



«Tit» «Name» «Fam\_Nam»  
«Organization»  
«Address1»  
«Address\_2»  
«PO\_Box» «City». «Country»

Sevilla, August, 2018

### **Proficiency Test 2018-1**

Laboratory Code: «**Lab\_code**»

Dear participants,

Enclosed you will find the report of the Proficiency Test 2018-1 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 fifty-three participating laboratories. Fifty of them sent the report forms back.

Sample contents were as follows:

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

**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

$\chi$ : 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:  $Z\text{-score} \leq \pm 2$

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

Unsatisfactory results:  $Z\text{-score} \geq 3$

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		MAM		P		MAM		P	
Morphine		P		Morphine		P		Cocaine		P	
Codeine <sup>1</sup>		P		Codeine		P		BE		P	
Cocaine		P		Cocaine		P		THC		P	
BE		P		BE		P		THC-COOH		P	
Amphetamine		P		Amphetamine <sup>2</sup>		P		Methadone <sup>3</sup>		P	
Methamphetamine		P		Methamphetamine		P					
MDMA		P		THC-COOH		P					
THC		P		Methadone		P					
THC-COOH		P		Tramadol		P					
Methadone		P		Diazepam		P					
Tramadol		P		Nordazepam		P					

1. The median concentration of Codeine in Sample A is 0.11 ng/mg, which is lower than the cut-off proposed by SoHT (0.2 ng/mg).
2. The median concentrations of Amphetamine in Sample B is 0.17 ng/mg, which is lower than the cut-off proposed by SoHT (0.2 ng/mg).
3. The median concentration of Methadone in Sample C is 0.145 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

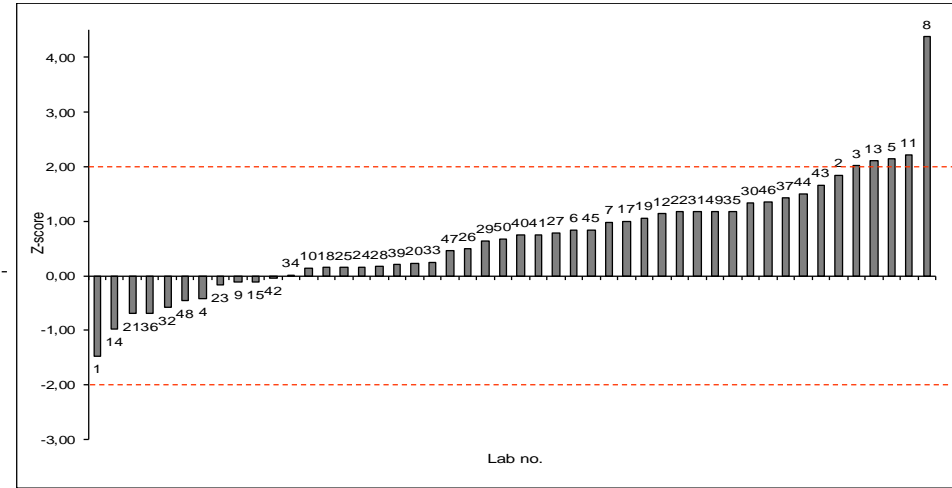
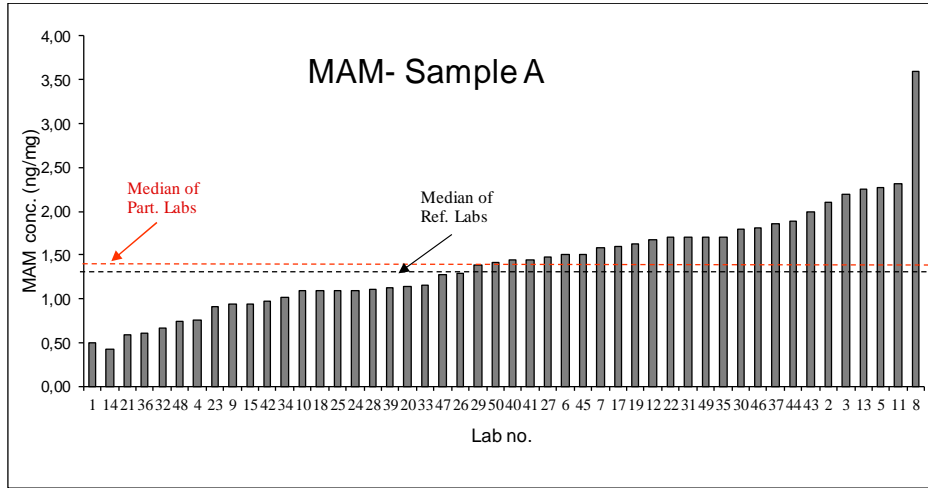
**NA:** Not analyzed

**FN:** False Negative

**FP:** False Positive

### Comments:

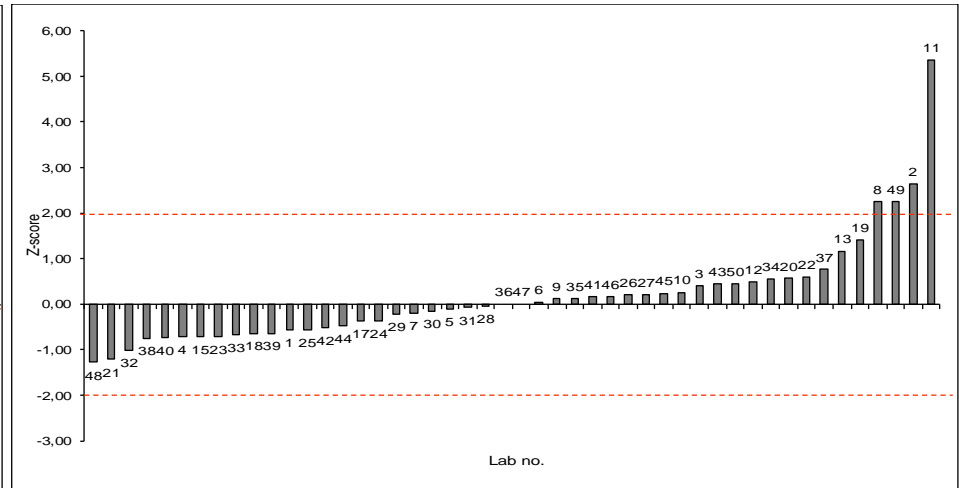
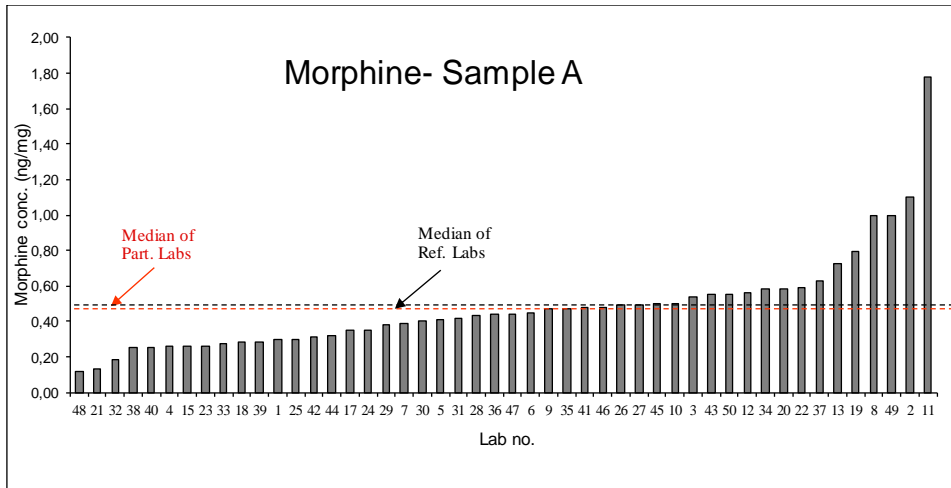
- Sample A contains dihydrocodeine, ketamine and traces of norcocaine (0.03 ng/mg, median concentration), cocaethylene (0.04 ng/mg, median concentration), diazepam (0.03 ng/mg, median concentration), and nordazepam (0.01 ng/mg, median concentration).
- Sample B contains dihydrocodeine and traces of norcocaine (0.02 ng/mg, median concentration), cocaethylene (0.02 ng/mg, median concentration), MDMA (0.06 ng/mg, median concentration), and THC (0.014 ng/mg, median concentration).
- Sample C contains traces of morphine (0.08 ng/mg, median concentration), codeine (0.025 ng/mg, median concentration), norcocaine (0.014 ng/mg, median concentration), cocaethylene (0.02 ng/mg, median concentration), and tramadol (0.07 ng/mg, median concentration).



Lab.	MAM (ng/mg)	Z-score	Result
1	0,50	-1,48	Satisfactory
14	0,43	-0,98	Satisfactory
21	0,60	-0,70	Satisfactory
36	0,60	-0,69	Satisfactory
32	0,66	-0,59	Satisfactory
48	0,74	-0,46	Satisfactory
4	0,76	-0,42	Satisfactory
23	0,91	-0,17	Satisfactory
9	0,94	-0,12	Satisfactory
15	0,95	-0,11	Satisfactory
42	0,98	-0,05	Satisfactory
34	1,02	0,02	Satisfactory
10	1,09	0,14	Satisfactory
18	1,10	0,15	Satisfactory
25	1,10	0,15	Satisfactory
24	1,10	0,15	Satisfactory
28	1,11	0,17	Satisfactory
39	1,13	0,20	Satisfactory
20	1,14	0,23	Satisfactory
33	1,16	0,25	Satisfactory
47	1,28	0,46	Satisfactory
26	1,30	0,49	Satisfactory
29	1,39	0,64	Satisfactory
50	1,41	0,68	Satisfactory
40	1,45	0,75	Satisfactory
41	1,45	0,75	Satisfactory

Lab.	MAM (ng/mg)	Z-score	Result
27	1,47	0,78	Satisfactory
6	1,50	0,83	Satisfactory
45	1,50	0,83	Satisfactory
7	1,59	0,98	Satisfactory
17	1,60	1,00	Satisfactory
19	1,63	1,05	Satisfactory
12	1,68	1,14	Satisfactory
22	1,70	1,17	Satisfactory
31	1,70	1,17	Satisfactory
49	1,70	1,17	Satisfactory
35	1,70	1,17	Satisfactory
30	1,80	1,34	Satisfactory
46	1,81	1,36	Satisfactory
37	1,85	1,42	Satisfactory
44	1,89	1,49	Satisfactory
43	1,99	1,66	Satisfactory
2	2,09	1,84	Satisfactory
3	2,20	2,02	Questionable
13	2,25	2,10	Questionable
5	2,27	2,14	Questionable
11	2,32	2,22	Questionable
8	3,60	4,39	Unsatisfactory
16	P		
38	>1,5		

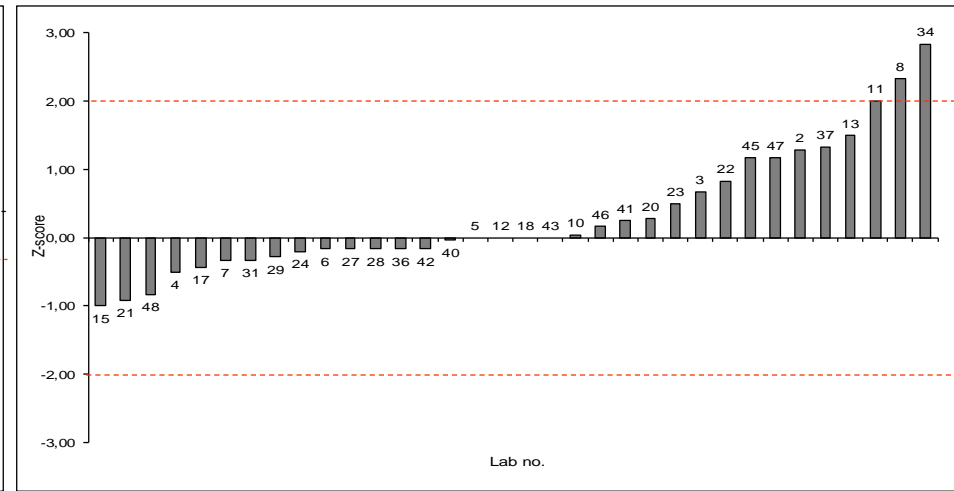
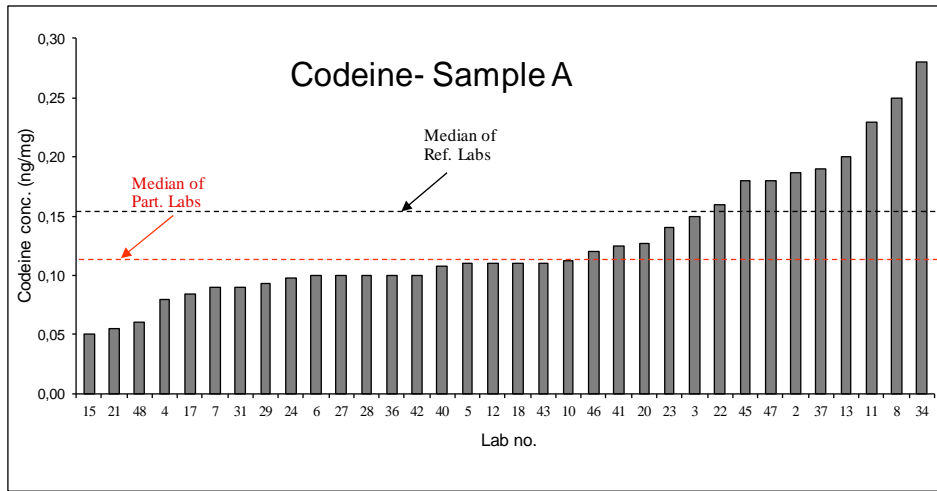
Average	1,42
SD	0,58
CV%	40,75
Median	1,43
Minimum	0,43
Quartile 25	1,07
Quartile 75	1,70
Maximum	3,60
Iqr	0,63



Lab	Morphine (ng/mg)	Z-score	Result
48	0,12	-1,28	Satisfactory
21	0,14	-1,22	Satisfactory
32	0,19	-1,02	Satisfactory
38	0,25	-0,75	Satisfactory
40	0,26	-0,74	Satisfactory
4	0,26	-0,72	Satisfactory
15	0,26	-0,72	Satisfactory
23	0,26	-0,72	Satisfactory
33	0,27	-0,67	Satisfactory
18	0,28	-0,64	Satisfactory
39	0,28	-0,64	Satisfactory
1	0,30	-0,56	Satisfactory
25	0,30	-0,56	Satisfactory
42	0,31	-0,52	Satisfactory
44	0,32	-0,48	Satisfactory
17	0,35	-0,36	Satisfactory
24	0,35	-0,36	Satisfactory
29	0,38	-0,22	Satisfactory
7	0,39	-0,20	Satisfactory
30	0,40	-0,16	Satisfactory
5	0,41	-0,12	Satisfactory
31	0,42	-0,08	Satisfactory
28	0,43	-0,04	Satisfactory
36	0,44	0,00	Satisfactory
47	0,44	0,00	Satisfactory
6	0,45	0,04	Satisfactory

Lab.	Morphine (ng/mg)	Z-score	Result
9	0,47	0,12	Satisfactory
35	0,47	0,12	Satisfactory
41	0,48	0,16	Satisfactory
46	0,48	0,16	Satisfactory
26	0,49	0,20	Satisfactory
27	0,49	0,20	Satisfactory
45	0,50	0,24	Satisfactory
10	0,50	0,26	Satisfactory
3	0,54	0,40	Satisfactory
43	0,55	0,44	Satisfactory
50	0,55	0,44	Satisfactory
12	0,56	0,48	Satisfactory
34	0,58	0,56	Satisfactory
20	0,58	0,56	Satisfactory
22	0,59	0,60	Satisfactory
37	0,63	0,76	Satisfactory
13	0,73	1,16	Satisfactory
19	0,79	1,42	Satisfactory
8	1,00	2,24	Questionable
49	1,00	2,24	Questionable
2	1,10	2,64	Questionable
11	1,78	5,36	Unsatisfactory
16	P		
14	N		

Average	0,48
SD	0,28
CV%	58,01
Median	0,44
Minimum	0,12
Quartile 25	0,30
Quartile 75	0,55
Maximum	1,78
Iqr	0,25

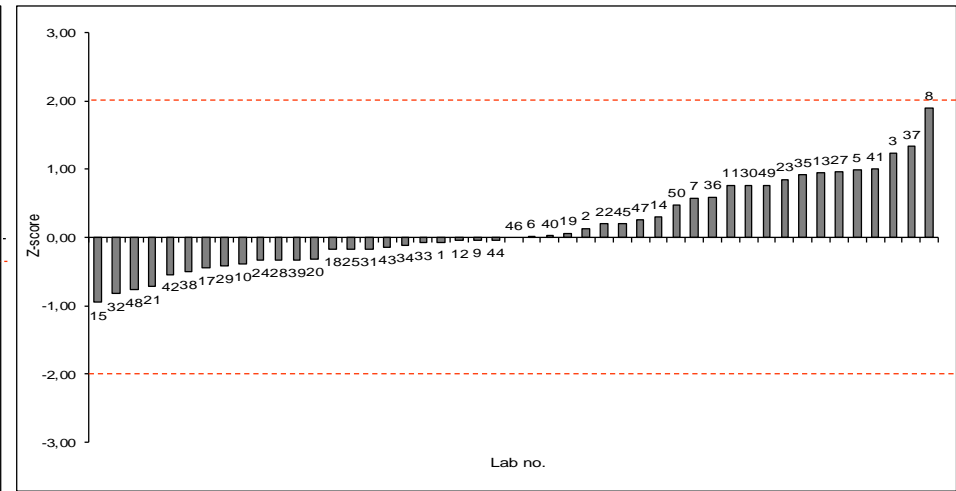
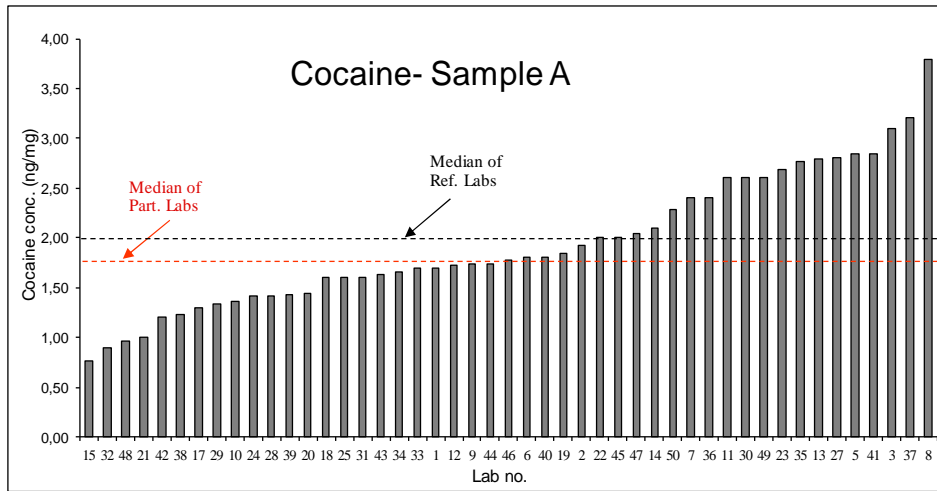


