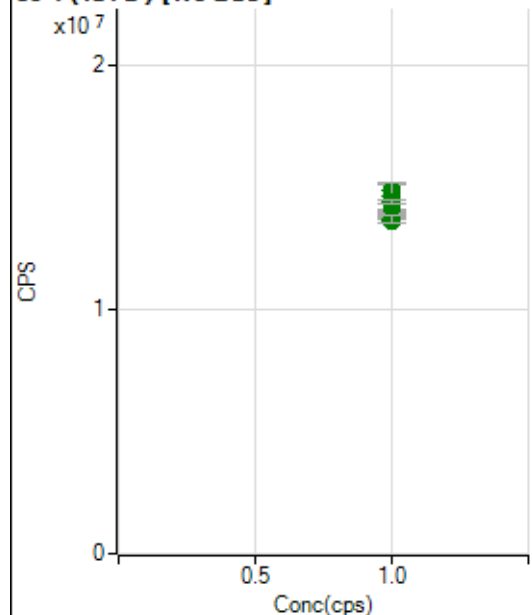
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5784477.78		A	1.6
2	☐	1.000		6055427.56		A	7.3
3	☐	1.000		5800611.24		A	1.5
4	☐	1.000		5837970.06		A	0.9
5	☐	1.000		5756338.70		A	1.0
6	☐	1.000		5986472.85		A	6.7
7	☐	1.000		5818619.45		A	1.2
8	☐	1.000		5492309.72		A	0.3

45 Sc (ISTD) [No Gas]

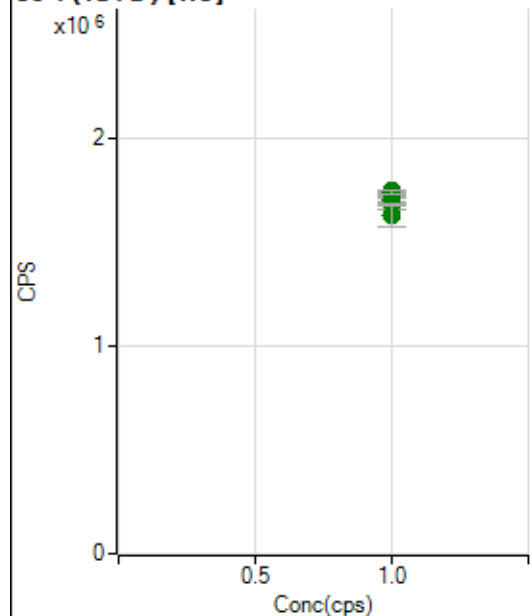
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6267780.18		A	2.0
2	☐	1.000		6515918.65		A	9.4
3	☐	1.000		6203931.64		A	1.0
4	☐	1.000		6274226.85		A	1.4
5	☐	1.000		6226565.05		A	1.1
6	☐	1.000		6541176.43		A	6.6
7	☐	1.000		6470029.70		A	1.1
8	☐	1.000		6270994.14		A	0.9

45 Sc (ISTD) [He]

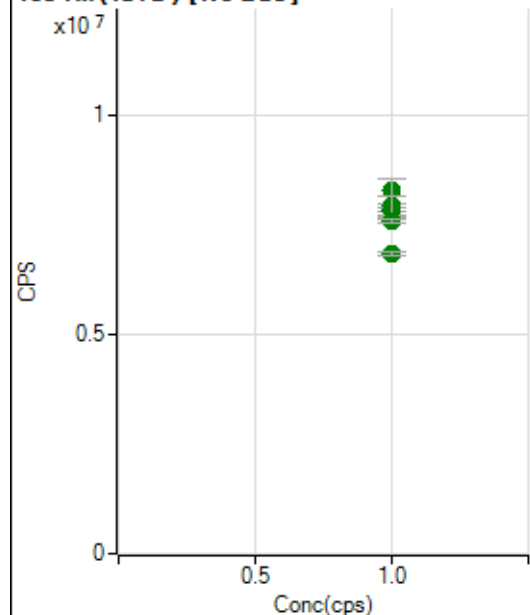
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		227451.74		P	1.7
2	☐	1.000		229636.67		P	1.2
3	☐	1.000		229757.63		P	0.6
4	☐	1.000		228522.73		P	0.4
5	☐	1.000		223260.26		P	0.8
6	☐	1.000		217160.97		P	3.4
7	☐	1.000		231952.53		P	0.8
8	☐	1.000		235651.39		P	0.7

