



«Tit» «Name» «Fam_Nam»
«Organization»
«Address1»
«Address_2»
«PO_Box» «City». «Country»

Sevilla, August, 2015

Proficiency Test 2015-1

Laboratory Code: **«Lab_code»**

Dear participants,

Enclosed you will find the report of the Proficiency Test 2015-1 on Drugs of Abuse in Hair, organized by the Society of Hair Testing.

Each of the participating laboratories received an identifying code. Your particular code is **«Lab_code»**.

Sets of three samples were sent to forty five participating laboratories. Forty three of them sent the report forms back.

Sample contents were as follows:

- * Sample A contained opiates (6-MAM, morphine, codeine, acetylcodeine and heroin), cocaineics (cocaine, BE, cocaethylene and norcocaine) amphetamine compounds (amphetamine, methamphetamine, MDMA and traces of MDA) and cannabis (THC, CBD, CBN and THC-COOH). It also contained methadone, dihydrocodeine, diazepam, nordiazepam, tramadol, ketamina and AEME.
- * Sample B contained amphetamine compounds (amphetamine and methamphetamine) and cannabis (THC, CBD, CBN and THC-COOH). It also contained traces of cocaineics (cocaine, BE).
- * Sample C opiates (6-MAM, morphine, codeine, acetylcodeine and heroin), cocaineics (cocaine, BE, cocaethylene and norcocaine) amphetamine compounds (amphetamine and MDMA) and cannabis (THC, CBD, CBN and THC-COOH). It also contained methadone, dihydrocodeine, diazepam, nordiazepam, tramadol and AEME.

Z-score

Z-score has been calculated based on robust estimators (median instead of mean and interquartile instead of standard deviation).

Z-score has been calculated as follows:

$$\text{Z-score} = (x - \chi) / \text{IQR}$$

Where:

x: Concentration reported by the participant

χ : Median concentration obtained from the participating laboratories

IQR: Interquartile range: It is calculated as: Q3-Q1 (the upper quartile minus the lower quartile)

Q3: Third quartile (percentile 75)

Q1: First quartile (percentile 25)

Decision criteria

The following criteria have been adopted:

Satisfactory results: Z-score $\leq \pm 2$

Questionable results: $2 < \text{Z-score} \leq 3$

Unsatisfactory results: Z-score ≥ 3

Yours faithfully,

Carmen Jurado

QUALITATIVE RESULTS

Laboratory Code: **Lab**

Sample A			Sample B			Sample C					
Substances	A	T	F	Substances	A	T	F	Substances	A	T	F
MAM	P			Amphetamine*		P		MAM		P	
Morphine	P			Methamphetamine		P		Morphine		P	
Codeine*	P			THC		P		Codeine		P	
Cocaine	P			THC-COOH		P		Cocaine		P	
BE	P							BE		P	
Amphetamine	P							Amphetamine*		P	
Methamphetamine	P							MDMA*		P	
MDMA	P							THC		P	
THC	P							THC-COOH		P	
THC-COOH	P										

* The median concentration of codeine in Sample A is 0.13 ng/mg, which is lower than the cut-off proposed by SoHT (0.2 ng/mg). The median concentration of amphetamine in Sample B is 0.16 ng/mg, which is lower than the cut-off proposed by SoHT (0.2 ng/mg). The median concentration of amphetamine in Sample C is 0.13 ng/mg, which is lower than the cut-off proposed by SoHT (0.2 ng/mg). The median concentration of MDMA in Sample C is 0.15 ng/mg, which is lower than the cut-off proposed by SoHT (0.2 ng/mg).

A: Your answer

T: True answer

F: False answer

P: Positive

N: Negative

NR: Not reported

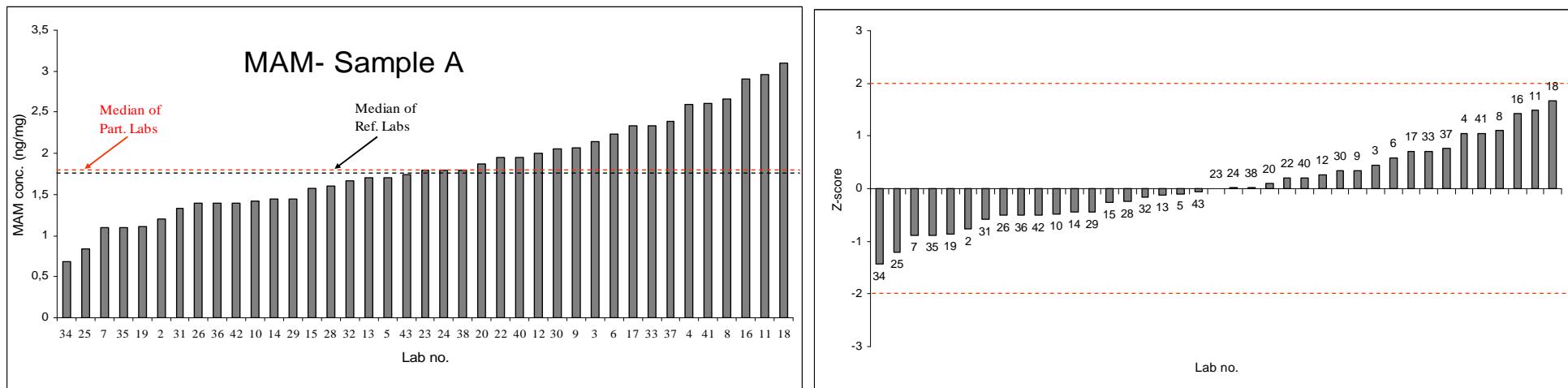
NA: Not analyzed

FN: False Negative

FP: False Positive

Comments:

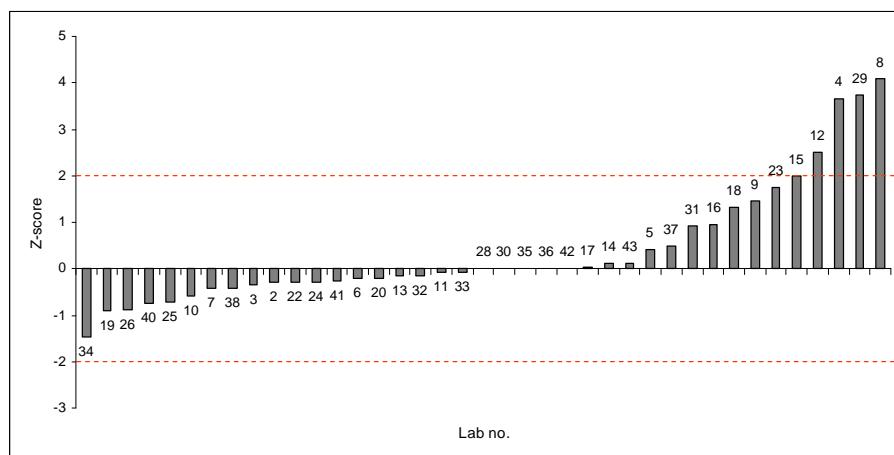
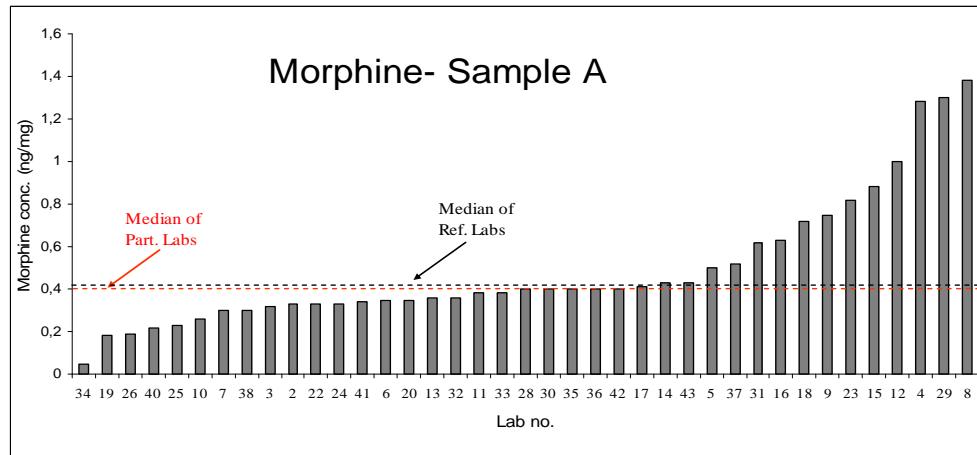
- Sample A contains methadone, CBD, CBN, norcocaine, cocaethylene, dihydrocodeine, diazepam, tramadol, ketamine and traces of MDA (0.04 ng/mg, median concentration).
- Sample B contains CBD, CBN, and traces of cocaine (0.06 ng/mg, median concentration), benzoylecgonine (0.08 ng/mg, median concentration),
- Sample C contains methadone, CBD, CBN, norcocaine, cocaethylene, dihydrocodeine, diazepam and tramadol.



Lab.	MAM (ng/mg)	Z-score	Result
34	0,68	-1,42	Satisfactory
25	0,84	-1,22	Satisfactory
7	1,10	-0,88	Satisfactory
35	1,10	-0,88	Satisfactory
19	1,11	-0,87	Satisfactory
2	1,20	-0,76	Satisfactory
31	1,33	-0,59	Satisfactory
26	1,40	-0,50	Satisfactory
36	1,40	-0,50	Satisfactory
42	1,40	-0,50	Satisfactory
10	1,42	-0,47	Satisfactory
14	1,45	-0,43	Satisfactory
29	1,45	-0,43	Satisfactory
15	1,58	-0,27	Satisfactory
28	1,60	-0,24	Satisfactory
32	1,67	-0,15	Satisfactory
13	1,70	-0,11	Satisfactory
5	1,71	-0,10	Satisfactory
43	1,75	-0,05	Satisfactory
23	1,79	0	Satisfactory
24	1,80	0,01	Satisfactory
38	1,80	0,01	Satisfactory
20	1,87	0,10	Satisfactory
22	1,95	0,20	Satisfactory
40	1,95	0,20	Satisfactory
12	2,00	0,27	Satisfactory

Lab.	MAM (ng/mg)	Z-score	Result
30	2,05	0,33	Satisfactory
9	2,06	0,35	Satisfactory
3	2,14	0,45	Satisfactory
6	2,24	0,58	Satisfactory
17	2,34	0,70	Satisfactory
33	2,34	0,70	Satisfactory
37	2,39	0,77	Satisfactory
4	2,60	1,04	Satisfactory
41	2,61	1,05	Satisfactory
8	2,66	1,11	Satisfactory
16	2,90	1,42	Satisfactory
11	2,96	1,50	Satisfactory
18	3,10	1,68	Satisfactory
21	P		
27	P		
39	P		

