

EtG Proficiency Test - Results

Examination period: July - August

1- Expected concentration after analyses of homogeneity:

QC A		QC B		QC C		QC D	
Lab code	EtG (pg/mg)	Lab code	EtG (pg/mg)	Lab code	EtG (pg/mg)	Lab code	EtG (pg/mg)
Lab 3	149	Lab 5	46	Lab 5	24	Lab 5	0
Lab 7	228	Lab 3	73	Lab 3	24	Lab 3	3
Lab 1	230	Lab 7	106	Lab 7	33	Lab 1	8
Lab 4	239	Lab 1	120	Lab 1	38	Lab 2	8
Lab 5	269	Lab 8	138	Lab 4	42	Lab 4	9
Lab 8	271	Lab 4	143	Lab 8	45	Lab 7	9
Lab 2	324	Lab 2	147	Lab 2	46	Lab 8	12
Average	244.29		121.17		36.00		9.20
SD	53.63		28.21		9.29		1.64
CV %	21.95		23.28		25.81		17.86
Average (mg/mg)	2.44E-04		1.21E-04		3.60E-05		9.20E-06
Log (Average)	-3.61		-3.92		-4.44		-5.04
VC %	6.99		7.77		9.33		11.46
SD_H	17.08		9.42		3.36		1.05
2*SD_H	34.17		18.83		6.72		2.11
Median	269		138		42		8

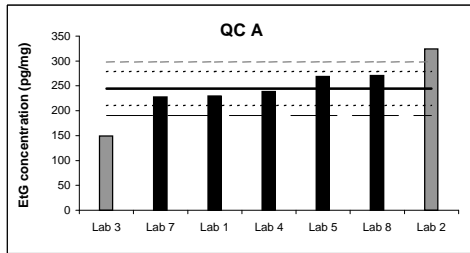
Lab code	CQ A z-score	Passed	Lab code	CQ B z-score	Passed	Lab code	CQ C z-score	Passed	Lab code	CQ D z-score	Passed
Lab 3	-5.58	no	Lab 5	-7.98	no	Lab 5	-3.57	no	Lab 5	-8.73	no
Lab 7	-0.95	yes	Lab 3	-5.11	no	Lab 3	-3.57	no	Lab 3	-5.88	no
Lab 1	-0.84	yes	Lab 7	-1.61	yes	Lab 7	-0.89	yes	Lab 1	-1.14	yes
Lab 4	-0.31	yes	Lab 1	-0.12	yes	Lab 1	0.60	yes	Lab 2	-1.14	yes
Lab 5	1.45	yes	Lab 8	1.79	yes	Lab 4	1.79	yes	Lab 4	-0.19	yes
Lab 8	1.56	yes	Lab 4	2.32	no	Lab 8	2.68	no	Lab 7	-0.19	yes
Lab 2	4.67	no	Lab 2	2.74	no	Lab 2	2.98	no	Lab 8	2.66	no

Standard deviation according to Horwitz

$$VC = 2^{(1+0.5 \log(C))}$$

with [C] given as mg EtG/mg hair

Calcul du Z-score = (result obtained - mean)/SD_H
with Abs(Z-score) <= 2

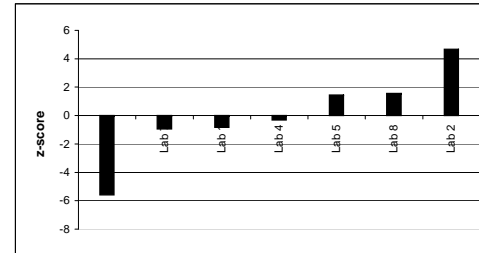


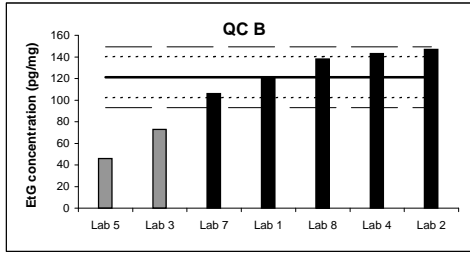
Average	Range ¹	
	Min	Max
244.29	210.12	278.45
244.29	210.12	278.45
244.29	210.12	278.45
244.29	210.12	278.45
244.29	210.12	278.45
244.29	210.12	278.45
244.29	210.12	278.45

¹corresponding to mean +/- 2SD_H

Min	Range ²	
	Min	Max
190.66	190.66	297.91
190.66	190.66	297.91
190.66	190.66	297.91
190.66	190.66	297.91
190.66	190.66	297.91
190.66	190.66	297.91
190.66	190.66	297.91

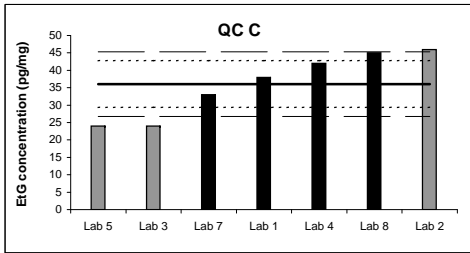
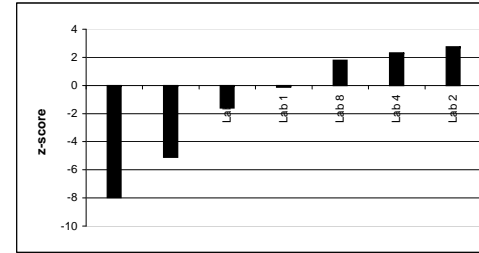
² corresponding to mean +/- SD





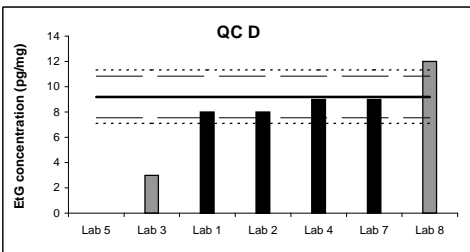
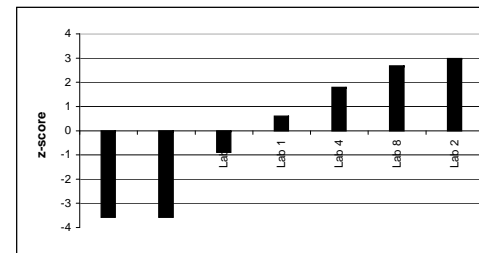
Average	Range ¹	
	Min	Max
121.17	102.33	140.00
121.17	102.33	140.00
121.17	102.33	140.00
121.17	102.33	140.00
121.17	102.33	140.00
121.17	102.33	140.00
121.17	102.33	140.00
121.17	102.33	140.00

Min	Max
92.96	149.38
92.96	149.38
92.96	149.38
92.96	149.38
92.96	149.38
92.96	149.38



Average	Range ¹	
	Min	Max
36.00	29.28	42.72
36.00	29.28	42.72
36.00	29.28	42.72
36.00	29.28	42.72
36.00	29.28	42.72
36.00	29.28	42.72
36.00	29.28	42.72
36.00	29.28	42.72

Min	Max
26.71	45.29
26.71	45.29
26.71	45.29
26.71	45.29
26.71	45.29
26.71	45.29



Average	Range ¹	
	Min	Max
9.20	7.09	11.31
9.20	7.09	11.31
9.20	7.09	11.31
9.20	7.09	11.31
9.20	7.09	11.31
9.20	7.09	11.31
9.20	7.09	11.31
9.20	7.09	11.31

Min	Max
7.56	10.84
7.56	10.84
7.56	10.84
7.56	10.84
7.56	10.84
7.56	10.84