89 Y (ISTD) [No Gas]

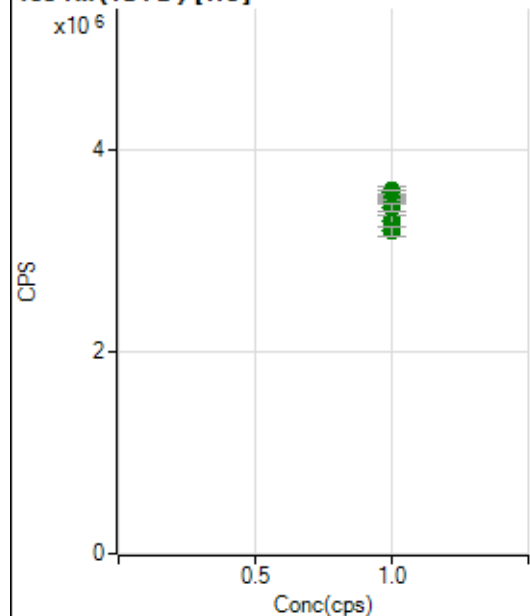
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13631127.99		A	1.0
2	☐	1.000		14623453.25		A	7.3
3	☐	1.000		14038717.85		A	0.2
4	☐	1.000		13985511.88		A	0.6
5	☐	1.000		13900935.63		A	1.2
6	☐	1.000		14868267.28		A	4.5
7	☐	1.000		14410859.09		A	1.3
8	☐	1.000		13711597.57		A	2.2

89 Y (ISTD) [He]

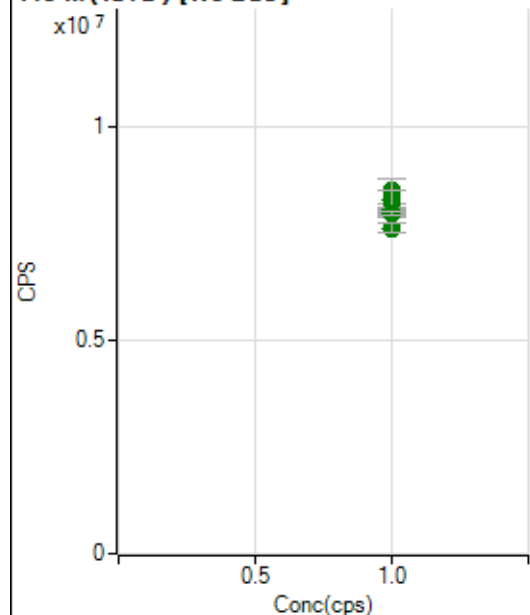
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1696844.76		A	1.6
2	☐	1.000		1683016.31		A	1.6
3	☐	1.000		1728527.16		A	2.6
4	☐	1.000		1698153.95		A	2.2
5	☐	1.000		1670662.56		A	1.7
6	☐	1.000		1625566.54		A	6.2
7	☐	1.000		1744672.77		A	0.8
8	☐	1.000		1735383.47		A	1.2