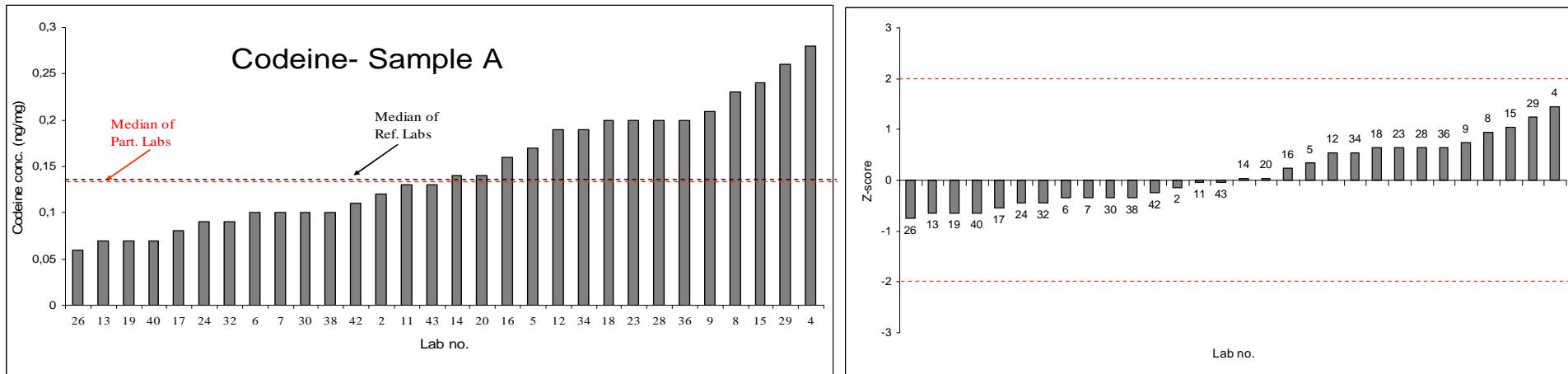
Average	1,83
SD	0,57
CV%	31,41
Median	1,79
Minimum	0,68
Quartile 25	1,41
Quartile 75	2,19
Maximum	3,1
Iqr	0,78



Lab.	Morphine (ng/mg)	Z-score	Result
34	0,05	-1,46	Satisfactory
19	0,18	-0,92	Satisfactory
26	0,19	-0,87	Satisfactory
40	0,22	-0,75	Satisfactory
25	0,23	-0,71	Satisfactory
10	0,26	-0,58	Satisfactory
7	0,30	-0,42	Satisfactory
38	0,30	-0,42	Satisfactory
3	0,32	-0,33	Satisfactory
2	0,33	-0,29	Satisfactory
22	0,33	-0,29	Satisfactory
24	0,33	-0,29	Satisfactory
41	0,34	-0,25	Satisfactory
6	0,35	-0,21	Satisfactory
20	0,35	-0,21	Satisfactory
13	0,36	-0,17	Satisfactory
32	0,36	-0,17	Satisfactory
11	0,38	-0,08	Satisfactory
33	0,38	-0,08	Satisfactory
28	0,40	0	Satisfactory
30	0,40	0	Satisfactory
35	0,40	0	Satisfactory
36	0,40	0	Satisfactory
42	0,40	0	Satisfactory
17	0,41	0,04	Satisfactory
14	0,43	0,12	Satisfactory

Lab.	Morphine (ng/mg)	Z-score	Result
43	0,43	0,12	Satisfactory
5	0,50	0,42	Satisfactory
37	0,52	0,50	Satisfactory
31	0,62	0,92	Satisfactory
16	0,63	0,96	Satisfactory
18	0,72	1,33	Satisfactory
9	0,75	1,46	Satisfactory
23	0,82	1,75	Satisfactory
15	0,88	2	Questionable
12	1,00	2,50	Questionable
4	1,28	3,67	Unsatisfactory
29	1,30	3,75	Unsatisfactory
8	1,38	4,08	Unsatisfactory
27	P		
39	P		

Average	0,49
SD	0,31
CV%	62,26
Median	0,40
Minimum	0,05
Quartile 25	0,33
Quartile 75	0,57
Maximum	1,38
Iqr	0,24

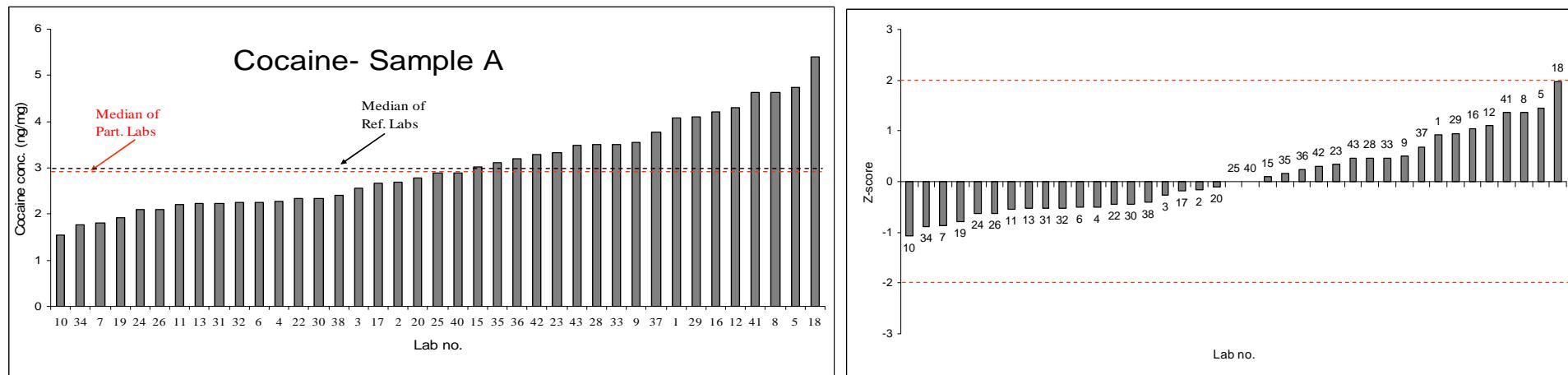


Lab.	Codeine (ng/mg)	Z-score	Result
26	0,06	-0,75	Satisfactory
13	0,07	-0,65	Satisfactory
19	0,07	-0,65	Satisfactory
40	0,07	-0,65	Satisfactory
17	0,08	-0,55	Satisfactory
24	0,09	-0,45	Satisfactory
32	0,09	-0,45	Satisfactory
6	0,10	-0,35	Satisfactory
7	0,10	-0,35	Satisfactory
30	0,10	-0,35	Satisfactory
38	0,10	-0,35	Satisfactory
42	0,11	-0,25	Satisfactory
2	0,12	-0,15	Satisfactory
11	0,13	-0,05	Satisfactory
43	0,13	-0,05	Satisfactory
14	0,14	0,05	Satisfactory
20	0,14	0,05	Satisfactory
16	0,16	0,25	Satisfactory
5	0,17	0,35	Satisfactory
12	0,19	0,55	Satisfactory
34	0,19	0,55	Satisfactory
18	0,20	0,65	Satisfactory
23	0,20	0,65	Satisfactory
28	0,20	0,65	Satisfactory
36	0,20	0,65	Satisfactory
9	0,21	0,75	Satisfactory

Lab.	Codeine (ng/mg)	Z-score	Result
8	0,23	0,95	Satisfactory
15	0,24	1,05	Satisfactory
29	0,26	1,25	Satisfactory
4	0,28	1,45	Satisfactory
22	Traces		
37	Traces		
39	P		

Average	0,15
SD	0,06
CV%	41,66
Median	0,135
Minimum	0,06
Quartile 25	0,10
Quartile 75	0,20
Maximum	0,28
Iqr	0,10

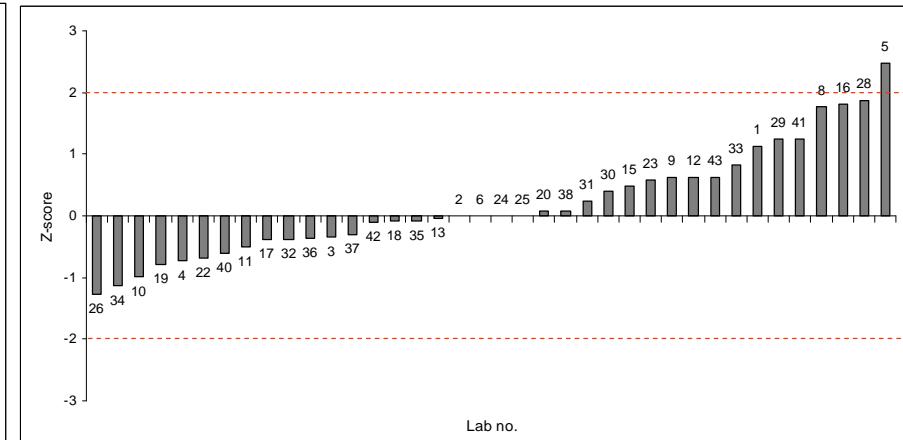
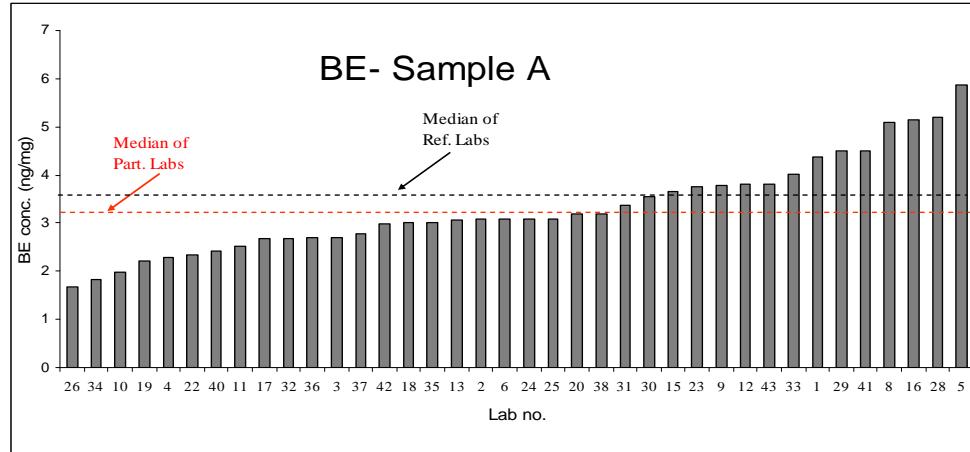
The median Codeine concentration is below the cut-off proposed by SoHT (0.20 ng/mg)