Lab.	Codeine (ng/mg)	Z-score	Result
15	0,05	-1,00	Satisfactory
21	0,06	-0,92	Satisfactory
48	0,06	-0,83	Satisfactory
4	0,08	-0,50	Satisfactory
17	0,08	-0,43	Satisfactory
7	0,09	-0,33	Satisfactory
31	0,09	-0,33	Satisfactory
29	0,09	-0,28	Satisfactory
24	0,10	-0,20	Satisfactory
6	0,10	-0,17	Satisfactory
27	0,10	-0,17	Satisfactory
28	0,10	-0,17	Satisfactory
36	0,10	-0,17	Satisfactory
42	0,10	-0,17	Satisfactory
40	0,11	-0,03	Satisfactory
5	0,11	0,00	Satisfactory
12	0,11	0,00	Satisfactory
18	0,11	0,00	Satisfactory
43	0,11	0,00	Satisfactory
10	0,11	0,03	Satisfactory
46	0,12	0,17	Satisfactory
41	0,13	0,25	Satisfactory
20	0,13	0,28	Satisfactory
23	0,14	0,50	Satisfactory
3	0,15	0,67	Satisfactory
22	0,16	0,83	Satisfactory

Lab.	Codeine (ng/mg)	Z-score	Result
45	0,18	1,17	Satisfactory
47	0,18	1,17	Satisfactory
2	0,19	1,28	Satisfactory
37	0,19	1,33	Satisfactory
13	0,20	1,50	Satisfactory
11	0,23	2,00	Questionable
8	0,25	2,33	Questionable
34	0,28	2,83	Questionable
39	<0,2		
16	U		
1	N		
9	N		
14	N		
19	N		
25	N		
26	N		
30	N		
32	N		
33	N		
35	N		
38	N		
44	N		
49	N		
50	N		

Average	0,13
SD	0,05
CV%	41,93
Median	0,11
Minimum	0,05
Quartile 25	0,10
Quartile 75	0,16
Maximum	0,28
Iqr	0,06

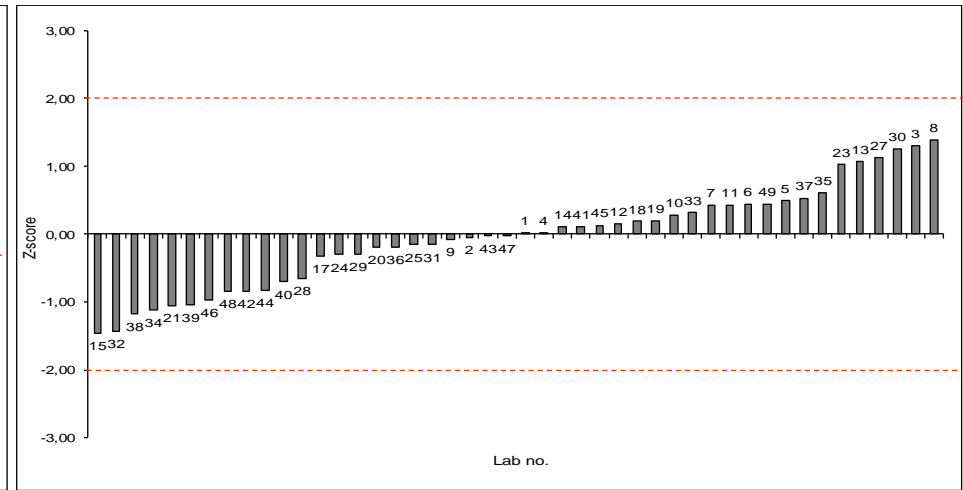
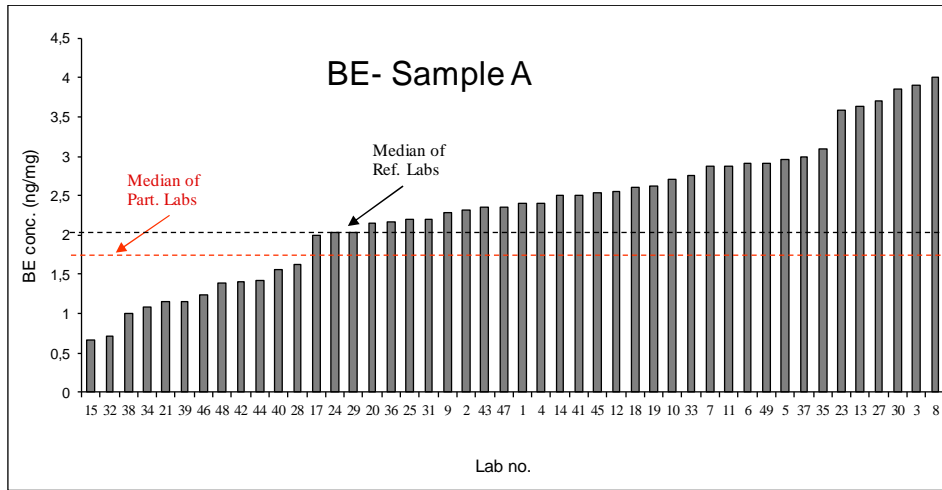
The median Codeine concentration is below the cut-off proposed by SoHT (0.20 ng/mg)



Lab.	Cocaine (ng/mg)	Z-score	Result
15	0,76	-0,95	Satisfactory
32	0,90	-0,82	Satisfactory
48	0,96	-0,76	Satisfactory
21	1,01	-0,72	Satisfactory
42	1,20	-0,54	Satisfactory
38	1,24	-0,51	Satisfactory
17	1,30	-0,45	Satisfactory
29	1,33	-0,42	Satisfactory
10	1,37	-0,38	Satisfactory
24	1,42	-0,34	Satisfactory
28	1,42	-0,34	Satisfactory
39	1,43	-0,33	Satisfactory
20	1,44	-0,32	Satisfactory
18	1,60	-0,17	Satisfactory
25	1,60	-0,17	Satisfactory
31	1,60	-0,17	Satisfactory
43	1,63	-0,14	Satisfactory
34	1,66	-0,11	Satisfactory
33	1,70	-0,08	Satisfactory
1	1,70	-0,07	Satisfactory
12	1,73	-0,05	Satisfactory
9	1,74	-0,04	Satisfactory
44	1,74	-0,04	Satisfactory
46	1,78	0,00	Satisfactory
6	1,80	0,02	Satisfactory
40	1,81	0,03	Satisfactory

Lab.	Cocaine (ng/mg)	Z-score	Result
19	1,85	0,06	Satisfactory
2	1,92	0,13	Satisfactory
22	2,00	0,21	Satisfactory
45	2,00	0,21	Satisfactory
47	2,05	0,25	Satisfactory
14	2,10	0,30	Satisfactory
50	2,29	0,48	Satisfactory
7	2,40	0,58	Satisfactory
36	2,41	0,59	Satisfactory
11	2,60	0,77	Satisfactory
30	2,60	0,77	Satisfactory
49	2,60	0,77	Satisfactory
23	2,69	0,85	Satisfactory
35	2,76	0,92	Satisfactory
13	2,79	0,94	Satisfactory
27	2,81	0,96	Satisfactory
5	2,85	1,00	Satisfactory
41	2,85	1,00	Satisfactory
3	3,10	1,23	Satisfactory
37	3,20	1,33	Satisfactory
8	3,80	1,89	Satisfactory
4	P		
16	P		

Average	1,95
SD	0,67
CV%	34,30
Median	1,78
Minimum	0,76
Quartile 25	1,44
Quartile 75	2,51
Maximum	3,80
Iqr	1,07

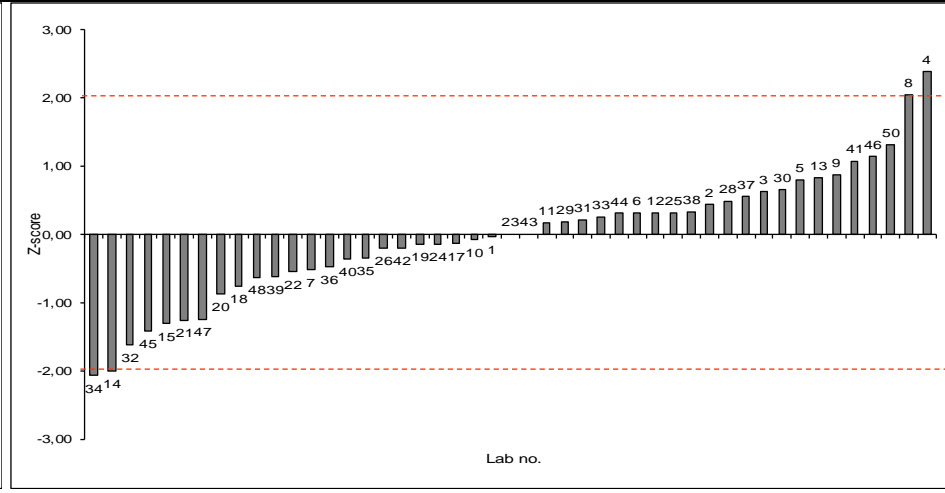
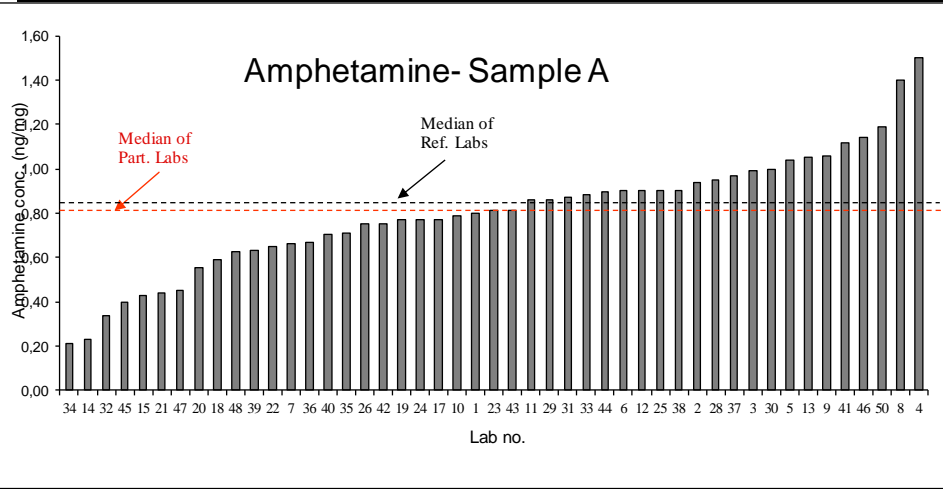


Lab.	BE (ng/mg)	Z-score	Result
15	0,67	-1,46	Satisfactory
32	0,712	-1,43	Satisfactory
38	1,008	-1,17	Satisfactory
34	1,08	-1,11	Satisfactory
21	1,147	-1,05	Satisfactory
39	1,16	-1,04	Satisfactory
46	1,24	-0,97	Satisfactory
48	1,39	-0,85	Satisfactory
42	1,4	-0,84	Satisfactory
44	1,42	-0,82	Satisfactory
40	1,56	-0,70	Satisfactory
28	1,62	-0,65	Satisfactory
17	2	-0,32	Satisfactory
24	2,027	-0,30	Satisfactory
29	2,036	-0,29	Satisfactory
20	2,16	-0,19	Satisfactory
36	2,16	-0,19	Satisfactory
25	2,20	-0,15	Satisfactory
31	2,20	-0,15	Satisfactory
9	2,29	-0,08	Satisfactory
2	2,33	-0,05	Satisfactory
43	2,35	-0,03	Satisfactory
47	2,35	-0,03	Satisfactory
1	2,40	0,02	Satisfactory
4	2,40	0,02	Satisfactory
14	2,50	0,10	Satisfactory

Lab.	BE (ng/mg)	Z-score	Result
41	2,50	0,10	Satisfactory
45	2,53	0,13	Satisfactory
12	2,55	0,15	Satisfactory
18	2,60	0,19	Satisfactory
19	2,61	0,20	Satisfactory
10	2,71	0,28	Satisfactory
33	2,75	0,32	Satisfactory
7	2,88	0,43	Satisfactory
11	2,88	0,43	Satisfactory
6	2,90	0,44	Satisfactory
49	2,90	0,44	Satisfactory
5	2,96	0,50	Satisfactory
37	3,00	0,53	Satisfactory
35	3,09	0,61	Satisfactory
23	3,58	1,03	Satisfactory
13	3,63	1,07	Satisfactory
27	3,70	1,13	Satisfactory
30	3,85	1,26	Satisfactory
3	3,90	1,30	Satisfactory
8	4,00	1,38	Satisfactory
22	>2,5		
16	P		

Average	2,33
SD	0,84
CV%	36,14
Median	2,38
Minimum	0,67
Quartile 25	1,72
Quartile 75	2,88
Maximum	4,00
Iqr	1,17

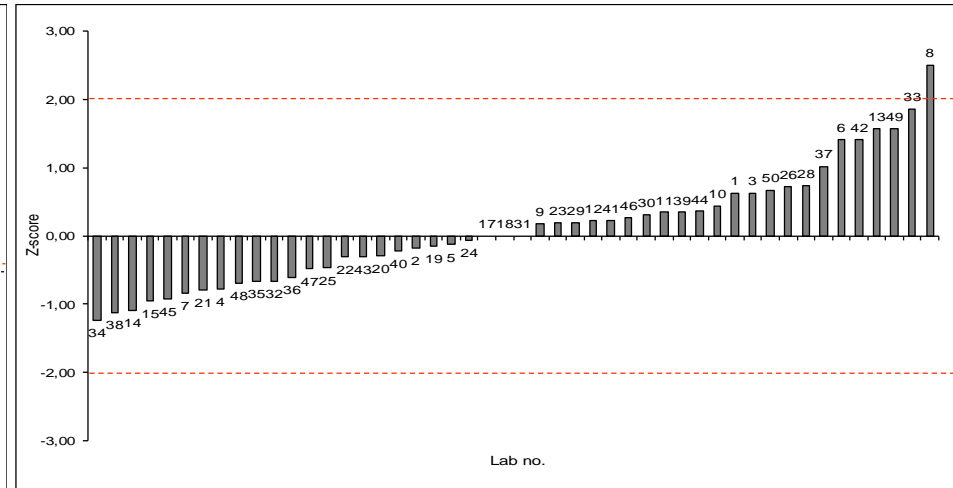
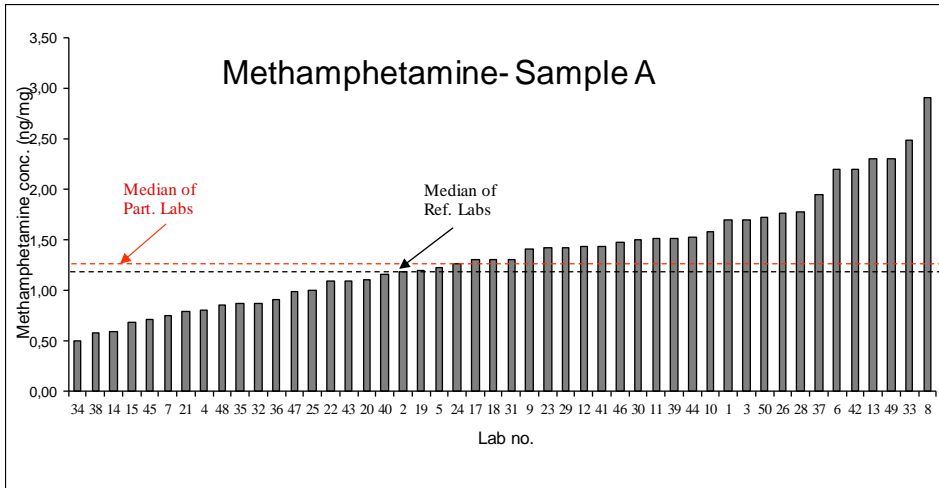




Lab.	Amphetamine (ng/mg)	Z-score	Result
34	0,21	-2,07	Questionable
14	0,23	-2,00	Questionable
32	0,34	-1,62	Satisfactory
45	0,40	-1,41	Satisfactory
15	0,43	-1,31	Satisfactory
21	0,44	-1,27	Satisfactory
47	0,45	-1,24	Satisfactory
20	0,56	-0,87	Satisfactory
18	0,59	-0,76	Satisfactory
48	0,63	-0,63	Satisfactory
39	0,63	-0,62	Satisfactory
22	0,65	-0,55	Satisfactory
7	0,66	-0,52	Satisfactory
36	0,67	-0,48	Satisfactory
40	0,71	-0,36	Satisfactory
35	0,71	-0,34	Satisfactory
26	0,75	-0,21	Satisfactory
42	0,75	-0,21	Satisfactory
19	0,77	-0,14	Satisfactory
24	0,77	-0,14	Satisfactory
17	0,77	-0,14	Satisfactory
10	0,79	-0,08	Satisfactory
1	0,80	-0,03	Satisfactory
23	0,81	0,00	Satisfactory
43	0,81	0,00	Satisfactory
11	0,86	0,17	Satisfactory

Lab.	Amphetamine (ng/mg)	Z-score	Result
29	0,86	0,18	Satisfactory
31	0,87	0,21	Satisfactory
33	0,88	0,25	Satisfactory
44	0,90	0,30	Satisfactory
6	0,90	0,31	Satisfactory
12	0,90	0,31	Satisfactory
25	0,90	0,31	Satisfactory
38	0,90	0,32	Satisfactory
2	0,94	0,43	Satisfactory
28	0,95	0,48	Satisfactory
37	0,97	0,55	Satisfactory
3	0,99	0,62	Satisfactory
30	1,00	0,66	Satisfactory
5	1,04	0,79	Satisfactory
13	1,05	0,83	Satisfactory
9	1,06	0,86	Satisfactory
41	1,12	1,07	Satisfactory
46	1,14	1,14	Satisfactory
50	1,19	1,31	Satisfactory
8	1,40	2,03	Questionable
4	1,50	2,38	Questionable
16	P		
49	P		