103 Rh (ISTD) [No Gas]

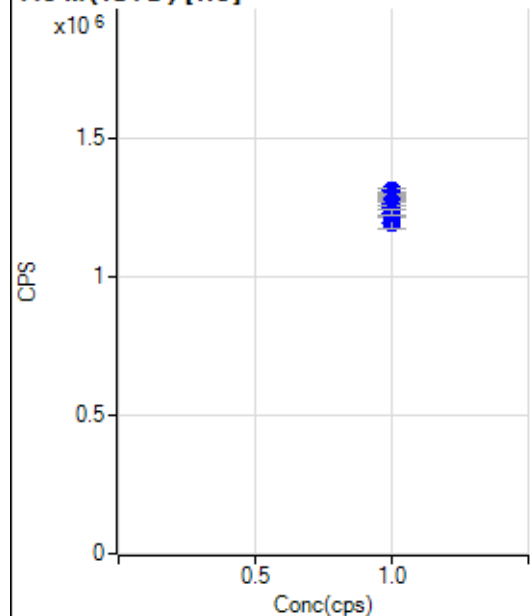
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7703725.61		A	0.5
2	☐	1.000		8274256.09		A	7.1
3	☐	1.000		7861310.42		A	1.4
4	☐	1.000		7818738.02		A	2.2
5	☐	1.000		7639593.14		A	0.5
6	☐	1.000		7948897.40		A	5.7
7	☐	1.000		7600187.06		A	1.3
8	☐	1.000		6826937.70		A	1.3

103 Rh (ISTD) [He]

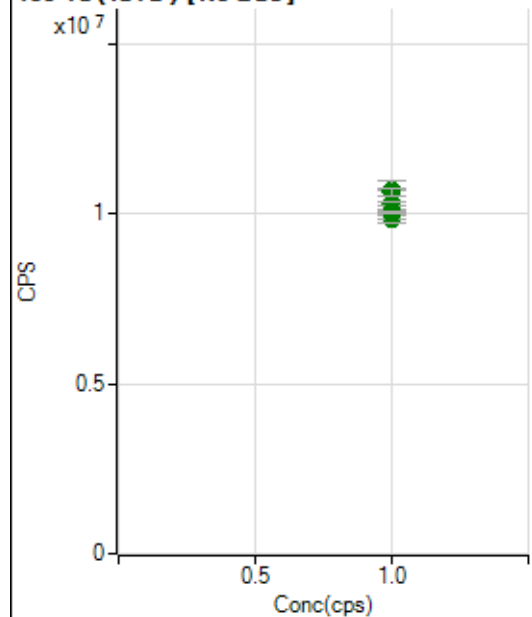
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3510070.82		A	1.7
2	☐	1.000		3593419.22		A	2.3
3	☐	1.000		3581680.71		A	1.1
4	☐	1.000		3495946.06		A	1.2
5	☐	1.000		3500893.56		A	0.3
6	☐	1.000		3301379.05		A	3.6
7	☐	1.000		3429709.63		A	1.8
8	☐	1.000		3192499.95		A	2.6

115 In (ISTD) [No Gas]

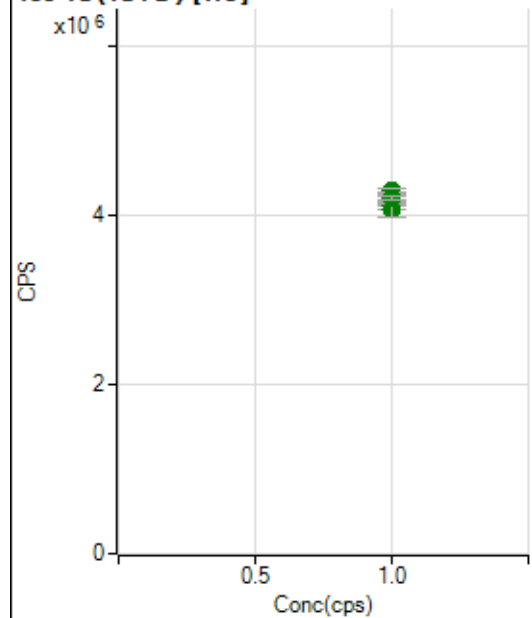
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7956997.55		A	1.7
2	☐	1.000		8504302.72		A	6.9
3	☐	1.000		8132381.59		A	2.1
4	☐	1.000		8085604.52		A	2.5
5	☐	1.000		7992170.12		A	1.1
6	☐	1.000		8315671.95		A	4.5
7	☐	1.000		7989195.76		A	1.2
8	☐	1.000		7635616.52		A	2.7