Lab.	Cocaine (ng/mg)	Z-score	Result
10	1,54	-1,07	Satisfactory
34	1,77	-0,89	Satisfactory
7	1,80	-0,87	Satisfactory
19	1,91	-0,78	Satisfactory
24	2,10	-0,63	Satisfactory
26	2,10	-0,63	Satisfactory
11	2,21	-0,54	Satisfactory
13	2,23	-0,53	Satisfactory
31	2,23	-0,53	Satisfactory
32	2,24	-0,52	Satisfactory
6	2,26	-0,50	Satisfactory
4	2,27	-0,50	Satisfactory
22	2,33	-0,45	Satisfactory
30	2,34	-0,44	Satisfactory
38	2,40	-0,39	Satisfactory
3	2,56	-0,27	Satisfactory
17	2,66	-0,19	Satisfactory
2	2,70	-0,16	Satisfactory
20	2,78	-0,09	Satisfactory
25	2,90	0	Satisfactory
40	2,90	0	Satisfactory
15	3,02	0,09	Satisfactory
35	3,10	0,16	Satisfactory
36	3,20	0,24	Satisfactory
42	3,28	0,30	Satisfactory
23	3,33	0,34	Satisfactory

Lab.	Cocaine (ng/mg)	Z-score	Result
43	3,48	0,46	Satisfactory
28	3,50	0,47	Satisfactory
33	3,50	0,47	Satisfactory
9	3,55	0,51	Satisfactory
37	3,78	0,69	Satisfactory
1	4,07	0,92	Satisfactory
29	4,10	0,94	Satisfactory
16	4,22	1,04	Satisfactory
12	4,30	1,10	Satisfactory
41	4,63	1,36	Satisfactory
8	4,64	1,37	Satisfactory
5	4,75	1,46	Satisfactory
18	5,40	1,97	Satisfactory
21	P		
27	P		
39	P		

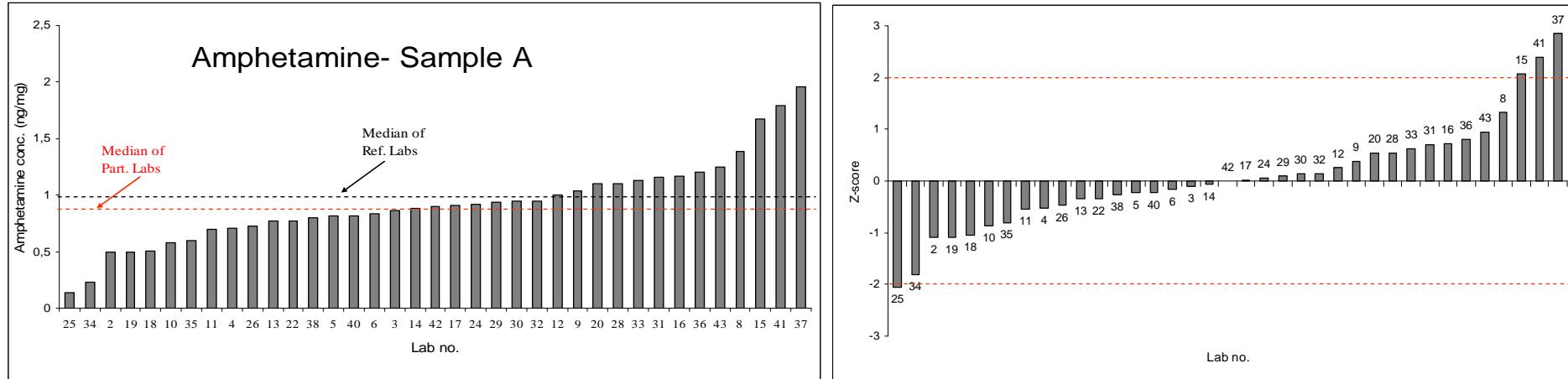
Average	3,03
SD	0,94
CV%	31,12
Median	2,90
Minimum	1,54
Quartile 25	2,25
Quartile 75	3,525
Maximum	5,4
Iqr	1,275



Lab.	BE (ng/mg)	Z-score	Result
26	1,68	-1,27	Satisfactory
34	1,83	-1,13	Satisfactory
10	1,99	-0,99	Satisfactory
19	2,22	-0,78	Satisfactory
4	2,28	-0,73	Satisfactory
22	2,33	-0,69	Satisfactory
40	2,43	-0,60	Satisfactory
11	2,53	-0,51	Satisfactory
17	2,67	-0,38	Satisfactory
32	2,67	-0,38	Satisfactory
36	2,70	-0,36	Satisfactory
3	2,71	-0,35	Satisfactory
37	2,77	-0,29	Satisfactory
42	2,98	-0,11	Satisfactory
18	3,00	-0,09	Satisfactory
35	3,02	-0,07	Satisfactory
13	3,05	-0,04	Satisfactory
2	3,10	0	Satisfactory
6	3,10	0	Satisfactory
24	3,10	0	Satisfactory
25	3,10	0	Satisfactory
20	3,19	0,08	Satisfactory
38	3,20	0,09	Satisfactory
31	3,38	0,25	Satisfactory
30	3,56	0,41	Satisfactory
15	3,65	0,49	Satisfactory

Lab.	BE (ng/mg)	Z-score	Result
23	3,76	0,59	Satisfactory
9	3,79	0,62	Satisfactory
12	3,80	0,62	Satisfactory
43	3,81	0,63	Satisfactory
33	4,02	0,82	Satisfactory
1	4,37	1,13	Satisfactory
29	4,50	1,25	Satisfactory
41	4,50	1,25	Satisfactory
8	5,09	1,78	Satisfactory
16	5,14	1,82	Satisfactory
28	5,20	1,87	Satisfactory
5	5,88	2,48	Questionable
7	P		
27	P		
39	P		

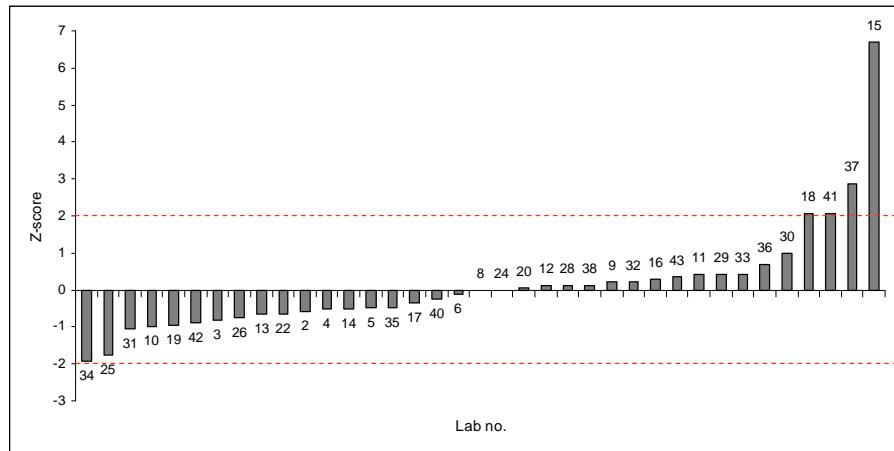
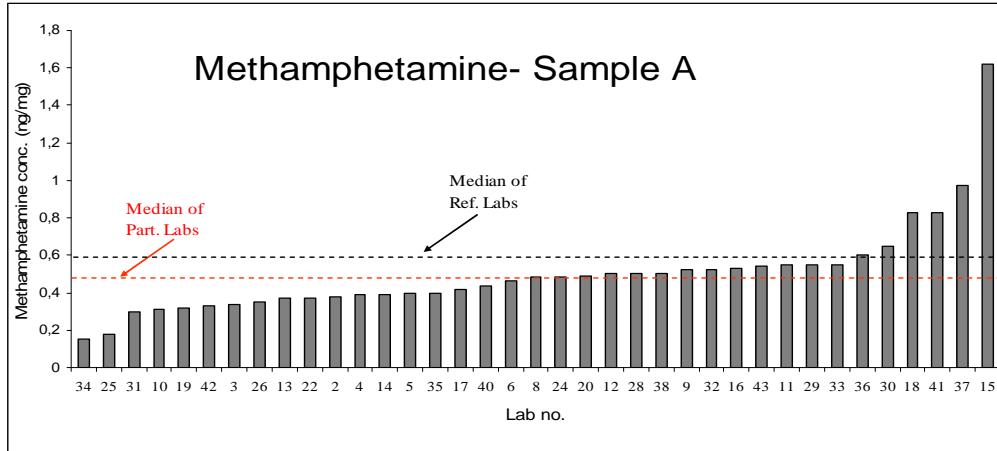
Average	3,3184211
SD	0,971189
CV%	29,266599
Median	3,1
Minimum	1,68
Quartile 25	2,6775
Quartile 75	3,7975
Maximum	5,88
Iqr	1,12



Lab.	Amphetamine (ng/mg)	Z-score	Result
25	0,14	-2,05	Questionable
34	0,23	-1,81	Satisfactory
2	0,50	-1,08	Satisfactory
19	0,50	-1,08	Satisfactory
18	0,51	-1,05	Satisfactory
10	0,58	-0,86	Satisfactory
35	0,60	-0,81	Satisfactory
11	0,70	-0,54	Satisfactory
4	0,71	-0,51	Satisfactory
26	0,73	-0,46	Satisfactory
13	0,77	-0,35	Satisfactory
22	0,77	-0,35	Satisfactory
38	0,80	-0,27	Satisfactory
5	0,82	-0,22	Satisfactory
40	0,82	-0,22	Satisfactory
6	0,84	-0,16	Satisfactory
3	0,86	-0,11	Satisfactory
14	0,88	-0,05	Satisfactory
42	0,90	0	Satisfactory
17	0,91	0,03	Satisfactory
24	0,92	0,05	Satisfactory
29	0,94	0,11	Satisfactory
30	0,95	0,13	Satisfactory
32	0,95	0,13	Satisfactory
12	1,00	0,27	Satisfactory
9	1,04	0,38	Satisfactory

Lab.	Amphetamine (ng/mg)	Z-score	Result
20	1,10	0,54	Satisfactory
28	1,10	0,54	Satisfactory
33	1,13	0,62	Satisfactory
31	1,16	0,70	Satisfactory
16	1,17	0,73	Satisfactory
36	1,20	0,81	Satisfactory
43	1,25	0,94	Satisfactory
8	1,39	1,32	Satisfactory
15	1,67	2,08	Questionable
41	1,79	2,40	Questionable
37	1,96	2,86	Questionable
7	P		
21	P		
27	P		