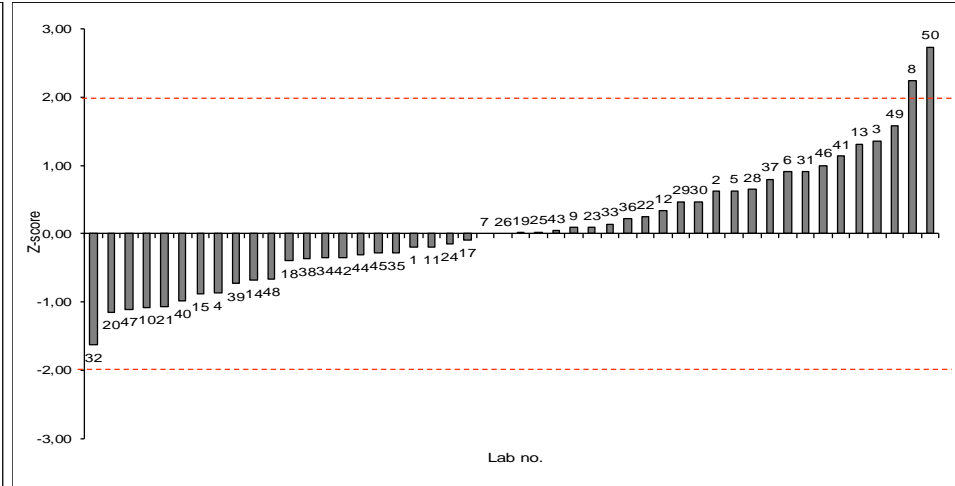
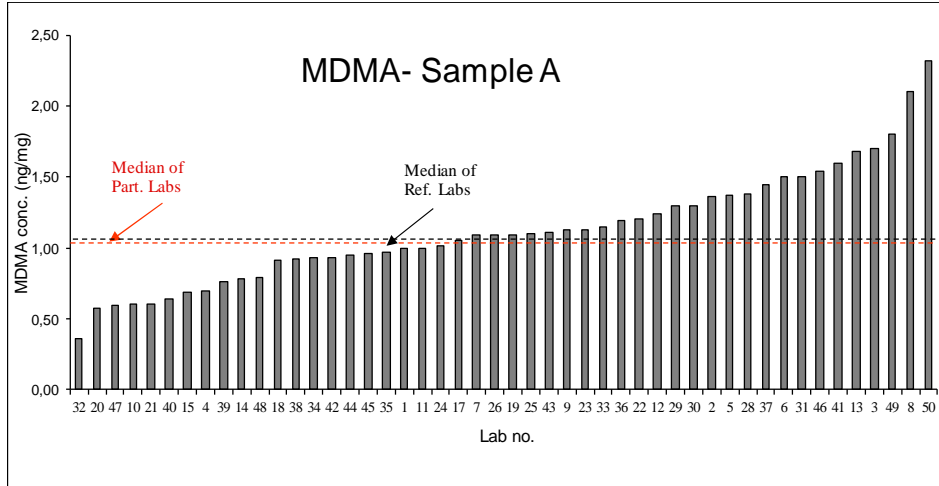
Average	0,80
SD	0,27
CV%	33,10
Median	0,81
Minimum	0,21
Quartile 25	0,66
Quartile 75	0,94
Maximum	1,50
Iqr	0,29



Lab.	Methamphetamine (ng/mg)	Z-score	Result
34	0,51	-1,23	Satisfactory
38	0,58	-1,12	Satisfactory
14	0,60	-1,09	Satisfactory
15	0,69	-0,95	Satisfactory
45	0,71	-0,92	Satisfactory
7	0,76	-0,84	Satisfactory
21	0,79	-0,79	Satisfactory
4	0,80	-0,78	Satisfactory
48	0,86	-0,69	Satisfactory
35	0,87	-0,67	Satisfactory
32	0,88	-0,66	Satisfactory
36	0,91	-0,61	Satisfactory
47	0,99	-0,48	Satisfactory
25	1,00	-0,47	Satisfactory
22	1,10	-0,31	Satisfactory
43	1,10	-0,31	Satisfactory
20	1,11	-0,29	Satisfactory
40	1,16	-0,22	Satisfactory
2	1,18	-0,18	Satisfactory
19	1,20	-0,16	Satisfactory
5	1,22	-0,13	Satisfactory
24	1,26	-0,06	Satisfactory
17	1,30	0,00	Satisfactory
18	1,30	0,00	Satisfactory
31	1,30	0,00	Satisfactory
9	1,41	0,17	Satisfactory

Lab.	Methamphetamine (ng/mg)	Z-score	Result
23	1,42	0,19	Satisfactory
29	1,42	0,19	Satisfactory
12	1,44	0,22	Satisfactory
41	1,44	0,22	Satisfactory
46	1,47	0,27	Satisfactory
30	1,50	0,31	Satisfactory
11	1,52	0,34	Satisfactory
39	1,52	0,34	Satisfactory
44	1,53	0,36	Satisfactory
10	1,58	0,44	Satisfactory
1	1,70	0,63	Satisfactory
3	1,70	0,63	Satisfactory
50	1,73	0,67	Satisfactory
26	1,76	0,72	Satisfactory
28	1,77	0,73	Satisfactory
37	1,95	1,02	Satisfactory
6	2,20	1,41	Satisfactory
42	2,20	1,41	Satisfactory
13	2,30	1,56	Satisfactory
49	2,30	1,56	Satisfactory
33	2,49	1,86	Satisfactory
8	2,90	2,50	Questionable
16	P		

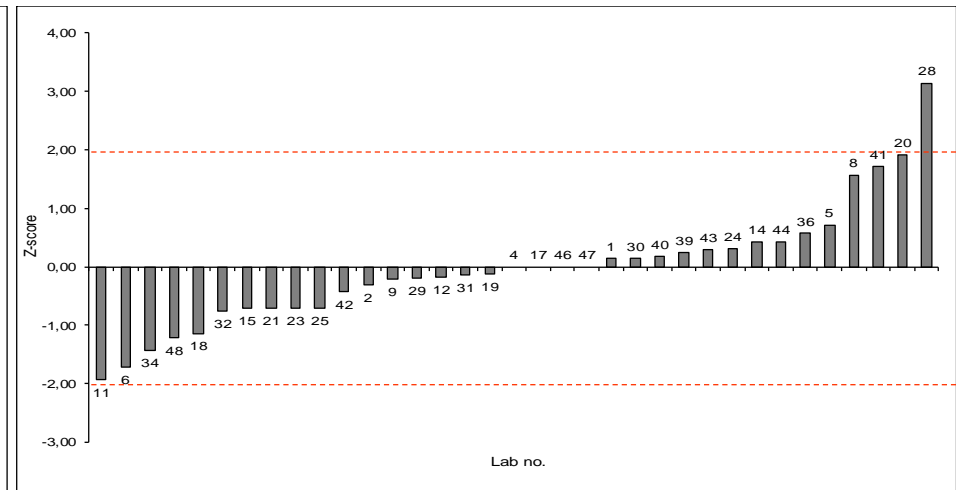
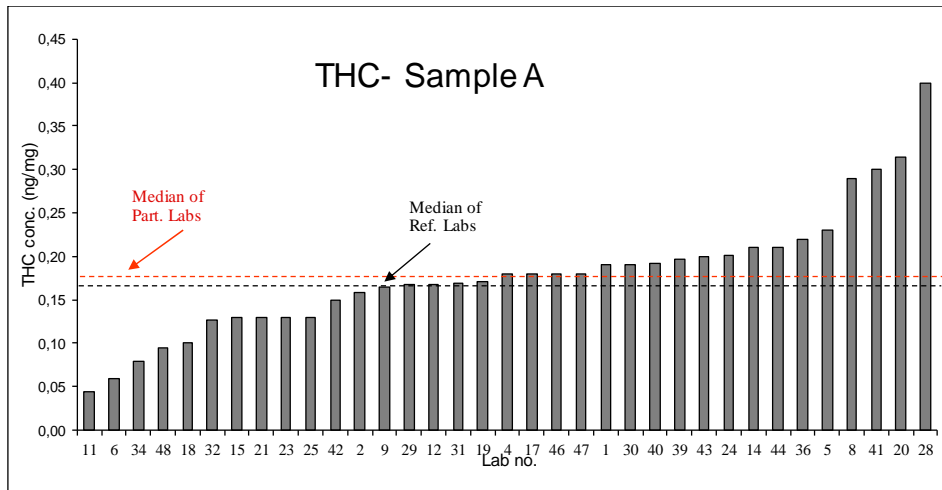
Average	1,36
SD	0,53
CV%	38,68
Median	1,30
Minimum	0,51
Quartile 25	0,97
Quartile 75	1,61
Maximum	2,90
Iqr	0,64



Lab.	MDMA (ng/mg)	Z-score	Result
32	0,36	-1,63	Satisfactory
20	0,57	-1,15	Satisfactory
47	0,59	-1,11	Satisfactory
10	0,60	-1,08	Satisfactory
21	0,61	-1,08	Satisfactory
40	0,64	-0,99	Satisfactory
15	0,69	-0,89	Satisfactory
4	0,70	-0,87	Satisfactory
39	0,76	-0,73	Satisfactory
14	0,78	-0,69	Satisfactory
48	0,79	-0,67	Satisfactory
18	0,91	-0,40	Satisfactory
38	0,92	-0,37	Satisfactory
34	0,93	-0,36	Satisfactory
42	0,93	-0,36	Satisfactory
44	0,95	-0,31	Satisfactory
45	0,96	-0,29	Satisfactory
35	0,97	-0,28	Satisfactory
1	1,00	-0,20	Satisfactory
11	1,00	-0,20	Satisfactory
24	1,02	-0,16	Satisfactory
17	1,05	-0,09	Satisfactory
7	1,09	0,00	Satisfactory
26	1,09	0,00	Satisfactory
19	1,09	0,01	Satisfactory
25	1,10	0,02	Satisfactory

Lab.	MDMA (ng/mg)	Z-score	Result
43	1,11	0,04	Satisfactory
9	1,13	0,09	Satisfactory
23	1,13	0,09	Satisfactory
33	1,15	0,14	Satisfactory
36	1,19	0,22	Satisfactory
22	1,20	0,24	Satisfactory
12	1,24	0,33	Satisfactory
29	1,30	0,46	Satisfactory
30	1,30	0,47	Satisfactory
2	1,37	0,62	Satisfactory
5	1,37	0,62	Satisfactory
28	1,38	0,64	Satisfactory
37	1,45	0,80	Satisfactory
6	1,50	0,91	Satisfactory
31	1,50	0,91	Satisfactory
46	1,54	1,00	Satisfactory
41	1,60	1,13	Satisfactory
13	1,68	1,31	Satisfactory
3	1,70	1,36	Satisfactory
49	1,80	1,58	Satisfactory
8	2,10	2,24	Questionable
50	2,32	2,73	Questionable
16	P		

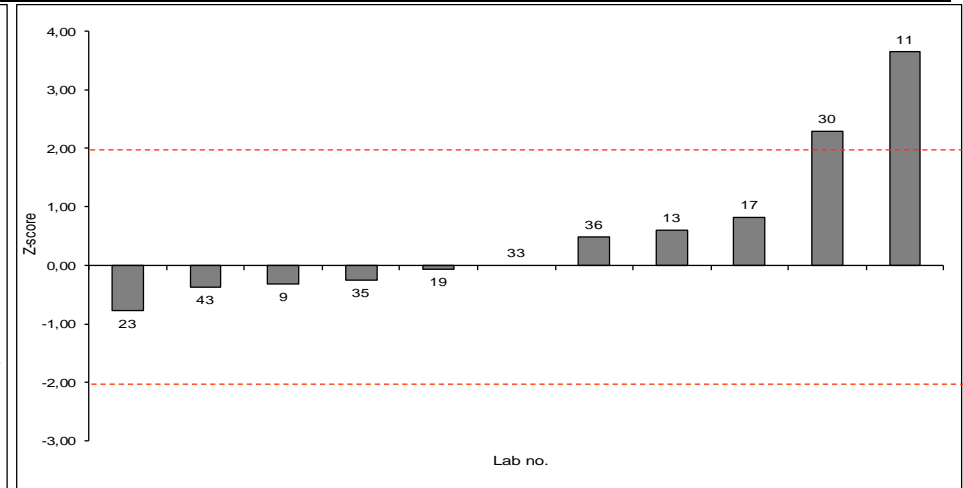
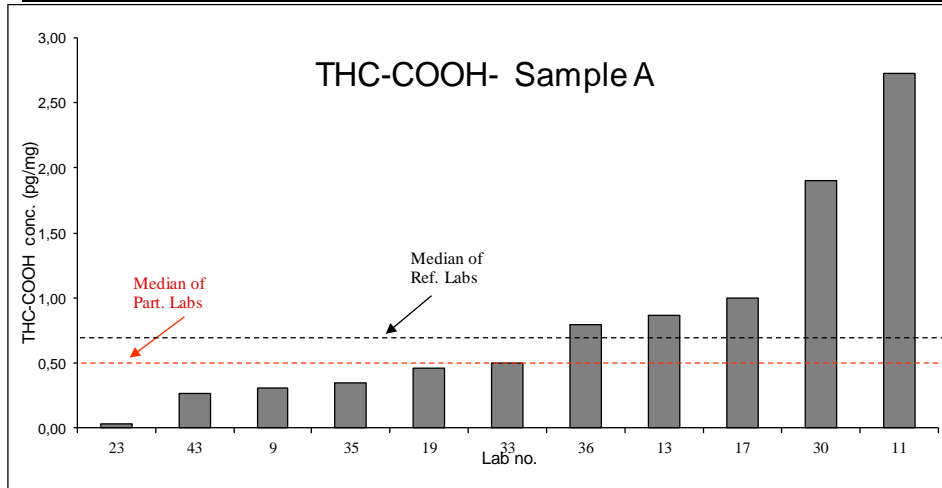
Average	1,13
SD	0,40
CV%	35,07
Median	1,09
Minimum	0,36
Quartile 25	0,92
Quartile 75	1,37
Maximum	2,32
Iqr	0,45



Lab.	THC (ng/mg)	Z-score	Result
11	0,05	-1,93	Satisfactory
6	0,06	-1,71	Satisfactory
34	0,08	-1,43	Satisfactory
48	0,10	-1,21	Satisfactory
18	0,10	-1,14	Satisfactory
32	0,13	-0,76	Satisfactory
15	0,13	-0,71	Satisfactory
21	0,13	-0,71	Satisfactory
23	0,13	-0,71	Satisfactory
25	0,13	-0,71	Satisfactory
42	0,15	-0,43	Satisfactory
2	0,16	-0,31	Satisfactory
9	0,17	-0,21	Satisfactory
29	0,17	-0,19	Satisfactory
12	0,17	-0,17	Satisfactory
31	0,17	-0,14	Satisfactory
19	0,17	-0,13	Satisfactory
4	0,18	0,00	Satisfactory
17	0,18	0,00	Satisfactory
46	0,18	0,00	Satisfactory
47	0,18	0,00	Satisfactory
1	0,19	0,14	Satisfactory
30	0,19	0,14	Satisfactory
40	0,19	0,17	Satisfactory
39	0,20	0,24	Satisfactory
43	0,20	0,29	Satisfactory

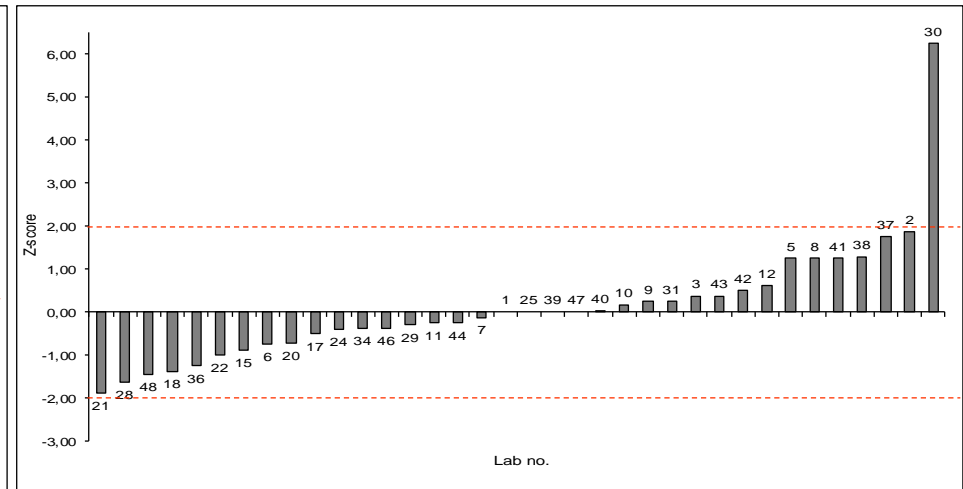
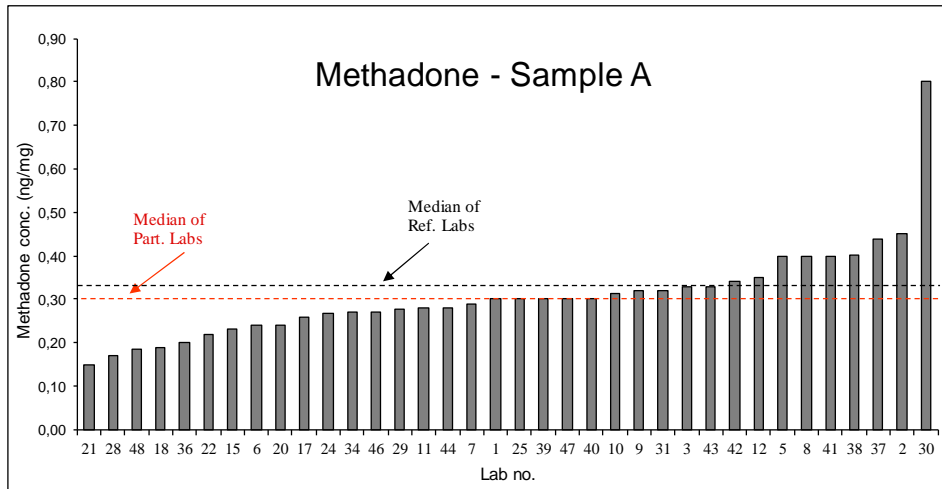
Lab.	THC (ng/mg)	Z-score	Result
24	0,20	0,31	Satisfactory
14	0,21	0,43	Satisfactory
44	0,21	0,43	Satisfactory
36	0,22	0,57	Satisfactory
5	0,23	0,71	Satisfactory
8	0,29	1,57	Satisfactory
41	0,30	1,71	Satisfactory
20	0,31	1,91	Satisfactory
28	0,40	3,14	Unsatisfactory
16	P		

Average	0,18
SD	0,07
CV%	39,23
Median	0,18
Minimum	0,05
Quartile 25	0,13
Quartile 75	0,20
Maximum	0,40
Iqr	0,07



Lab.	THC-COOH (pg/mg)	Z-score	Result
23	0,03	-0,77	Satisfactory
43	0,27	-0,38	Satisfactory
9	0,31	-0,31	Satisfactory
35	0,35	-0,25	Satisfactory
19	0,46	-0,07	Satisfactory
33	0,50	0,00	Satisfactory
36	0,80	0,49	Satisfactory
13	0,87	0,61	Satisfactory
17	1,00	0,82	Satisfactory
30	1,90	2,30	Questionable
11	2,73	3,66	Unsatisfactory
16	U		
1	N		
2	N		
12	N		
25	N		
32	N		

