



Sevilla. February 2023

## **Proficiency Test 2022-2**

Laboratory Code:

Dear participants.

Enclosed you will find the report of the Proficiency Test 2022-2 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

Sets of three samples were sent to sixty-seven participating laboratories. Sixty-one of them have sent the report forms back.

This report includes quantitative evaluations of the results. We have also included other compounds that have been reported by more than one participating laboratory.

### **Z-score**

Z-score has been calculated as follows:

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

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**

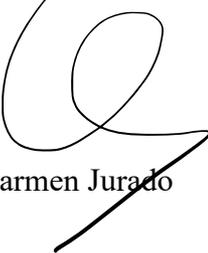
The following criteria have been adopted:

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

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

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

Yours faithfully.



Carmen Jurado

**SAMPLE A**

Sample A contents were as follows:

- Opiate compounds: 6-MAM, morphine, and codeine
- Cocaine compounds: cocaine, benzoylecgonine, cocaethylene and norcocaine.
- Cannabis compounds: THC and THC-COOH
- Methadone and EDDP
- Tramadol
- Diazepam nordazepam

Other compounds reported by more than one participating laboratory were:

Compound	N	Average	SD	CY%	Median	Minimum	Quartile 25	Quartile 75	Maximum	Iqr
CBN	17	0.100	0.027	27.207	0.100	0.057	0.079	0.128	0.150	0.050
CBD	13	0.048	0.024	51.264	0.041	0.017	0.030	0.060	0.109	0.030
Dihydrocodeine	10	0.078	0.042	53.453	0.073	0.033	0.040	0.097	0.170	0.057
Fentanyl	10	0.014	0.007	46.267	0.013	0.005	0.010	0.020	0.026	0.010
Acetylcodeine	8	0.215	0.029	13.418	0.205	0.185	0.192	0.230	0.263	0.039
Anhydroecgoninemethylester	8	3.294	0.552	16.756	3.330	2.400	2.951	3.525	4.380	0.574
o-Desmethyltramadol	7	0.062	0.036	58.007	0.050	0.031	0.045	0.055	0.140	0.011
Diphenhydramine	6	0.074	0.014	19.301	0.074	0.058	0.062	0.079	0.100	0.017
Heroin	6	0.066	0.016	23.529	0.060	0.047	0.057	0.078	0.090	0.021
Citalopram	5	0.091	0.067	73.843	0.068	0.026	0.048	0.111	0.202	0.063
Ecgoninemethylester	5	0.174	0.052	30.105	0.140	0.130	0.130	0.210	0.260	0.080
Hydromorphone	5	0.042	0.014	34.648	0.043	0.020	0.035	0.050	0.060	0.015
Ketamine	5	0.009	0.001	14.846	0.009	0.007	0.008	0.010	0.010	0.002
JWH-081*	3	0.002	0.000	0.000	0.002	0.002	0.002	0.002	0.002	0.000
JWH-122*	3	0.001	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.000
Midazolam	3	0.008	0.001	14.967	0.008	0.007	0.008	0.009	0.010	0.002
N-Desmethyltramadol	3	0.180	0.057	31.753	0.150	0.130	0.140	0.205	0.260	0.065
Zopiclone	3	0.019	0.015	80.930	0.009	0.007	0.008	0.025	0.040	0.017
Chlorpheniramine	2	0.013	0.003	20.000	0.013	0.010	0.011	0.014	0.015	0.003
m-OH-benzoylecgonine	2	0.041	0.006	14.634	0.041	0.035	0.038	0.044	0.047	0.006
m-hydroxycocaine	2	0.036	0.019	51.515	0.036	0.018	0.027	0.046	0.055	0.019
o-hydroxycocaine	2	0.008	0.002	20.482	0.008	0.007	0.007	0.009	0.010	0.002
p-hydroxycocaine	2	0.037	0.012	32.612	0.037	0.025	0.031	0.043	0.049	0.012

\* Only one participant reported quantitative results for these compounds

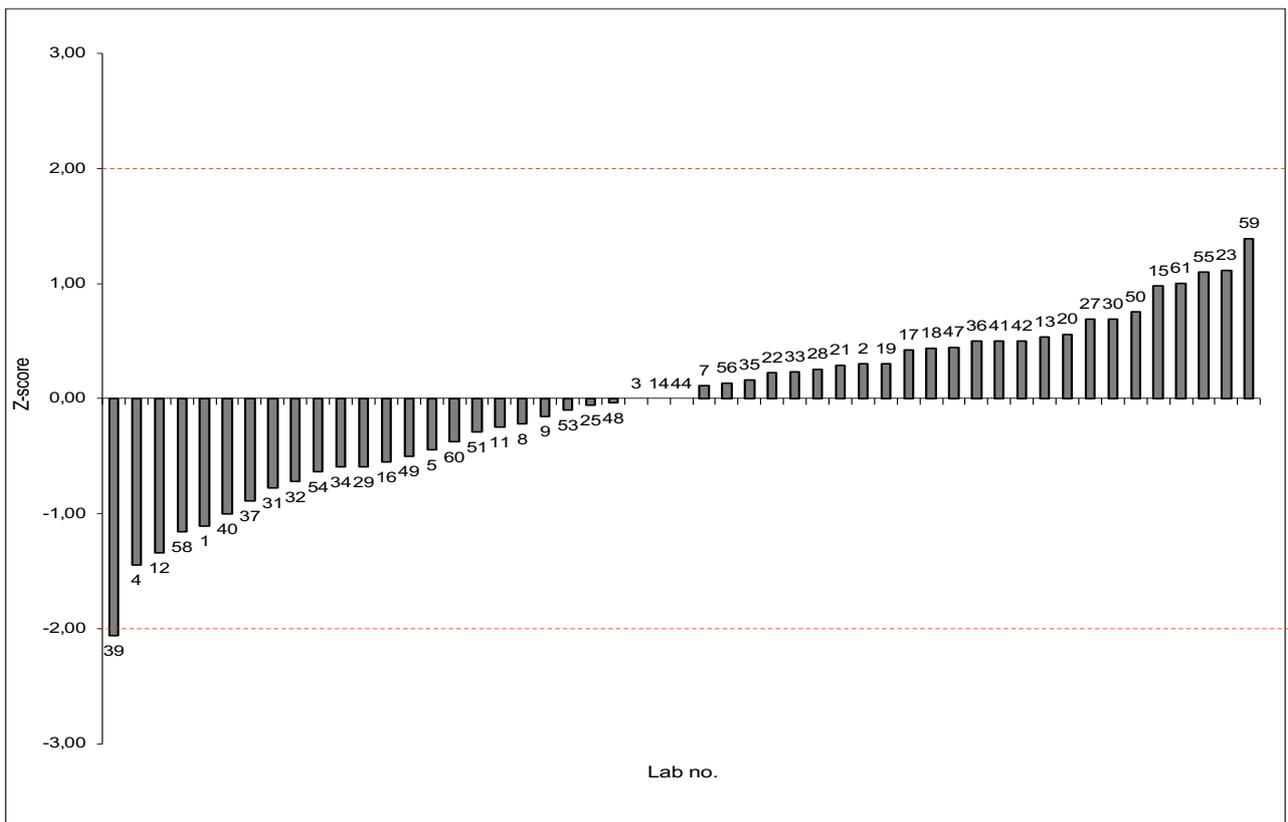
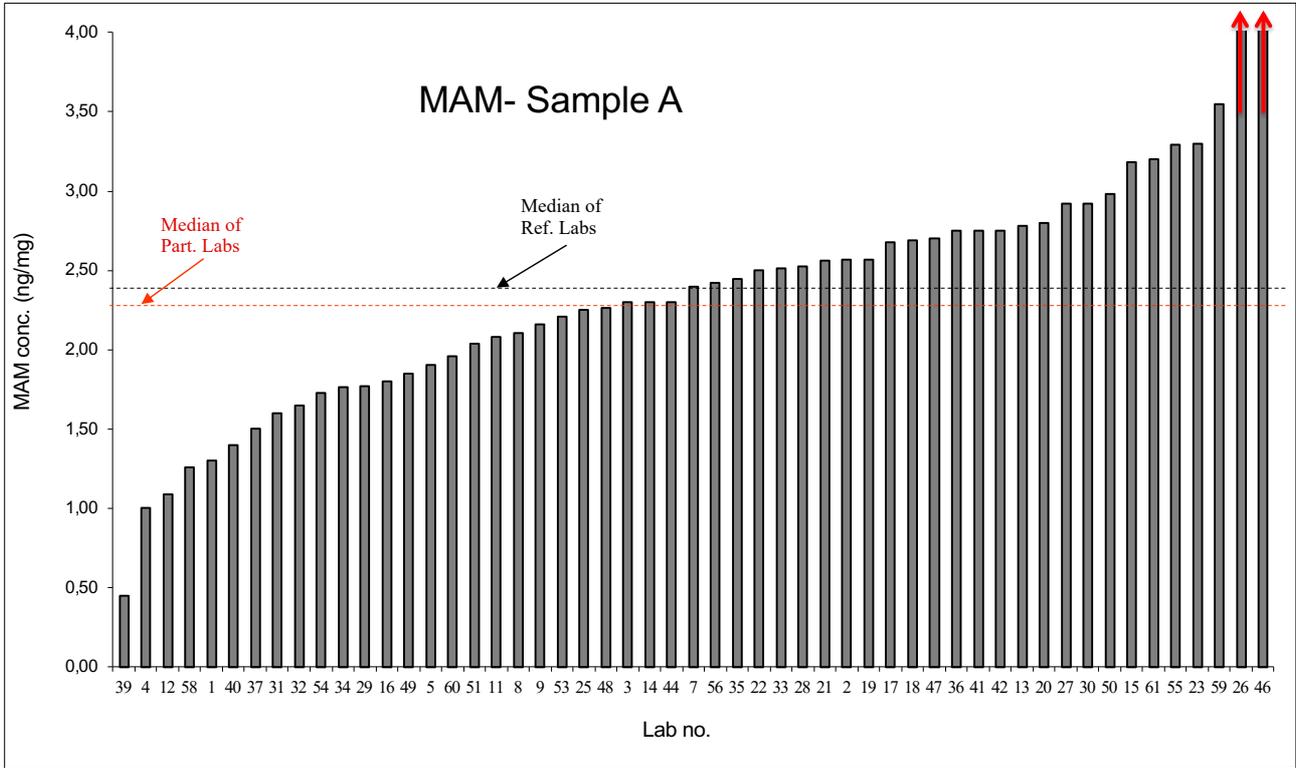
**6-MONOACETYL MORPHINE (MAM)**

Lab	MAM (ng/mg)	Z-score	Result
1	1.30	-1.11	Satisfactory
2	2.57	0.30	Satisfactory
3	2.30	0.00	Satisfactory
4	1.00	-1.44	Satisfactory
5	1.90	-0.44	Satisfactory
6	N		
7	2.40	0.11	Satisfactory
8	2.10	-0.22	Satisfactory
9	2.16	-0.16	Satisfactory
11	2.08	-0.24	Satisfactory
12	1.09	-1.34	Satisfactory
13	2.78	0.53	Satisfactory
14	2.30	0.00	Satisfactory
15	3.18	0.98	Satisfactory
16	1.80	-0.55	Satisfactory
17	2.68	0.42	Satisfactory
18	2.69	0.43	Satisfactory
19	2.57	0.30	Satisfactory
20	2.80	0.56	Satisfactory
21	2.56	0.29	Satisfactory
22	2.50	0.22	Satisfactory
23	3.30	1.11	Satisfactory
24	U		
25	2.25	-0.06	Satisfactory
26	7.28	Outlier*	
27	2.92	0.69	Satisfactory
28	2.53	0.25	Satisfactory
29	1.77	-0.59	Satisfactory
30	2.92	0.69	Satisfactory
31	1.60	-0.78	Satisfactory
32	1.65	-0.72	Satisfactory
33	2.51	0.23	Satisfactory
34	1.77	-0.59	Satisfactory
35	2.45	0.16	Satisfactory
36	2.75	0.50	Satisfactory
37	1.50	-0.89	Satisfactory
39	0.45	-2.06	Questionable
40	1.40	-1.00	Satisfactory
41	2.75	0.50	Satisfactory
42	2.75	0.50	Satisfactory
44	2.30	0.00	Satisfactory
45	>1.00		
46	8.88	Outlier*	
47	2.70	0.44	Satisfactory
48	2.27	-0.04	Satisfactory
49	1.85	-0.50	Satisfactory
50	2.98	0.76	Satisfactory
51	2.04	-0.29	Satisfactory
53	2.21	-0.10	Satisfactory
54	1.73	-0.63	Satisfactory
55	3.29	1.10	Satisfactory
56	2.42	0.13	Satisfactory

Lab	MAM (ng/mg)	Z-score	Result
57	N		
58	1.26	-1.16	Satisfactory
59	3.55	1.39	Satisfactory
60	1.96	-0.38	Satisfactory
61	3.20	1.00	Satisfactory

\*Outliers have not been included in the statistical study

Average	2.27
SD	0.64
CV%	28.32
Median	2.30
Minimum	0.45
Quartile 25	1.83
Quartile 75	2.73
Maximum	3.55
Iqr	0.90

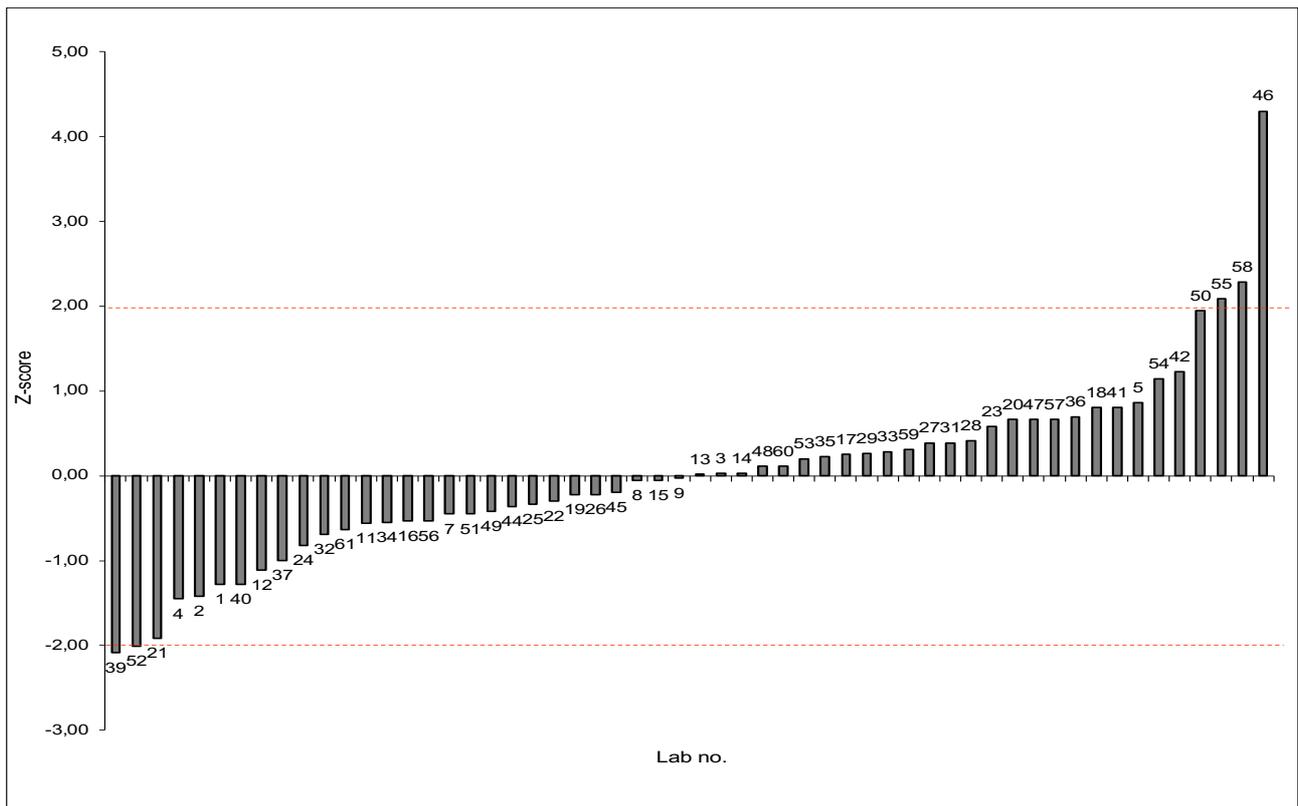
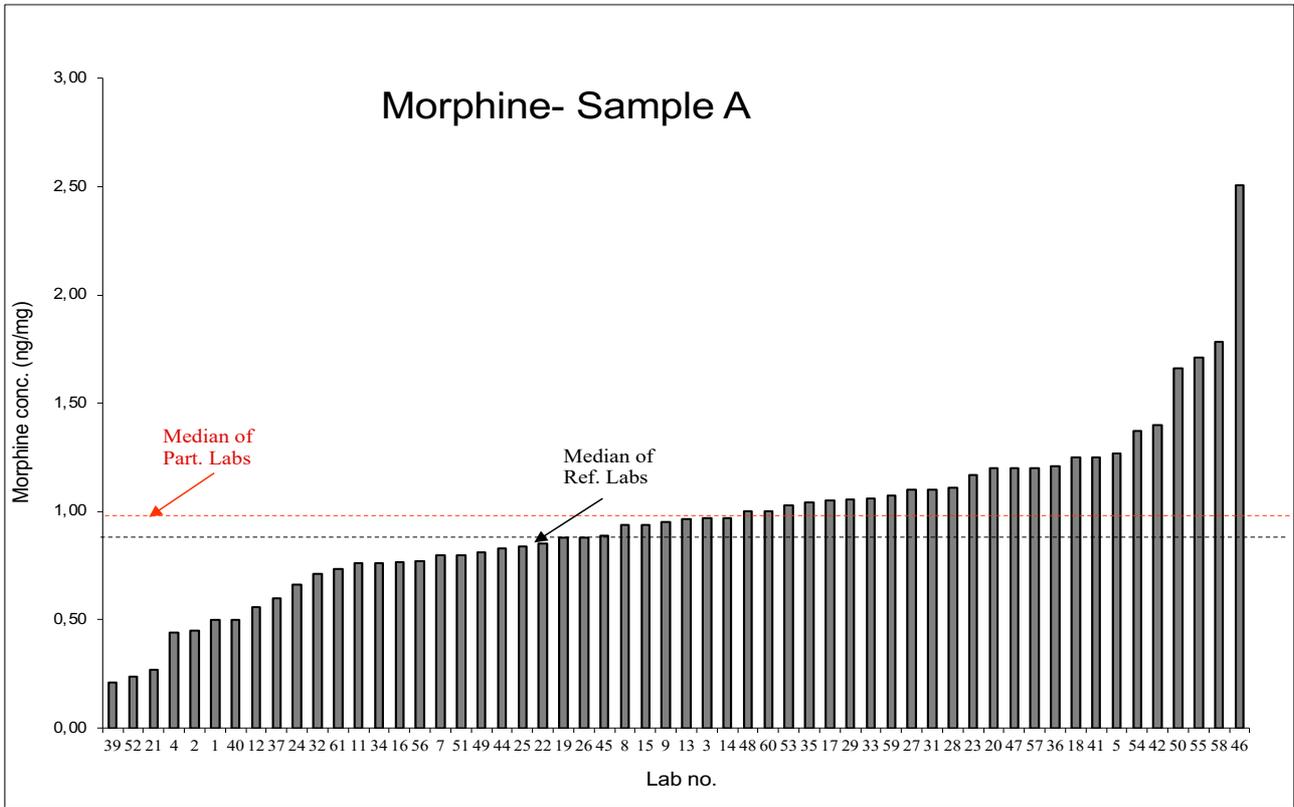