115 In (ISTD) [He]

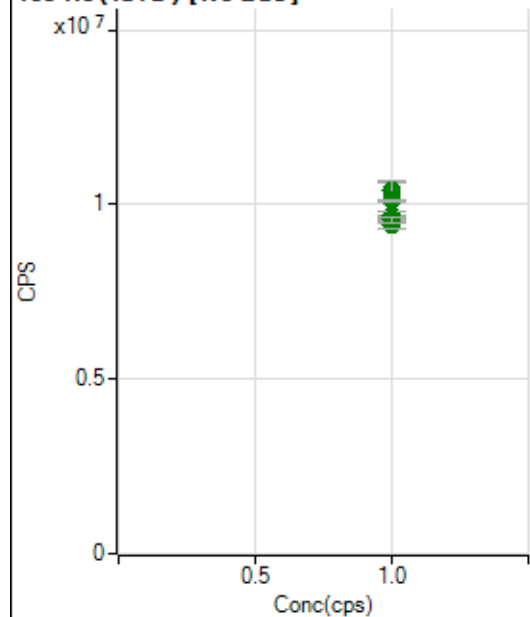
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1284438.49		P	0.2
2	☐	1.000		1310612.72		P	1.1
3	☐	1.000		1294183.33		P	0.6
4	☐	1.000		1273803.40		P	0.5
5	☐	1.000		1264143.34		P	1.1
6	☐	1.000		1196751.70		P	3.4
7	☐	1.000		1249737.95		P	1.4
8	☐	1.000		1232073.45		P	1.7

159 Tb (ISTD) [No Gas]

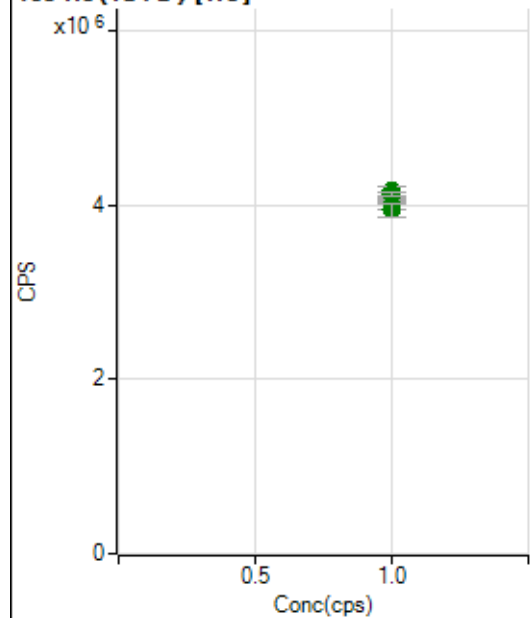
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9827476.59		A	2.0
2	☐	1.000		10252707.14		A	8.1
3	☐	1.000		10029436.03		A	1.6
4	☐	1.000		10298038.39		A	1.0
5	☐	1.000		10302269.15		A	1.3
6	☐	1.000		10666139.56		A	5.9
7	☐	1.000		10616341.58		A	1.8
8	☐	1.000		10037855.47		A	0.4