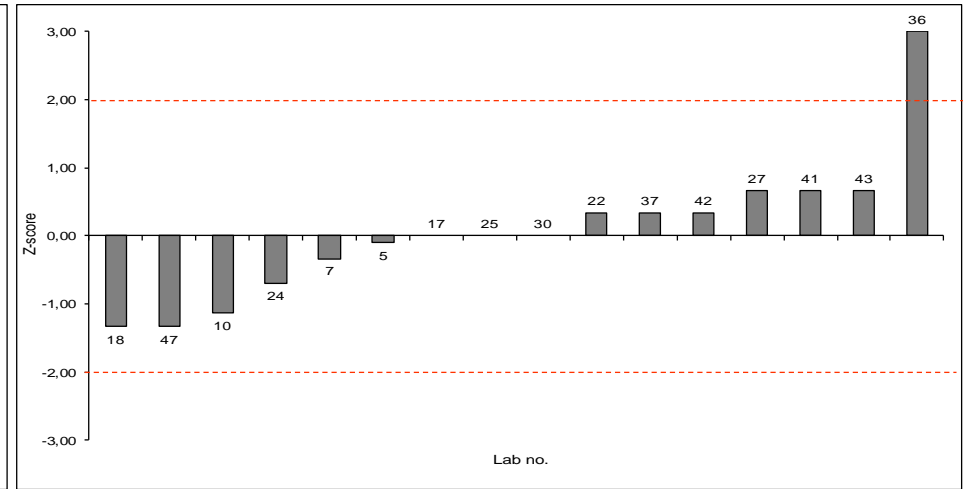
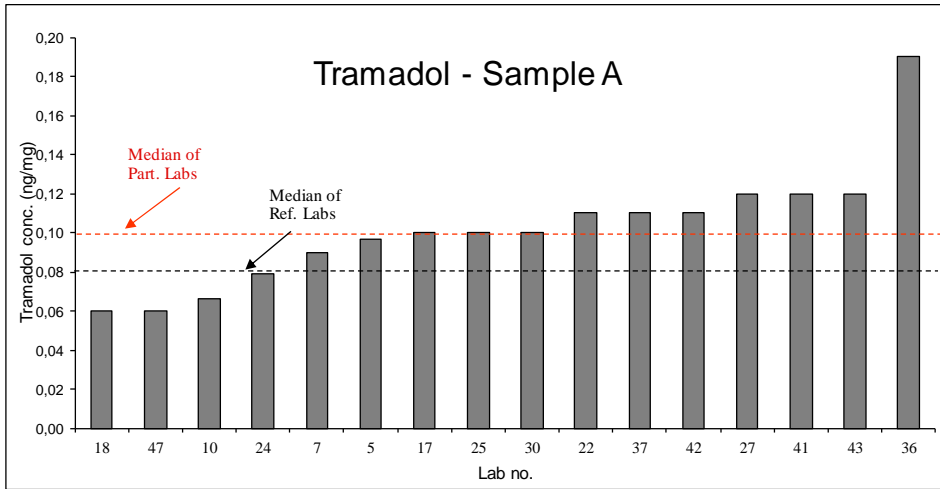
Average	0,84
SD	0,77
CV%	91,61
Median	0,50
Minimum	0,03
Quartile 25	0,33
Quartile 75	0,94
Maximum	2,73
Iqr	0,61



Lab.	Methadone (ng/mg)	Z-score	Result
21	0,15	-1,88	Satisfactory
28	0,17	-1,63	Satisfactory
48	0,19	-1,44	Satisfactory
18	0,19	-1,38	Satisfactory
36	0,20	-1,25	Satisfactory
22	0,22	-1,00	Satisfactory
15	0,23	-0,88	Satisfactory
6	0,24	-0,75	Satisfactory
20	0,24	-0,73	Satisfactory
17	0,26	-0,50	Satisfactory
24	0,27	-0,40	Satisfactory
34	0,27	-0,38	Satisfactory
46	0,27	-0,38	Satisfactory
29	0,28	-0,29	Satisfactory
11	0,28	-0,25	Satisfactory
44	0,28	-0,25	Satisfactory
7	0,29	-0,13	Satisfactory
1	0,30	0,00	Satisfactory
25	0,30	0,00	Satisfactory
39	0,30	0,00	Satisfactory
47	0,30	0,00	Satisfactory
40	0,30	0,03	Satisfactory
10	0,31	0,16	Satisfactory
9	0,32	0,25	Satisfactory
31	0,32	0,25	Satisfactory
3	0,33	0,38	Satisfactory

Lab.	Methadone (ng/mg)	Z-score	Result
43	0,33	0,38	Satisfactory
42	0,34	0,50	Satisfactory
12	0,35	0,63	Satisfactory
5	0,40	1,25	Satisfactory
8	0,40	1,25	Satisfactory
41	0,40	1,25	Satisfactory
38	0,40	1,29	Satisfactory
37	0,44	1,75	Satisfactory
2	0,45	1,88	Satisfactory
30	0,80	6,25	Unsatisfactory
16	P		
49	P		
14	N		
32	N		
33	N		
50	N		

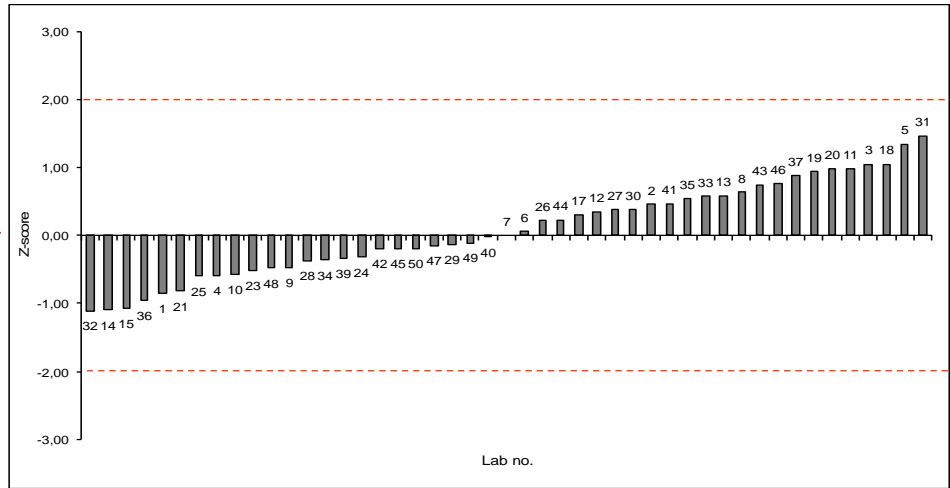
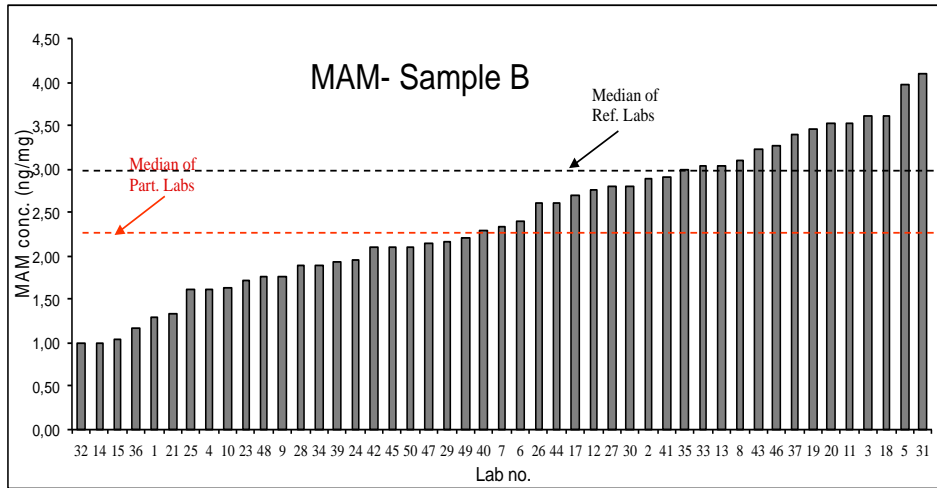
Average	0,31
SD	0,11
CV%	35,61
Median	0,30
Minimum	0,15
Quartile 25	0,26
Quartile 75	0,33
Maximum	0,80
Iqr	0,08



Lab.	Tramadol (ng/mg)	Z-score	Result
18	0,06	-1,33	Satisfactory
47	0,06	-1,33	Satisfactory
10	0,07	-1,13	Satisfactory
24	0,08	-0,70	Satisfactory
7	0,09	-0,33	Satisfactory
5	0,10	-0,10	Satisfactory
17	0,10	0,00	Satisfactory
25	0,10	0,00	Satisfactory
30	0,10	0,00	Satisfactory
22	0,11	0,33	Satisfactory
37	0,11	0,33	Satisfactory
42	0,11	0,33	Satisfactory
27	0,12	0,67	Satisfactory
41	0,12	0,67	Satisfactory
43	0,12	0,67	Satisfactory
36	0,19	3,00	Unsatisfactory
39	<0,2		
12	P		
16	U		
1	N		
2	N		
6	N		
9	N		
14	N		
28	N		
32	N		

Lab.	Tramadol (ng/mg)	Z-score	Result
38	N		
40	N		
49	N		

Average	0,10
SD	0,03
CV%	29,45
Median	0,10
Minimum	0,06
Quartile 25	0,09
Quartile 75	0,11
Maximum	0,19
Iqr	0,03

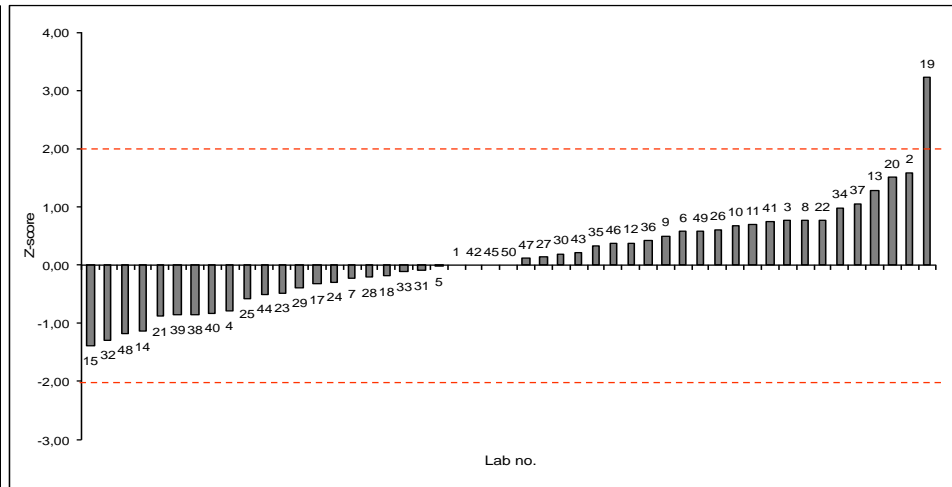
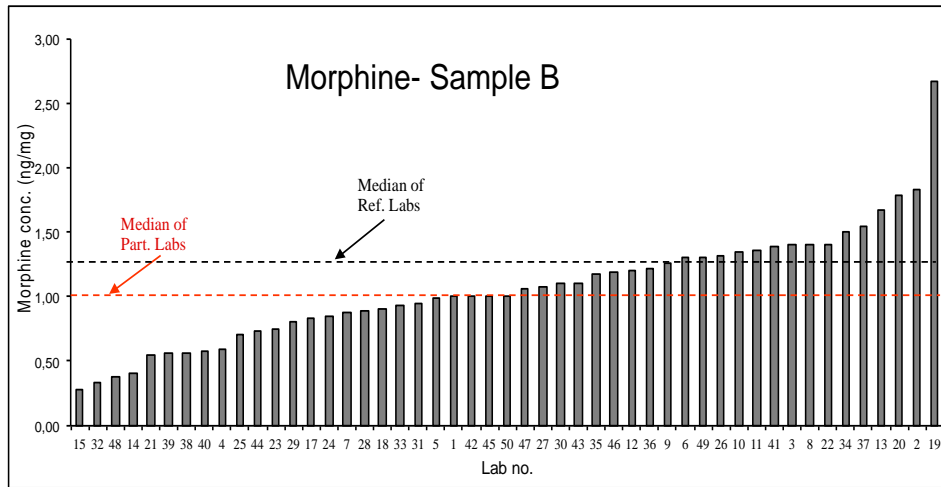


Lab.	MAM (ng/mg)	Z-score	Result
32	0,99	-1,10	Satisfactory
14	1,00	-1,10	Satisfactory
15	1,03	-1,07	Satisfactory
36	1,17	-0,96	Satisfactory
1	1,30	-0,85	Satisfactory
21	1,34	-0,82	Satisfactory
25	1,60	-0,60	Satisfactory
4	1,62	-0,59	Satisfactory
10	1,63	-0,58	Satisfactory
23	1,71	-0,51	Satisfactory
48	1,75	-0,48	Satisfactory
9	1,76	-0,47	Satisfactory
28	1,88	-0,37	Satisfactory
34	1,89	-0,36	Satisfactory
39	1,92	-0,34	Satisfactory
24	1,94	-0,32	Satisfactory
42	2,10	-0,19	Satisfactory
45	2,10	-0,19	Satisfactory
50	2,10	-0,19	Satisfactory
47	2,15	-0,15	Satisfactory
29	2,17	-0,13	Satisfactory
49	2,20	-0,11	Satisfactory
40	2,30	-0,02	Satisfactory
7	2,33	0,00	Satisfactory
6	2,40	0,06	Satisfactory
26	2,60	0,22	Satisfactory

Lab.	MAM (ng/mg)	Z-score	Result
44	2,61	0,23	Satisfactory
17	2,70	0,31	Satisfactory
12	2,75	0,35	Satisfactory
27	2,79	0,38	Satisfactory
30	2,80	0,39	Satisfactory
2	2,88	0,45	Satisfactory
41	2,90	0,47	Satisfactory
35	2,99	0,54	Satisfactory
33	3,03	0,58	Satisfactory
13	3,03	0,58	Satisfactory
8	3,10	0,64	Satisfactory
43	3,23	0,74	Satisfactory
46	3,26	0,77	Satisfactory
37	3,40	0,88	Satisfactory
19	3,46	0,93	Satisfactory
20	3,51	0,98	Satisfactory
11	3,52	0,98	Satisfactory
3	3,60	1,05	Satisfactory
18	3,60	1,05	Satisfactory
5	3,96	1,35	Satisfactory
31	4,10	1,46	Satisfactory
38	>1,8		
22	>2,5		
16	P		

Average	2,43
SD	0,81
CV%	33,50
Median	2,33
Minimum	0,99
Quartile 25	1,82
Quartile 75	3,03
Maximum	4,10
Iqr	1,21

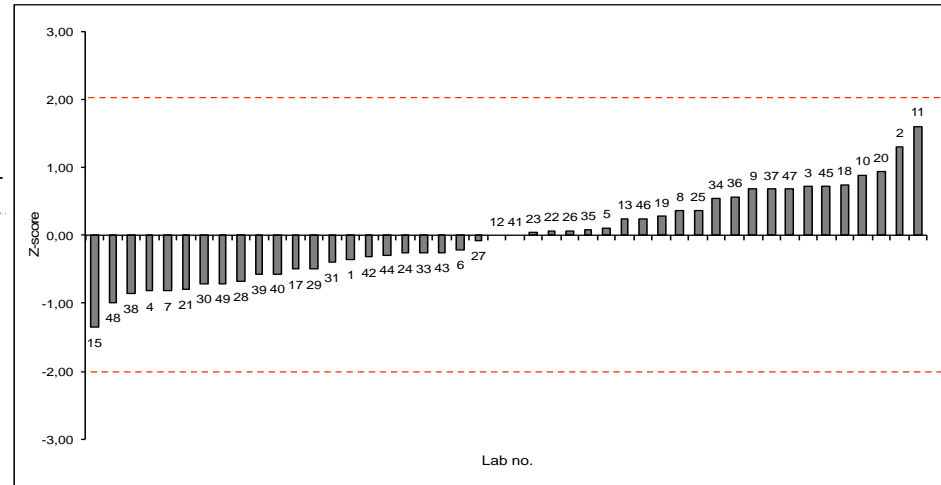
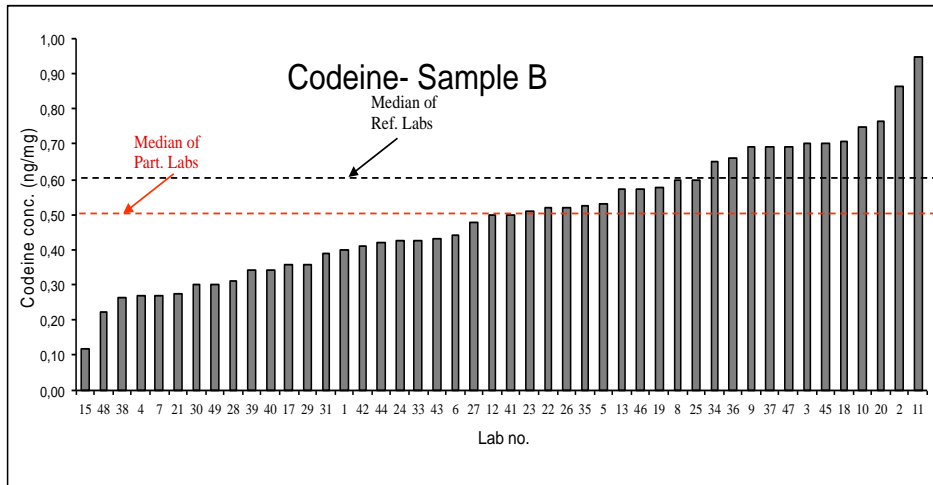




Lab.	Morphine (ng/mg)	Z-score	Result
15	0,28	-1,38	Satisfactory
32	0,33	-1,28	Satisfactory
48	0,38	-1,19	Satisfactory
14	0,41	-1,13	Satisfactory
21	0,55	-0,88	Satisfactory
39	0,56	-0,85	Satisfactory
38	0,56	-0,85	Satisfactory
40	0,57	-0,82	Satisfactory
4	0,59	-0,79	Satisfactory
25	0,70	-0,58	Satisfactory
44	0,74	-0,50	Satisfactory
23	0,75	-0,48	Satisfactory
29	0,80	-0,38	Satisfactory
17	0,83	-0,33	Satisfactory
24	0,85	-0,29	Satisfactory
7	0,88	-0,23	Satisfactory
28	0,89	-0,21	Satisfactory
18	0,90	-0,19	Satisfactory
33	0,94	-0,12	Satisfactory
31	0,95	-0,10	Satisfactory
5	0,99	-0,02	Satisfactory
1	1,00	0,00	Satisfactory
42	1,00	0,00	Satisfactory
45	1,00	0,00	Satisfactory
50	1,00	0,00	Satisfactory
47	1,06	0,12	Satisfactory