**MORPHINE**

Lab	Morphine (ng/mg)	Z-score	Result
1	0.50	-1.28	Satisfactory
2	0.45	-1.42	Satisfactory
3	0.97	0.03	Satisfactory
4	0.44	-1.44	Satisfactory
5	1.27	0.86	Satisfactory
6	N		
7	0.80	-0.44	Satisfactory
8	0.94	-0.06	Satisfactory
9	0.95	-0.03	Satisfactory
11	0.76	-0.56	Satisfactory
12	0.56	-1.11	Satisfactory
13	0.97	0.02	Satisfactory
14	0.97	0.03	Satisfactory
15	0.94	-0.06	Satisfactory
16	0.77	-0.54	Satisfactory
17	1.05	0.25	Satisfactory
18	1.25	0.81	Satisfactory
19	0.88	-0.22	Satisfactory
20	1.20	0.67	Satisfactory
21	0.27	-1.92	Satisfactory
22	0.85	-0.30	Satisfactory
23	1.17	0.58	Satisfactory
24	0.66	-0.83	Satisfactory
25	0.84	-0.34	Satisfactory
26	0.88	-0.22	Satisfactory
27	1.10	0.39	Satisfactory
28	1.11	0.41	Satisfactory
29	1.05	0.26	Satisfactory
30	N		
31	1.10	0.39	Satisfactory
32	0.71	-0.69	Satisfactory
33	1.06	0.28	Satisfactory
34	0.76	-0.55	Satisfactory
35	1.04	0.23	Satisfactory
36	1.21	0.69	Satisfactory
37	0.60	-1.00	Satisfactory
39	0.21	-2.09	Questionable
40	0.50	-1.28	Satisfactory
41	1.25	0.81	Satisfactory
42	1.40	1.22	Satisfactory
44	0.83	-0.36	Satisfactory
45	0.89	-0.19	Satisfactory
46	2.51	4.30	Unsatisfactory
47	1.20	0.67	Satisfactory
48	1.00	0.11	Satisfactory
49	0.81	-0.42	Satisfactory
50	1.66	1.94	Satisfactory
51	0.80	-0.44	Satisfactory
52	0.24	-2.01	Questionable
53	1.03	0.19	Satisfactory
54	1.37	1.14	Satisfactory
55	1.71	2.08	Questionable

Lab	Morphine (ng/mg)	Z-score	Result
56	0.77	-0.53	Satisfactory
57	1.20	0.67	Satisfactory
58	1.78	2.28	Questionable
59	1.07	0.31	Satisfactory
60	1.00	0.11	Satisfactory
61	0.73	-0.63	Satisfactory

Average	0.97
SD	0.39
CV%	40.22
Median	0.96
Minimum	0.21
Quartile 25	0.77
Quartile 75	1.12
Maximum	2.51
Iqr	0.36



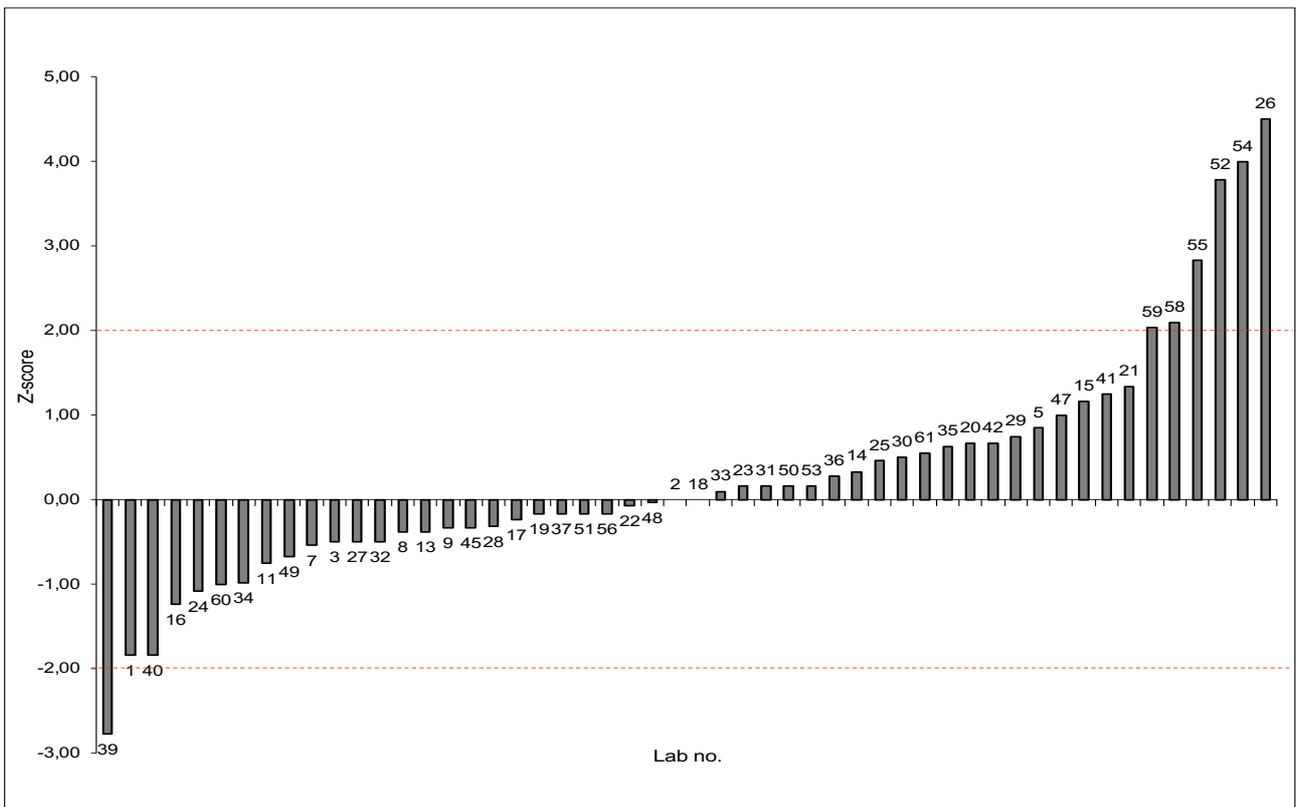
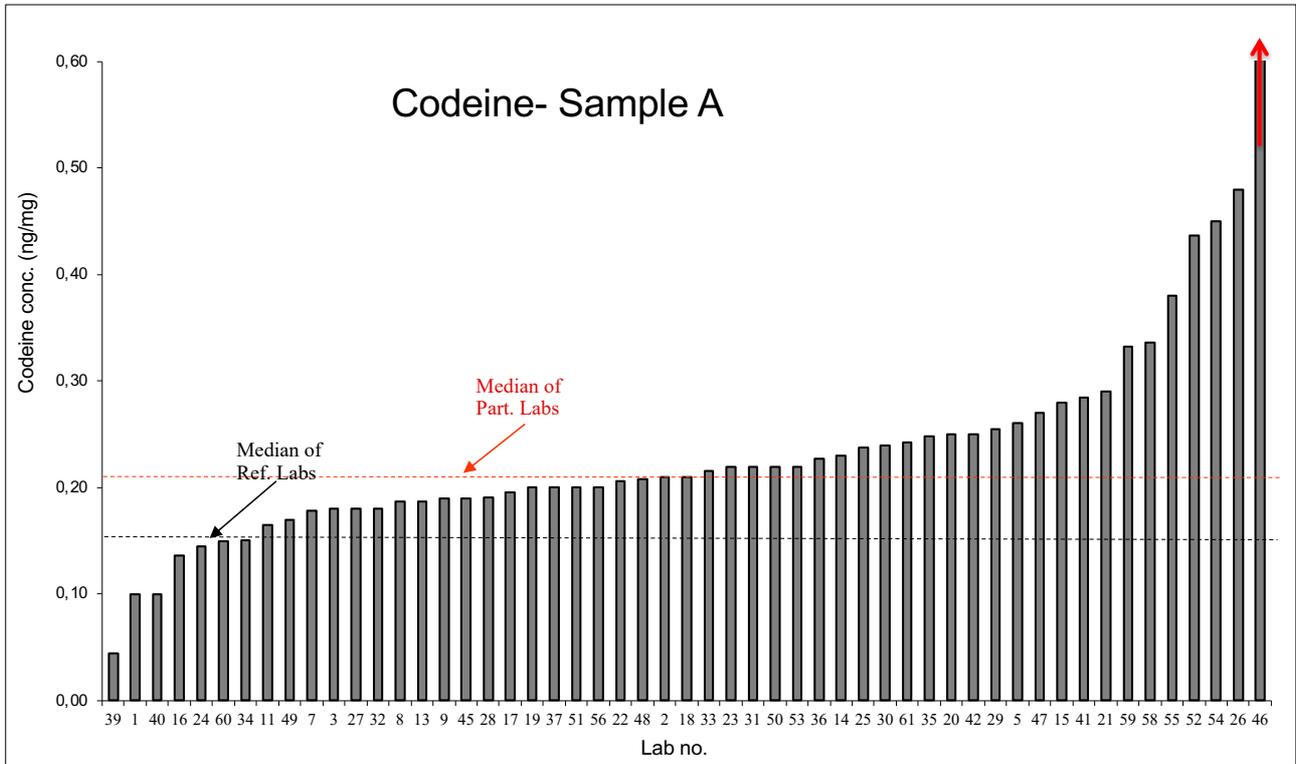
**CODEINE**

Lab	Codeine (ng/mg)	Z-score	Result
1	0.10	-1.83	Satisfactory
2	0.21	0.00	Satisfactory
3	0.18	-0.50	Satisfactory
4	N		
5	0.26	0.85	Satisfactory
6	N		
7	0.18	-0.53	Satisfactory
8	0.19	-0.38	Satisfactory
9	0.19	-0.33	Satisfactory
11	0.17	-0.75	Satisfactory
12	N		
13	0.19	-0.38	Satisfactory
14	0.23	0.33	Satisfactory
15	0.28	1.17	Satisfactory
16	0.14	-1.23	Satisfactory
17	0.20	-0.23	Satisfactory
18	0.21	0.00	Satisfactory
19	0.20	-0.17	Satisfactory
20	0.25	0.67	Satisfactory
21	0.29	1.33	Satisfactory
22	0.21	-0.07	Satisfactory
23	0.22	0.17	Satisfactory
24	0.15	-1.08	Satisfactory
25	0.24	0.47	Satisfactory
26	0.48	4.50	Unsatisfactory
27	0.18	-0.50	Satisfactory
28	0.19	-0.32	Satisfactory
29	0.26	0.75	Satisfactory
30	0.24	0.50	Satisfactory
31	0.22	0.17	Satisfactory
32	0.18	-0.50	Satisfactory
33	0.22	0.10	Satisfactory
34	0.15	-0.98	Satisfactory
35	0.25	0.63	Satisfactory
36	0.23	0.28	Satisfactory
37	0.20	-0.17	Satisfactory
39	0.04	-2.77	Questionable
40	0.10	-1.83	Satisfactory
41	0.29	1.25	Satisfactory
42	0.25	0.67	Satisfactory
44	N		
45	0.19	-0.33	Satisfactory
46	0.69	Outlier*	
47	0.27	1.00	Satisfactory
48	0.21	-0.03	Satisfactory
49	0.17	-0.67	Satisfactory
50	0.22	0.17	Satisfactory
51	0.20	-0.17	Satisfactory
52	0.44	3.78	Unsatisfactory
53	0.22	0.17	Satisfactory
54	0.45	4.00	Unsatisfactory
55	0.38	2.83	Questionable

Lab	Codeine (ng/mg)	Z-score	Result
56	0.20	-0.17	Satisfactory
57	N		
58	0.34	2.10	Questionable
59	0.33	2.03	Questionable
60	0.15	-1.00	Satisfactory
61	0.24	0.55	Satisfactory

\*Lab 46 has not been included in the statistical study

Average	0.23
SD	0.08
CV%	35.91
Median	0.21
Minimum	0.04
Quartile 25	0.19
Quartile 75	0.25
Maximum	0.48
Iqr	0.06

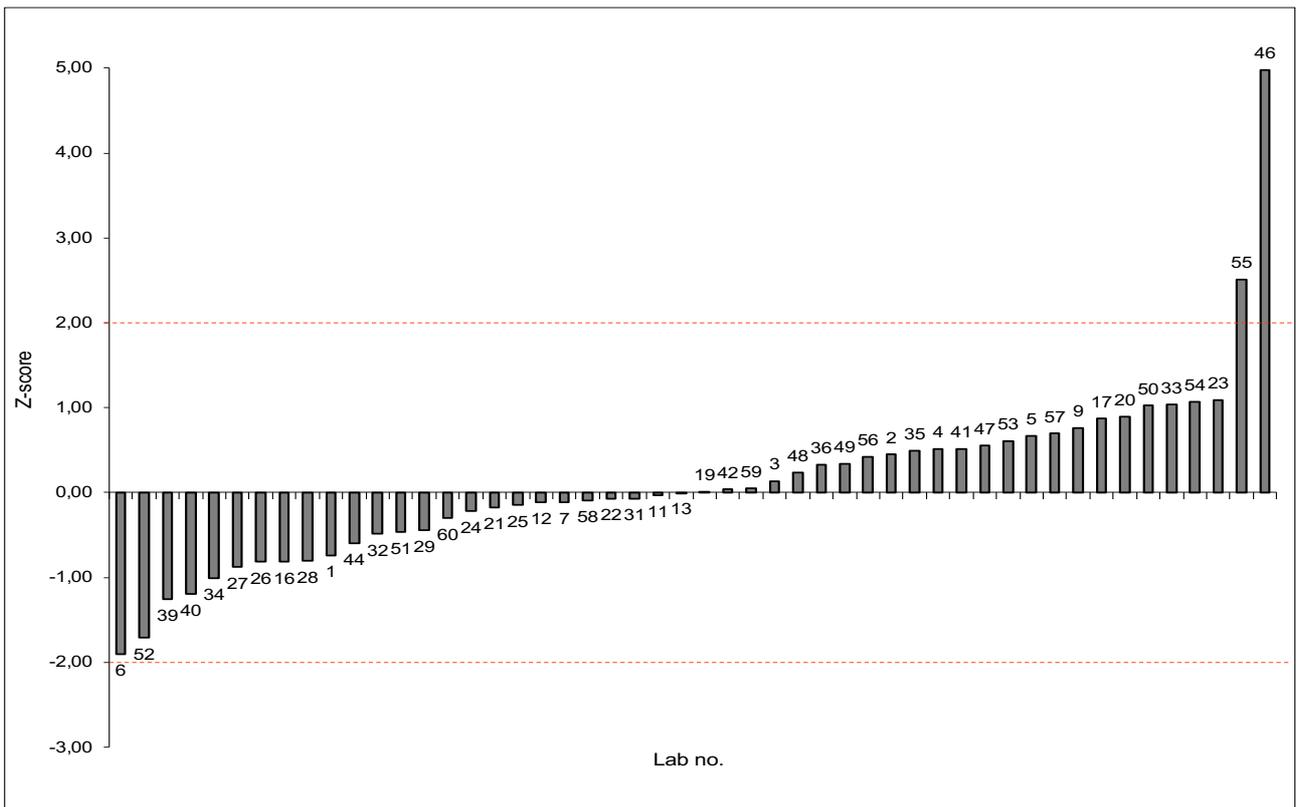
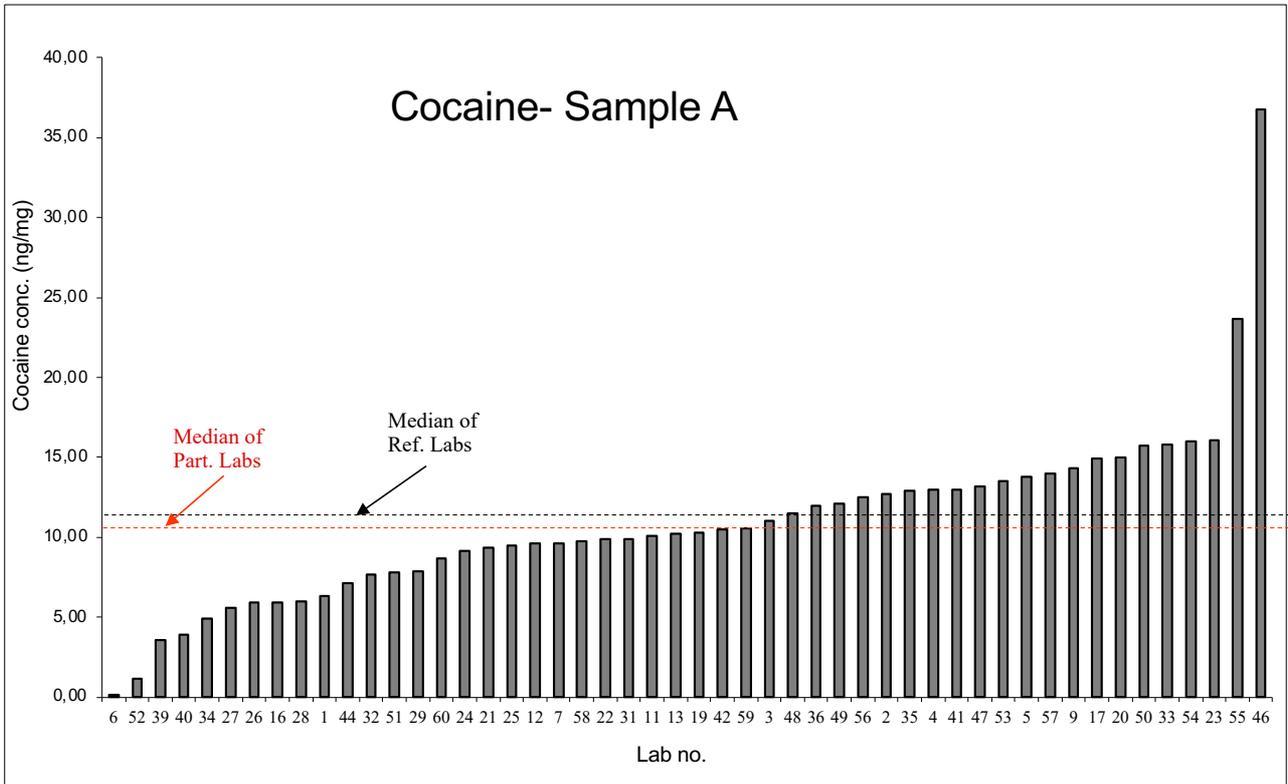


**COCAINE**

Lab	Cocaine (ng/mg)	Z-score	Result
1	6.30	-0.75	Satisfactory
2	12.68	0.45	Satisfactory
3	11.00	0.14	Satisfactory
4	13.00	0.51	Satisfactory
5	13.81	0.66	Satisfactory
6	0.14	-1.90	Satisfactory
7	9.65	-0.12	Satisfactory
8	>5.00		
9	14.30	0.76	Satisfactory
11	10.10	-0.03	Satisfactory
12	9.64	-0.12	Satisfactory
13	10.24	0.00	Satisfactory
14	>5.00		
15	>10.00		
16	5.95	-0.81	Satisfactory
17	14.90	0.87	Satisfactory
18	>2.00		
19	10.30	0.01	Satisfactory
20	15.00	0.89	Satisfactory
21	9.33	-0.18	Satisfactory
22	9.86	-0.08	Satisfactory
23	16.05	1.09	Satisfactory
24	9.12	-0.22	Satisfactory
25	9.49	-0.15	Satisfactory
26	5.92	-0.82	Satisfactory
27	5.62	-0.87	Satisfactory
28	6.01	-0.80	Satisfactory
29	7.90	-0.45	Satisfactory
30	>9.00		
31	9.90	-0.07	Satisfactory
32	7.70	-0.48	Satisfactory
33	15.80	1.04	Satisfactory
34	4.92	-1.01	Satisfactory
35	12.90	0.49	Satisfactory
36	12.00	0.33	Satisfactory
37	P		
39	3.59	-1.26	Satisfactory
40	3.90	-1.20	Satisfactory
41	13.00	0.51	Satisfactory
42	10.50	0.04	Satisfactory
44	7.10	-0.60	Satisfactory
45	>8.00		
46	36.77	4.98	Unsatisfactory
47	13.20	0.55	Satisfactory
48	11.50	0.23	Satisfactory
49	12.08	0.34	Satisfactory
50	15.73	1.03	Satisfactory
51	7.80	-0.46	Satisfactory
52	1.17	-1.71	Satisfactory
53	13.50	0.61	Satisfactory
54	15.97	1.07	Satisfactory
55	23.64	2.51	Questionable

Lab	Cocaine (ng/mg)	Z-score	Result
56	12.50	0.42	Satisfactory
57	14.00	0.70	Satisfactory
58	9.76	-0.10	Satisfactory
59	10.54	0.05	Satisfactory
60	8.65	-0.30	Satisfactory
61	>5.00		

Average	10.89
SD	5.59
CV%	51.33
Median	10.27
Minimum	0.14
Quartile 25	7.83
Quartile 75	13.15
Maximum	36.77
Iqr	5.32