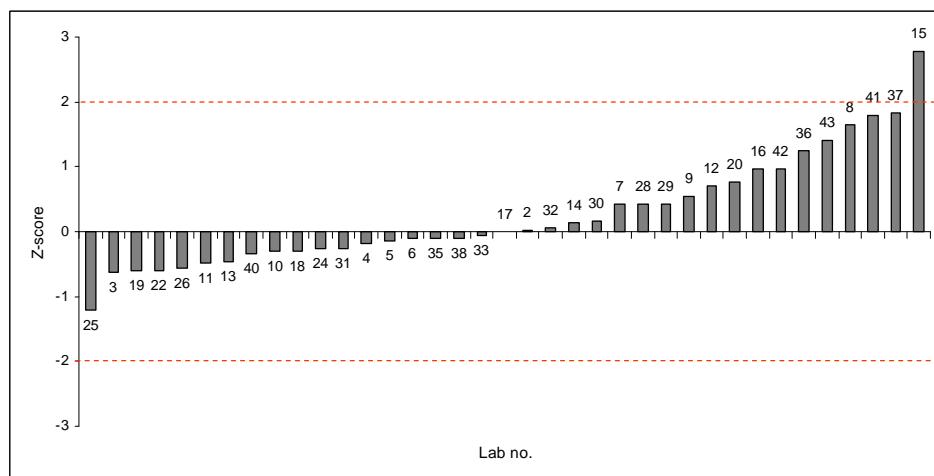
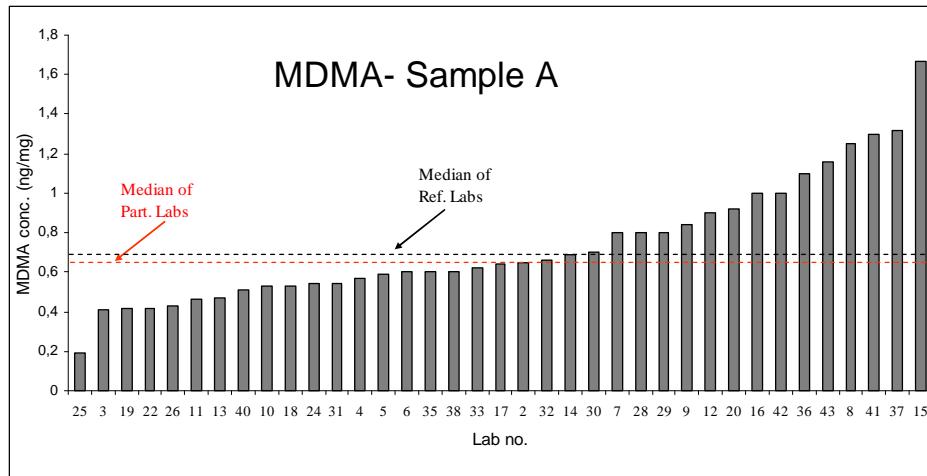
Average	0,93
SD	0,37
CV%	40,07
Median	0,90
Minimum	0,14
Quartile 25	0,73
Quartile 75	1,10
Maximum	1,96
Iqr	0,37



Lab.	Methaphet. (ng/mg)	Z-score	Result
34	0,15	-1,94	Satisfactory
25	0,18	-1,76	Satisfactory
31	0,30	-1,06	Satisfactory
10	0,31	-1	Satisfactory
19	0,32	-0,94	Satisfactory
42	0,33	-0,88	Satisfactory
3	0,34	-0,82	Satisfactory
26	0,35	-0,76	Satisfactory
13	0,37	-0,65	Satisfactory
22	0,37	-0,65	Satisfactory
2	0,38	-0,59	Satisfactory
4	0,39	-0,53	Satisfactory
14	0,39	-0,53	Satisfactory
5	0,40	-0,47	Satisfactory
35	0,40	-0,47	Satisfactory
17	0,42	-0,35	Satisfactory
40	0,44	-0,23	Satisfactory
6	0,46	-0,12	Satisfactory
8	0,48	0	Satisfactory
24	0,48	0	Satisfactory
20	0,49	0,06	Satisfactory
12	0,50	0,12	Satisfactory
28	0,50	0,12	Satisfactory
38	0,50	0,12	Satisfactory
9	0,52	0,23	Satisfactory
32	0,52	0,23	Satisfactory

Lab.	Methaphet. (ng/mg)	Z-score	Result
16	0,53	0,29	Satisfactory
43	0,54	0,35	Satisfactory
11	0,55	0,41	Satisfactory
29	0,55	0,41	Satisfactory
33	0,55	0,41	Satisfactory
36	0,60	0,70	Satisfactory
30	0,65	1	Satisfactory
18	0,83	2,06	Questionable
41	0,83	2,06	Questionable
37	0,97	2,88	Questionable
15	1,62	6,70	Unsatisfactory
27	P		

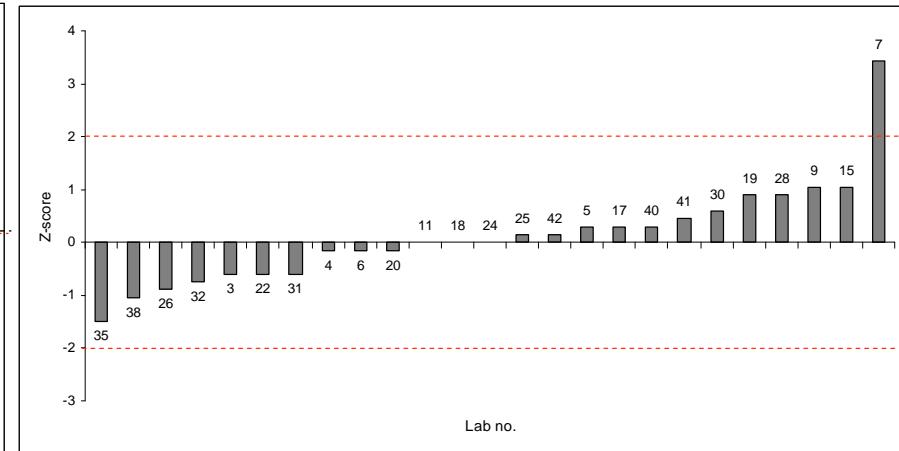
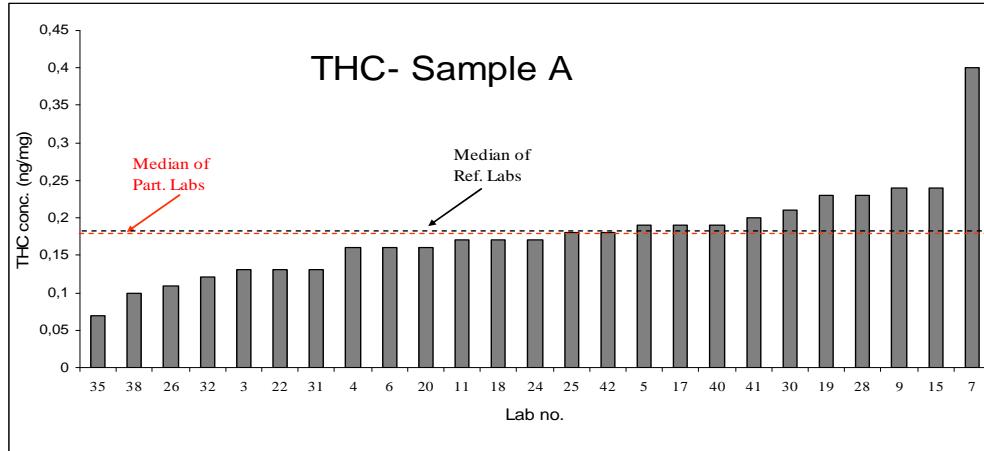
Average	0,50
SD	0,25
CV%	49,31
Median	0,48
Minimum	0,15
Quartile 25	0,37
Quartile 75	0,54
Maximum	1,62
Iqr	0,17



Lab.	MDMA (ng/mg)	Z-score	Result
25	0,19	-1,22	Satisfactory
3	0,41	-0,62	Satisfactory
19	0,42	-0,59	Satisfactory
22	0,42	-0,59	Satisfactory
26	0,43	-0,57	Satisfactory
11	0,46	-0,49	Satisfactory
13	0,47	-0,46	Satisfactory
40	0,51	-0,35	Satisfactory
10	0,53	-0,30	Satisfactory
18	0,53	-0,30	Satisfactory
24	0,54	-0,27	Satisfactory
31	0,54	-0,27	Satisfactory
4	0,57	-0,19	Satisfactory
5	0,59	-0,13	Satisfactory
6	0,60	-0,11	Satisfactory
35	0,60	-0,11	Satisfactory
38	0,60	-0,11	Satisfactory
33	0,62	-0,05	Satisfactory
17	0,64	0	Satisfactory
2	0,65	0,03	Satisfactory
32	0,66	0,05	Satisfactory
14	0,69	0,13	Satisfactory
30	0,70	0,16	Satisfactory
7	0,80	0,43	Satisfactory
28	0,80	0,43	Satisfactory
29	0,80	0,43	Satisfactory

Lab.	MDMA (ng/mg)	Z-score	Result
9	0,84	0,54	Satisfactory
12	0,90	0,70	Satisfactory
20	0,92	0,76	Satisfactory
16	1,00	0,97	Satisfactory
42	1,00	0,97	Satisfactory
36	1,10	1,24	Satisfactory
43	1,16	1,40	Satisfactory
8	1,25	1,65	Satisfactory
41	1,30	1,78	Satisfactory
37	1,32	1,84	Satisfactory
15	1,67	2,78	Questionable
27	P		

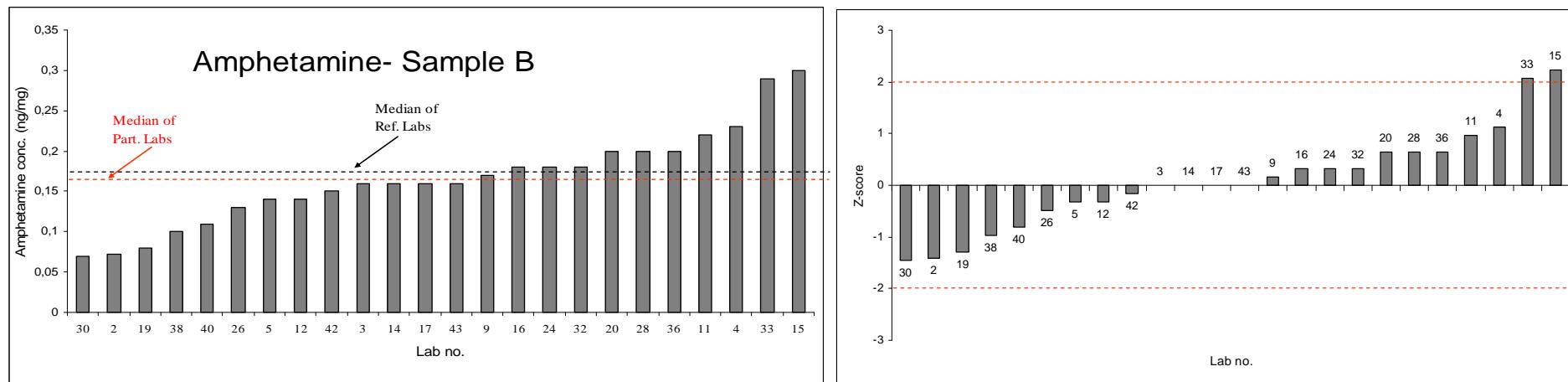
Average	0,73
SD	0,31
CV%	41,98
Median	0,64
Minimum	0,19
Quartile 25	0,53
Quartile 75	0,9
Maximum	1,67
Iqr	0,37