159 Tb (ISTD) [He]

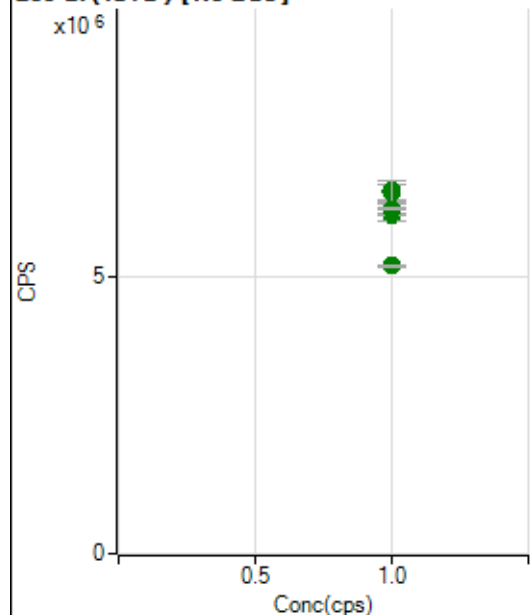
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4149333.86		A	1.3
2	☐	1.000		4132070.74		A	0.9
3	☐	1.000		4180453.72		A	0.9
4	☐	1.000		4119016.95		A	2.1
5	☐	1.000		4220138.34		A	1.2
6	☐	1.000		4066893.00		A	3.6
7	☐	1.000		4295170.28		A	1.2
8	☐	1.000		4209979.97		A	1.5

165 Ho (ISTD) [No Gas]

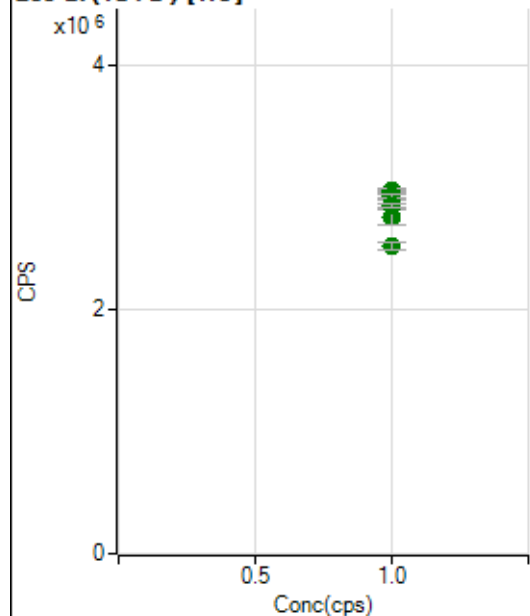
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9394037.62		A	2.2
2	☐	1.000		10158422.71		A	8.8
3	☐	1.000		9580143.10		A	2.7
4	☐	1.000		9675538.24		A	2.6
5	☐	1.000		9557955.51		A	0.8
6	☐	1.000		10392605.35		A	5.8
7	☐	1.000		10111442.50		A	0.7
8	☐	1.000		9572793.53		A	1.5

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4003881.26		A	2.9
2	☐	1.000		4068993.69		A	1.5
3	☐	1.000		4058304.77		A	1.4
4	☐	1.000		4106195.46		A	2.0
5	☐	1.000		4064332.65		A	1.0
6	☐	1.000		3937740.57		A	3.7
7	☐	1.000		4158193.10		A	2.5
8	☐	1.000		4116718.13		A	1.3

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6088191.78		A	3.3
2	☐	1.000		6525945.53		A	4.4
3	☐	1.000		6143288.10		A	1.9
4	☐	1.000		6224287.34		A	2.9
5	☐	1.000		6187387.13		A	1.3
6	☐	1.000		6536701.50		A	5.9
7	☐	1.000		6211231.64		A	0.4
8	☐	1.000		5184892.01		A	0.9

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2859090.72		A	2.4
2	☐	1.000		2939578.98		A	1.9
3	☐	1.000		2962858.08		A	1.3
4	☐	1.000		2969993.43		A	1.5
5	☐	1.000		2929099.06		A	0.8
6	☐	1.000		2751393.71		A	4.7
7	☐	1.000		2848229.82		A	1.4
8	☐	1.000		2517518.73		A	2.9

US EPA Tune Check Report

Operator Name Jaswal
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP8011323 MS.b
Acq. Date-Time 2023-01-13 09:49:55
Report Comment ---
Instrument Name G8403A SG19224459