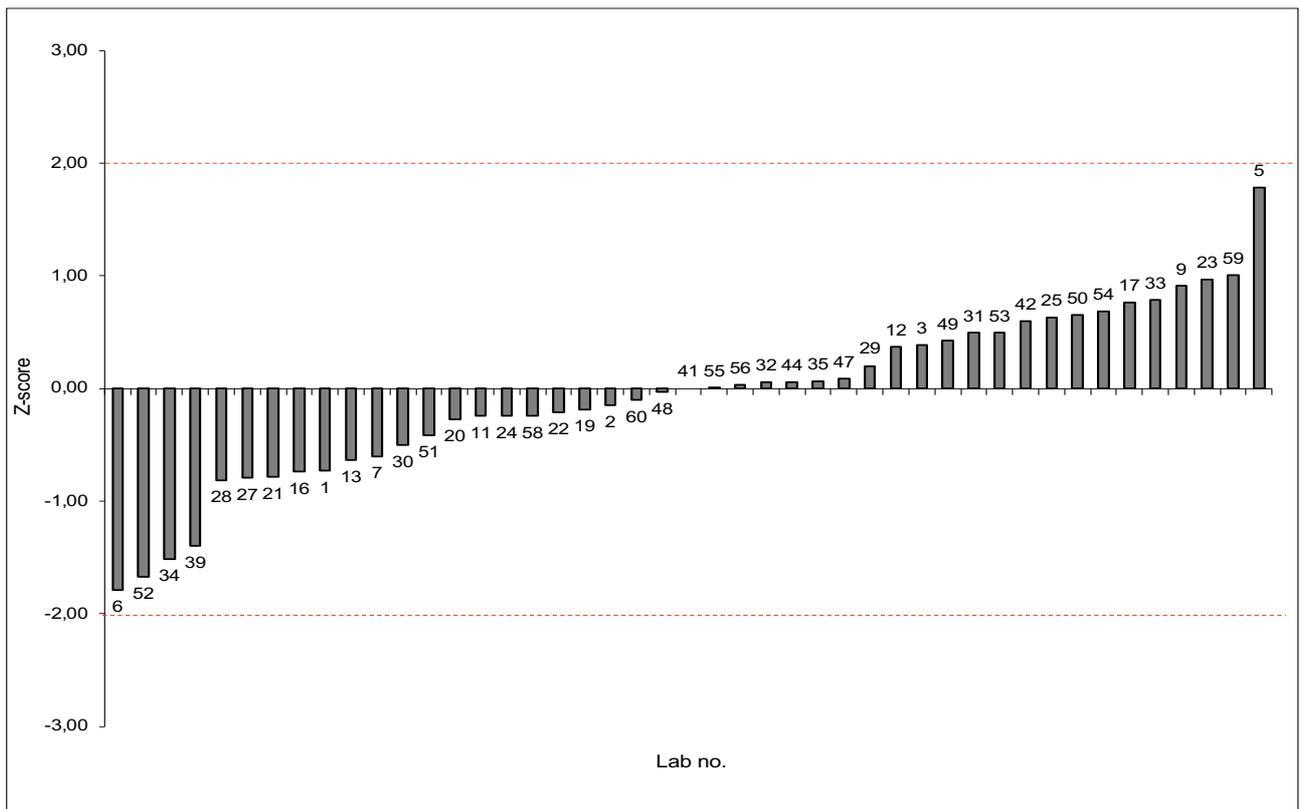
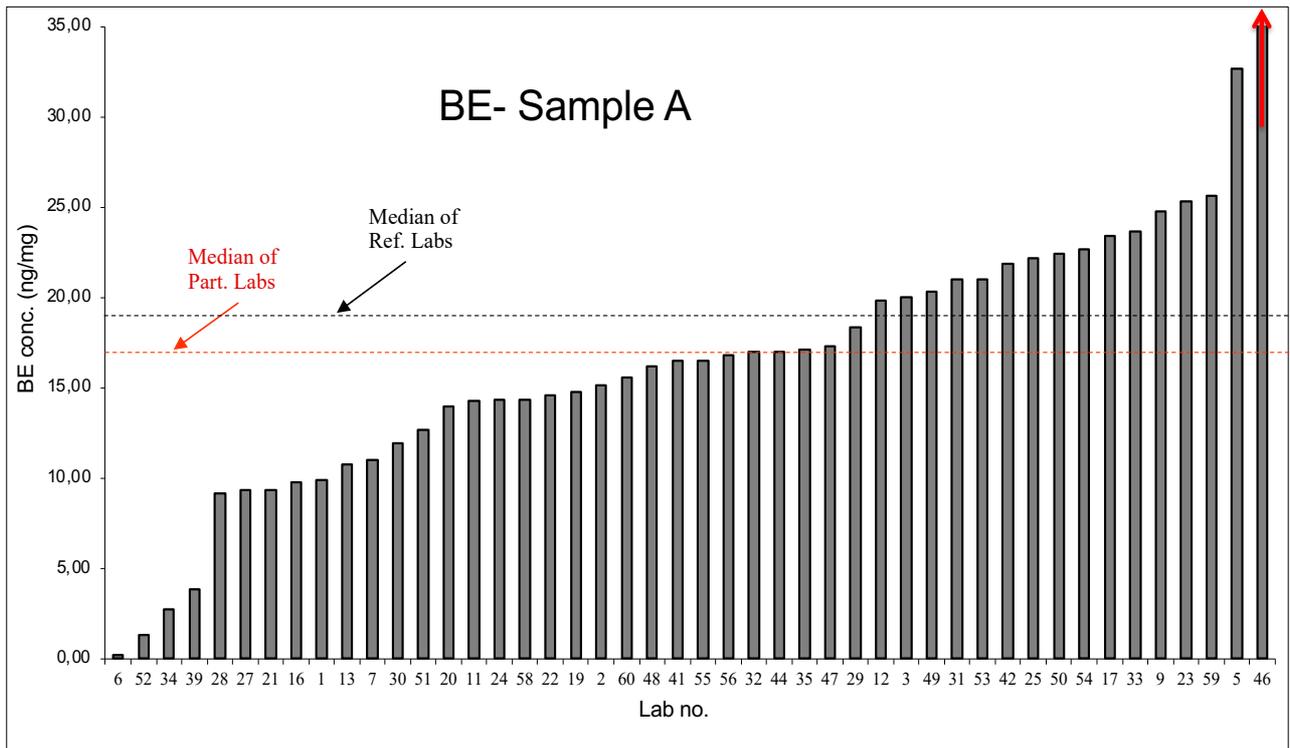
**BENZOYLECGONINE (BE)**

Lab	BE (ng/mg)	Z-score	Result
1	9.90	-0.73	Satisfactory
2	15.14	-0.15	Satisfactory
3	20.00	0.39	Satisfactory
4	>12.50		
5	32.67	1.78	Satisfactory
6	0.22	-1.79	Satisfactory
7	11.04	-0.60	Satisfactory
8	>5.00		
9	24.80	0.91	Satisfactory
11	14.30	-0.24	Satisfactory
12	19.86	0.37	Satisfactory
13	10.76	-0.63	Satisfactory
14	>5.00		
15	>10.00		
16	9.78	-0.74	Satisfactory
17	23.40	0.76	Satisfactory
18	>0.40		
19	14.80	-0.19	Satisfactory
20	14.00	-0.28	Satisfactory
21	9.36	-0.79	Satisfactory
22	14.60	-0.21	Satisfactory
23	25.30	0.97	Satisfactory
24	14.32	-0.24	Satisfactory
25	22.20	0.63	Satisfactory
26	P		
27	9.33	-0.79	Satisfactory
28	9.13	-0.81	Satisfactory
29	18.33	0.20	Satisfactory
30	11.92	-0.50	Satisfactory
31	21.00	0.50	Satisfactory
32	17.00	0.06	Satisfactory
33	23.65	0.79	Satisfactory
34	2.74	-1.52	Satisfactory
35	17.10	0.07	Satisfactory
36	>20.00		
37	P		
39	3.83	-1.40	Satisfactory
40	>5.00		
41	16.50	0.00	Satisfactory
42	21.90	0.59	Satisfactory
44	17.00	0.06	Satisfactory
45	>8.00		
46	76.34	Outlier*	
47	17.30	0.09	Satisfactory
48	16.20	-0.03	Satisfactory
49	20.34	0.42	Satisfactory
50	22.43	0.65	Satisfactory
51	12.70	-0.42	Satisfactory
52	1.32	-1.67	Satisfactory
53	21.00	0.50	Satisfactory
54	22.70	0.68	Satisfactory
55	16.51	0.00	Satisfactory

Lab	BE (ng/mg)	Z-score	Result
56	16.80	0.03	Satisfactory
58	14.32	-0.24	Satisfactory
59	25.61	1.00	Satisfactory
60	15.60	-0.10	Satisfactory
61	>5.00		

\*Lab 46 has not been included in the statistical study

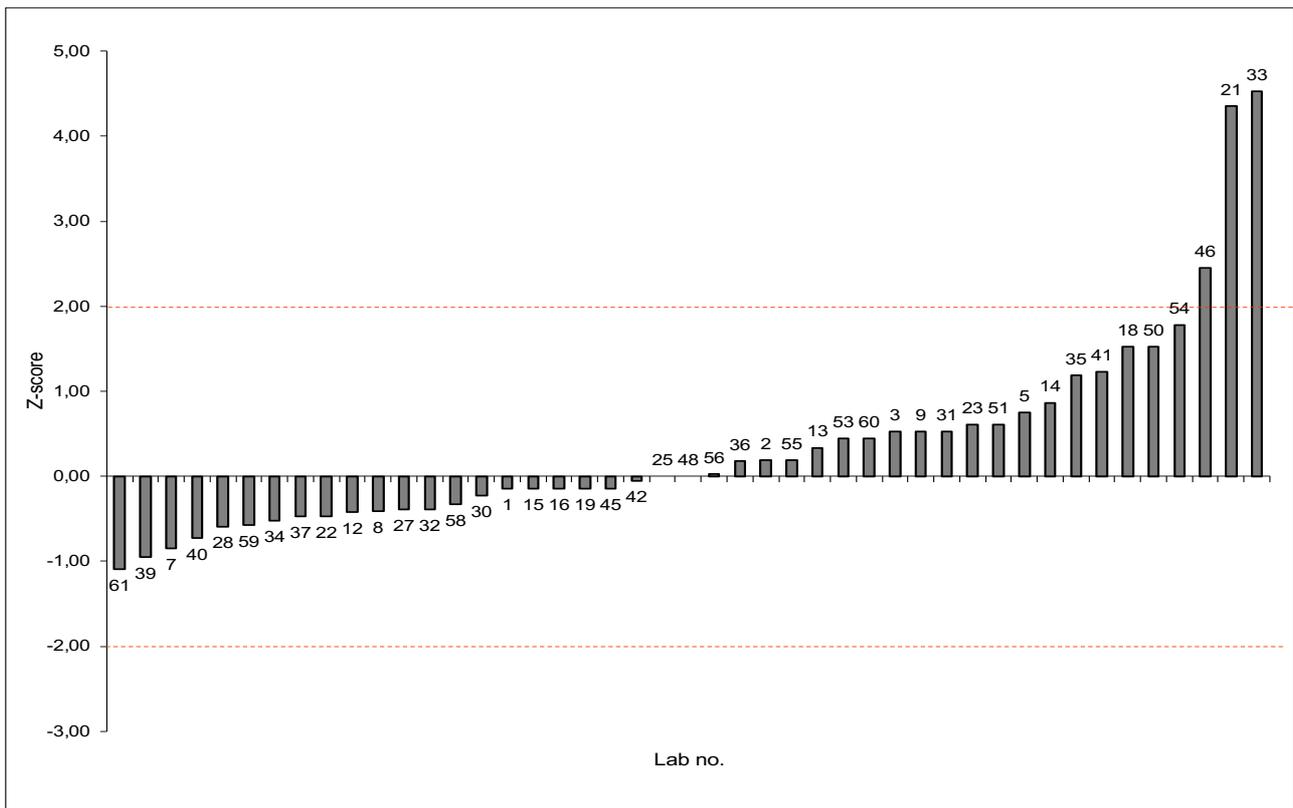
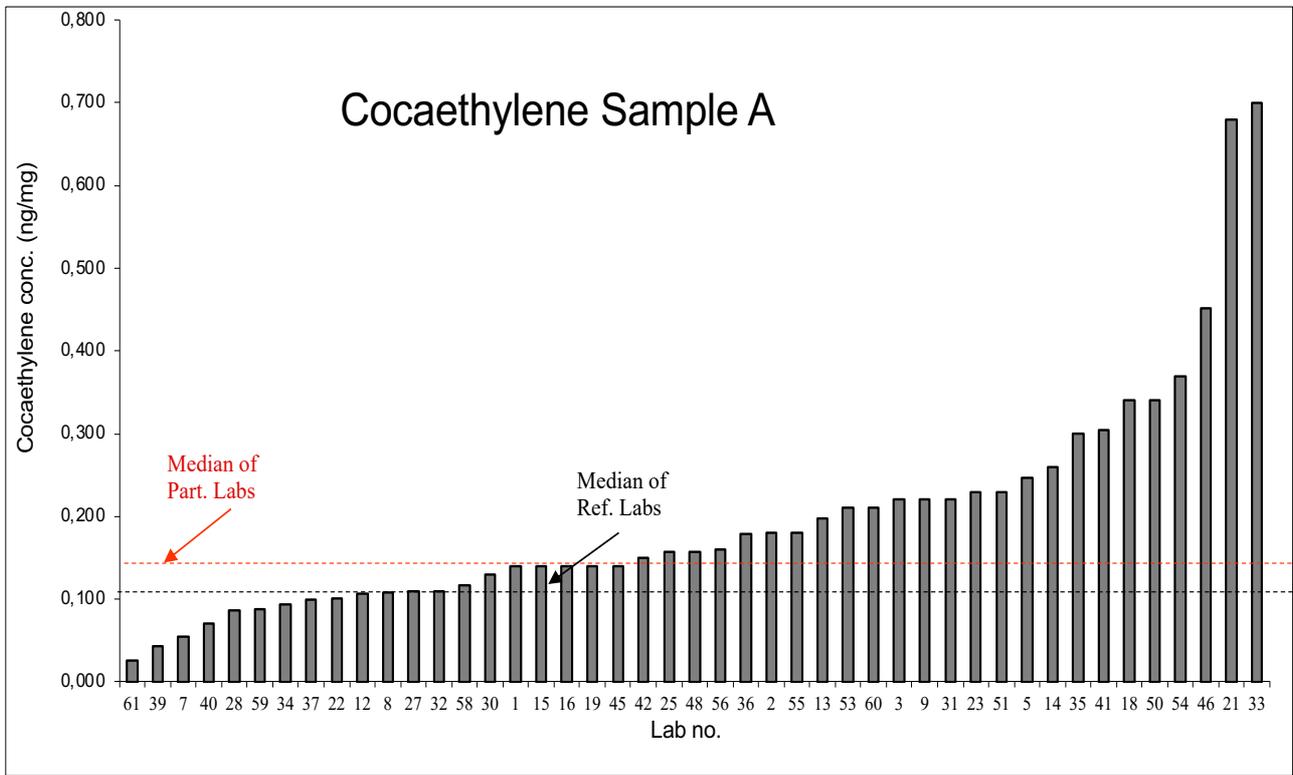
Average	15.97
SD	6.69
CV%	41.90
Median	16.50
Minimum	0.22
Quartile 25	11.92
Quartile 75	21.00
Maximum	32.67
Iqr	9.08



**COCAETHYLENE (Ethylbenzoylecgonine, EBE)**

Lab	EBE (ng/mg)	Z-score	Result
1	0.140	-0.14	Satisfactory
2	0.180	0.19	Satisfactory
3	0.220	0.53	Satisfactory
5	0.247	0.75	Satisfactory
7	0.055	-0.85	Satisfactory
8	0.108	-0.41	Satisfactory
9	0.220	0.53	Satisfactory
12	0.107	-0.42	Satisfactory
13	0.197	0.33	Satisfactory
14	0.260	0.86	Satisfactory
15	0.140	-0.14	Satisfactory
16	0.140	-0.14	Satisfactory
18	0.340	1.53	Satisfactory
19	0.140	-0.14	Satisfactory
21	0.680	4.36	Unsatisfactory
22	0.101	-0.47	Satisfactory
23	0.230	0.61	Satisfactory
25	0.157	0.00	Satisfactory
26	N		
27	0.110	-0.39	Satisfactory
28	0.086	-0.59	Satisfactory
30	0.130	-0.23	Satisfactory
31	0.220	0.53	Satisfactory
32	0.110	-0.39	Satisfactory
33	0.700	4.53	Unsatisfactory
34	0.094	-0.53	Satisfactory
35	0.300	1.19	Satisfactory
36	0.179	0.18	Satisfactory
37	0.100	-0.48	Satisfactory
39	0.043	-0.95	Satisfactory
40	0.070	-0.73	Satisfactory
41	0.305	1.23	Satisfactory
42	0.150	-0.06	Satisfactory
44	P		
45	0.140	-0.14	Satisfactory
46	0.451	2.45	Questionable
48	0.157	0.00	Satisfactory
49	P		
50	0.340	1.53	Satisfactory
51	0.230	0.61	Satisfactory
53	0.210	0.44	Satisfactory
54	0.370	1.78	Satisfactory
55	0.180	0.19	Satisfactory
56	0.160	0.03	Satisfactory
58	0.117	-0.33	Satisfactory
59	0.088	-0.58	Satisfactory
60	0.210	0.44	Satisfactory
61	0.026	-1.09	Satisfactory