Lab.	THC (ng/mg)	Z-score	Result
35	0,07	-1,49	Satisfactory
38	0,10	-1,04	Satisfactory
26	0,11	-0,89	Satisfactory
32	0,12	-0,75	Satisfactory
3	0,13	-0,60	Satisfactory
22	0,13	-0,60	Satisfactory
31	0,13	-0,60	Satisfactory
4	0,16	-0,15	Satisfactory
6	0,16	-0,15	Satisfactory
20	0,16	-0,15	Satisfactory
11	0,17	0	Satisfactory
18	0,17	0	Satisfactory
24	0,17	0	Satisfactory
25	0,18	0,15	Satisfactory
42	0,18	0,15	Satisfactory
5	0,19	0,30	Satisfactory
17	0,19	0,30	Satisfactory
40	0,19	0,30	Satisfactory
41	0,20	0,454	Satisfactory
30	0,21	0,60	Satisfactory
19	0,23	0,89	Satisfactory
28	0,23	0,89	Satisfactory
9	0,24	1,04	Satisfactory
15	0,24	1,04	Satisfactory
7	0,40	3,43	Unsatisfactory
2	P		

Lab.	THC (ng/mg)	Z-score	Result
21	P		
27	P		
39	P		

Average	0,18
SD	0,06
CV%	35,12
Median	0,17
Minimum	0,07
Quartile 25	0,13
Quartile 75	0,20
Maximum	0,40
Iqr	0,07

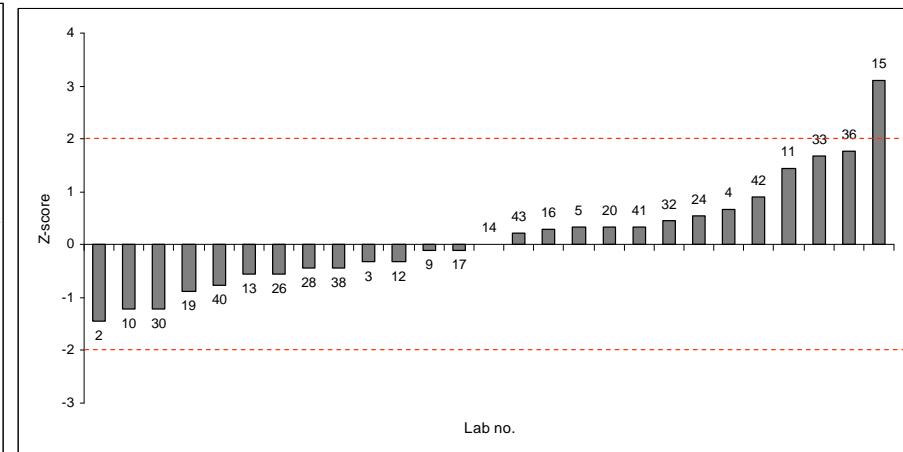
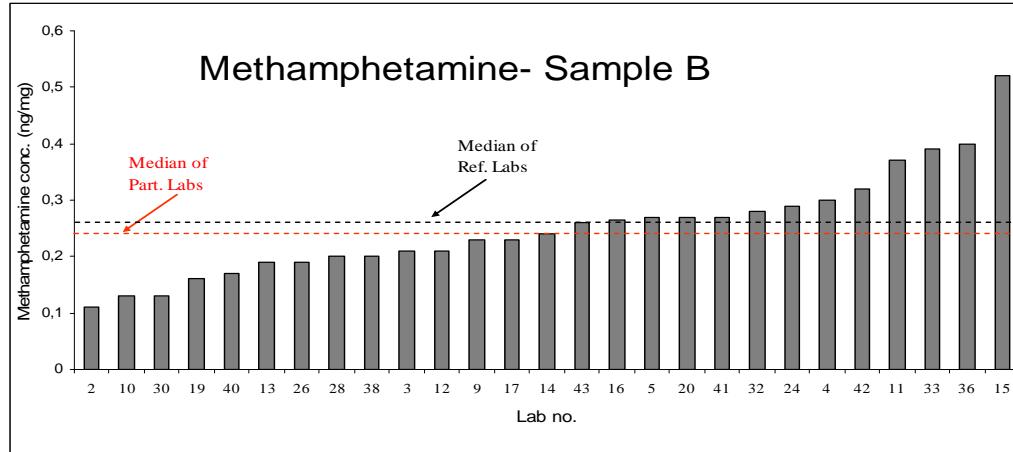


Lab.	Amphetamine (ng/mg)	Z-score	Result
30	0,07	-1,44	Satisfactory
2	0,07	-1,408	Satisfactory
19	0,08	-1,28	Satisfactory
38	0,10	-0,96	Satisfactory
40	0,11	-0,8	Satisfactory
26	0,13	-0,48	Satisfactory
5	0,14	-0,32	Satisfactory
12	0,14	-0,32	Satisfactory
42	0,15	-0,16	Satisfactory
3	0,16	0	Satisfactory
14	0,16	0	Satisfactory
17	0,16	0	Satisfactory
43	0,16	0	Satisfactory
9	0,17	0,16	Satisfactory
16	0,18	0,32	Satisfactory
24	0,18	0,32	Satisfactory
32	0,18	0,32	Satisfactory
20	0,20	0,64	Satisfactory
28	0,20	0,64	Satisfactory
36	0,20	0,64	Satisfactory
11	0,22	0,96	Satisfactory
4	0,23	1,12	Satisfactory
33	0,29	2,08	Questionable
15	0,30	2,24	Questionable
7	P		
22	Traces		

Lab.	THC (ng/mg)	Z-score	Result
27	U		

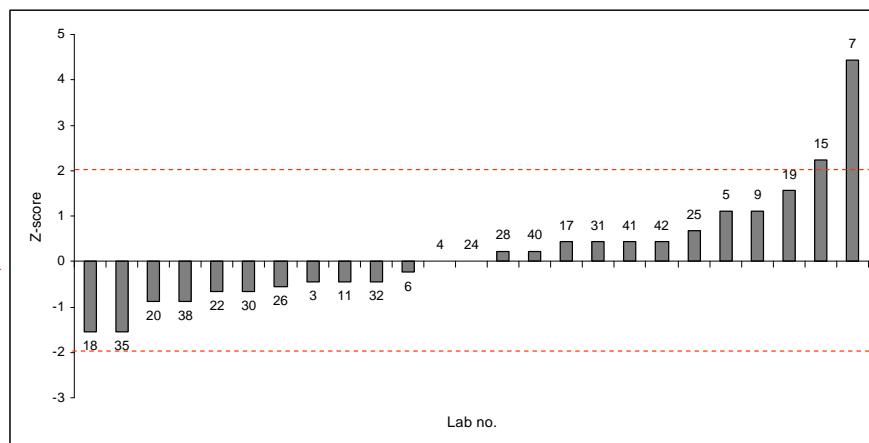
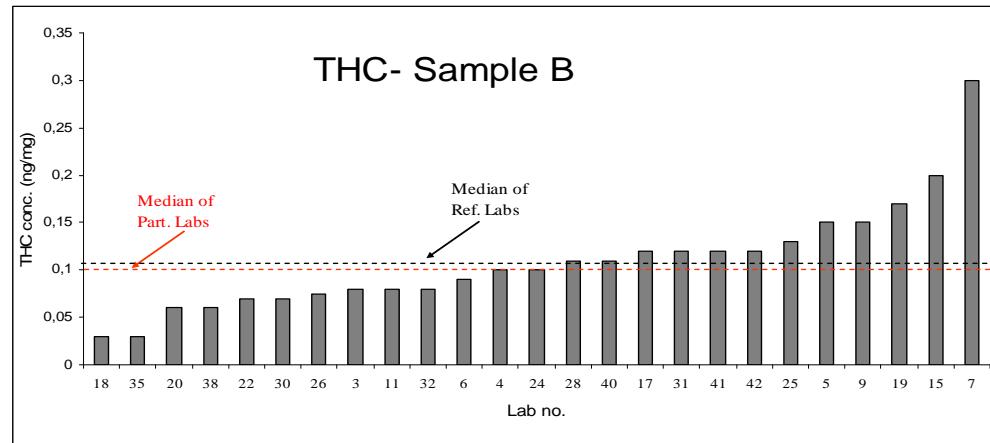
Average	0,16
SD	0,06
CV%	34,88
Median	0,16
Minimum	0,07
Quartile 25	0,14
Quartile 75	0,20
Maximum	0,30
Iqr	0,0625

The median Amphetamine concentration is below the cut-off proposed by SoHT (0.20 ng/mg)



Lab.	Methamphetamine (ng/mg)	Z-score	Result
2	0,11	-1,44	Satisfactory
10	0,13	-1,22	Satisfactory
30	0,13	-1,22	Satisfactory
19	0,16	-0,89	Satisfactory
40	0,17	-0,78	Satisfactory
13	0,19	-0,56	Satisfactory
26	0,19	-0,56	Satisfactory
28	0,20	-0,44	Satisfactory
38	0,20	-0,44	Satisfactory
3	0,21	-0,33	Satisfactory
12	0,21	-0,33	Satisfactory
9	0,23	-0,11	Satisfactory
17	0,23	-0,11	Satisfactory
14	0,24	0	Satisfactory
43	0,26	0,22	Satisfactory
16	0,26	0,28	Satisfactory
5	0,27	0,33	Satisfactory
20	0,27	0,33	Satisfactory
41	0,27	0,33	Satisfactory
32	0,28	0,44	Satisfactory
24	0,29	0,56	Satisfactory
4	0,30	0,67	Satisfactory
42	0,32	0,89	Satisfactory
11	0,37	1,44	Satisfactory
33	0,39	1,67	Satisfactory
36	0,40	1,78	Satisfactory
15	0,52	3,11	Unsatisfactory
22	Traces		
34	P		
27	U		