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		17522	175215.74			2.583	5.000
24		111180	1111801.69			2.704	5.000
25		14383	143825.72			2.317	5.000
26		17191	171914.79			2.348	5.000
59		80321	803209.06			3.113	5.000
113		7704	77035.94			2.799	5.000
115		103677	1036770.38			3.161	5.000
206		21361	213607.43			2.376	5.000
207		19110	191103.51			2.199	5.000
208		46064	460641.04			3.019	5.000
220		0	3.00			66.667	

Mass	RSD% (Flag)
9	
24	
25	
26	
59	
113	
115	
206	
207	
208	
220	

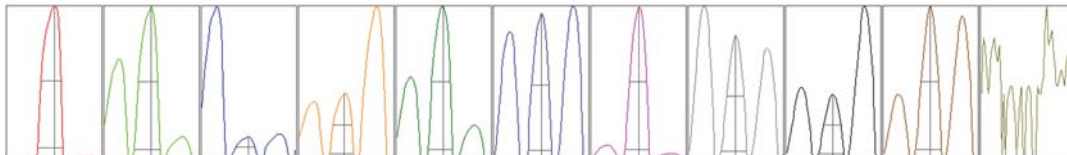
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	17571	17769	16733	17849	17686
24	111970	113072	105848	112536	112474
25	14417	14657	13807	14500	14533
26	17233	17635	16531	17303	17255
59	81396	83039	76814	81615	78740
113	7721	7808	7341	7908	7741
115	104525	103957	98100	106667	105137
206	21489	21266	20547	21890	21612
207	19242	19169	18386	19472	19284
208	45913	46691	43859	47623	46235

US EPA Tune Check Report

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
220	0	0	0	1	0

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	29125.62	9.05	8.90 - 9.10	
24	194292.63	24.00	23.90 - 24.10	
25	25386.36	25.00	24.90 - 25.10	
26	28807.64	25.95	25.90 - 26.10	
59	145203.81	59.00	58.90 - 59.10	
113	14982.35	113.05	112.90 - 113.10	
115	200995.92	115.05	114.90 - 115.10	
206	41035.51	206.00	205.90 - 206.10	
207	36709.80	207.00	206.90 - 207.10	
208	87967.20	208.00	207.90 - 208.10	
220			-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.64	0.786	0.900	
24	0.62	0.821	0.900	
25	0.60	0.819	0.900	
26	0.61	0.752	0.900	
59	0.58	0.774	0.900	
113	0.54	0.734	0.900	
115	0.53	0.765	0.900	
206	0.54	0.801	0.900	
207	0.54	0.798	0.900	
208	0.55	0.817	0.900	
220				

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode --- Nebulizer Gas 0.87 L/min Dilution Gas 0.40 L/min

US EPA Tune Check Report

RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.40 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	10.4 V	Deflect	15.4 V
Extract 2	-205.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-105 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	4.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	180 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9993	QP Bias	-4.0 V
Mass Offset	125	Axis Offset	-0.01		

Hardware Settings

Torch

Torch H	0.9 mm	Torch V	-0.7 mm
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EM

Discriminator	4.5 mV	Analog HV	2304 V	Pulse HV	1633 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		17278	172776.57			0.255	
89		19573	195729.54			0.454	
205		12447	124465.05			1.090	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	17349	17277	17238	17244	17281
89	19555	19447	19562	19691	19610
205	12446	12340	12295	12519	12631

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.87 L/min	Dilution Gas	0.40 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.40 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	10.4 V	Deflect	3.6 V
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US EPA Tune Check Report

Extract 2	-205.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-105 V	Cell Exit	-70 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9993	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.01		

Hardware Settings

Torch

Torch H	0.9 mm	Torch V	-0.7 mm
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EM

Discriminator	4.5 mV	Analog HV	2304 V	Pulse HV	1633 V
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