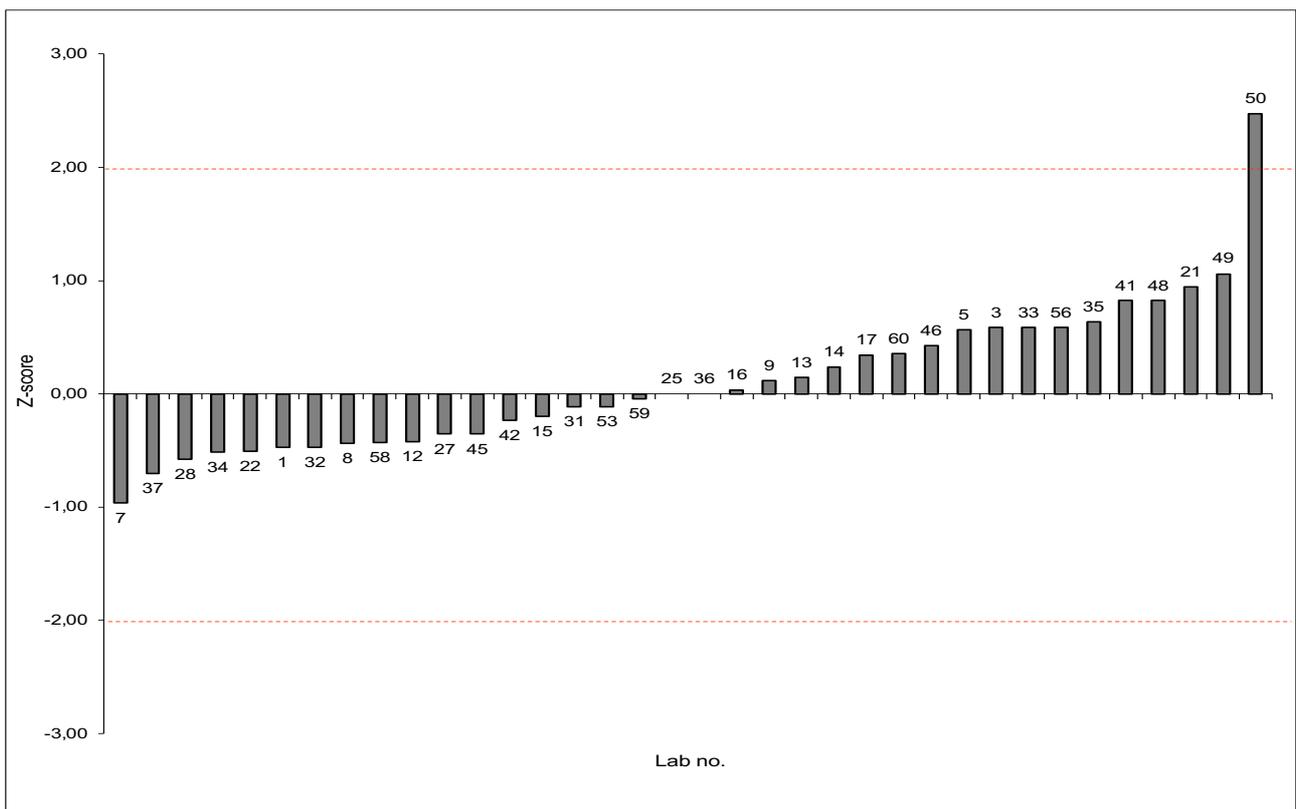
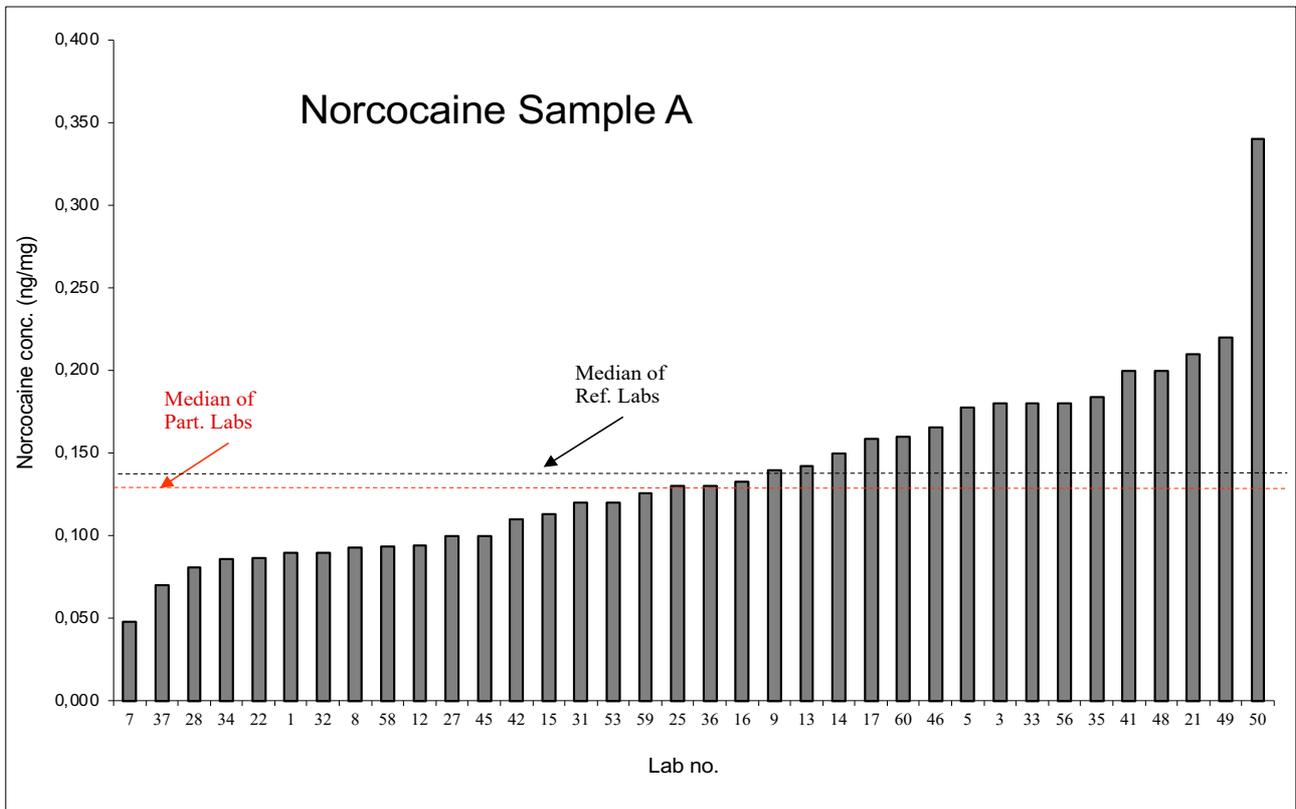
Average	0.199
SD	0.138
CV%	69.728
Median	0.157
Minimum	0.026
Quartile 25	0.110
Quartile 75	0.230
Maximum	0.700
Iqr	0.120



**NORCOCAINE (NorCOC)**

Lab	NorCOC (ng/mg)	Z-score	Result
1	0.090	-0.47	Satisfactory
3	0.180	0.59	Satisfactory
5	0.178	0.56	Satisfactory
7	0.048	-0.96	Satisfactory
8	0.093	-0.44	Satisfactory
9	0.140	0.12	Satisfactory
12	0.094	-0.42	Satisfactory
13	0.142	0.14	Satisfactory
14	0.150	0.24	Satisfactory
15	0.113	-0.20	Satisfactory
16	0.133	0.04	Satisfactory
17	0.159	0.34	Satisfactory
21	0.210	0.94	Satisfactory
22	0.087	-0.51	Satisfactory
25	0.130	0.00	Satisfactory
27	0.100	-0.35	Satisfactory
28	0.081	-0.58	Satisfactory
31	0.120	-0.12	Satisfactory
32	0.090	-0.47	Satisfactory
33	0.180	0.59	Satisfactory
34	0.086	-0.52	Satisfactory
35	0.184	0.64	Satisfactory
36	0.130	0.00	Satisfactory
37	0.070	-0.71	Satisfactory
40	N		
41	0.200	0.82	Satisfactory
42	0.110	-0.24	Satisfactory
44	N		
45	0.100	-0.35	Satisfactory
46	0.166	0.42	Satisfactory
48	0.200	0.82	Satisfactory
49	0.220	1.06	Satisfactory
50	0.340	2.47	Questionable
53	0.120	-0.12	Satisfactory
56	0.180	0.59	Satisfactory
58	0.093	-0.43	Satisfactory
59	0.126	-0.05	Satisfactory
60	0.160	0.35	Satisfactory
61	N		

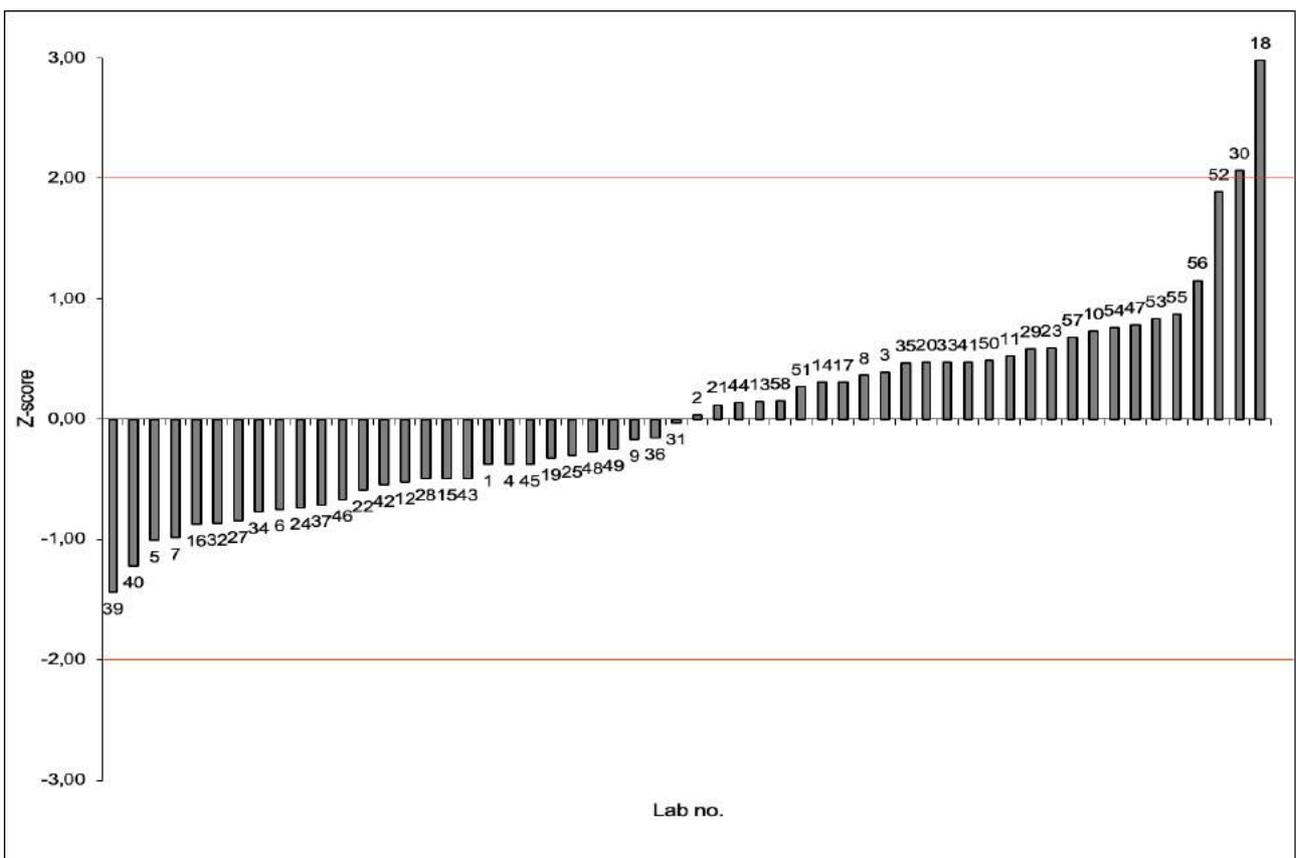
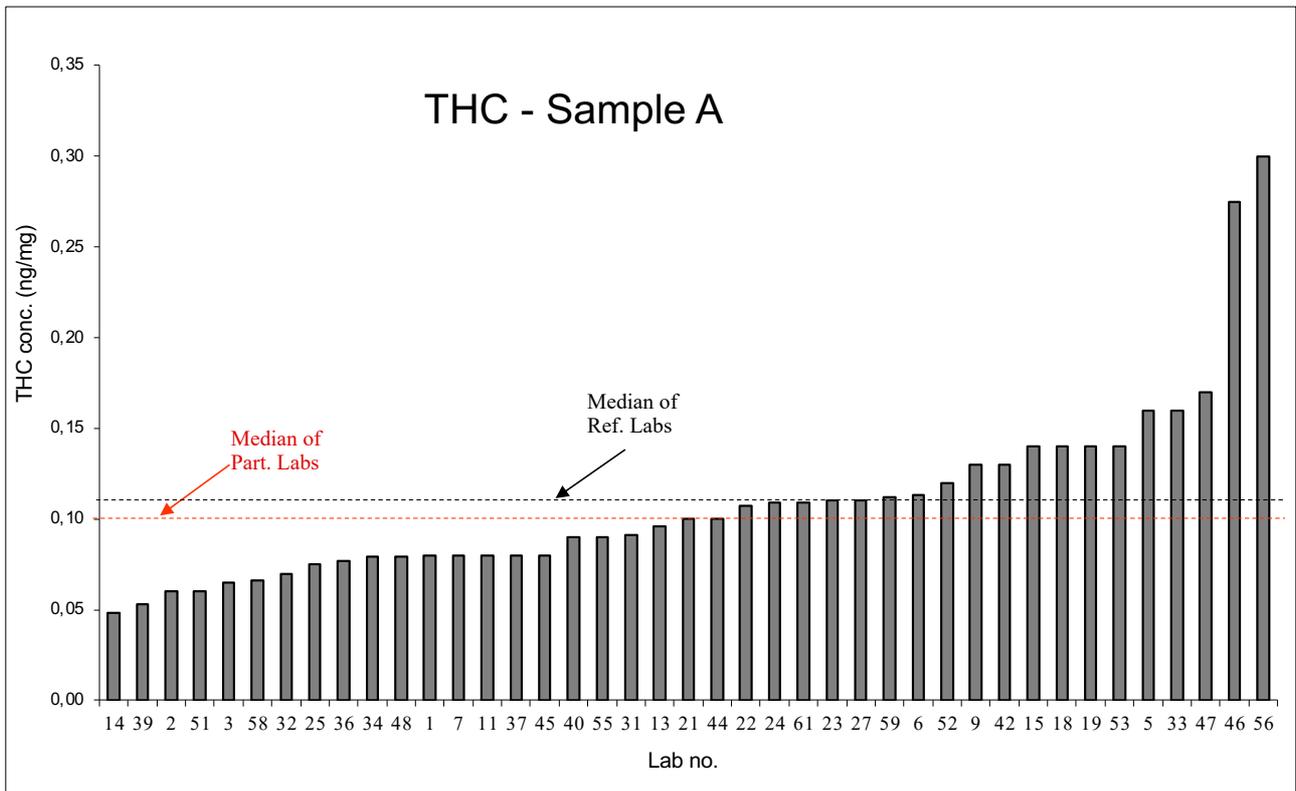
Average	0.139
SD	0.055
CV%	39.473
Median	0.130
Minimum	0.048
Quartile 25	0.094
Quartile 75	0.179
Maximum	0.340
Iqr	0.085



**$\Delta^9$ -TETRAHYDROCANNABINOL (THC)**

Lab	THC (ng/mg)	Z-score	Result
1	0.08	-0.40	Satisfactory
2	0.06	-0.80	Satisfactory
3	0.07	-0.70	Satisfactory
5	0.16	1.20	Satisfactory
6	0.11	0.26	Satisfactory
7	0.08	-0.40	Satisfactory
9	0.13	0.60	Satisfactory
11	0.08	-0.40	Satisfactory
13	0.10	-0.08	Satisfactory
14	0.05	-1.04	Satisfactory
15	0.14	0.80	Satisfactory
16	P		
18	0.14	0.80	Satisfactory
19	0.14	0.80	Satisfactory
20	<0.05		
21	0.10	0.00	Satisfactory
22	0.11	0.14	Satisfactory
23	0.11	0.20	Satisfactory
24	0.11	0.18	Satisfactory
25	0.08	-0.50	Satisfactory
26	P		
27	0.11	0.20	Satisfactory
31	0.09	-0.18	Satisfactory
32	0.07	-0.60	Satisfactory
33	0.16	1.20	Satisfactory
34	0.08	-0.42	Satisfactory
36	0.08	-0.46	Satisfactory
37	0.08	-0.40	Satisfactory
39	0.05	-0.94	Satisfactory
40	0.09	-0.20	Satisfactory
42	0.13	0.60	Satisfactory
44	0.10	0.00	Satisfactory
45	0.08	-0.40	Satisfactory
46	0.28	3.50	Unsatisfactory
47	0.17	1.40	Satisfactory
48	0.08	-0.42	Satisfactory
51	0.06	-0.80	Satisfactory
52	0.12	0.40	Satisfactory
53	0.14	0.80	Satisfactory
54	N		
55	0.09	-0.20	Satisfactory
56	0.30	4.00	Unsatisfactory
58	0.07	-0.67	Satisfactory
59	0.11	0.24	Satisfactory
61	0.11	0.18	Satisfactory

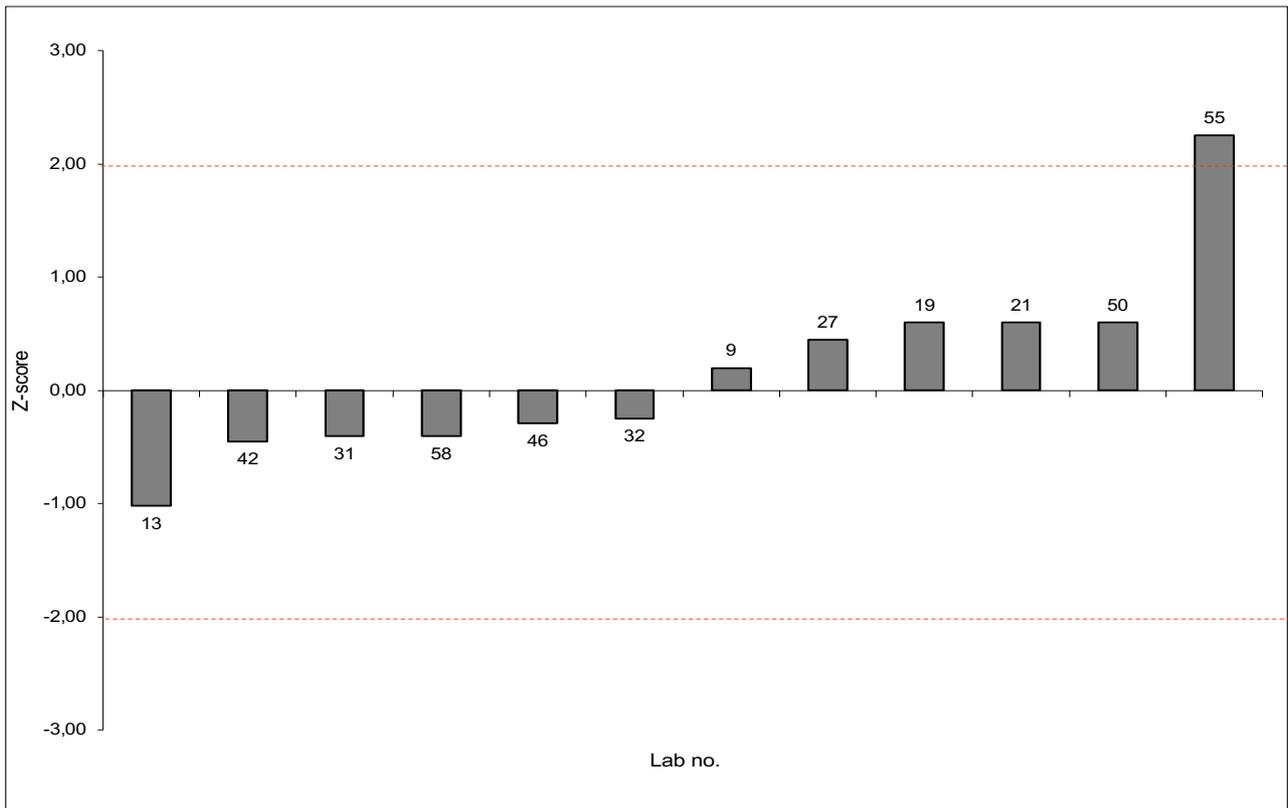
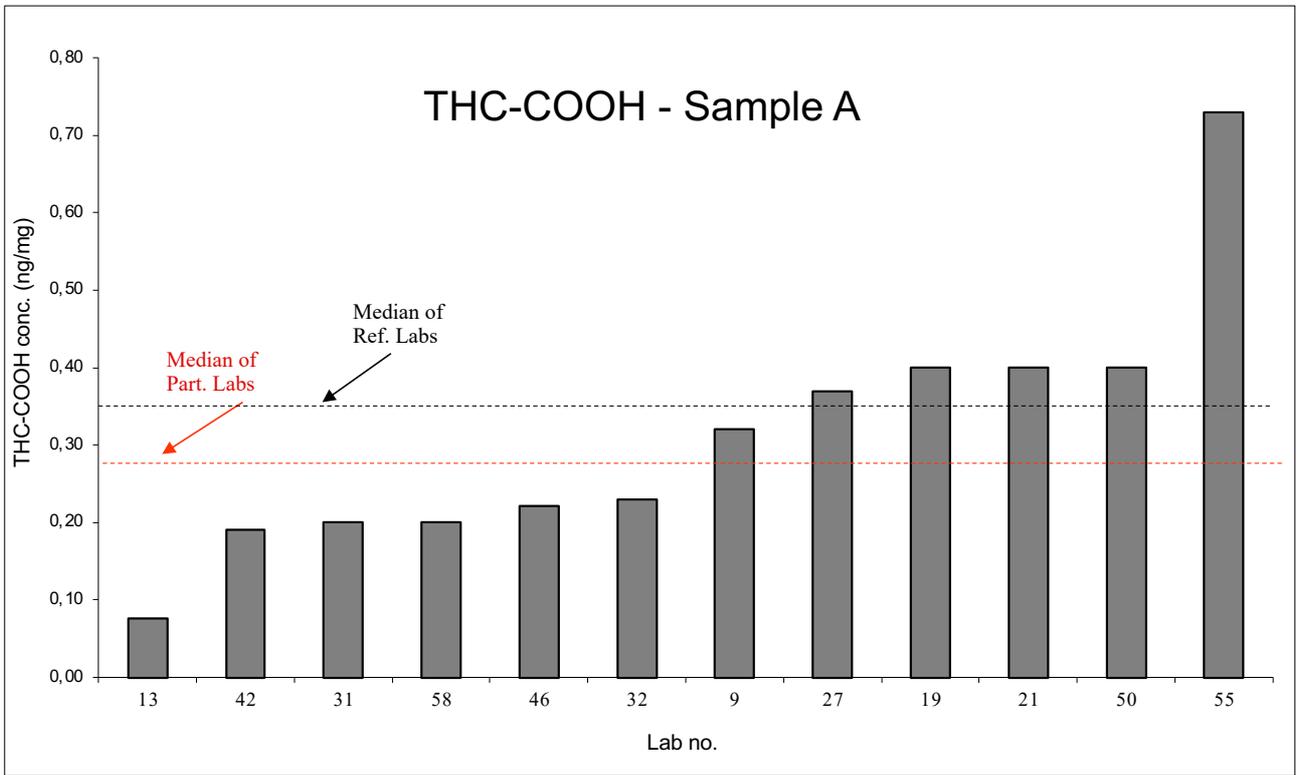
Average	0.11
SD	0.05
CV%	46.23
Median	0.10
Minimum	0.05
Quartile 25	0.08
Quartile 75	0.13
Maximum	0.30
Iqr	0.05