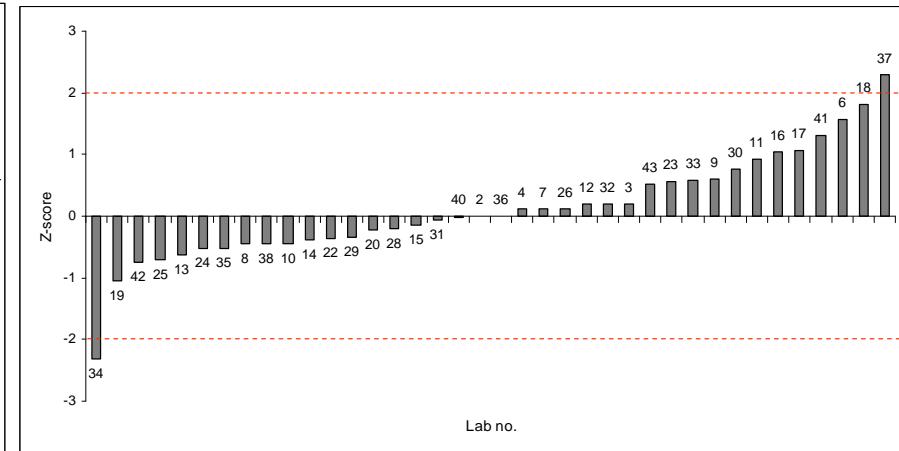
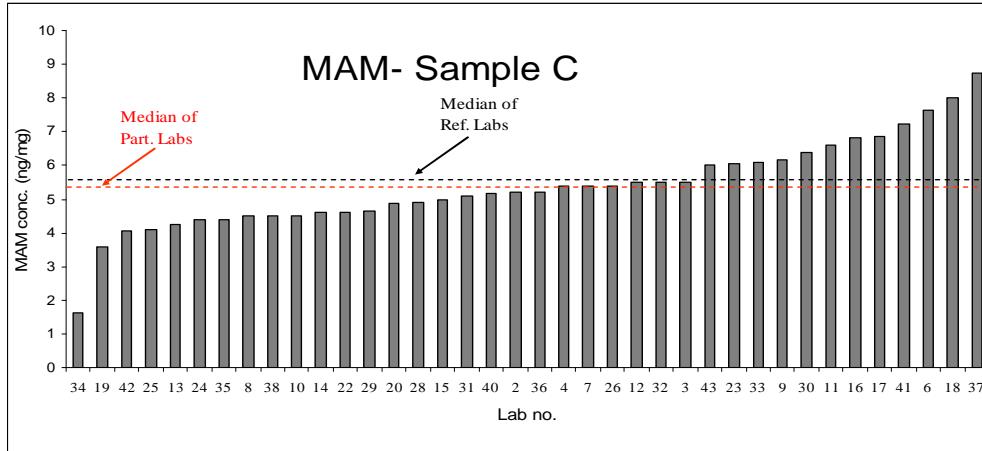
Average	0,25
SD	0,09
CV%	35,81
Median	0,24
Minimum	0,11
Quartile 25	0,195
Quartile 75	0,285
Maximum	0,52
Iqr	0,09



Lab.	THC (ng/mg)	Z-score	Result
18	0,03	-1,56	Satisfactory
35	0,03	-1,56	Satisfactory
20	0,06	-0,89	Satisfactory
38	0,06	-0,89	Satisfactory
22	0,07	-0,67	Satisfactory
30	0,07	-0,67	Satisfactory
26	0,075	-0,56	Satisfactory
3	0,08	-0,44	Satisfactory
11	0,08	-0,44	Satisfactory
32	0,08	-0,44	Satisfactory
6	0,09	-0,22	Satisfactory
4	0,10	0	Satisfactory
24	0,10	0	Satisfactory
28	0,11	0,22	Satisfactory
40	0,11	0,22	Satisfactory
17	0,12	0,44	Satisfactory
31	0,12	0,44	Satisfactory
41	0,12	0,44	Satisfactory
42	0,12	0,44	Satisfactory
25	0,13	0,67	Satisfactory
5	0,15	1,11	Satisfactory
9	0,15	1,11	Satisfactory
19	0,17	1,56	Satisfactory
15	0,20	2,22	Questionable
7	0,30	4,44	Unsatisfactory
21	P		

Lab.	THC (ng/mg)	Z-score	Result
39	P		
27	U		

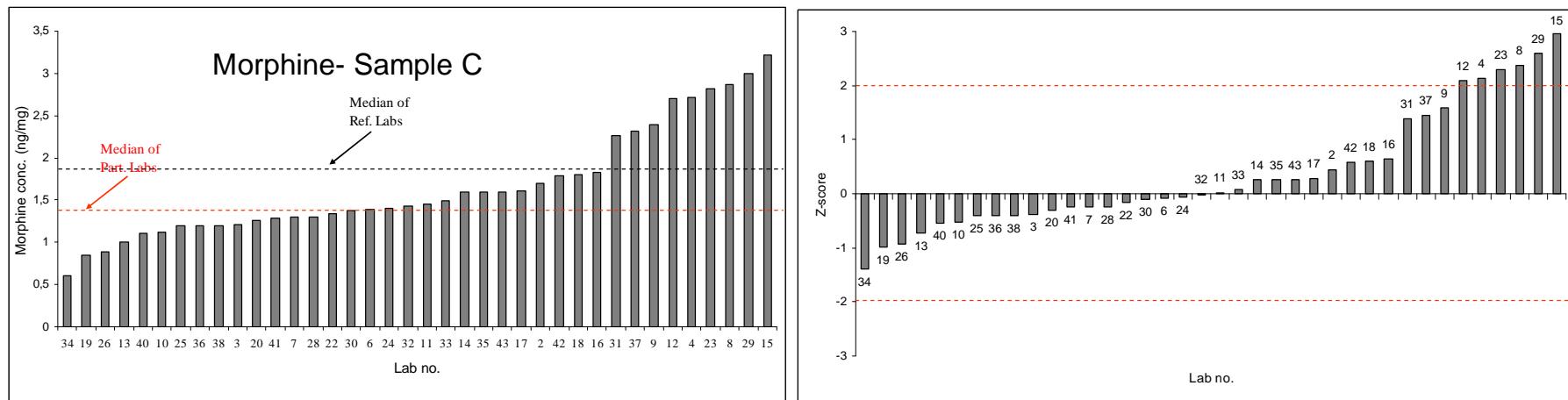
Average	0,109
SD	0,056
CV%	51,01
Median	0,10
Minimum	0,03
Quartile 25	0,075
Quartile 75	0,12
Maximum	0,3
Iqr	0,045



Lab.	MAM (ng/mg)	Z-score	Result
34	1,63	-2,31	Questionable
19	3,58	-1,05	Satisfactory
42	4,06	-0,74	Satisfactory
25	4,10	-0,71	Satisfactory
13	4,23	-0,63	Satisfactory
24	4,40	-0,52	Satisfactory
35	4,40	-0,52	Satisfactory
8	4,50	-0,45	Satisfactory
38	4,50	-0,45	Satisfactory
10	4,51	-0,45	Satisfactory
14	4,61	-0,38	Satisfactory
22	4,63	-0,37	Satisfactory
29	4,66	-0,35	Satisfactory
20	4,87	-0,21	Satisfactory
28	4,90	-0,19	Satisfactory
15	4,97	-0,15	Satisfactory
31	5,11	-0,06	Satisfactory
40	5,18	-0,01	Satisfactory
2	5,20	0	Satisfactory
36	5,20	0	Satisfactory
4	5,39	0,12	Satisfactory
7	5,40	0,13	Satisfactory
26	5,40	0,13	Satisfactory
12	5,50	0,19	Satisfactory
32	5,50	0,19	Satisfactory
3	5,51	0,20	Satisfactory

Lab.	MAM (ng/mg)	Z-score	Result
43	6,00	0,52	Satisfactory
23	6,06	0,55	Satisfactory
33	6,09	0,57	Satisfactory
9	6,15	0,61	Satisfactory
30	6,38	0,76	Satisfactory
11	6,62	0,92	Satisfactory
16	6,83	1,05	Satisfactory
17	6,85	1,07	Satisfactory
41	7,22	1,30	Satisfactory
6	7,62	1,56	Satisfactory
18	8,00	1,81	Satisfactory
37	8,76	2,30	Questionable
21	P		
27	P		

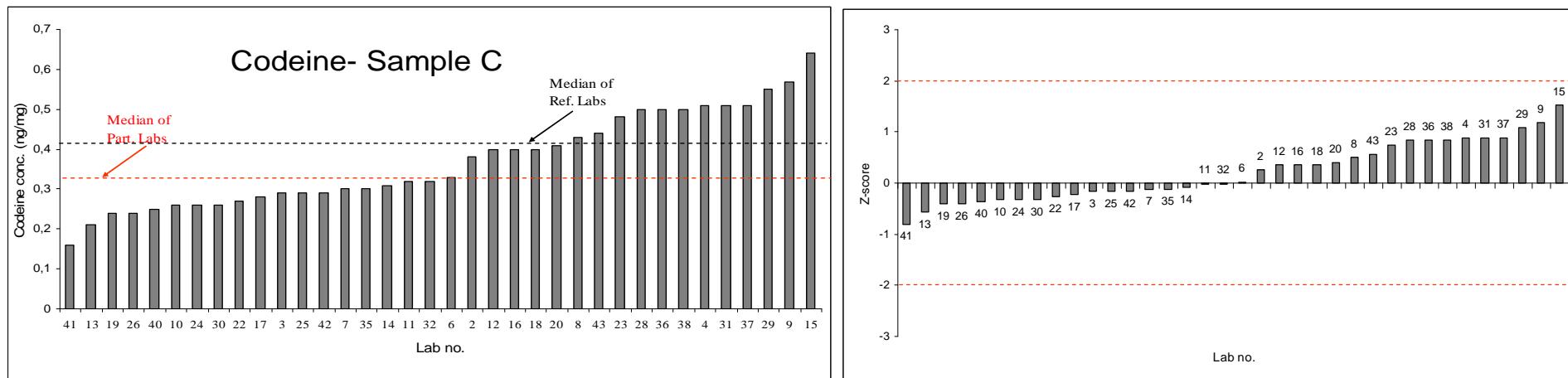
Average	5,38
SD	1,30
CV%	24,15
Median	5,20
Minimum	1,63
Quartile 25	4,535
Quartile 75	6,08
Maximum	8,76
Iqr	1,547



Lab.	Morphine (ng/mg)	Z-score	Result
34	0,61	-1,38	Satisfactory
19	0,85	-0,98	Satisfactory
26	0,89	-0,92	Satisfactory
13	1,00	-0,73	Satisfactory
40	1,11	-0,55	Satisfactory
10	1,12	-0,53	Satisfactory
25	1,20	-0,4	Satisfactory
36	1,20	-0,4	Satisfactory
38	1,20	-0,4	Satisfactory
3	1,21	-0,38	Satisfactory
20	1,26	-0,3	Satisfactory
41	1,29	-0,25	Satisfactory
7	1,30	-0,23	Satisfactory
28	1,30	-0,23	Satisfactory
22	1,34	-0,17	Satisfactory
30	1,38	-0,1	Satisfactory
6	1,39	-0,08	Satisfactory
24	1,40	-0,07	Satisfactory
32	1,43	-0,02	Satisfactory
11	1,45	0,02	Satisfactory
33	1,49	0,08	Satisfactory
14	1,60	0,27	Satisfactory
35	1,60	0,27	Satisfactory
43	1,60	0,27	Satisfactory
17	1,61	0,28	Satisfactory
2	1,70	0,43	Satisfactory

Lab.	Morphine (ng/mg)	Z-score	Result
42	1,79	0,58	Satisfactory
18	1,80	0,6	Satisfactory
16	1,83	0,65	Satisfactory
31	2,27	1,38	Satisfactory
37	2,31	1,45	Satisfactory
9	2,39	1,58	Satisfactory
12	2,70	2,1	Questionable
4	2,72	2,13	Questionable
23	2,82	2,3	Questionable
8	2,87	2,38	Questionable
29	3,00	2,6	Questionable
15	3,22	2,97	Questionable
27	P		