Lab.	Morphine (ng/mg)	Z-score	Result
27	1,07	0,13	Satisfactory
30	1,10	0,19	Satisfactory
43	1,11	0,21	Satisfactory
35	1,17	0,33	Satisfactory
46	1,19	0,37	Satisfactory
12	1,20	0,38	Satisfactory
36	1,22	0,42	Satisfactory
9	1,26	0,50	Satisfactory
6	1,30	0,58	Satisfactory
49	1,30	0,58	Satisfactory
26	1,32	0,62	Satisfactory
10	1,35	0,68	Satisfactory
11	1,36	0,69	Satisfactory
41	1,39	0,75	Satisfactory
3	1,40	0,77	Satisfactory
8	1,40	0,77	Satisfactory
22	1,40	0,77	Satisfactory
34	1,51	0,98	Satisfactory
37	1,55	1,06	Satisfactory
13	1,67	1,29	Satisfactory
20	1,78	1,50	Satisfactory
2	1,83	1,59	Satisfactory
19	2,68	3,23	Unsatisfactory
16	P		

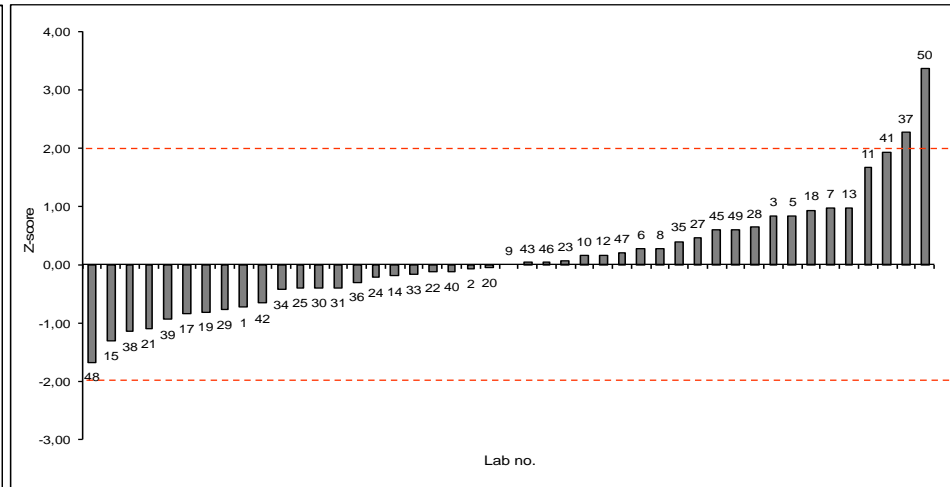
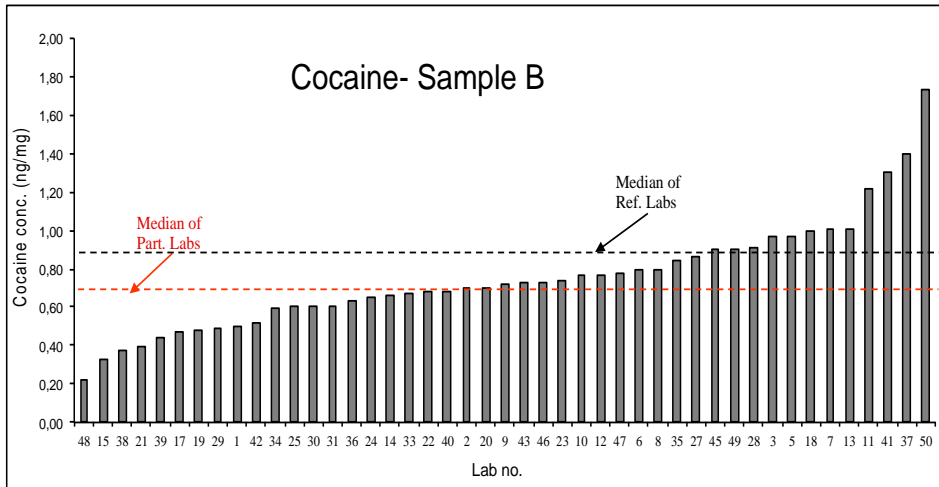
Average	1,06
SD	0,44
CV%	41,08
Median	1,00
Minimum	0,28
Quartile 25	0,80
Quartile 75	1,32
Maximum	2,68
Iqr	0,52



Lab.	Codeine (ng/mg)	Z-score	Result
15	0,12	-1,36	Satisfactory
48	0,22	-0,99	Satisfactory
38	0,26	-0,85	Satisfactory
4	0,27	-0,82	Satisfactory
7	0,27	-0,82	Satisfactory
21	0,28	-0,80	Satisfactory
30	0,30	-0,71	Satisfactory
49	0,30	-0,71	Satisfactory
28	0,31	-0,68	Satisfactory
39	0,34	-0,57	Satisfactory
40	0,34	-0,56	Satisfactory
17	0,36	-0,50	Satisfactory
29	0,36	-0,50	Satisfactory
31	0,39	-0,39	Satisfactory
1	0,40	-0,36	Satisfactory
42	0,41	-0,32	Satisfactory
44	0,42	-0,29	Satisfactory
24	0,43	-0,26	Satisfactory
33	0,43	-0,26	Satisfactory
43	0,43	-0,25	Satisfactory
6	0,44	-0,21	Satisfactory
27	0,48	-0,07	Satisfactory
12	0,50	0,00	Satisfactory
41	0,50	0,00	Satisfactory
23	0,51	0,04	Satisfactory
22	0,52	0,07	Satisfactory

Lab.	Codeine (ng/mg)	Z-score	Result
26	0,52	0,07	Satisfactory
35	0,52	0,08	Satisfactory
5	0,53	0,11	Satisfactory
13	0,57	0,25	Satisfactory
46	0,57	0,25	Satisfactory
19	0,58	0,28	Satisfactory
8	0,60	0,36	Satisfactory
25	0,60	0,36	Satisfactory
34	0,65	0,54	Satisfactory
36	0,66	0,57	Satisfactory
9	0,69	0,68	Satisfactory
37	0,69	0,68	Satisfactory
47	0,69	0,68	Satisfactory
3	0,70	0,71	Satisfactory
45	0,70	0,71	Satisfactory
18	0,71	0,75	Satisfactory
10	0,75	0,89	Satisfactory
20	0,76	0,94	Satisfactory
2	0,87	1,31	Satisfactory
11	0,95	1,61	Satisfactory
16	P		
14	N		
32	N		
50	N		

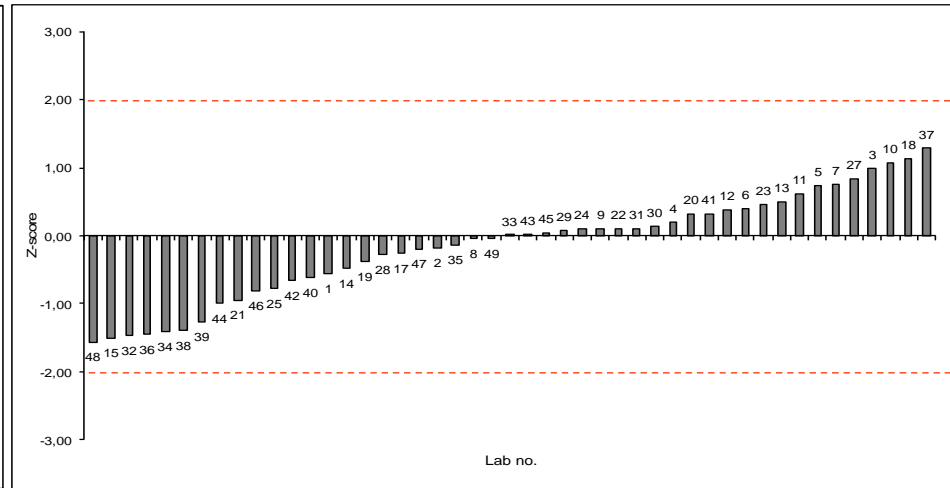
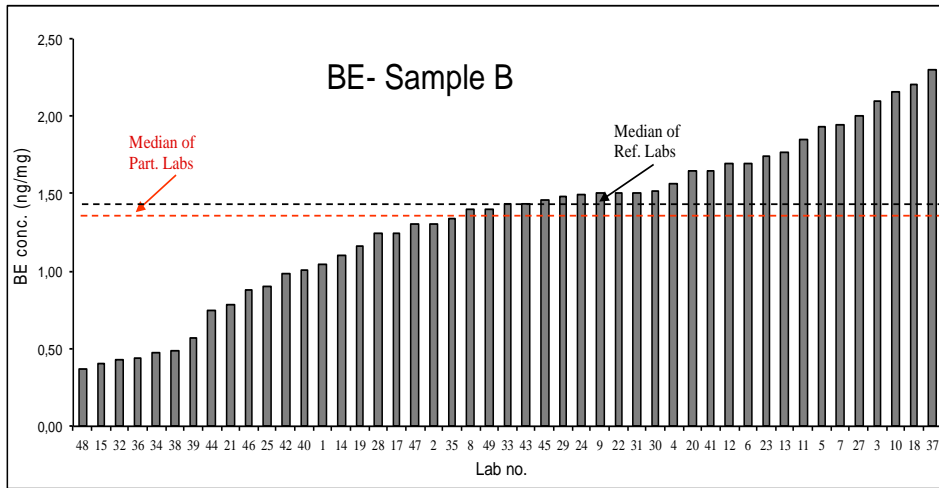
Average	0,50
SD	0,18
CV%	36,06
Median	0,50
Minimum	0,12
Quartile 25	0,36
Quartile 75	0,64
Maximum	0,95
Iqr	0,28



Lab.	Cocaine (ng/mg)	Z-score	Result
48	0,22	-1,67	Satisfactory
15	0,33	-1,30	Satisfactory
38	0,38	-1,15	Satisfactory
21	0,39	-1,09	Satisfactory
39	0,44	-0,93	Satisfactory
17	0,47	-0,83	Satisfactory
19	0,48	-0,81	Satisfactory
29	0,49	-0,77	Satisfactory
1	0,50	-0,73	Satisfactory
42	0,52	-0,67	Satisfactory
34	0,59	-0,43	Satisfactory
25	0,60	-0,40	Satisfactory
30	0,60	-0,40	Satisfactory
31	0,60	-0,40	Satisfactory
36	0,63	-0,30	Satisfactory
24	0,65	-0,23	Satisfactory
14	0,66	-0,20	Satisfactory
33	0,67	-0,17	Satisfactory
22	0,68	-0,13	Satisfactory
40	0,69	-0,12	Satisfactory
2	0,70	-0,07	Satisfactory
20	0,70	-0,05	Satisfactory
9	0,72	0,00	Satisfactory
43	0,73	0,03	Satisfactory
46	0,73	0,03	Satisfactory
23	0,74	0,07	Satisfactory

Lab.	Cocaine (ng/mg)	Z-score	Result
10	0,77	0,16	Satisfactory
12	0,77	0,17	Satisfactory
47	0,78	0,20	Satisfactory
6	0,80	0,27	Satisfactory
8	0,80	0,27	Satisfactory
35	0,84	0,40	Satisfactory
27	0,86	0,47	Satisfactory
45	0,90	0,60	Satisfactory
49	0,90	0,60	Satisfactory
28	0,91	0,63	Satisfactory
3	0,97	0,83	Satisfactory
5	0,97	0,83	Satisfactory
18	1,00	0,93	Satisfactory
7	1,01	0,97	Satisfactory
13	1,01	0,97	Satisfactory
11	1,22	1,67	Satisfactory
41	1,30	1,93	Satisfactory
37	1,40	2,27	Questionable
50	1,73	3,37	Unsatisfactory
4	P		
16	U		
32	N		
44	N		

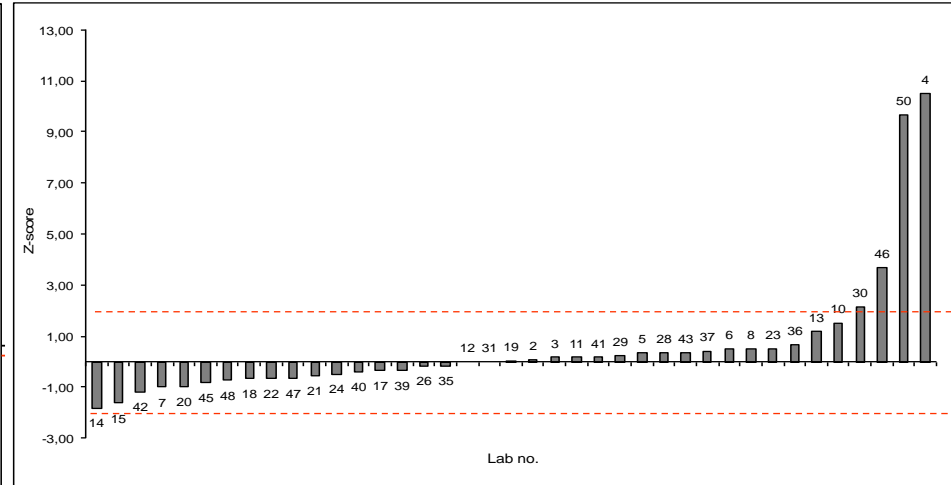
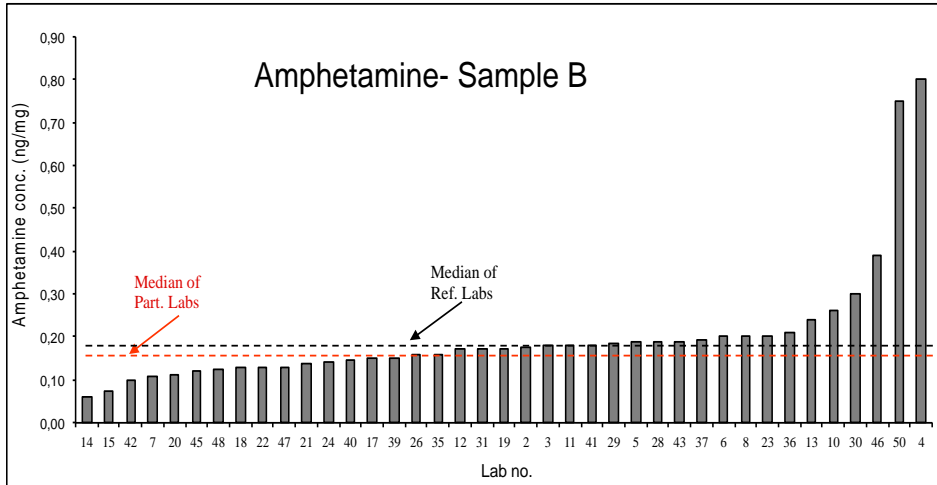
Average	0,75
SD	0,28
CV%	37,64
Median	0,72
Minimum	0,22
Quartile 25	0,60
Quartile 75	0,90
Maximum	1,73
Iqr	0,30



Lab.	BE (ng/mg)	Z-score	Result
48	0,37	-1,56	Satisfactory
15	0,41	-1,50	Satisfactory
32	0,43	-1,46	Satisfactory
36	0,44	-1,46	Satisfactory
34	0,47	-1,41	Satisfactory
38	0,48	-1,39	Satisfactory
39	0,57	-1,26	Satisfactory
44	0,75	-1,00	Satisfactory
21	0,79	-0,95	Satisfactory
46	0,88	-0,81	Satisfactory
25	0,90	-0,78	Satisfactory
42	0,98	-0,66	Satisfactory
40	1,01	-0,62	Satisfactory
1	1,05	-0,56	Satisfactory
14	1,10	-0,49	Satisfactory
19	1,17	-0,39	Satisfactory
28	1,24	-0,28	Satisfactory
17	1,25	-0,26	Satisfactory
47	1,30	-0,19	Satisfactory
2	1,31	-0,18	Satisfactory
35	1,34	-0,14	Satisfactory
8	1,40	-0,04	Satisfactory
49	1,40	-0,04	Satisfactory
33	1,43	0,00	Satisfactory
43	1,44	0,01	Satisfactory
45	1,46	0,04	Satisfactory

Lab.	BE (ng/mg)	Z-score	Result
29	1,49	0,08	Satisfactory
24	1,50	0,10	Satisfactory
9	1,50	0,10	Satisfactory
22	1,50	0,10	Satisfactory
31	1,50	0,10	Satisfactory
30	1,52	0,13	Satisfactory
4	1,56	0,19	Satisfactory
20	1,65	0,32	Satisfactory
41	1,65	0,32	Satisfactory
12	1,69	0,38	Satisfactory
6	1,70	0,40	Satisfactory
23	1,74	0,46	Satisfactory
13	1,77	0,50	Satisfactory
11	1,85	0,62	Satisfactory
5	1,93	0,74	Satisfactory
7	1,94	0,75	Satisfactory
27	2,00	0,84	Satisfactory
3	2,10	0,99	Satisfactory
10	2,16	1,08	Satisfactory
18	2,20	1,13	Satisfactory
37	2,30	1,28	Satisfactory
16	P		

Average	1,33
SD	0,51
CV%	38,50
Median	1,43
Minimum	0,37
Quartile 25	1,00
Quartile 75	1,67
Maximum	2,30
Iqr	0,68

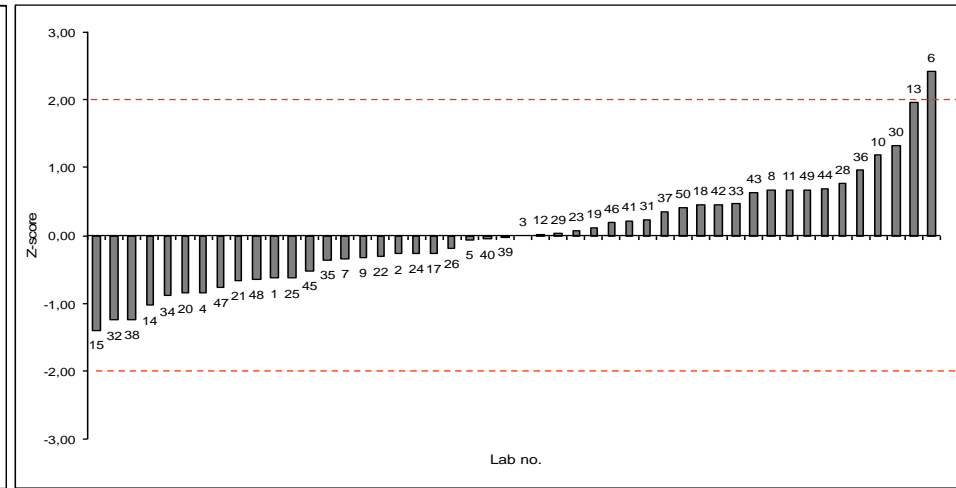
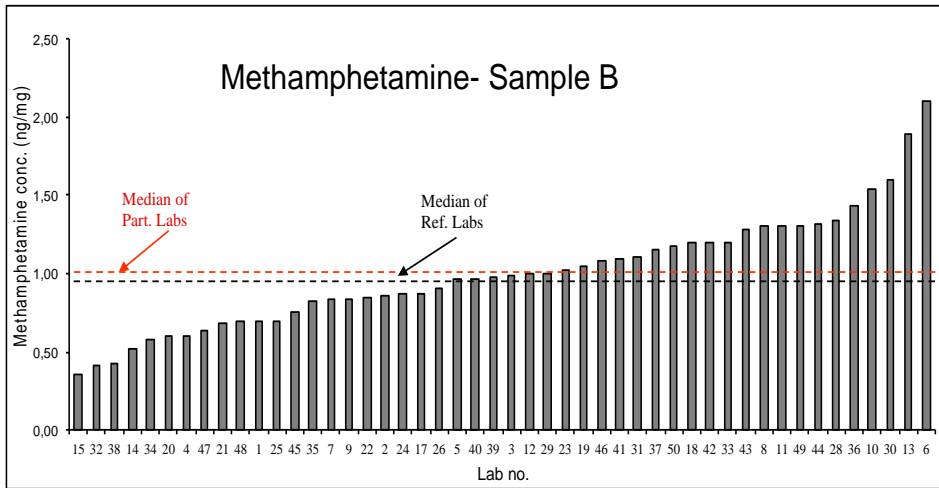