## 11-nor- $\Delta^9$ -TETRAHYDROCANNABINOL-9-CARBOXYLIC ACID (THC-COOH)

Lab	THC-COOC (pg/mg)	Z-score	Result
1	N		
7	N		
9	0.32	0.20	Satisfactory
12	N		
13	0.08	-1.02	Satisfactory
15	<0.50		
19	0.40	0.60	Satisfactory
21	0.40	0.60	Satisfactory
27	0.37	0.45	Satisfactory
31	0.20	-0.40	Satisfactory
32	0.23	-0.25	Satisfactory
37	N		
42	0.19	-0.45	Satisfactory
46	0.22	-0.29	Satisfactory
50	0.40	0.60	Satisfactory
51	N		
54	N		
55	0.73	2.25	Questionable
58	0.20	-0.40	Satisfactory
59	N		

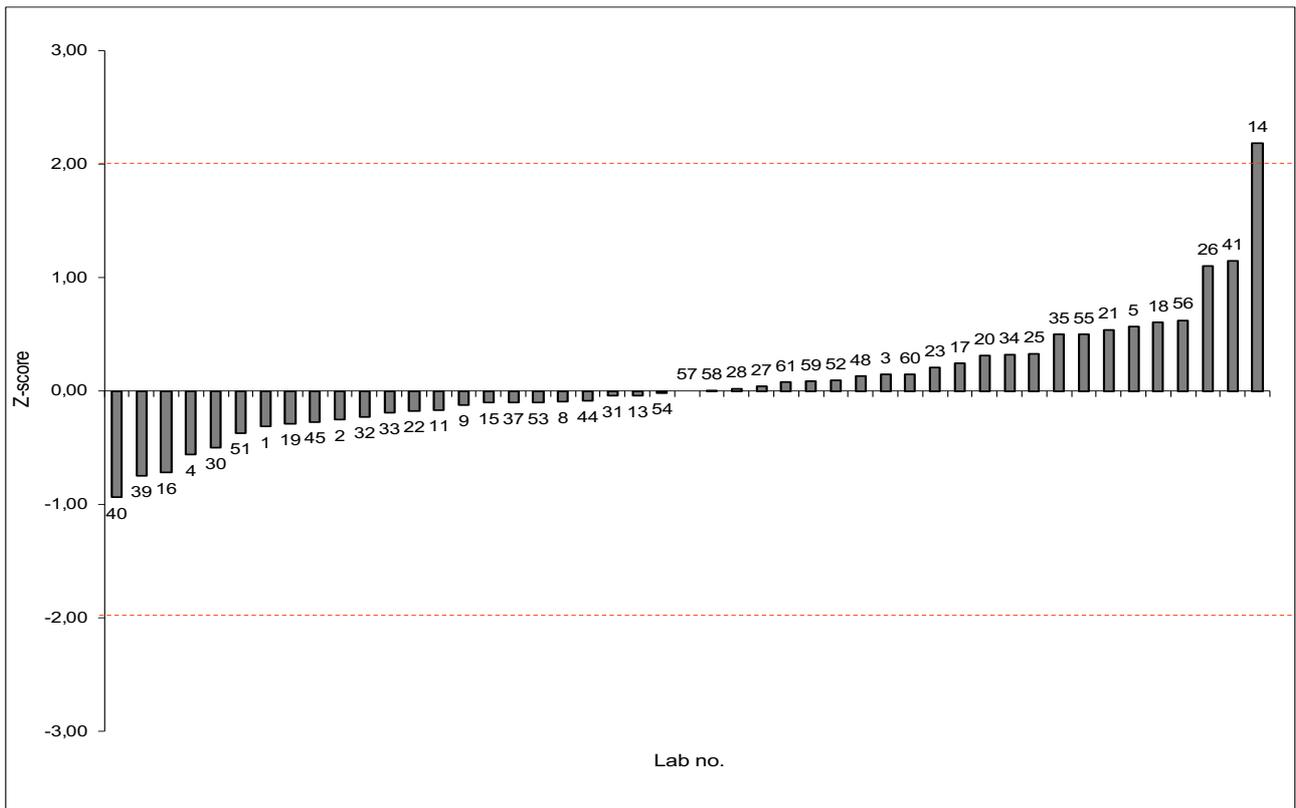
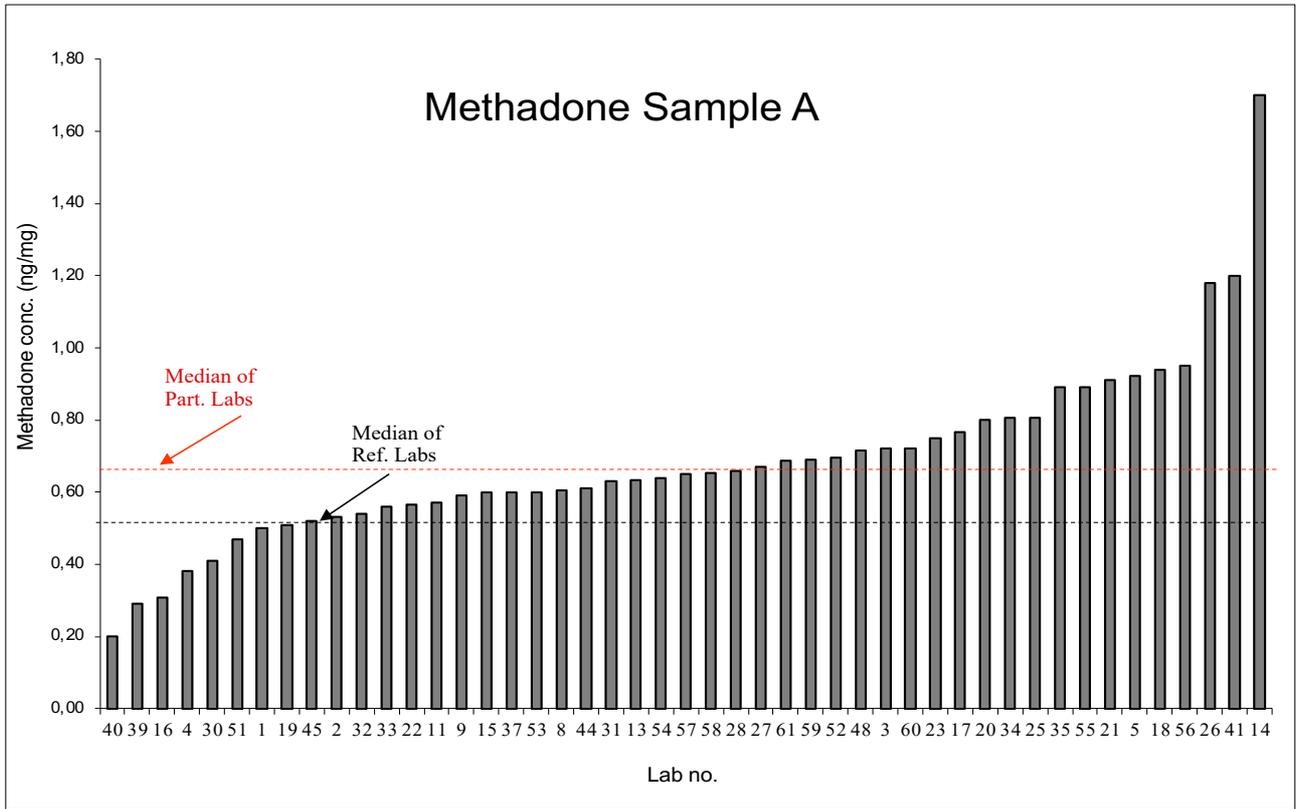
Average	0.31
SD	0.16
CV%	51.75
Median	0.28
Minimum	0.08
Quartile 25	0.20
Quartile 75	0.40
Maximum	0.73
Iqr	0.20



**METHADONE**

Lab	Methadone (ng/mg)	Z-score	Result
1	0.50	-0.31	Satisfactory
2	0.53	-0.25	Satisfactory
3	0.72	0.15	Satisfactory
4	0.38	-0.56	Satisfactory
5	0.92	0.57	Satisfactory
6	N		
8	0.61	-0.09	Satisfactory
9	0.59	-0.13	Satisfactory
11	0.57	-0.17	Satisfactory
13	0.63	-0.04	Satisfactory
14	1.70	2.19	Questionable
15	0.60	-0.10	Satisfactory
16	0.31	-0.71	Satisfactory
17	0.77	0.24	Satisfactory
18	0.94	0.60	Satisfactory
19	0.51	-0.29	Satisfactory
20	0.80	0.31	Satisfactory
21	0.91	0.54	Satisfactory
22	0.57	-0.18	Satisfactory
23	0.75	0.21	Satisfactory
25	0.81	0.33	Satisfactory
26	1.18	1.10	Satisfactory
27	0.67	0.04	Satisfactory
28	0.66	0.02	Satisfactory
30	0.41	-0.50	Satisfactory
31	0.63	-0.04	Satisfactory
32	0.54	-0.23	Satisfactory
33	0.56	-0.19	Satisfactory
34	0.81	0.32	Satisfactory
35	0.89	0.50	Satisfactory
37	0.60	-0.10	Satisfactory
39	0.29	-0.75	Satisfactory
40	0.20	-0.94	Satisfactory
41	1.20	1.15	Satisfactory
44	0.61	-0.08	Satisfactory
45	0.52	-0.27	Satisfactory
48	0.71	0.13	Satisfactory
51	0.47	-0.38	Satisfactory
52	0.70	0.10	Satisfactory
53	0.60	-0.10	Satisfactory
54	0.64	-0.02	Satisfactory
55	0.89	0.50	Satisfactory
56	0.95	0.63	Satisfactory
57	0.65	0.00	Satisfactory
58	0.65	0.00	Satisfactory
59	0.69	0.09	Satisfactory
60	0.72	0.15	Satisfactory
61	0.69	0.08	Satisfactory

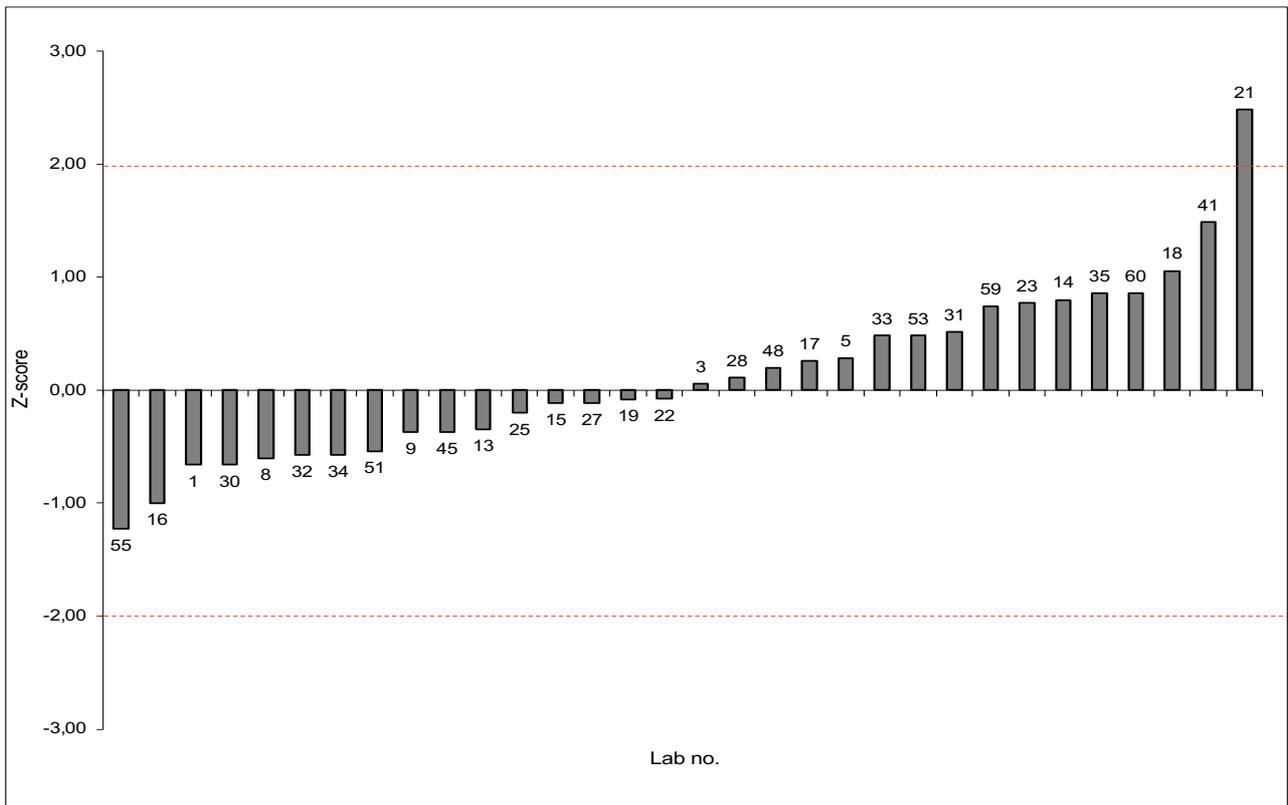
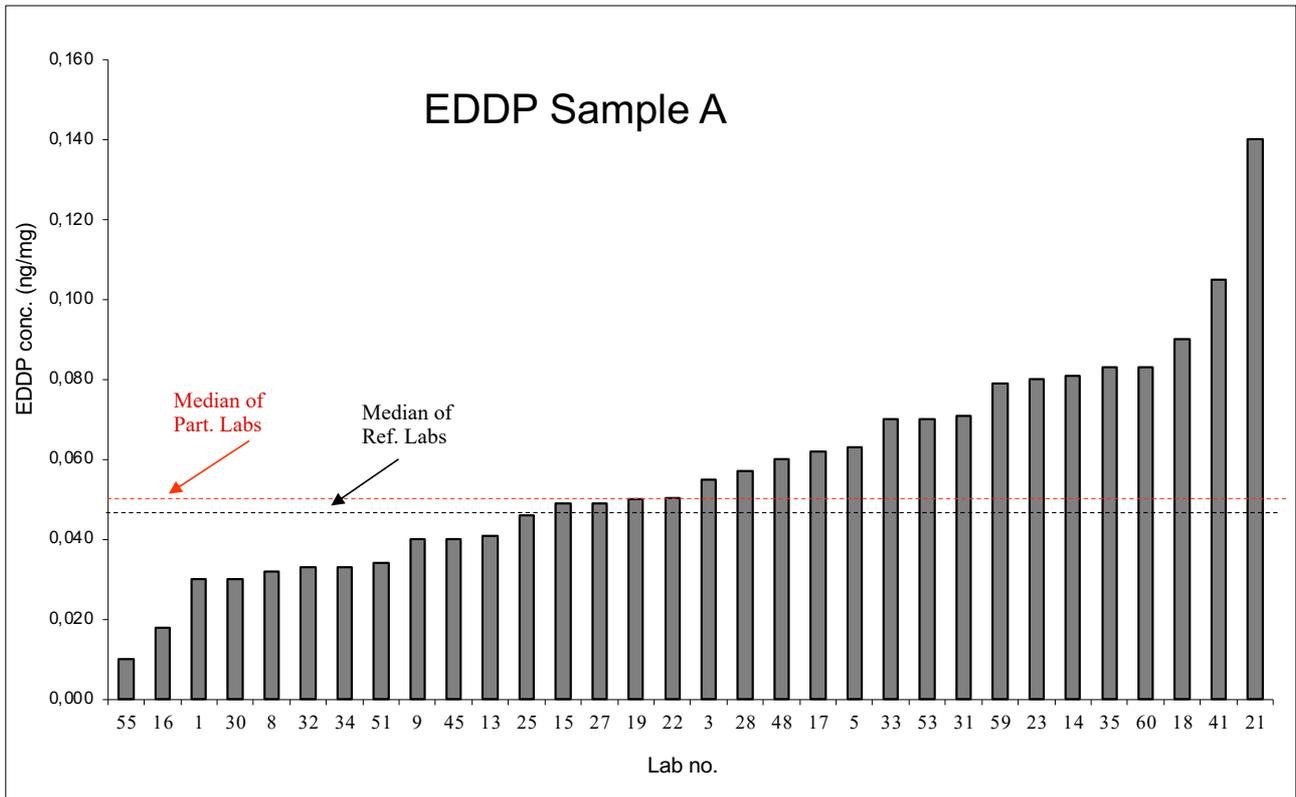
Average	0.69
SD	0.25
CV%	36.25
Median	0.65
Minimum	0.20
Quartile 25	0.30
Quartile 75	0.78
Maximum	1.70
Iqr	0.48



**2-ETHYLIDENE-1, 5-DIMETHYL-3, 3-DIPHENYLPYRROLIDINE (EDDP)**

Lab	EDDP (ng/mg)	Z-score	Result
1	0.030	-0.66	Satisfactory
2	N		
3	0.055	0.06	Satisfactory
4	N		
5	0.063	0.29	Satisfactory
6	N		
8	0.032	-0.60	Satisfactory
9	0.040	-0.37	Satisfactory
11	<0.05		
13	0.041	-0.34	Satisfactory
14	0.081	0.80	Satisfactory
15	0.049	-0.11	Satisfactory
16	0.018	-1.00	Satisfactory
17	0.062	0.26	Satisfactory
18	0.090	1.06	Satisfactory
19	0.050	-0.09	Satisfactory
20	<0.05		
21	0.140	2.49	Questionable
22	0.050	-0.08	Satisfactory
23	0.080	0.77	Satisfactory
25	0.046	-0.20	Satisfactory
26	P		
27	0.049	-0.11	Satisfactory
28	0.057	0.11	Satisfactory
30	0.030	-0.66	Satisfactory
31	0.071	0.51	Satisfactory
32	0.033	-0.57	Satisfactory
33	0.070	0.49	Satisfactory
34	0.033	-0.57	Satisfactory
35	0.083	0.86	Satisfactory
37	N		
40	N		
41	0.105	1.49	Satisfactory
44	N		
45	0.040	-0.37	Satisfactory
48	0.060	0.20	Satisfactory
51	0.034	-0.54	Satisfactory
53	0.070	0.49	Satisfactory
54	N		
55	0.010	-1.23	Satisfactory
56	P		
58	N		
59	0.079	0.74	Satisfactory
60	0.083	0.86	Satisfactory
61	N		