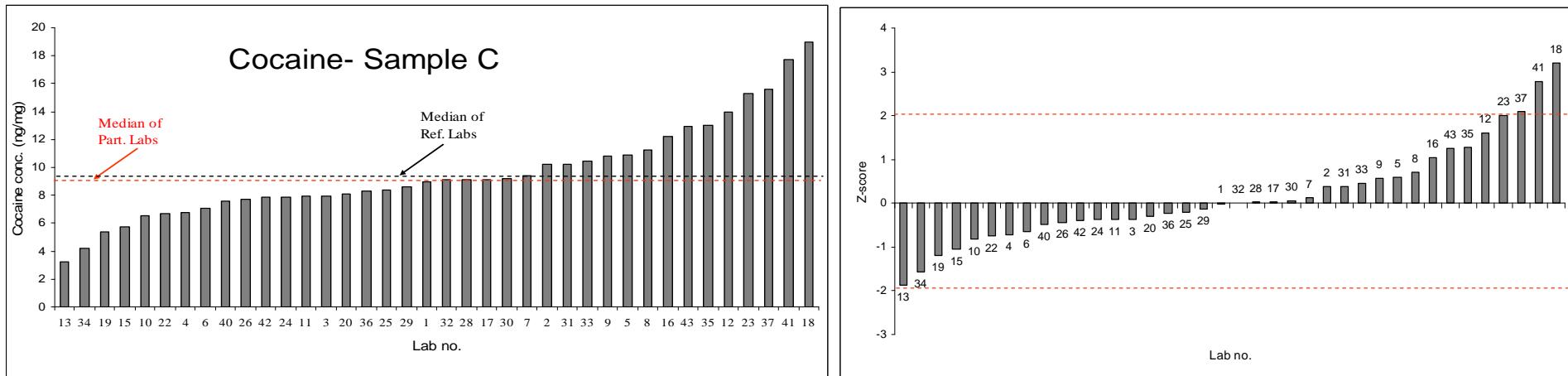
Average	1,66
SD	0,65
CV%	38,83
Median	1,44
Minimum	0,61
Quartile 25	1,22
Quartile 75	1,82
Maximum	3,22
Iqr	0,6



Lab.	Codeine (ng/mg)	Z-score	Result
41	0,16	-0,80	Satisfactory
13	0,21	-0,56	Satisfactory
19	0,24	-0,41	Satisfactory
26	0,24	-0,41	Satisfactory
40	0,25	-0,36	Satisfactory
10	0,26	-0,31	Satisfactory
24	0,26	-0,31	Satisfactory
30	0,26	-0,31	Satisfactory
22	0,27	-0,26	Satisfactory
17	0,28	-0,22	Satisfactory
3	0,29	-0,17	Satisfactory
25	0,29	-0,17	Satisfactory
42	0,29	-0,17	Satisfactory
7	0,30	-0,12	Satisfactory
35	0,30	-0,12	Satisfactory
14	0,31	-0,07	Satisfactory
11	0,32	-0,02	Satisfactory
32	0,32	-0,02	Satisfactory
6	0,33	0,02	Satisfactory
2	0,38	0,26	Satisfactory
12	0,40	0,36	Satisfactory
16	0,40	0,36	Satisfactory
18	0,40	0,36	Satisfactory
20	0,41	0,41	Satisfactory
8	0,43	0,51	Satisfactory
43	0,44	0,56	Satisfactory

Lab.	Codeine (ng/mg)	Z-score	Result
23	0,48	0,75	Satisfactory
28	0,50	0,84	Satisfactory
36	0,50	0,84	Satisfactory
38	0,5	0,84	Satisfactory
4	0,51	0,89	Satisfactory
31	0,51	0,89	Satisfactory
37	0,51	0,89	Satisfactory
29	0,55	1,09	Satisfactory
9	0,57	1,18	Satisfactory
15	0,64	1,52	Satisfactory
27	P		

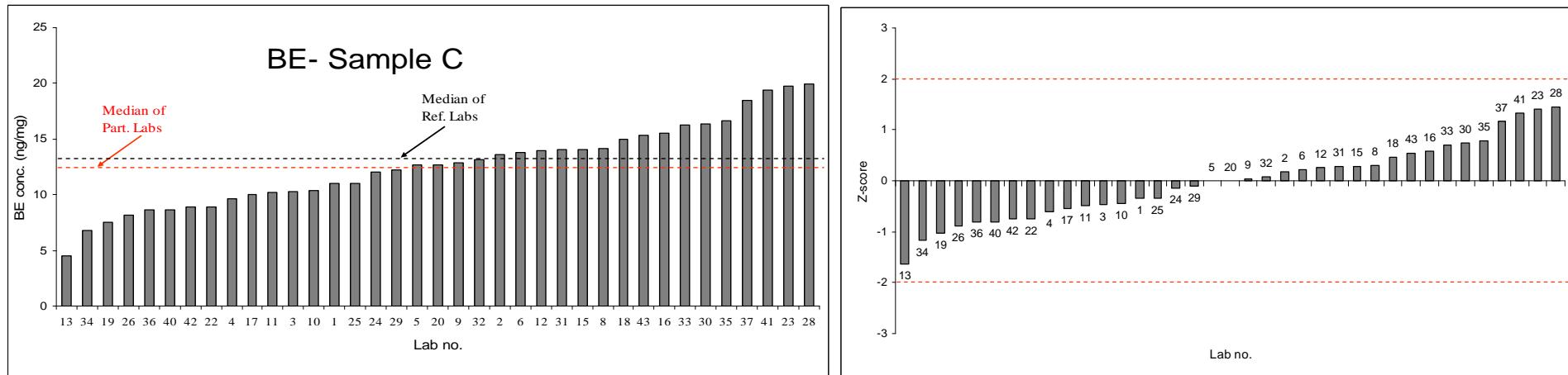
Average	0,37
SD	0,12
CV%	31,60
Median	0,325
Minimum	0,16
Quartile 25	0,2775
Quartile 75	0,485
Maximum	0,64
Iqr	0,207



Lab.	Cocaine (ng/mg)	Z-score	Result
13	3,20	-1,88	Satisfactory
34	4,20	-1,56	Satisfactory
19	5,35	-1,19	Satisfactory
15	5,75	-1,06	Satisfactory
10	6,52	-0,81	Satisfactory
22	6,72	-0,74	Satisfactory
4	6,79	-0,72	Satisfactory
6	7,04	-0,64	Satisfactory
40	7,55	-0,48	Satisfactory
26	7,70	-0,43	Satisfactory
42	7,84	-0,38	Satisfactory
24	7,90	-0,37	Satisfactory
11	7,91	-0,36	Satisfactory
3	7,92	-0,36	Satisfactory
20	8,11	-0,30	Satisfactory
36	8,30	-0,24	Satisfactory
25	8,40	-0,20	Satisfactory
29	8,59	-0,14	Satisfactory
1	9,00	-0,01	Satisfactory
32	9,09	0,02	Satisfactory
28	9,10	0,02	Satisfactory
17	9,13	0,03	Satisfactory
30	9,21	0,05	Satisfactory
7	9,40	0,16	Satisfactory
2	10,20	0,37	Satisfactory
31	10,23	0,38	Satisfactory

Lab.	Cocaine (ng/mg)	Z-score	Result
33	10,46	0,46	Satisfactory
9	10,80	0,56	Satisfactory
5	10,86	0,58	Satisfactory
8	11,27	0,72	Satisfactory
16	12,24	1,03	Satisfactory
43	12,96	1,26	Satisfactory
35	13,00	1,27	Satisfactory
12	14,00	1,59	Satisfactory
23	15,27	2,00	Questionable
37	15,59	2,11	Questionable
41	17,69	2,78	Questionable
18	19,00	3,20	Unsatisfactory
38	>5		
21	P		
27	P		
39	P		

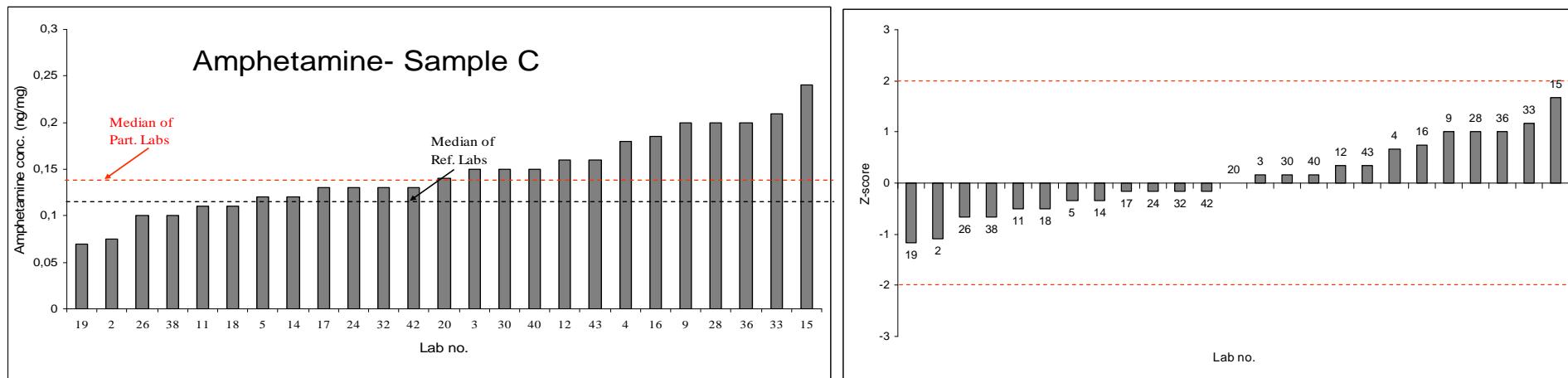
Average	9,59
SD	3,40
CV%	35,52
Median	9,045
Minimum	3,2
Quartile 25	7,735
Quartile 75	10,845
Maximum	19
Iqr	3,11



Lab.	BE (ng/mg)	Z-score	Result
13	4,53	-1,63	Satisfactory
34	6,81	-1,17	Satisfactory
19	7,55	-1,02	Satisfactory
26	8,20	-0,89	Satisfactory
36	8,6	-0,81	Satisfactory
40	8,65	-0,80	Satisfactory
42	8,92	-0,75	Satisfactory
22	8,94	-0,75	Satisfactory
4	9,63	-0,61	Satisfactory
17	10,00	-0,53	Satisfactory
11	10,22	-0,49	Satisfactory
3	10,34	-0,47	Satisfactory
10	10,43	-0,45	Satisfactory
1	11,00	-0,33	Satisfactory
25	11,00	-0,33	Satisfactory
24	12,00	-0,13	Satisfactory
29	12,18	-0,10	Satisfactory
5	12,65	-0,004	Satisfactory
20	12,67	0	Satisfactory
9	12,90	0,05	Satisfactory
32	13,10	0,09	Satisfactory
2	13,60	0,19	Satisfactory
6	13,80	0,23	Satisfactory
12	14,00	0,23	Satisfactory
31	14,06	0,28	Satisfactory
15	14,07	0,28	Satisfactory