Lab.	Amphetamine (ng/mg)	Z-score	Result
14	0,06	-1,80	Satisfactory
15	0,07	-1,62	Satisfactory
42	0,10	-1,17	Satisfactory
7	0,11	-1,00	Satisfactory
20	0,11	-0,98	Satisfactory
45	0,12	-0,83	Satisfactory
48	0,13	-0,73	Satisfactory
18	0,13	-0,67	Satisfactory
22	0,13	-0,67	Satisfactory
47	0,13	-0,67	Satisfactory
21	0,14	-0,55	Satisfactory
24	0,14	-0,48	Satisfactory
40	0,15	-0,38	Satisfactory
17	0,15	-0,33	Satisfactory
39	0,15	-0,33	Satisfactory
26	0,16	-0,17	Satisfactory
35	0,16	-0,17	Satisfactory
12	0,17	0,00	Satisfactory
31	0,17	0,00	Satisfactory
19	0,17	0,02	Satisfactory
2	0,18	0,08	Satisfactory
3	0,18	0,17	Satisfactory
11	0,18	0,17	Satisfactory
41	0,18	0,17	Satisfactory
29	0,19	0,25	Satisfactory
5	0,19	0,33	Satisfactory

Lab.	Amphetamine (ng/mg)	Z-score	Result
28	0,19	0,33	Satisfactory
43	0,19	0,33	Satisfactory
37	0,20	0,42	Satisfactory
6	0,20	0,50	Satisfactory
8	0,20	0,50	Satisfactory
23	0,20	0,50	Satisfactory
36	0,21	0,67	Satisfactory
13	0,24	1,17	Satisfactory
10	0,26	1,52	Satisfactory
30	0,30	2,17	Questionable
46	0,39	3,67	Unsatisfactory
50	0,75	9,67	Unsatisfactory
4	0,80	10,50	Unsatisfactory
49	P		
16	U		
1	N		
9	N		
25	N		
32	N		
33	N		
34	N		
38	N		
44	N		

Average	0,20
SD	0,15
CV%	72,14
Median	0,17
Minimum	0,06
Quartile 25	0,13
Quartile 75	0,20
Maximum	0,80
Iqr	0,06

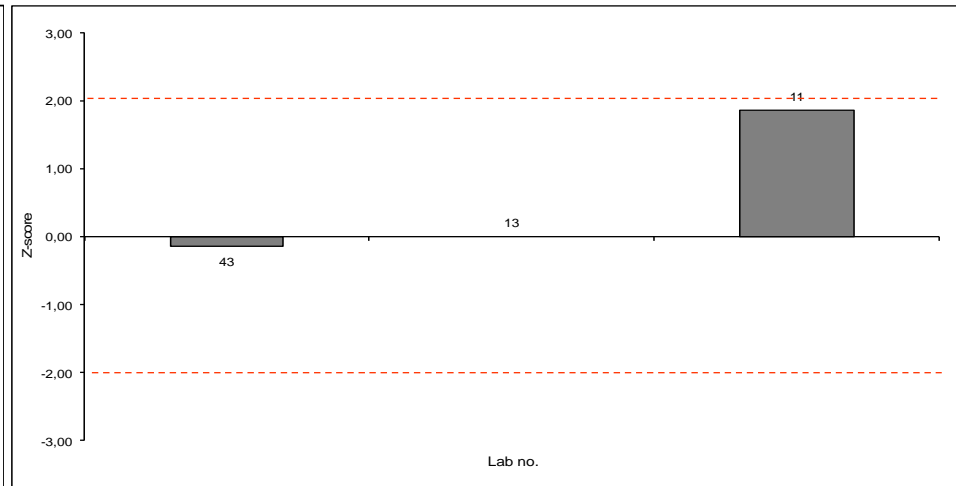
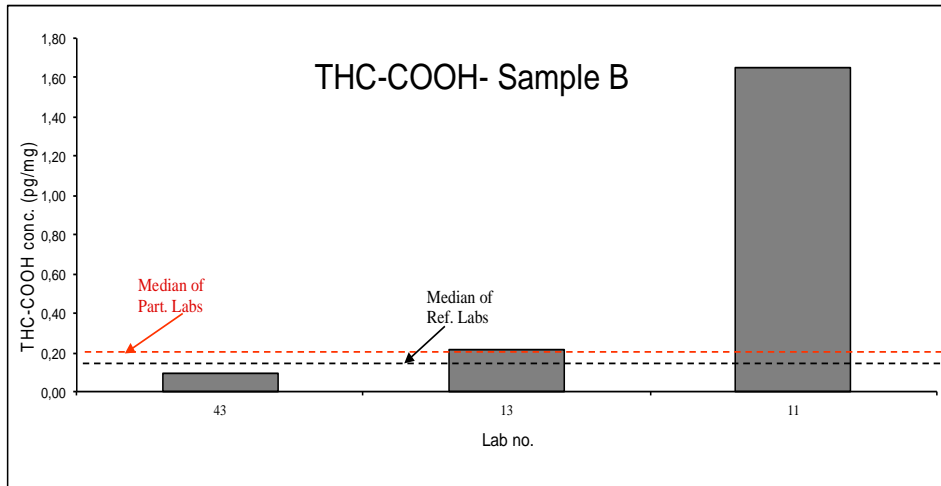
The median Amphetamine concentration is below the cut-off proposed by SoHT (0.20 ng/mg)



Lab.	Methamphetamine (ng/mg)	Z-score	Result
15	0,35	-1,39	Satisfactory
32	0,42	-1,25	Satisfactory
38	0,42	-1,24	Satisfactory
14	0,52	-1,02	Satisfactory
34	0,58	-0,89	Satisfactory
20	0,60	-0,85	Satisfactory
4	0,60	-0,85	Satisfactory
47	0,64	-0,76	Satisfactory
21	0,69	-0,66	Satisfactory
48	0,69	-0,64	Satisfactory
1	0,70	-0,63	Satisfactory
25	0,70	-0,63	Satisfactory
45	0,75	-0,52	Satisfactory
35	0,83	-0,36	Satisfactory
7	0,83	-0,35	Satisfactory
9	0,84	-0,33	Satisfactory
22	0,85	-0,30	Satisfactory
2	0,86	-0,27	Satisfactory
24	0,87	-0,27	Satisfactory
17	0,87	-0,26	Satisfactory
26	0,90	-0,20	Satisfactory
5	0,96	-0,07	Satisfactory
40	0,96	-0,06	Satisfactory
39	0,98	-0,02	Satisfactory
3	0,99	0,00	Satisfactory
12	1,00	0,02	Satisfactory

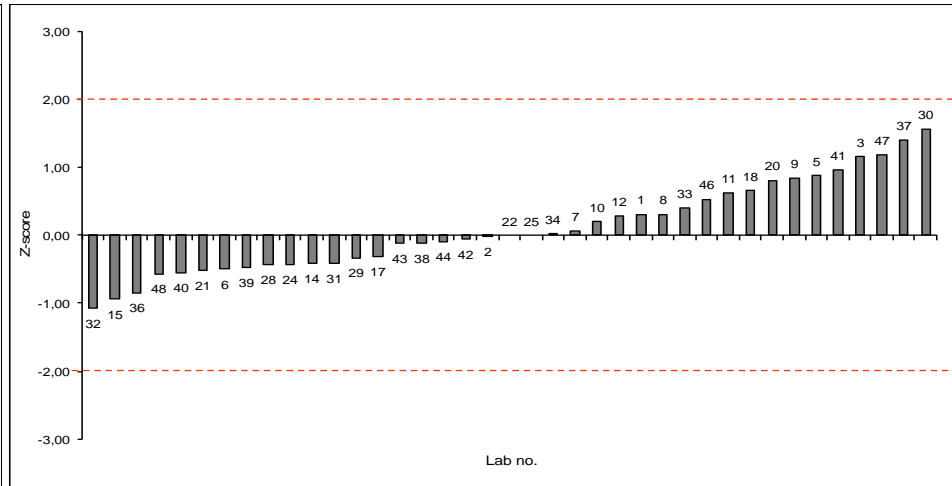
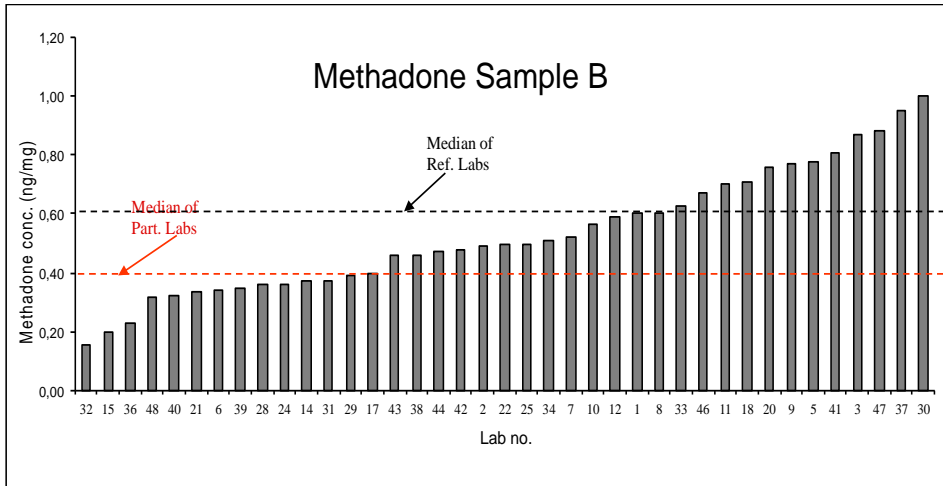
Lab.	Methamphetamine (ng/mg)	Z-score	Result
29	1,01	0,03	Satisfactory
23	1,02	0,07	Satisfactory
19	1,04	0,12	Satisfactory
46	1,08	0,20	Satisfactory
41	1,09	0,22	Satisfactory
31	1,10	0,24	Satisfactory
37	1,15	0,35	Satisfactory
50	1,18	0,41	Satisfactory
18	1,20	0,46	Satisfactory
42	1,20	0,46	Satisfactory
33	1,20	0,46	Satisfactory
43	1,28	0,63	Satisfactory
8	1,30	0,67	Satisfactory
11	1,30	0,67	Satisfactory
49	1,30	0,67	Satisfactory
44	1,31	0,70	Satisfactory
28	1,34	0,76	Satisfactory
36	1,43	0,96	Satisfactory
10	1,53	1,18	Satisfactory
30	1,60	1,33	Satisfactory
13	1,89	1,96	Satisfactory
6	2,10	2,41	Questionable
16	P		

Average	1,00
SD	0,36
CV%	35,79
Median	0,99
Minimum	0,35
Quartile 25	0,74
Quartile 75	1,20
Maximum	2,10
Iqr	0,46



Lab	THC-COOH (pg/mg)	Z-score	Result
43	0,10	-0,15	Satisfactory
13	0,21	0,00	Satisfactory
11	1,65	1,85	Satisfactory
1	N		
2	N		
9	N		
12	N		
16	N		
17	N		
19	N		
23	N		
25	N		
30	N		
32	N		
33	N		
35	N		
36	N		

Average	0,65
SD	0,71
CV%	108,47
Median	0,21
Minimum	0,10
Quartile 25	0,15
Quartile 75	0,93
Maximum	1,65
Iqr	0,78

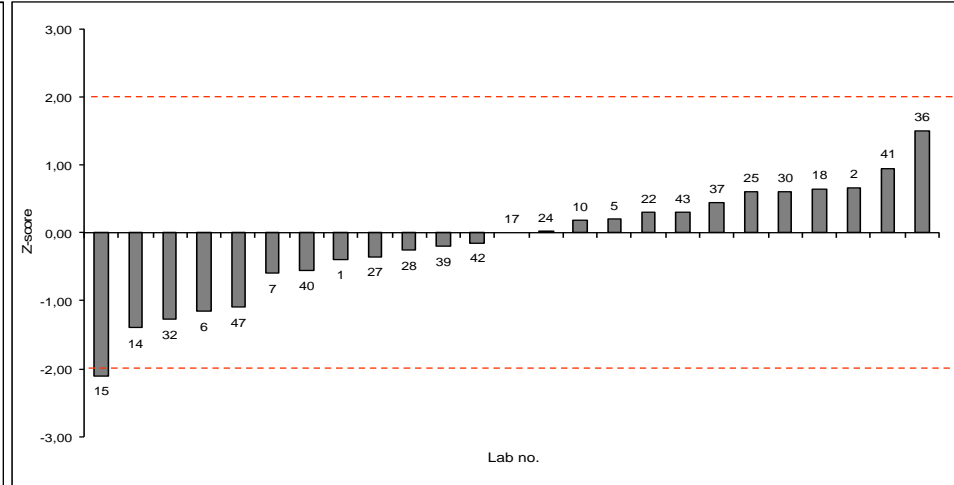
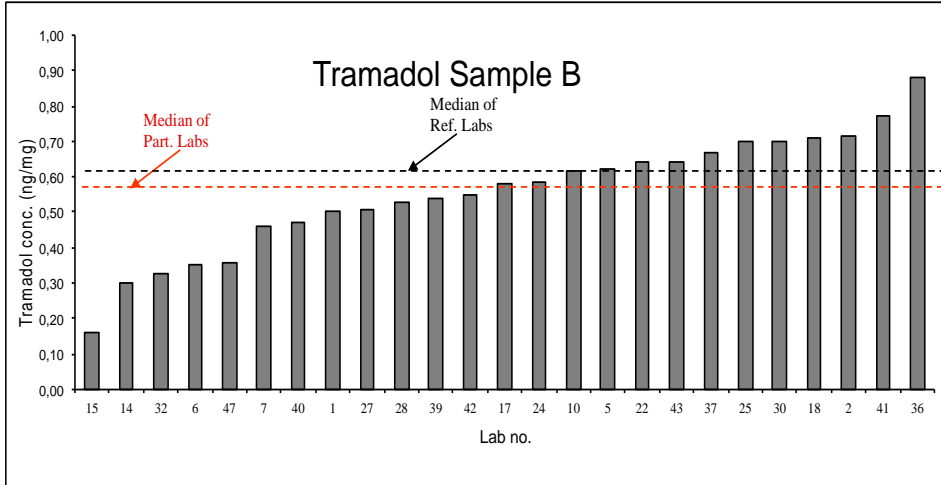


Lab.	Methadone (ng/mg)	Z-score	Result
32	0,15	-1,08	Satisfactory
15	0,20	-0,94	Satisfactory
36	0,23	-0,84	Satisfactory
48	0,32	-0,57	Satisfactory
40	0,33	-0,55	Satisfactory
21	0,34	-0,52	Satisfactory
6	0,34	-0,50	Satisfactory
39	0,35	-0,47	Satisfactory
28	0,36	-0,44	Satisfactory
24	0,36	-0,43	Satisfactory
14	0,37	-0,41	Satisfactory
31	0,37	-0,41	Satisfactory
29	0,39	-0,33	Satisfactory
17	0,40	-0,31	Satisfactory
43	0,46	-0,13	Satisfactory
38	0,46	-0,12	Satisfactory
44	0,47	-0,09	Satisfactory
42	0,48	-0,06	Satisfactory
2	0,49	-0,02	Satisfactory
22	0,50	0,00	Satisfactory
25	0,50	0,00	Satisfactory
34	0,51	0,03	Satisfactory
7	0,52	0,06	Satisfactory
10	0,56	0,20	Satisfactory
12	0,59	0,28	Satisfactory
1	0,60	0,31	Satisfactory

Lab.	Methadone (ng/mg)	Z-score	Result
8	0,60	0,31	Satisfactory
33	0,63	0,41	Satisfactory
46	0,67	0,53	Satisfactory
11	0,70	0,63	Satisfactory
18	0,71	0,66	Satisfactory
20	0,76	0,81	Satisfactory
9	0,77	0,84	Satisfactory
5	0,78	0,88	Satisfactory
41	0,81	0,97	Satisfactory
3	0,87	1,16	Satisfactory
47	0,88	1,19	Satisfactory
37	0,95	1,41	Satisfactory
30	1,00	1,56	Satisfactory
16	P		
49	P		
50	N		

Average	0,53
SD	0,21
CV%	39,05
Median	0,50
Minimum	0,15
Quartile 25	0,37
Quartile 75	0,69
Maximum	1,00
Iqr	0,32