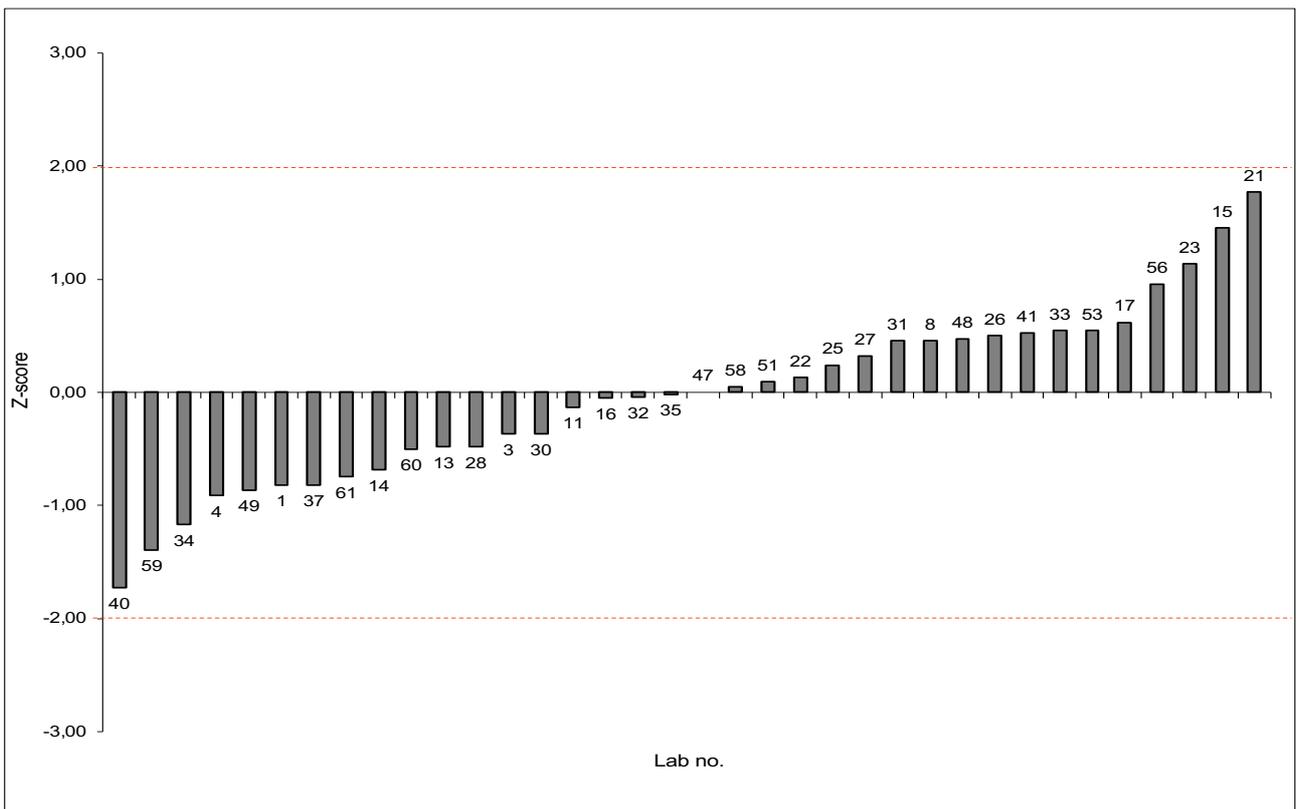
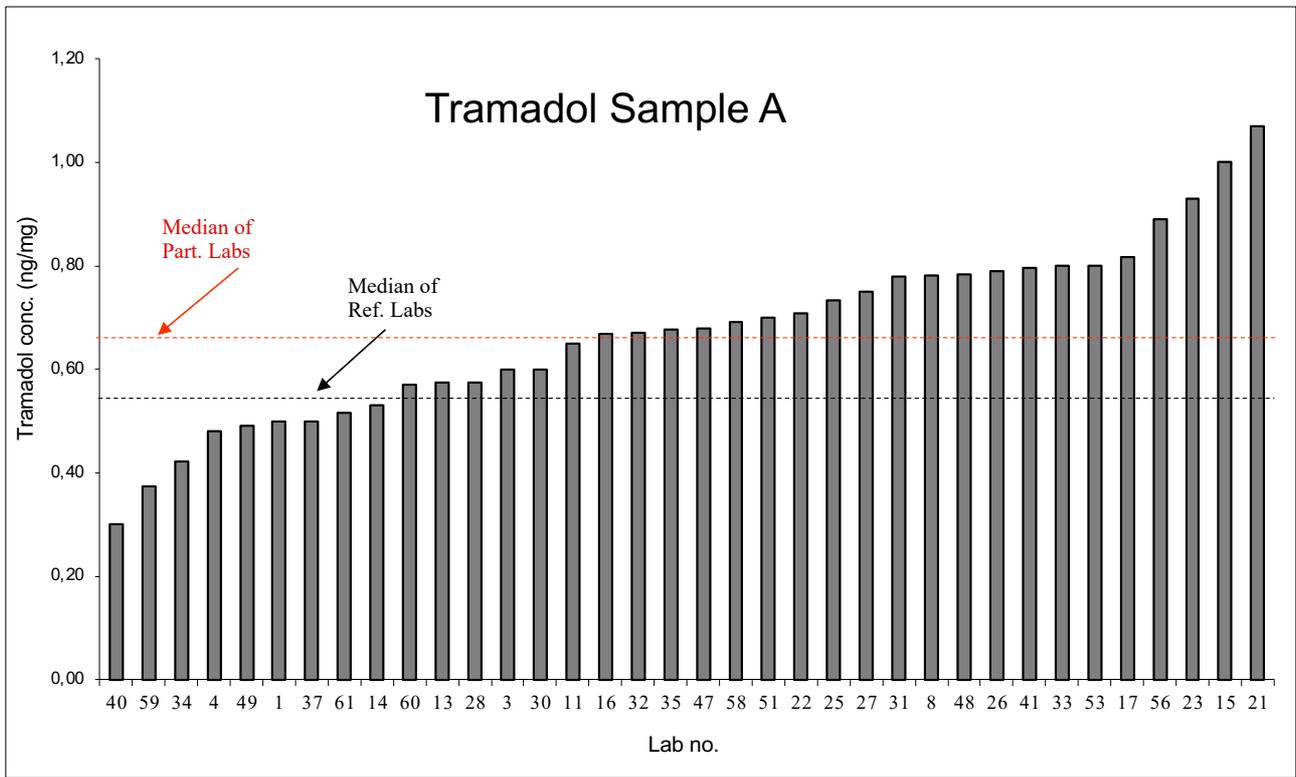
Average	0.057
SD	0.027
CV%	46.257
Median	0.053
Minimum	0.010
Quartile 25	0.039
Quartile 75	0.073
Maximum	0.140
Iqr	0.035



**TRAMADOL**

Lab	Tramadol (ng/mg)	Z-score	Result
1	0.50	-0.82	Satisfactory
3	0.60	-0.36	Satisfactory
4	0.48	-0.91	Satisfactory
5	N		
8	0.78	0.46	Satisfactory
11	0.65	-0.14	Satisfactory
13	0.57	-0.48	Satisfactory
14	0.53	-0.68	Satisfactory
15	1.00	1.45	Satisfactory
16	0.67	-0.05	Satisfactory
17	0.82	0.62	Satisfactory
18	N		
21	1.07	1.77	Satisfactory
22	0.71	0.13	Satisfactory
23	0.93	1.14	Satisfactory
25	0.73	0.24	Satisfactory
26	0.79	0.50	Satisfactory
27	0.75	0.32	Satisfactory
28	0.58	-0.48	Satisfactory
30	0.60	-0.36	Satisfactory
31	0.78	0.45	Satisfactory
32	0.67	-0.05	Satisfactory
33	0.80	0.55	Satisfactory
34	0.42	-1.17	Satisfactory
35	0.68	-0.02	Satisfactory
37	0.50	-0.82	Satisfactory
40	0.30	-1.73	Satisfactory
41	0.80	0.52	Satisfactory
45	P		
47	0.68	0.00	Satisfactory
48	0.78	0.47	Satisfactory
49	0.49	-0.86	Satisfactory
51	0.70	0.09	Satisfactory
53	0.80	0.55	Satisfactory
56	0.89	0.95	Satisfactory
58	0.69	0.05	Satisfactory
59	0.37	-1.39	Satisfactory
60	0.57	-0.50	Satisfactory
61	0.52	-0.74	Satisfactory

Average	0.67
SD	0.17
CV%	24.97
Median	0.68
Minimum	0.30
Quartile 25	0.56
Quartile 75	0.78
Maximum	1.07
Iqr	0.22

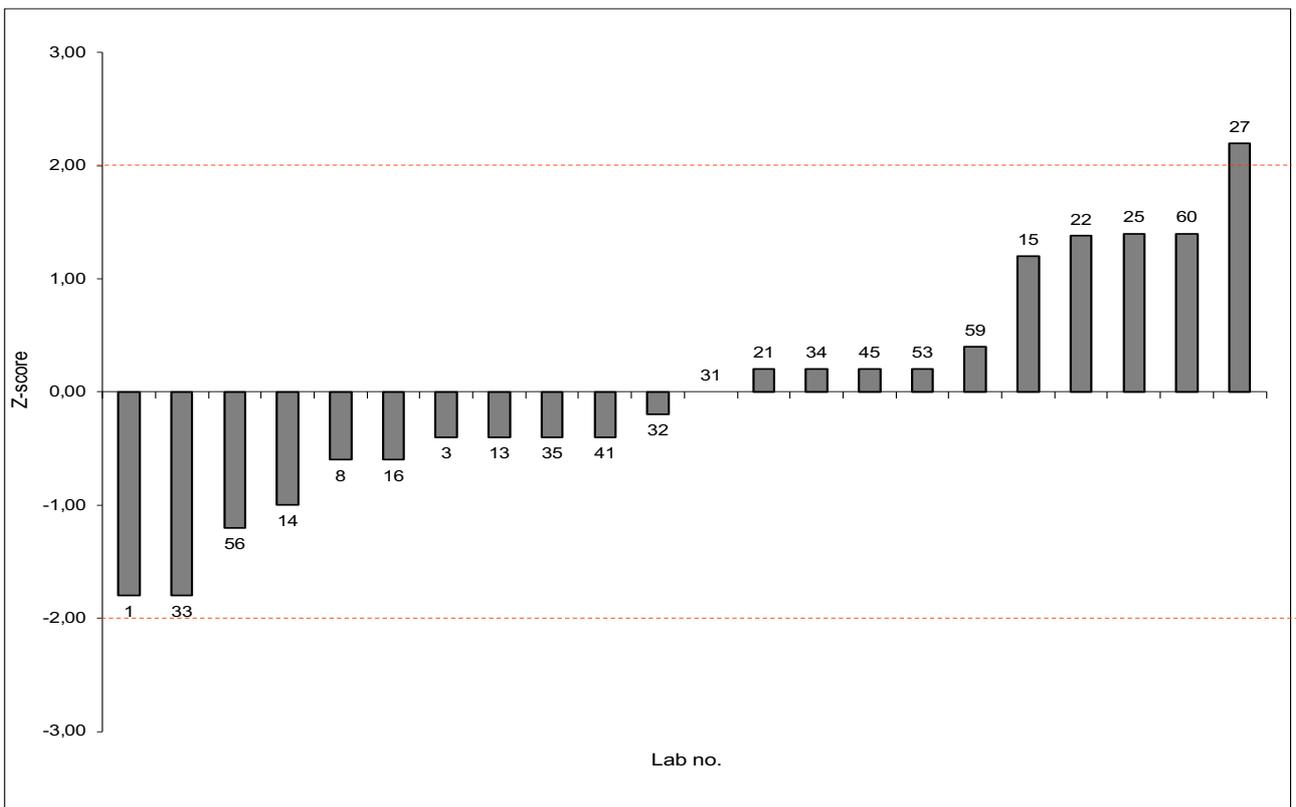
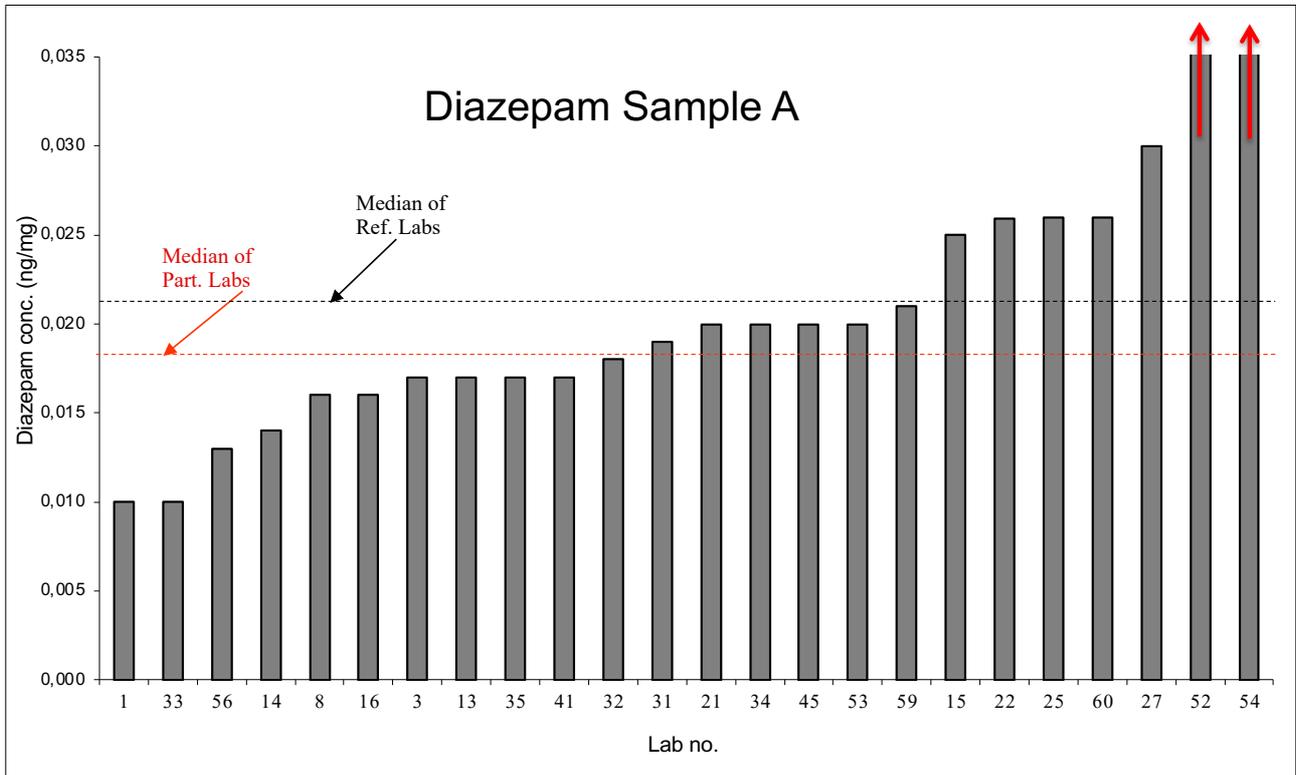


**DIAZEPAM**

Lab	Diazepam (ng/mg)	Z-score	Result
1	0.010	-1.80	Satisfactory
3	0.017	-0.40	Satisfactory
5	N		
6	N		
8	0.016	-0.60	Satisfactory
11	<0.025		
12	N		
13	0.017	-0.40	Satisfactory
14	0.014	-1.00	Satisfactory
15	0.025	1.20	Satisfactory
16	0.016	-0.60	Satisfactory
17	N		
21	0.020	0.20	Satisfactory
22	0.026	1.38	Satisfactory
24	N		
25	0.026	1.40	Satisfactory
27	0.030	2.20	Questionable
28	N		
30	N		
31	0.019	0.00	Satisfactory
32	0.018	-0.20	Satisfactory
33	0.010	-1.80	Satisfactory
34	0.020	0.20	Satisfactory
35	0.017	-0.40	Satisfactory
37	N		
39	N		
40	N		
41	0.017	-0.40	Satisfactory
44	N		
45	0.020	0.20	Satisfactory
48	P		
52	0.070	Outlier*	
53	0.020	0.20	Satisfactory
54	0.080	Outlier*	
56	0.013	-1.20	Satisfactory
58	N		
59	0.021	0.40	Satisfactory
60	0.026	1.40	Satisfactory
61	N		

Average	0.019
SD	0.005
CV%	26.764
Median	0.019
Minimum	0.010
Quartile 25	0.016
Quartile 75	0.021
Maximum	0.030
Iqr	0.005

\*Outliers have not been included in the statistical study

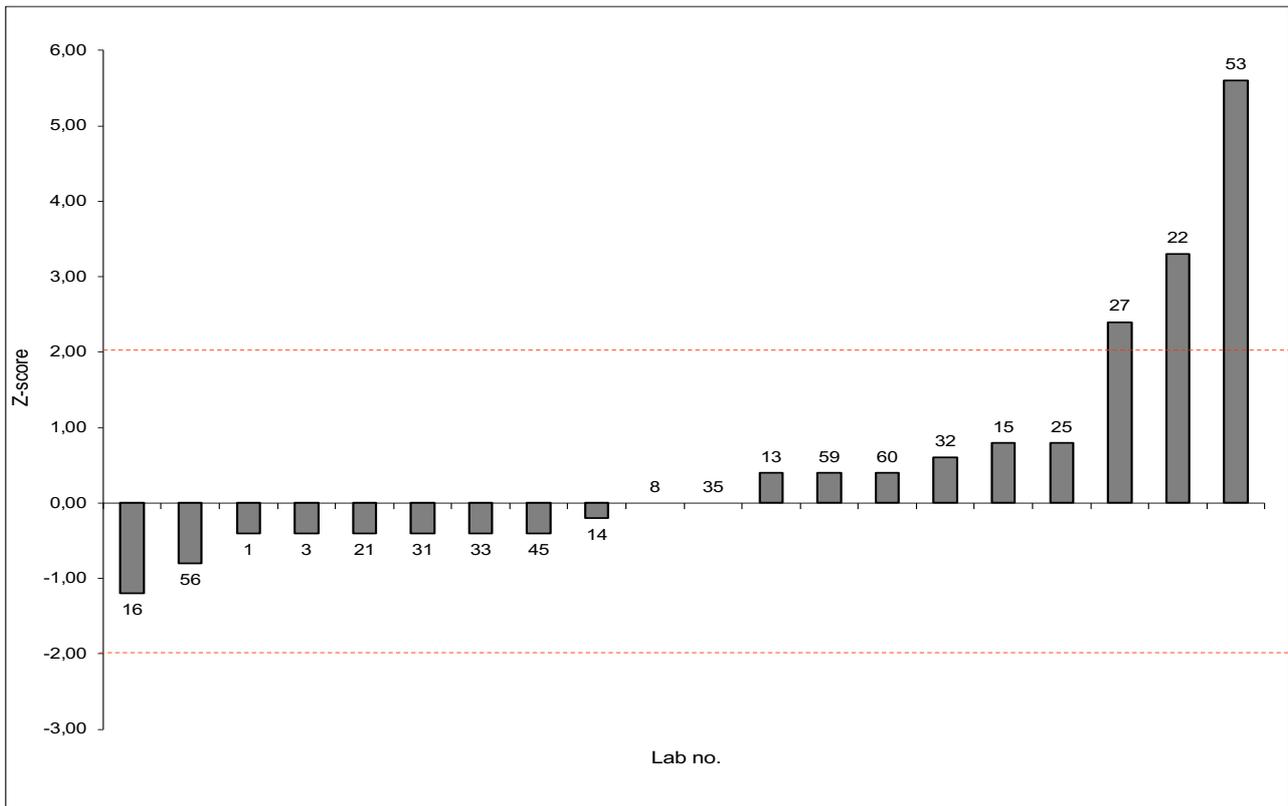
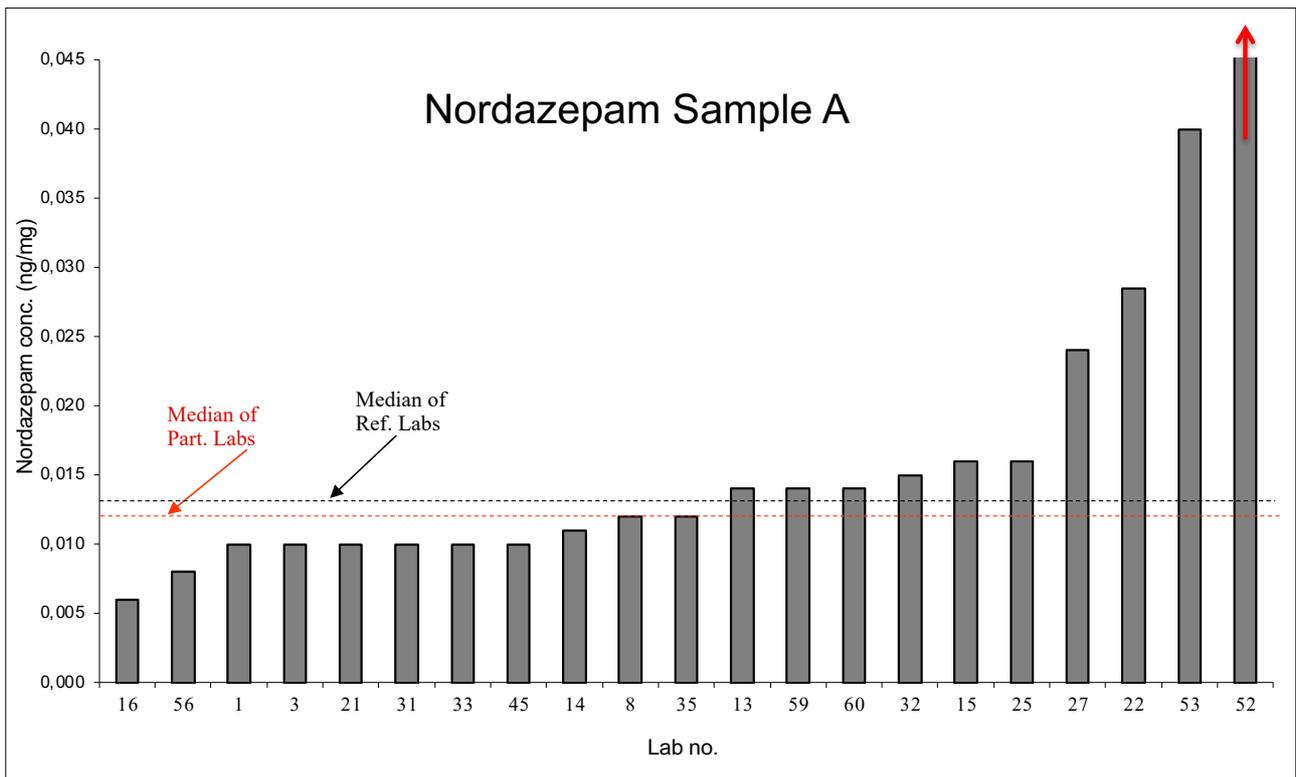