Lab.	BE (ng/mg)	Z-score	Result
8	14,17	0,30	Satisfactory
18	15	0,47	Satisfactory
43	15,36	0,54	Satisfactory
16	15,56	0,58	Satisfactory
33	16,24	0,71	Satisfactory
30	16,4	0,75	Satisfactory
35	16,62	0,79	Satisfactory
37	18,5	1,17	Satisfactory
41	19,35	1,34	Satisfactory
23	19,74	1,41	Satisfactory
28	19,9	1,45	Satisfactory
38	>5		
7	P		
27	P		
39	P		

Average	12,61
SD	3,68
CV%	29,17
Median	12,67
Minimum	4,53
Quartile 25	10,00
Quartile 75	15,00
Maximum	19,90
Iqr	5

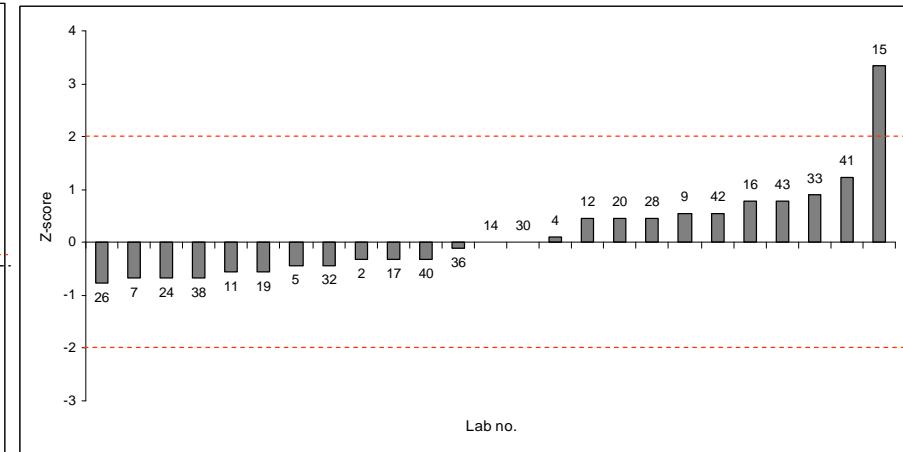
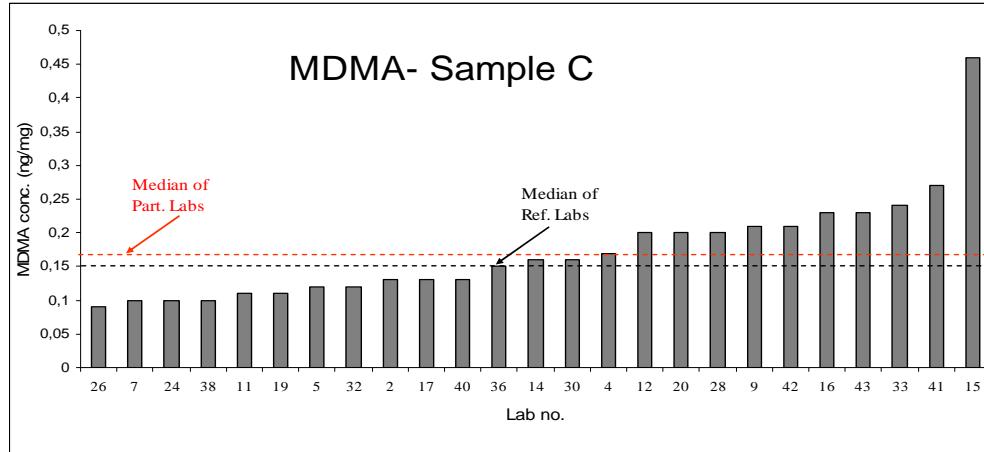


Lab.	Amphetamine (ng/mg)	Z-score	Result
19	0,07	-1,17	Satisfactory
2	0,075	-1,08	Satisfactory
26	0,10	-0,67	Satisfactory
38	0,10	-0,67	Satisfactory
11	0,11	-0,5	Satisfactory
18	0,11	-0,5	Satisfactory
5	0,12	-0,33	Satisfactory
14	0,12	-0,33	Satisfactory
17	0,13	-0,17	Satisfactory
24	0,13	-0,17	Satisfactory
32	0,13	-0,17	Satisfactory
42	0,13	-0,17	Satisfactory
20	0,14	0	Satisfactory
3	0,15	0,17	Satisfactory
30	0,15	0,17	Satisfactory
40	0,15	0,17	Satisfactory
12	0,16	0,33	Satisfactory
43	0,16	0,33	Satisfactory
4	0,18	0,67	Satisfactory
16	0,185	0,75	Satisfactory
9	0,20	1	Satisfactory
28	0,20	1	Satisfactory
36	0,20	1	Satisfactory
33	0,21	1,	Satisfactory
15	0,24	1,67	Satisfactory
22	<0,20		

Lab.	Amphetamine (ng/mg)	Z-score	Result
7	P		
21	P		
27	U		

Average	0,146
SD	0,04
CV%	29,01
Median	0,14
Minimum	0,07
Quartile 25	0,12
Quartile 75	0,18
Maximum	0,24
Iqr	0,06

The median Amphetamine concentration is below the cut-off proposed by SoHT (0.20 ng/mg)

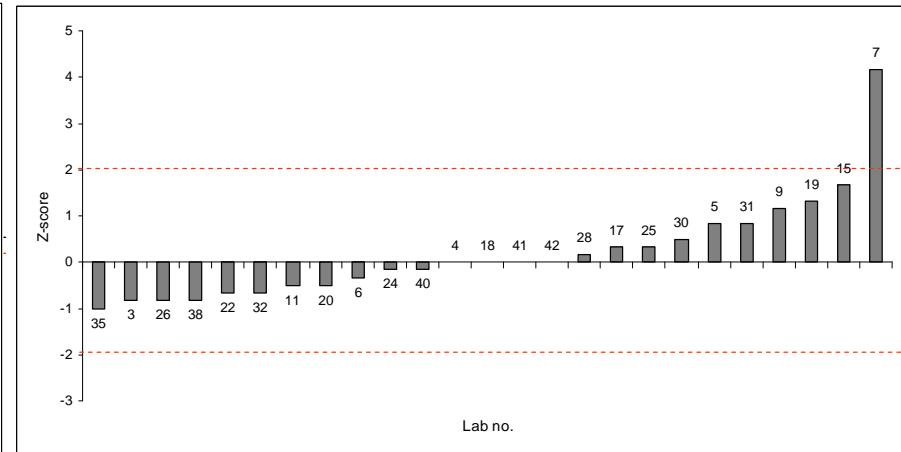
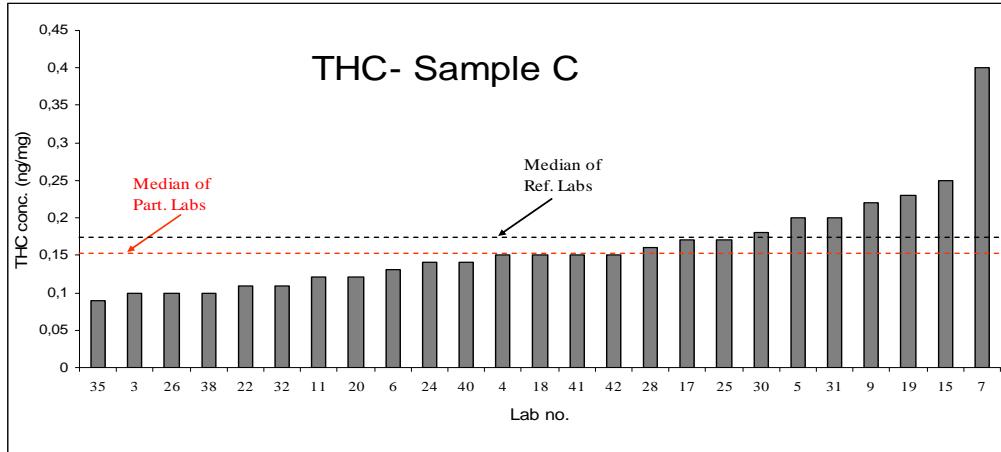


Lab.	MDMA (ng/mg)	Z-score	Result
26	0,09	-0,78	Satisfactory
7	0,10	-0,67	Satisfactory
24	0,10	-0,67	Satisfactory
38	0,10	-0,67	Satisfactory
11	0,11	-0,56	Satisfactory
19	0,11	-0,56	Satisfactory
5	0,12	-0,44	Satisfactory
32	0,12	-0,44	Satisfactory
2	0,13	-0,33	Satisfactory
17	0,13	-0,33	Satisfactory
40	0,13	-0,33	Satisfactory
36	0,15	-0,11	Satisfactory
14	0,16	0	Satisfactory
30	0,16	0	Satisfactory
4	0,17	0,11	Satisfactory
12	0,20	0,44	Satisfactory
20	0,20	0,44	Satisfactory
28	0,20	0,44	Satisfactory
9	0,21	0,56	Satisfactory
42	0,21	0,56	Satisfactory
16	0,23	0,78	Satisfactory
43	0,23	0,78	Satisfactory
33	0,24	0,89	Satisfactory
41	0,27	1,22	Satisfactory
15	0,46	3,33	Unsatisfactory
22	<0.20		

Lab.	MDMA (ng/mg)	Z-score	Result
27	U		

Average	0,17
SD	0,08
CV%	44,80
Median	0,16
Minimum	0,09
Quartile 25	0,12
Quartile 75	0,21
Maximum	0,46
Iqr	0,09

The median MDMA concentration is below the cut-off proposed by SoHT (0.20 ng/mg)



Lab.	THC (ng/mg)	Z-score	Result
35	0,09	-1	Satisfactory
3	0,10	-0,83	Satisfactory
26	0,10	-0,83	Satisfactory
38	0,10	-0,83	Satisfactory
22	0,11	-0,67	Satisfactory
32	0,11	-0,67	Satisfactory
11	0,12	-0,5	Satisfactory
20	0,12	-0,5	Satisfactory
6	0,13	-0,33	Satisfactory
24	0,14	-0,17	Satisfactory
40	0,14	-0,17	Satisfactory
4	0,15	0	Satisfactory
18	0,15	0	Satisfactory
41	0,15	0	Satisfactory
42	0,15	0	Satisfactory
28	0,16	0,17	Satisfactory
17	0,17	0,33	Satisfactory
25	0,17	0,33	Satisfactory
30	0,18	0,5	Satisfactory
5	0,20	0,83	Satisfactory
31	0,20	0,83	Satisfactory
9	0,22	1,17	Satisfactory
19	0,23	1,33	Satisfactory
15	0,25	1,67	Satisfactory
7	0,40	4,17	Unsatisfactory
37	<0.10		

Lab.	THC (ng/mg)	Z-score	Result
2	P		
21	P		
27	P		
39	P		

Average	0,16
SD	0,06
CV%	39,90
Median	0,15
Minimum	0,09
Quartile 25	0,12
Quartile 75	0,18
Maximum	0,40
Iqr	0,06