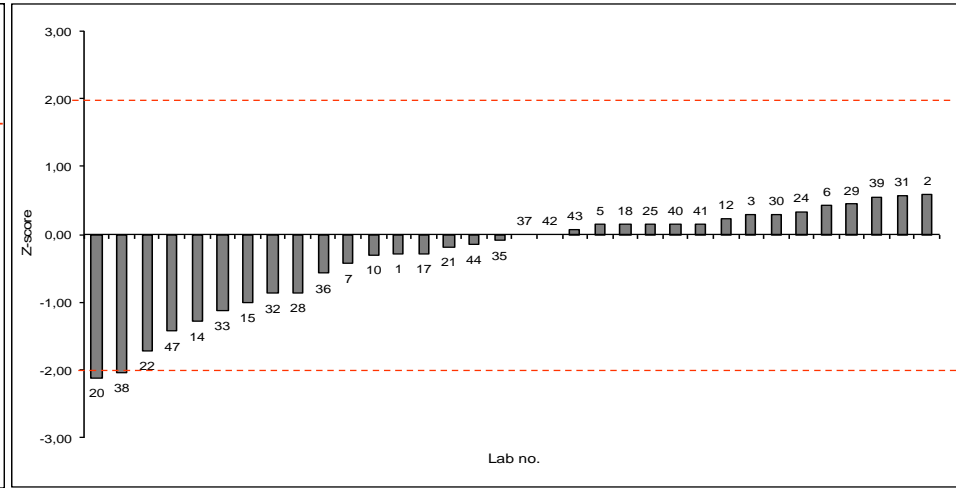
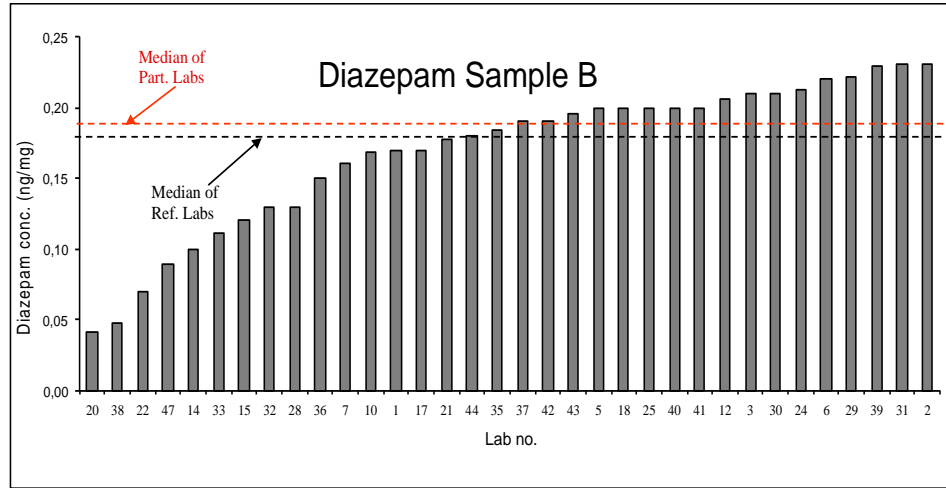




Lab.	Tramadol (ng/mg)	Z-score	Result
15	0,16	-2,10	Questionable
14	0,30	-1,40	Satisfactory
32	0,33	-1,27	Satisfactory
6	0,35	-1,15	Satisfactory
47	0,36	-1,10	Satisfactory
7	0,46	-0,60	Satisfactory
40	0,47	-0,56	Satisfactory
1	0,50	-0,40	Satisfactory
27	0,51	-0,35	Satisfactory
28	0,53	-0,25	Satisfactory
39	0,54	-0,20	Satisfactory
42	0,55	-0,15	Satisfactory
17	0,58	0,00	Satisfactory
24	0,59	0,03	Satisfactory
10	0,62	0,18	Satisfactory
5	0,62	0,20	Satisfactory
22	0,64	0,30	Satisfactory
43	0,64	0,30	Satisfactory
37	0,67	0,45	Satisfactory
25	0,70	0,60	Satisfactory
30	0,70	0,60	Satisfactory
18	0,71	0,65	Satisfactory
2	0,71	0,67	Satisfactory
41	0,77	0,95	Satisfactory
36	0,88	1,50	Satisfactory
9	N		

Lab.	Tramadol (ng/mg)	Z-score	Result
12	N		
38	N		

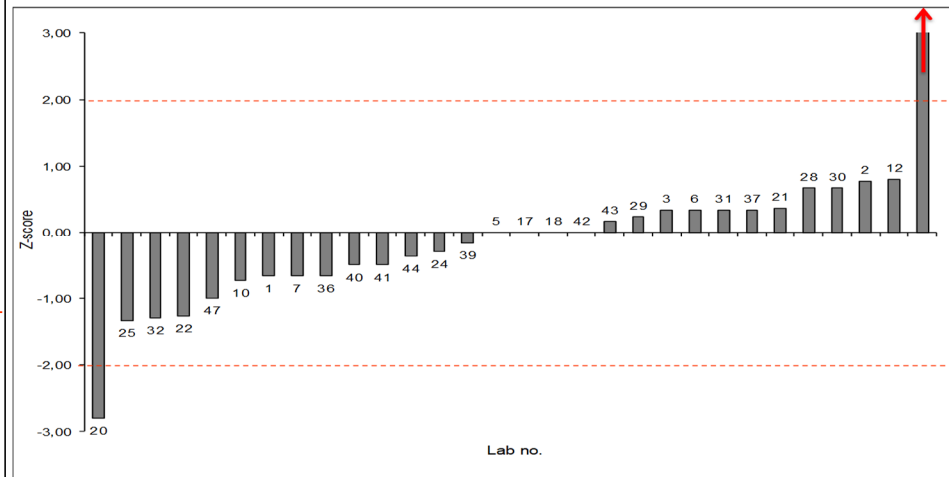
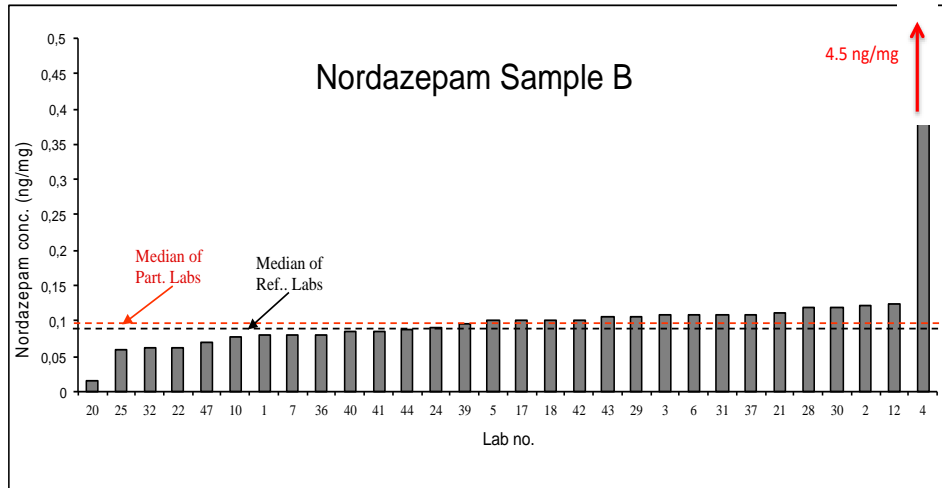
Average	0,56
SD	0,16
CV%	29,18
Median	0,58
Minimum	0,16
Quartile 25	0,47
Quartile 75	0,67
Maximum	0,88
Iqr	0,20



Lab.	Diazepam (ng/mg)	Z-score	Result
20	0,04	-2,11	Questionable
38	0,05	-2,03	Satisfactory
22	0,07	-1,71	Satisfactory
47	0,09	-1,43	Satisfactory
14	0,10	-1,29	Satisfactory
33	0,11	-1,13	Satisfactory
15	0,12	-1,00	Satisfactory
32	0,13	-0,87	Satisfactory
28	0,13	-0,86	Satisfactory
36	0,15	-0,57	Satisfactory
7	0,16	-0,43	Satisfactory
10	0,17	-0,30	Satisfactory
1	0,17	-0,29	Satisfactory
17	0,17	-0,29	Satisfactory
21	0,18	-0,19	Satisfactory
44	0,18	-0,14	Satisfactory
35	0,18	-0,09	Satisfactory
37	0,19	0,00	Satisfactory
42	0,19	0,00	Satisfactory
43	0,20	0,07	Satisfactory
5	0,20	0,14	Satisfactory
18	0,20	0,14	Satisfactory
25	0,20	0,14	Satisfactory
40	0,20	0,14	Satisfactory
41	0,20	0,14	Satisfactory
12	0,21	0,23	Satisfactory

Lab.	Diazepam (ng/mg)	Z-score	Result
3	0,21	0,29	Satisfactory
30	0,21	0,29	Satisfactory
24	0,21	0,33	Satisfactory
6	0,22	0,43	Satisfactory
29	0,22	0,44	Satisfactory
39	0,23	0,56	Satisfactory
31	0,23	0,57	Satisfactory
2	0,23	0,59	Satisfactory
16	P		
4	U		
9	N		
49	N		

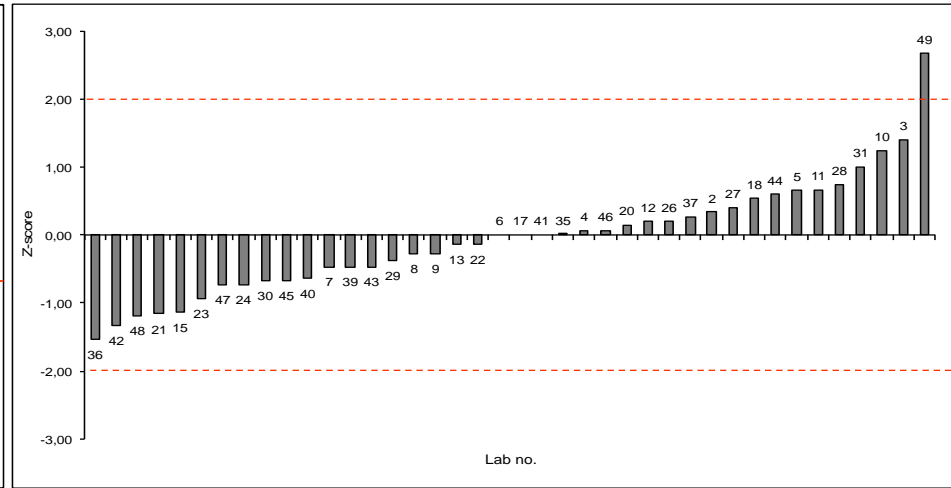
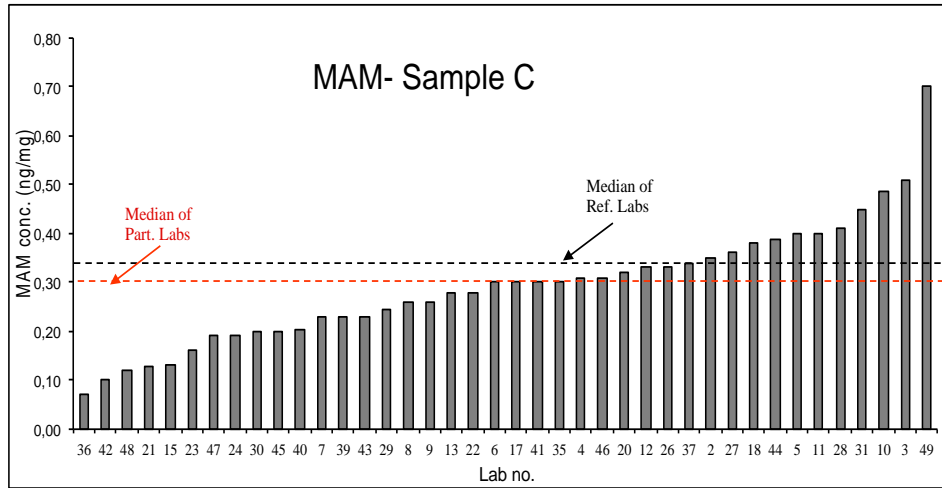
Average	0,17
SD	0,05
CV%	30,59
Median	0,19
Minimum	0,04
Quartile 25	0,14
Quartile 75	0,20
Maximum	0,23
Iqr	0,07



Lab.	Nordazepam (ng/mg)	Z-score	Result
20	0,016	-2,80	Satisfactory
25	0,06	-1,33	Satisfactory
32	0,061	-1,30	Satisfactory
22	0,062	-1,27	Satisfactory
47	0,07	-1,00	Satisfactory
10	0,078	-0,73	Satisfactory
1	0,08	-0,67	Satisfactory
7	0,08	-0,67	Satisfactory
36	0,08	-0,67	Satisfactory
40	0,085	-0,50	Satisfactory
41	0,085	-0,50	Satisfactory
44	0,089	-0,37	Satisfactory
24	0,09	-0,30	Satisfactory
39	0,10	-0,17	Satisfactory
5	0,10	0,00	Satisfactory
17	0,10	0,00	Satisfactory
18	0,10	0,00	Satisfactory
42	0,10	0,00	Satisfactory
43	0,11	0,17	Satisfactory
29	0,11	0,23	Satisfactory
3	0,11	0,33	Satisfactory
6	0,11	0,33	Satisfactory
31	0,11	0,33	Satisfactory
37	0,11	0,33	Satisfactory
21	0,11	0,37	Satisfactory
28	0,12	0,67	Satisfactory

Lab.	Nordazepam (ng/mg)	Z-score	Result
30	0,12	0,67	Satisfactory
2	0,12	0,77	Satisfactory
12	0,12	0,80	Satisfactory
4	4,50	146,67	Unsatisfactory
16	P		
9	N		
33	N		
35	N		
38	N		
49	N		

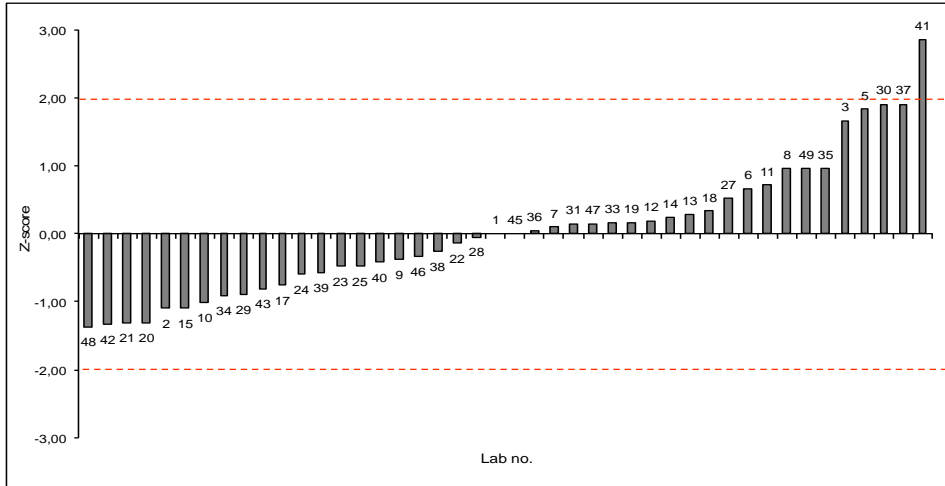
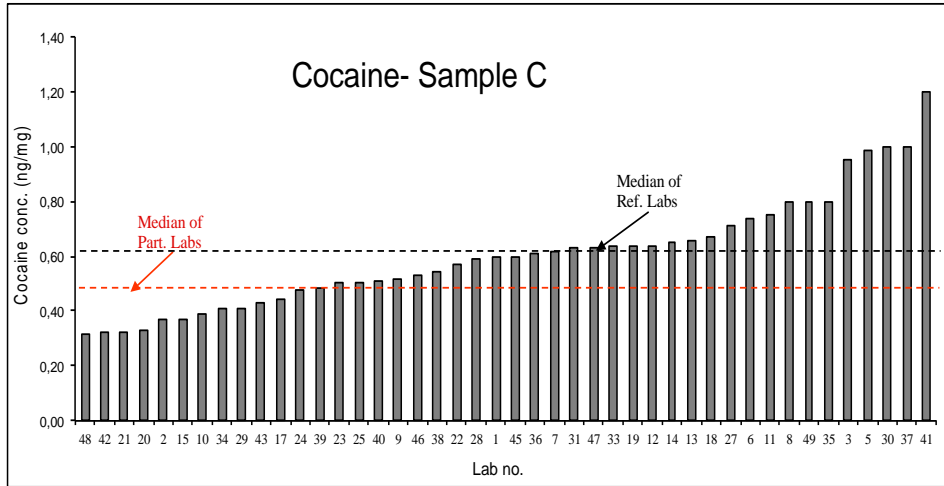
Average	0,24
SD	0,79
CV%	330,62
Median	0,10
Minimum	0,02
Quartile 25	0,08
Quartile 75	0,11
Maximum	4,50
Iqr	0,03



Lab.	MAM (ng/mg)	Z-score	Result
36	0,07	-1,53	Satisfactory
42	0,10	-1,33	Satisfactory
48	0,12	-1,19	Satisfactory
21	0,13	-1,16	Satisfactory
15	0,13	-1,13	Satisfactory
23	0,16	-0,93	Satisfactory
47	0,19	-0,73	Satisfactory
24	0,19	-0,73	Satisfactory
30	0,20	-0,67	Satisfactory
45	0,20	-0,67	Satisfactory
40	0,20	-0,64	Satisfactory
7	0,23	-0,47	Satisfactory
39	0,23	-0,47	Satisfactory
43	0,23	-0,47	Satisfactory
29	0,24	-0,38	Satisfactory
8	0,26	-0,27	Satisfactory
9	0,26	-0,27	Satisfactory
13	0,28	-0,13	Satisfactory
22	0,28	-0,13	Satisfactory
6	0,30	0,00	Satisfactory
17	0,30	0,00	Satisfactory
41	0,30	0,00	Satisfactory
35	0,30	0,01	Satisfactory
4	0,31	0,07	Satisfactory
46	0,31	0,07	Satisfactory
20	0,32	0,15	Satisfactory

Lab.	MAM (ng/mg)	Z-score	Result
12	0,33	0,20	Satisfactory
26	0,33	0,20	Satisfactory
37	0,34	0,27	Satisfactory
2	0,35	0,33	Satisfactory
27	0,36	0,40	Satisfactory
18	0,38	0,53	Satisfactory
44	0,39	0,60	Satisfactory
5	0,40	0,65	Satisfactory
11	0,40	0,67	Satisfactory
28	0,41	0,73	Satisfactory
31	0,45	1,00	Satisfactory
10	0,49	1,24	Satisfactory
3	0,51	1,40	Satisfactory
49	0,70	2,67	Quetionable
16	P		
1	N		
14	N		
19	N		
25	N		
32	N		
33	N		
34	N		
38	N		
50	N		