**NORDAZEPAM**

Lab	Nordazepam (ng/mg)	Z-score	Result
1	0.010	-0.40	Satisfactory
3	0.010	-0.40	Satisfactory
5	N		
6	N		
8	0.012	0.00	Satisfactory
11	<0.025		
12	N		
13	0.014	0.40	Satisfactory
14	0.011	-0.20	Satisfactory
15	0.016	0.80	Satisfactory
16	0.006	-1.20	Satisfactory
17	N		
21	0.010	-0.40	Satisfactory
22	0.029	3.30	Unsatisfactory
24	N		
25	0.016	0.80	Satisfactory
27	0.024	2.40	Questionable
28	N		
30	N		
31	0.010	-0.40	Satisfactory
32	0.015	0.60	Satisfactory
33	0.010	-0.40	Satisfactory
34	N		
35	0.012	0.00	Satisfactory
37	N		
39	N		
40	N		
41	N		
44	N		
45	0.010	-0.40	Satisfactory
48	P		
52	0.055	Outlier*	
53	0.040	5.60	Unsatisfactory
54	N		
56	0.008	-0.80	Satisfactory
58	N		
59	0.014	0.40	Satisfactory
60	0.014	0.40	Satisfactory
61	N		

\*Lab 52 has not been included in the statistical study

Average	0.015
SD	0.008
CV%	53.389
Median	0.012
Minimum	0.006
Quartile 25	0.010
Quartile 75	0.015
Maximum	0.040
Iqr	0.005



**SAMPLE B**

Sample B contents were as follows:

- Cocaine compounds: benzoylecgonine and low concentrations of cocaine (0.077 ng/mg median conc.)
- Amphetamine compounds: low concentrations of amphetamine (0.064 ng/mg median conc.) and methamphetamine (0.068 ng /mg median conc.)
- Cannabis compounds: THC and THC-COOH
- Low concentrations of tramadol (0.069 ng/mg median conc.)

Other compounds reported by more than two participating laboratories were:

Compound	N	Average	SD	CV%	Median	Minimum	Quartile 25	Quartile 75	Maximum	Iqr
CBN	16	0.161	0.038	23.410	0.160	0.078	0.138	0.195	0.220	0.057
CBD	13	0.053	0.018	34.415	0.055	0.015	0.043	0.070	0.080	0.027
JWH-073 <sup>1</sup>	3	0.083	0.000	0.000	0.083	0.083	0.083	0.083	0.083	0.000
Chlorpheniramine	2	0.009	0.002	17.647	0.009	0.007	0.008	0.009	0.010	0.002
Zopiclone	2	0.004	0.002	42.857	0.004	0.002	0.003	0.004	0.005	0.002
JWH-018 <sup>2</sup>	2	P	P	P	P	P	P	P	P	P
JWH-081 <sup>2</sup>	2	P	P	P	P	P	P	P	P	P

1. Only one participant reported quantitative results for this compound

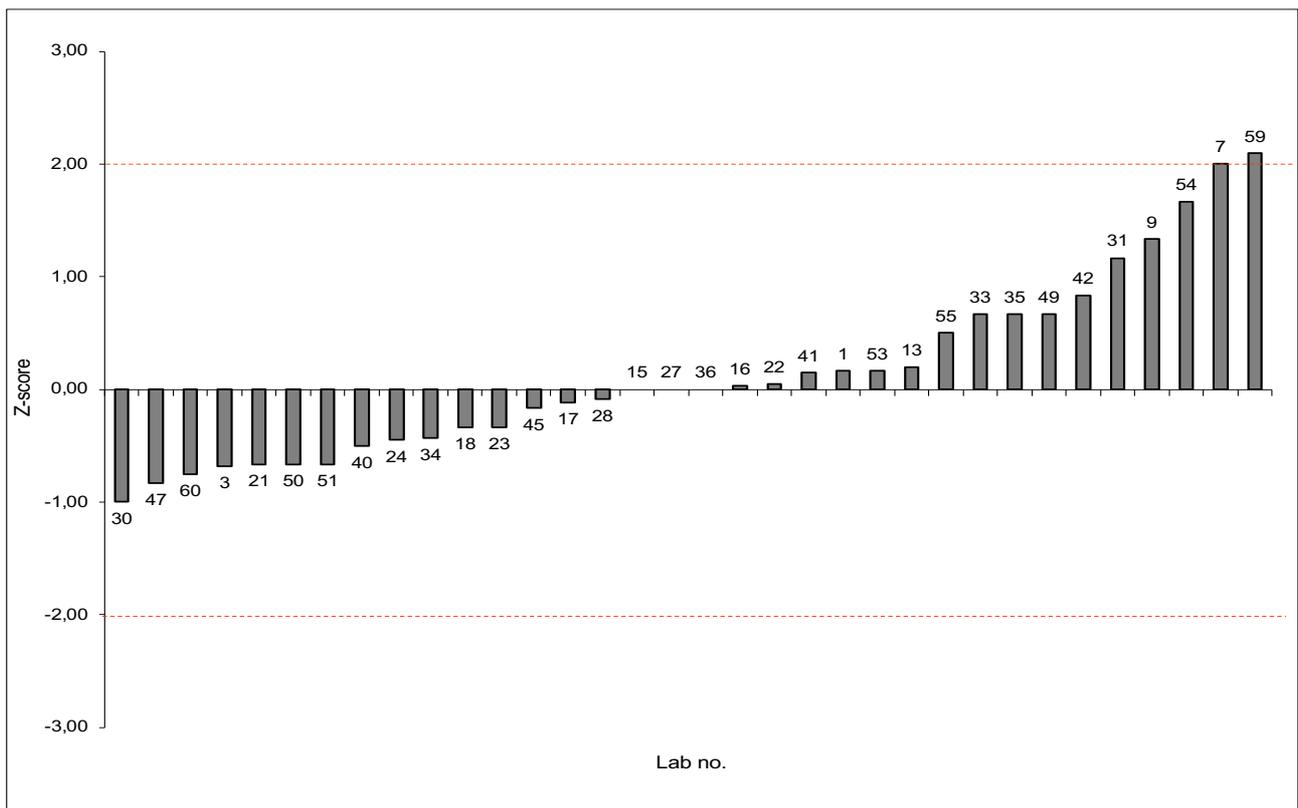
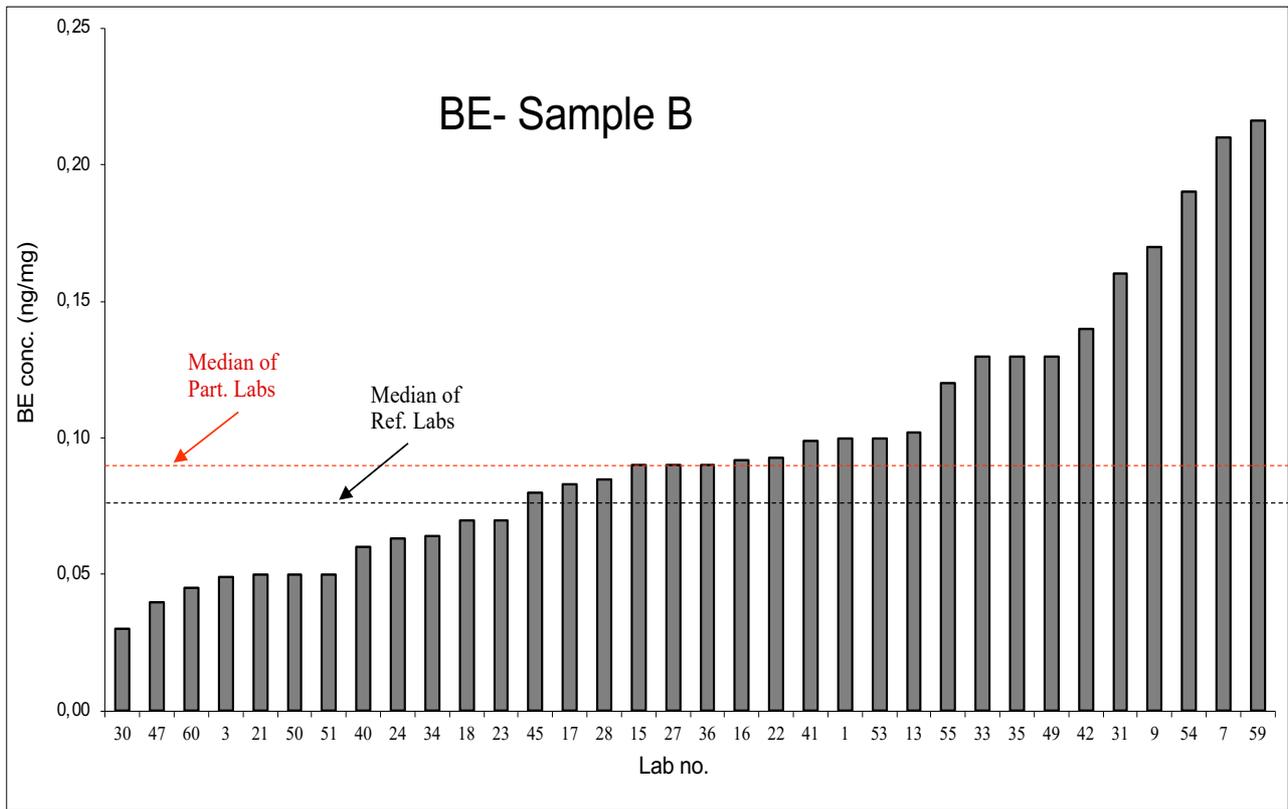
2. None of the participants reported quantitative results for these compounds

**BENZOYLECGONINE (BE)**

Lab	BE (ng/mg)	Z-score	Result
1	0.10	0.17	Satisfactory
2	N		
3	0.05	-0.68	Satisfactory
5	N		
6	N		
7	0.21	2.00	Questionable
8	N		
9	0.17	1.33	Satisfactory
11	<0.05		
12	N		
13	0.10	0.20	Satisfactory
14	N		
15	0.09	0.00	Satisfactory
16	0.09	0.03	Satisfactory
17	0.08	-0.12	Satisfactory
18	0.07	-0.33	Satisfactory
19	N		
20	N		
21	0.05	-0.67	Satisfactory
22	0.09	0.05	Satisfactory
23	0.07	-0.33	Satisfactory
24	0.06	-0.45	Satisfactory
25	N		
26	P		
27	0.09	0.00	Satisfactory
28	0.09	-0.08	Satisfactory
29	N		
30	0.03	-1.00	Satisfactory
31	0.16	1.17	Satisfactory
32	N		
33	0.13	0.67	Satisfactory
34	0.06	-0.43	Satisfactory
35	0.13	0.67	Satisfactory
36	0.09	0.00	Satisfactory
37	N		
39	N		
40	0.06	-0.50	Satisfactory
41	0.10	0.15	Satisfactory
42	0.14	0.83	Satisfactory
44	N		
45	0.08	-0.17	Satisfactory
46	N		
47	0.04	-0.83	Satisfactory
48	N		
49	0.13	0.67	Satisfactory
50	0.05	-0.67	Satisfactory
51	0.05	-0.67	Satisfactory
52	N		
53	0.10	0.17	Satisfactory
54	0.19	1.67	Satisfactory
55	0.12	0.50	Satisfactory
56	N		

Lab	BE (ng/mg)	Z-score	Result
58	N		
59	0.22	2.10	Questionable
60	0.05	-0.75	Satisfactory
61	N		

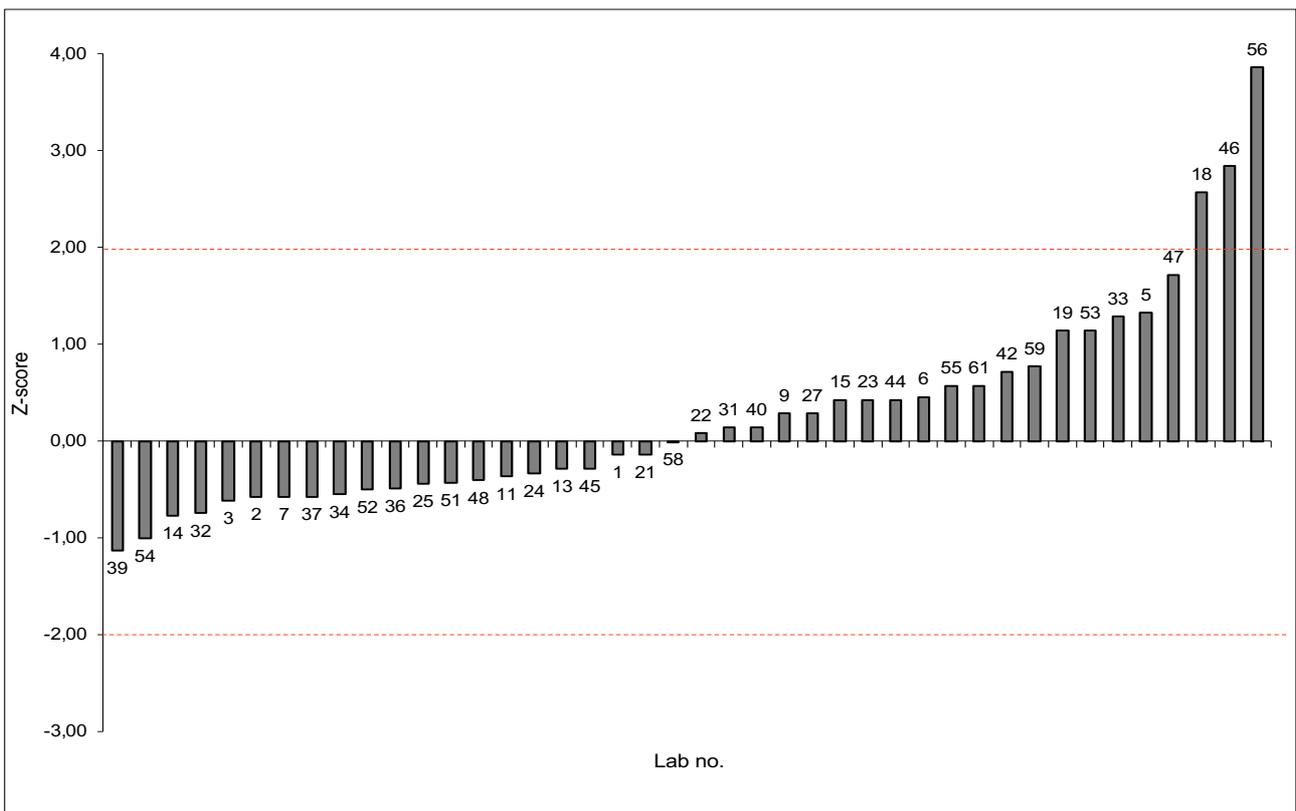
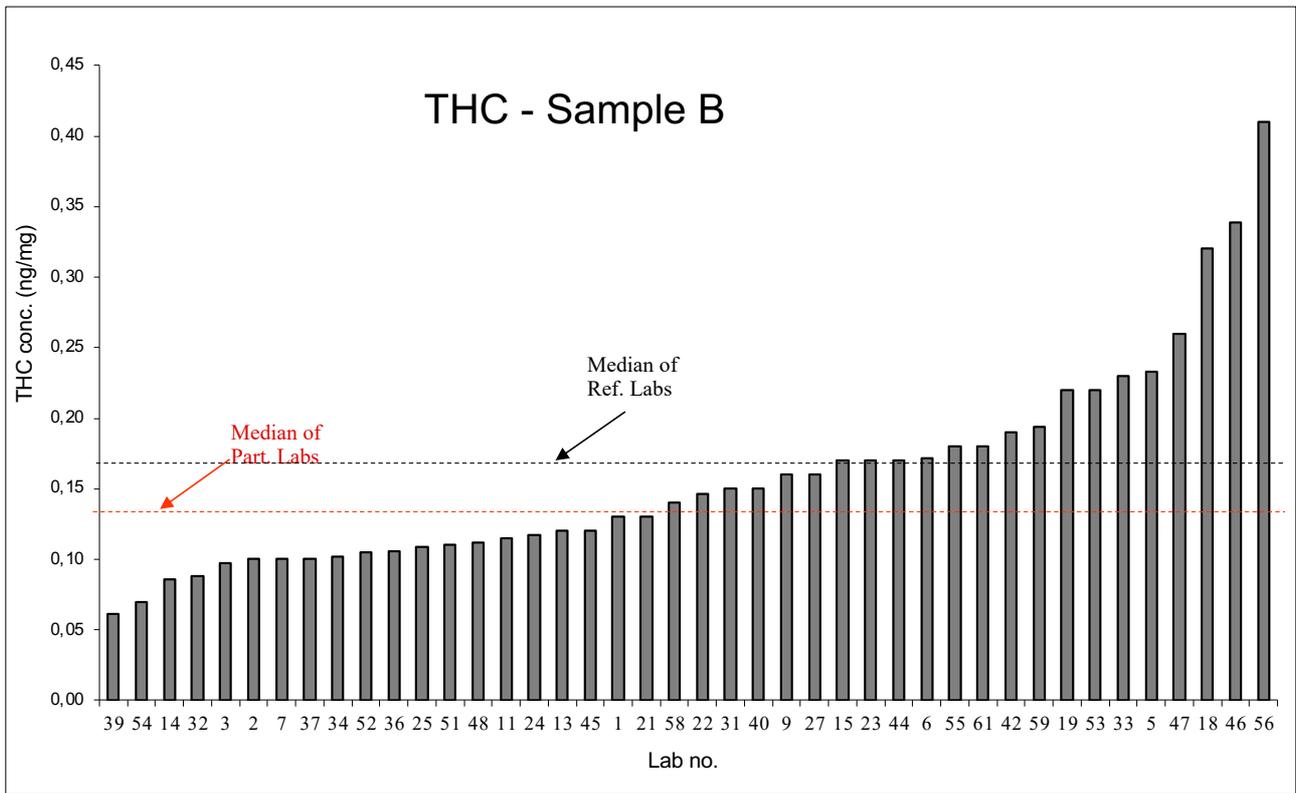
Average	0.10
SD	0.05
CV%	48.04
Median	0.09
Minimum	0.03
Quartile 25	0.06
Quartile 75	0.13
Maximum	0.22
Iqr	0.06