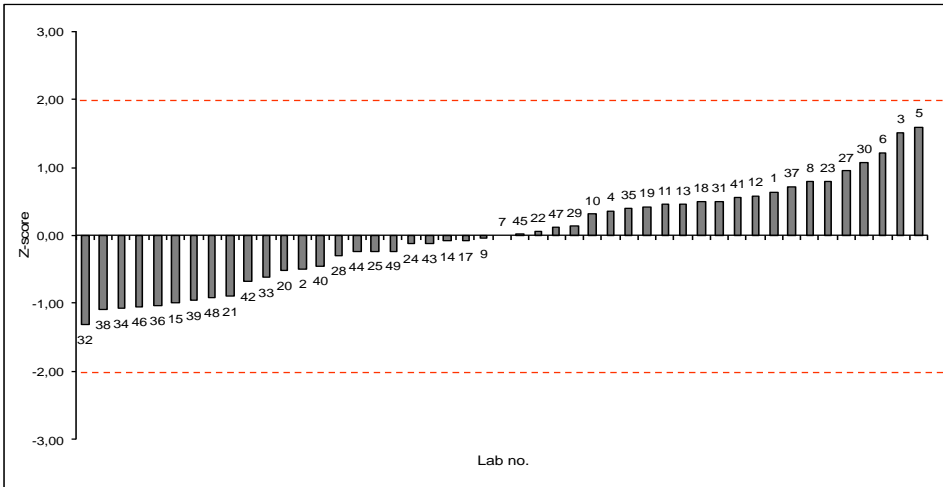
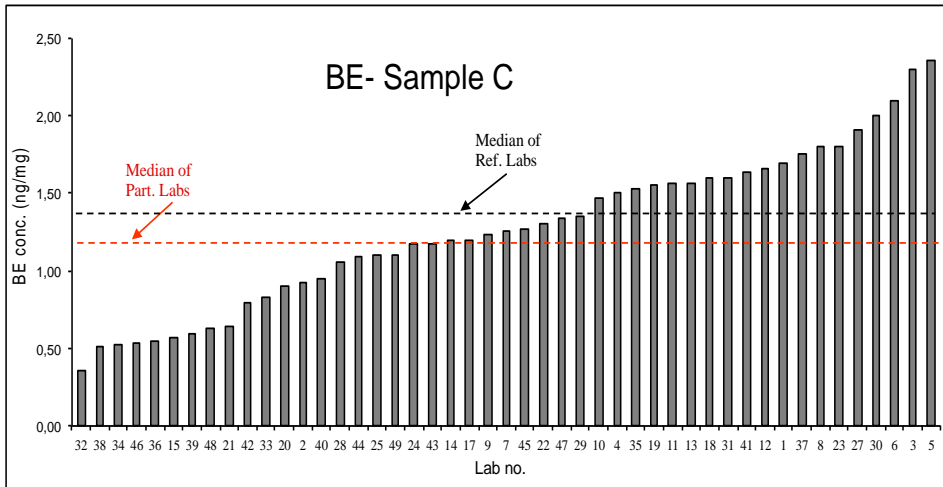
Average	0,29
SD	0,12
CV%	41,71
Median	0,30
Minimum	0,07
Quartile 25	0,20
Quartile 75	0,35
Maximum	0,70
Iqr	0,15



Lab.	Cocaine (ng/mg)	Z-score	Result
48	0,31	-1,37	Satisfactory
42	0,32	-1,33	Satisfactory
21	0,33	-1,31	Satisfactory
20	0,33	-1,30	Satisfactory
2	0,37	-1,10	Satisfactory
15	0,37	-1,10	Satisfactory
10	0,39	-1,01	Satisfactory
34	0,41	-0,90	Satisfactory
29	0,41	-0,90	Satisfactory
43	0,43	-0,81	Satisfactory
17	0,44	-0,76	Satisfactory
24	0,47	-0,60	Satisfactory
39	0,48	-0,57	Satisfactory
23	0,50	-0,48	Satisfactory
25	0,50	-0,48	Satisfactory
40	0,51	-0,42	Satisfactory
9	0,52	-0,38	Satisfactory
46	0,53	-0,33	Satisfactory
38	0,55	-0,26	Satisfactory
22	0,57	-0,14	Satisfactory
28	0,59	-0,05	Satisfactory
1	0,60	0,00	Satisfactory
45	0,60	0,00	Satisfactory
36	0,61	0,05	Satisfactory
7	0,62	0,10	Satisfactory
31	0,63	0,14	Satisfactory

Lab.	Cocaine (ng/mg)	Z-score	Result
47	0,63	0,14	Satisfactory
33	0,63	0,16	Satisfactory
19	0,64	0,17	Satisfactory
12	0,64	0,19	Satisfactory
14	0,65	0,24	Satisfactory
13	0,66	0,29	Satisfactory
18	0,67	0,33	Satisfactory
27	0,71	0,52	Satisfactory
6	0,74	0,67	Satisfactory
11	0,75	0,71	Satisfactory
8	0,80	0,95	Satisfactory
49	0,80	0,95	Satisfactory
35	0,80	0,96	Satisfactory
3	0,95	1,67	Satisfactory
5	0,99	1,83	Satisfactory
30	1,00	1,90	Satisfactory
37	1,00	1,90	Satisfactory
41	1,20	2,86	Questionable
4	P		
16	P		
32	N		
44	N		
50	N		

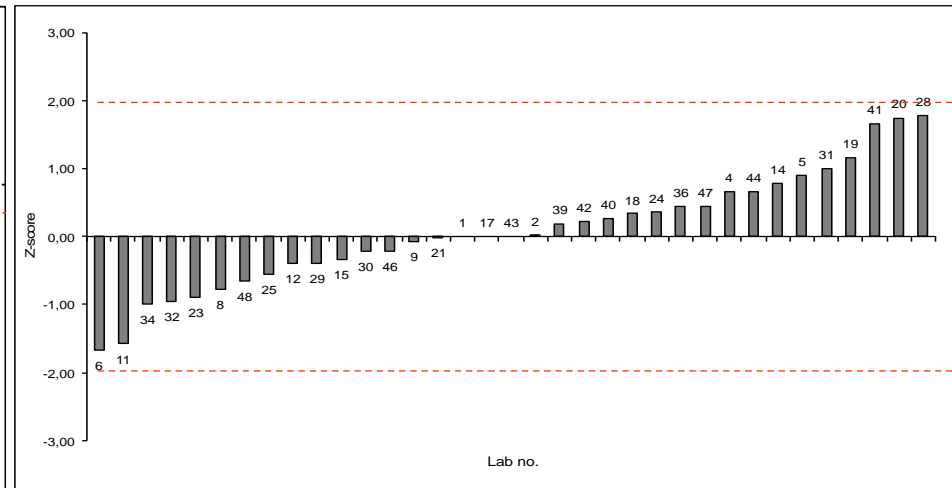
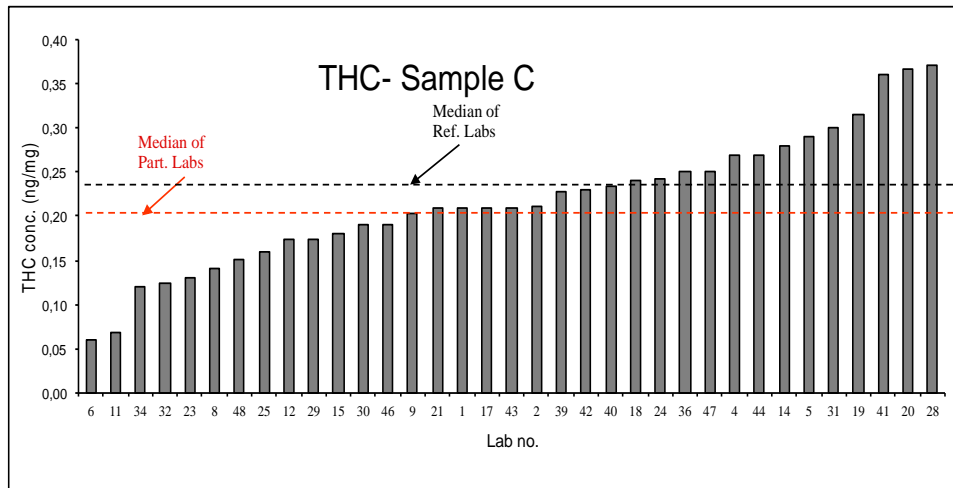
Average	0,61
SD	0,20
CV%	33,44
Median	0,60
Minimum	0,31
Quartile 25	0,47
Quartile 75	0,68
Maximum	1,20
Iqr	0,21



Lab.	BE (ng/mg)	Z-score	Result
32	0,36	-1,31	Satisfactory
38	0,51	-1,09	Satisfactory
34	0,52	-1,07	Satisfactory
46	0,54	-1,04	Satisfactory
36	0,55	-1,03	Satisfactory
15	0,57	-1,00	Satisfactory
39	0,60	-0,96	Satisfactory
48	0,64	-0,91	Satisfactory
21	0,64	-0,90	Satisfactory
42	0,79	-0,68	Satisfactory
33	0,83	-0,62	Satisfactory
20	0,91	-0,51	Satisfactory
2	0,92	-0,49	Satisfactory
40	0,95	-0,45	Satisfactory
28	1,06	-0,29	Satisfactory
44	1,09	-0,25	Satisfactory
25	1,10	-0,23	Satisfactory
49	1,10	-0,23	Satisfactory
24	1,18	-0,12	Satisfactory
43	1,18	-0,12	Satisfactory
14	1,20	-0,09	Satisfactory
17	1,20	-0,09	Satisfactory
9	1,23	-0,04	Satisfactory
7	1,26	0,00	Satisfactory
45	1,27	0,01	Satisfactory
22	1,30	0,06	Satisfactory

Lab.	BE (ng/mg)	Z-score	Result
47	1,34	0,12	Satisfactory
29	1,35	0,13	Satisfactory
10	1,47	0,31	Satisfactory
4	1,51	0,36	Satisfactory
35	1,53	0,39	Satisfactory
19	1,55	0,42	Satisfactory
11	1,57	0,45	Satisfactory
13	1,57	0,45	Satisfactory
18	1,60	0,49	Satisfactory
31	1,60	0,49	Satisfactory
41	1,64	0,55	Satisfactory
12	1,66	0,58	Satisfactory
1	1,70	0,64	Satisfactory
37	1,75	0,71	Satisfactory
8	1,80	0,78	Satisfactory
23	1,80	0,78	Satisfactory
27	1,91	0,94	Satisfactory
30	2,00	1,07	Satisfactory
6	2,10	1,22	Satisfactory
3	2,30	1,51	Satisfactory
5	2,36	1,59	Satisfactory
16	P		

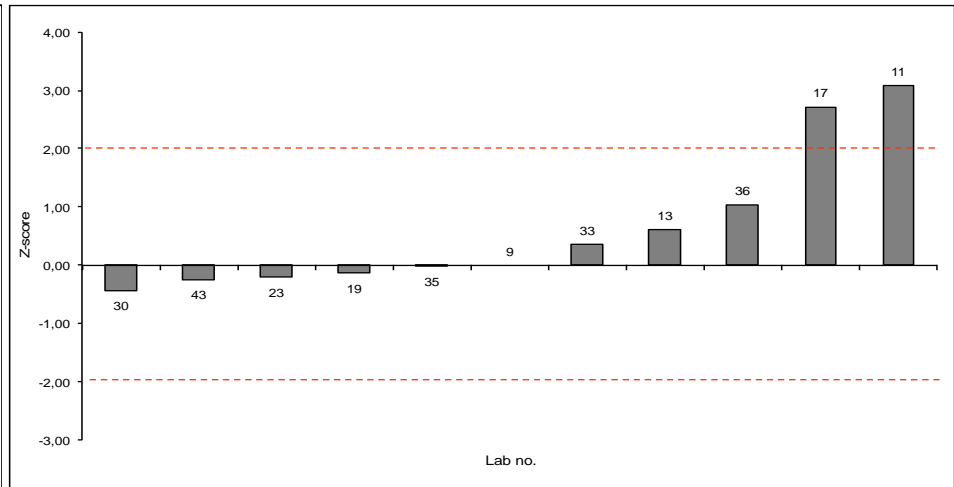
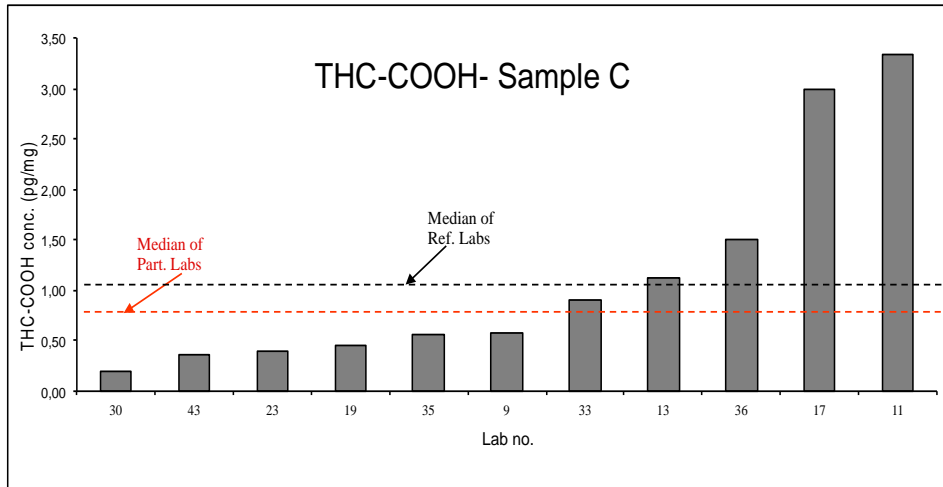
Average	1,27
SD	0,50
CV%	39,05
Median	1,26
Minimum	0,36
Quartile 25	0,91
Quartile 75	1,60
Maximum	2,36
Iqr	0,69



Lab.	THC (ng/mg)	Z-score	Result
6	0,06	-1,67	Satisfactory
11	0,07	-1,58	Satisfactory
34	0,12	-1,00	Satisfactory
32	0,12	-0,96	Satisfactory
23	0,13	-0,89	Satisfactory
8	0,14	-0,78	Satisfactory
48	0,15	-0,66	Satisfactory
25	0,16	-0,56	Satisfactory
12	0,18	-0,39	Satisfactory
29	0,18	-0,39	Satisfactory
15	0,18	-0,33	Satisfactory
30	0,19	-0,22	Satisfactory
46	0,19	-0,22	Satisfactory
9	0,20	-0,08	Satisfactory
21	0,21	-0,01	Satisfactory
1	0,21	0,00	Satisfactory
17	0,21	0,00	Satisfactory
43	0,21	0,00	Satisfactory
2	0,21	0,01	Satisfactory
39	0,23	0,19	Satisfactory
42	0,23	0,22	Satisfactory
40	0,23	0,27	Satisfactory
18	0,24	0,33	Satisfactory
24	0,24	0,36	Satisfactory
36	0,25	0,44	Satisfactory
47	0,25	0,44	Satisfactory

Lab.	THC (ng/mg)	Z-score	Result
4	0,27	0,67	Satisfactory
44	0,27	0,67	Satisfactory
14	0,28	0,78	Satisfactory
5	0,29	0,90	Satisfactory
31	0,30	1,00	Satisfactory
19	0,32	1,17	Satisfactory
41	0,36	1,67	Satisfactory
20	0,37	1,74	Satisfactory
28	0,37	1,78	Satisfactory
16	P		

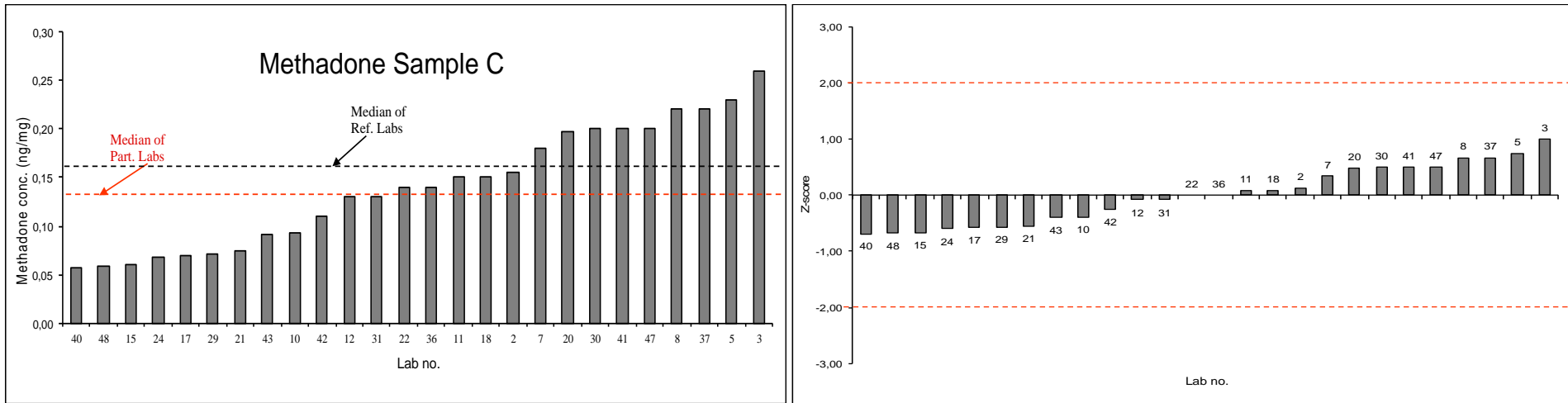
Average	0,22
SD	0,07
CV%	34,29
Median	0,21
Minimum	0,06
Quartile 25	0,18
Quartile 75	0,26
Maximum	0,37
Iqr	0,09



Lab.	THC-COOH (pg/mg)	Z-score	Result
30	0,20	-0,43	Satisfactory
43	0,36	-0,25	Satisfactory
23	0,39	-0,21	Satisfactory
19	0,46	-0,13	Satisfactory
35	0,56	-0,02	Satisfactory
9	0,58	0,00	Satisfactory
33	0,90	0,36	Satisfactory
13	1,13	0,62	Satisfactory
36	1,50	1,03	Satisfactory
17	3,00	2,72	Questionable
11	3,33	3,09	Unsatisfactory
16	U		
1	N		
2	N		
12	N		
25	N		
32	N		

Average	1,13
SD	1,03
CV%	91,06
Median	0,58
Minimum	0,20
Quartile 25	0,43
Quartile 75	1,32
Maximum	3,33
Iqr	0,89





Lab.	Methadone (ng/mg)	Z-score	Result
40	0,06	-0,68	Satisfactory
48	0,06	-0,67	Satisfactory
15	0,06	-0,67	Satisfactory
24	0,07	-0,60	Satisfactory
17	0,07	-0,58	Satisfactory
29	0,07	-0,57	Satisfactory
21	0,07	-0,55	Satisfactory
43	0,09	-0,40	Satisfactory
10	0,09	-0,39	Satisfactory
42	0,11	-0,25	Satisfactory
12	0,13	-0,08	Satisfactory
31	0,13	-0,08	Satisfactory
22	0,14	0,00	Satisfactory
36	0,14	0,00	Satisfactory
11	0,15	0,08	Satisfactory
18	0,15	0,08	Satisfactory
2	0,16	0,13	Satisfactory
7	0,18	0,33	Satisfactory
20	0,20	0,48	Satisfactory
30	0,20	0,50	Satisfactory
41	0,20	0,50	Satisfactory
47	0,20	0,50	Satisfactory
8	0,22	0,67	Satisfactory
37	0,22	0,67	Satisfactory
5	0,23	0,75	Satisfactory
3	0,26	1,00	Satisfactory

Lab.	Methadone (ng/mg)	Z-score	Result
39	<0,2		
49	P		
16	U		
1	N		
6	N		
9	N		
25	N		
28	N		
32	N		
33	N		
34	N		
38	N		
44	N		
46	N		
50	N		

Average	0,14
SD	0,06
CV%	43,08
Median	0,14
Minimum	0,06
Quartile 25	0,08
Quartile 75	0,20
Maximum	0,26
Iqr	0,12

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