**$\Delta^9$ -TETRAHYDROCANNABINOL (THC)**

Lab	THC (ng/mg)	Z-score	Result
1	0.13	-0.14	Satisfactory
2	0.10	-0.57	Satisfactory
3	0.10	-0.61	Satisfactory
5	0.23	1.33	Satisfactory
6	0.17	0.46	Satisfactory
7	0.10	-0.57	Satisfactory
9	0.16	0.29	Satisfactory
11	0.12	-0.36	Satisfactory
13	0.12	-0.29	Satisfactory
14	0.09	-0.77	Satisfactory
15	0.17	0.43	Satisfactory
16	P		
18	0.32	2.57	Questionable
19	0.22	1.14	Satisfactory
20	N		
21	0.13	-0.14	Satisfactory
22	0.15	0.09	Satisfactory
23	0.17	0.43	Satisfactory
24	0.12	-0.33	Satisfactory
25	0.11	-0.44	Satisfactory
26	P		
27	0.16	0.29	Satisfactory
31	0.15	0.14	Satisfactory
32	0.09	-0.74	Satisfactory
33	0.23	1.29	Satisfactory
34	0.10	-0.54	Satisfactory
36	0.11	-0.49	Satisfactory
37	0.10	-0.57	Satisfactory
39	0.06	-1.13	Satisfactory
40	0.15	0.14	Satisfactory
42	0.19	0.71	Satisfactory
44	0.17	0.43	Satisfactory
45	0.12	-0.29	Satisfactory
46	0.34	2.84	Questionable
47	0.26	1.71	Satisfactory
48	0.11	-0.40	Satisfactory
51	0.11	-0.43	Satisfactory
52	0.11	-0.50	Satisfactory
53	0.22	1.14	Satisfactory
54	0.07	-1.00	Satisfactory
55	0.18	0.57	Satisfactory
56	0.41	3.86	Unsatisfactory
58	0.14	0.00	Satisfactory
59	0.19	0.77	Satisfactory
61	0.18	0.57	Satisfactory

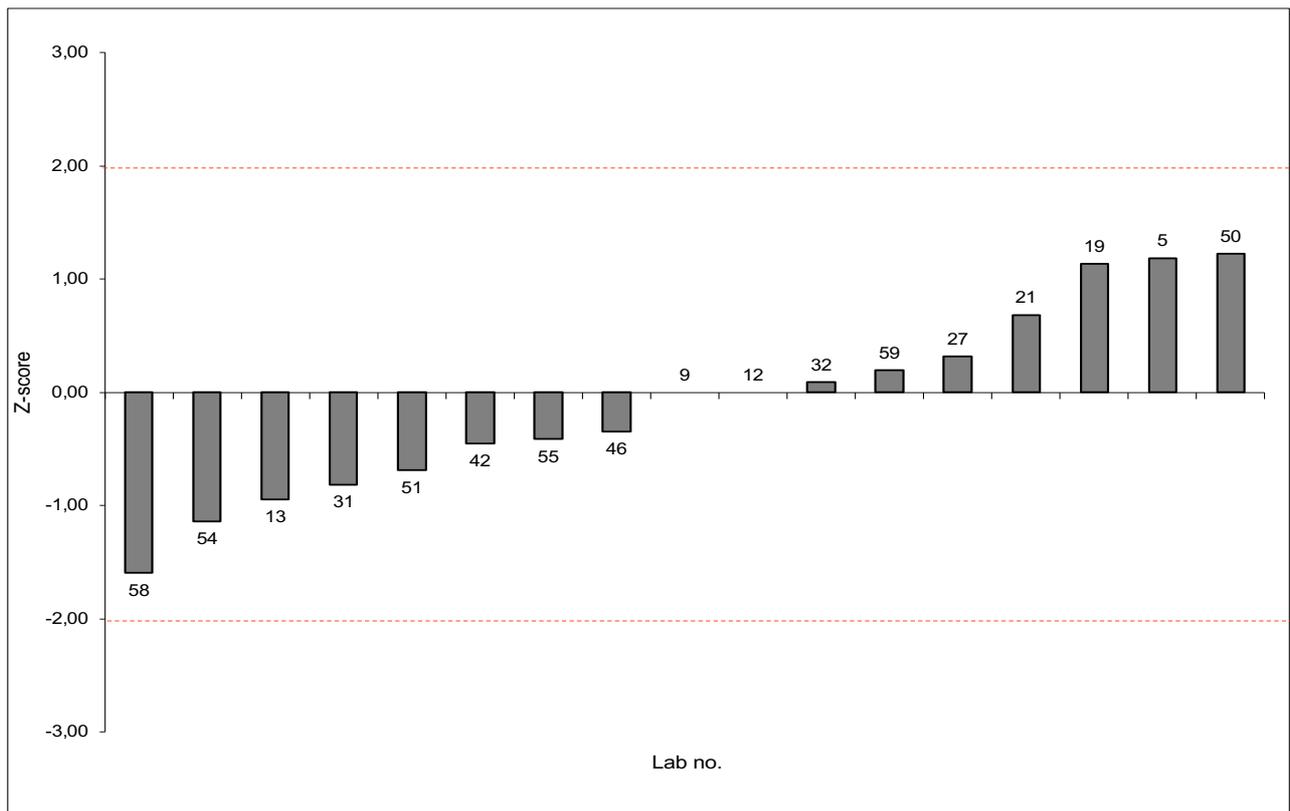
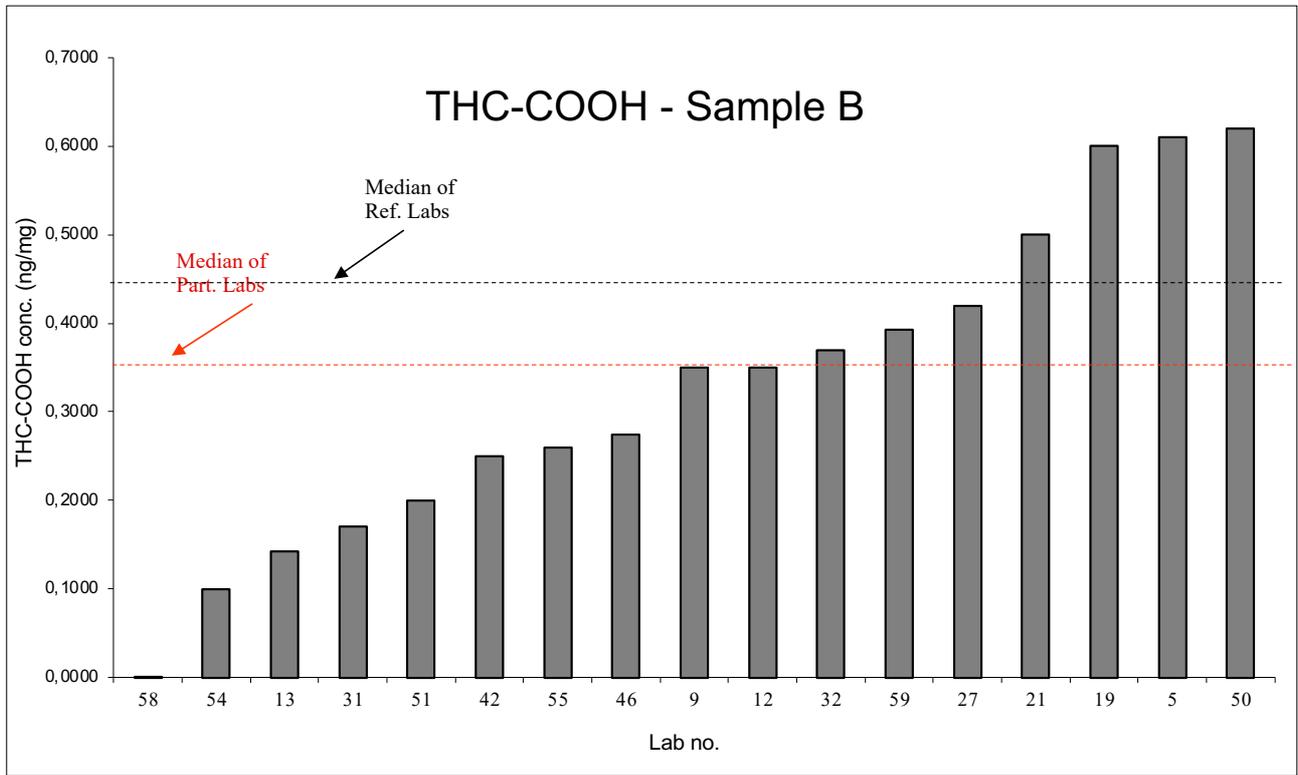
Average	0.16
SD	0.07
CV%	45.81
Median	0.14
Minimum	0.06
Quartile 25	0.11
Quartile 75	0.18
Maximum	0.41
Iqr	0.07



## 11-nor- $\Delta^9$ -TETRAHYDROCANNABINOL-9-CARBOXYLIC ACID (THC-COOH)

Lab	THC-COOC (pg/mg)	Z-score	Result
1	N		
5	0.61	1.18	Satisfactory
7	N		
9	0.35	0.00	Satisfactory
12	0.35	0.00	Satisfactory
13	0.14	-0.95	Satisfactory
15	<0.5		
19	0.60	1.14	Satisfactory
21	0.50	0.68	Satisfactory
27	0.42	0.32	Satisfactory
31	0.17	-0.82	Satisfactory
32	0.37	0.09	Satisfactory
37	N		
42	0.25	-0.45	Satisfactory
46	0.27	-0.35	Satisfactory
50	0.62	1.23	Satisfactory
51	0.20	-0.68	Satisfactory
54	0.10	-1.14	Satisfactory
55	0.26	-0.41	Satisfactory
58	0.0003	-1.59	Satisfactory
59	0.39	0.20	Satisfactory

Average	0.33
SD	0.18
CV%	55.74
Median	0.31
Minimum	0.00
Quartile 25	0.19
Quartile 75	0.44
Maximum	0.62
Iqr	0.25



**SAMPLE C**

Sample C contents were as follows:

- Opiate compounds: 6-MAM, morphine, and low concentrations of codeine (0.06 ng/mg median conc.)
- Cocaine compounds: cocaine, benzoylecgonine, cocaethylene, and low concentrations of norcocaine (0.022 ng/mg median conc.)
- Amphetamine compounds: amphetamine, methamphetamine, and MDMA
- Cannabis: THC and THC-COOH
- Low concentrations of methadone (0.065 ng/mg median conc.)
- Tramadol
- Diazepam and nordazepam

Other compounds reported by more than one participating laboratory were:

Compound	N	Average	SD	CV%	Median	Minimum	Quartile 25	Quartile 75	Maximum	Iqr
CBN	15	0.112	0.039	35.094	0.115	0.014	0.094	0.146	0.160	0.052
CBD	13	0.070	0.038	54.443	0.063	0.023	0.047	0.075	0.165	0.028
Acetylcodeine	9	0.128	0.048	37.785	0.130	0.068	0.078	0.150	0.204	0.072
Anhydroecgoninemethylester	8	0.337	0.045	13.257	0.332	0.295	0.300	0.346	0.440	0.046
Zolpidem	8	0.020	0.007	35.437	0.020	0.010	0.015	0.025	0.030	0.011
o-Desmethyltramadol	7	0.062	0.045	71.866	0.040	0.029	0.037	0.055	0.150	0.018
Heroin	6	0.059	0.024	41.461	0.054	0.030	0.041	0.070	0.100	0.029
Ecgoninemethylester	5	0.099	0.155	156.671	0.020	0.020	0.020	0.026	0.410	0.006
Fentanyl	5	0.005	0.003	58.715	0.005	0.002	0.003	0.007	0.010	0.005
MDPV	5	0.064	0.027	42.560	0.050	0.035	0.046	0.080	0.110	0.034
Dihydrocodeine	4	0.025	0.004	14.392	0.025	0.020	0.023	0.026	0.030	0.003
Diphenhydramine	4	0.013	0.004	31.716	0.013	0.008	0.010	0.017	0.018	0.007
JWH-081	4	0.045	0.031	68.514	0.045	0.014	0.030	0.061	0.076	0.031
Citalopram	3	0.060	0.000	0.000	0.060	0.060	0.060	0.060	0.060	0.000
JWH-018	3	0.010	0.000	0.000	0.010	0.010	0.010	0.010	0.010	0.000
JWH-073	3	0.136	0.000	0.000	0.136	0.136	0.136	0.136	0.136	0.000
JWH-122	3	0.004	0.000	0.000	0.004	0.004	0.004	0.004	0.004	0.000
Ketamine	3	0.019	0.022	115.390	0.004	0.003	0.004	0.027	0.050	0.024
N-Desmethyltramadol	3	0.196	0.086	43.826	0.230	0.078	0.154	0.255	0.280	0.101
Hydromorphone	2	0.017	0.003	17.647	0.017	0.014	0.016	0.019	0.020	0.003
m-hydroxycocaine	2	0.006	0.003	56.522	0.006	0.003	0.004	0.007	0.009	0.003
p-hydroxycocaine	2	0.006	0.003	45.161	0.006	0.003	0.005	0.008	0.009	0.003
Zopiclone	2	0.009	0.004	44.444	0.009	0.005	0.007	0.011	0.013	0.004

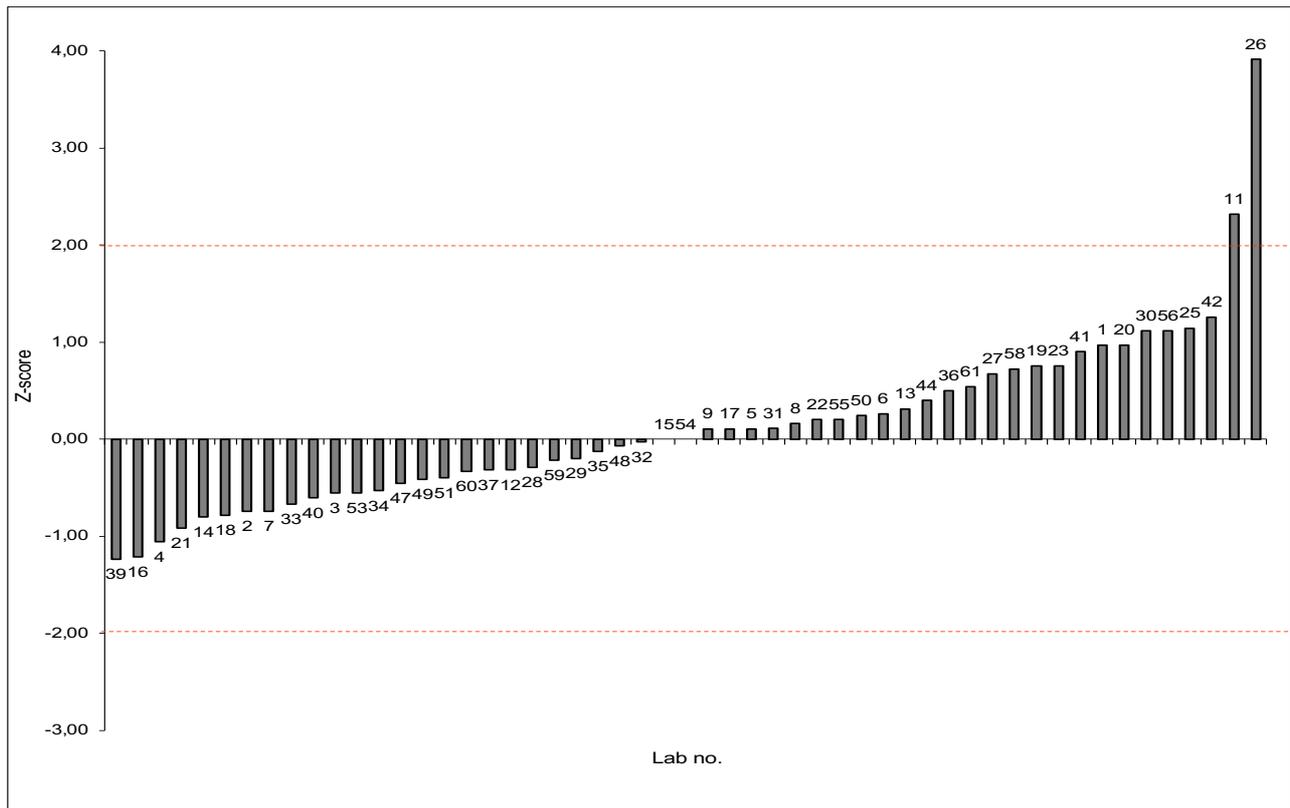
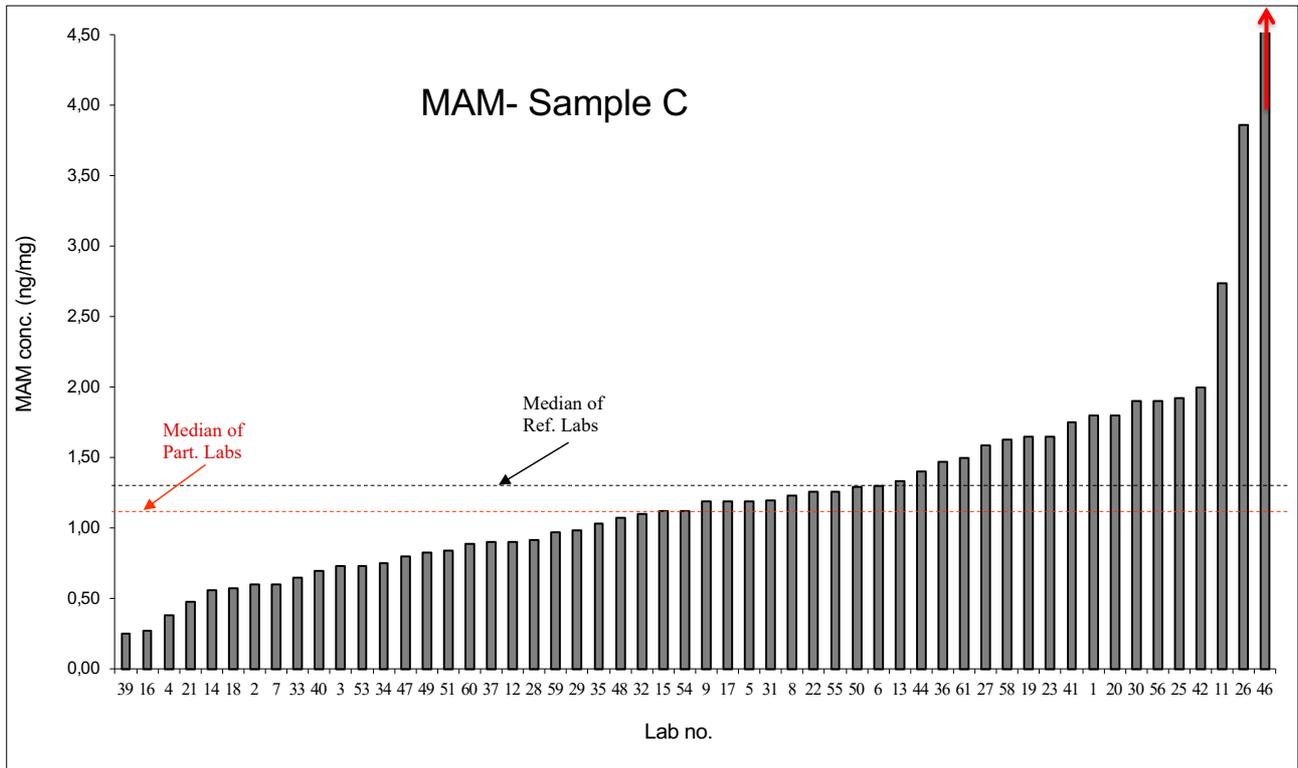
**6-MONOACETILMORPHINE (MAM)**

Lab	MAM (ng/mg)	Z-score	Result
1	1.80	0.97	Satisfactory
2	0.60	-0.74	Satisfactory
3	0.73	-0.56	Satisfactory
4	0.38	-1.06	Satisfactory
5	1.19	0.10	Satisfactory
6	1.30	0.26	Satisfactory
7	0.60	-0.74	Satisfactory
8	1.23	0.16	Satisfactory
9	1.19	0.10	Satisfactory
11	2.74	2.31	Questionable
12	0.90	-0.31	Satisfactory
13	1.33	0.31	Satisfactory
14	0.56	-0.80	Satisfactory
15	1.12	0.00	Satisfactory
16	0.27	-1.22	Satisfactory
17	1.19	0.10	Satisfactory
18	0.57	-0.79	Satisfactory
19	1.65	0.76	Satisfactory
20	1.80	0.97	Satisfactory
21	0.48	-0.91	Satisfactory
22	1.26	0.20	Satisfactory
23	1.65	0.76	Satisfactory
24	U		
25	1.92	1.14	Satisfactory
26	3.86	3.91	Unsatisfactory
27	1.59	0.67	Satisfactory
28	0.92	-0.29	Satisfactory
29	0.98	-0.20	Satisfactory
30	1.90	1.11	Satisfactory
31	1.20	0.11	Satisfactory
32	1.10	-0.03	Satisfactory
33	0.65	-0.67	Satisfactory
34	0.75	-0.53	Satisfactory
35	1.03	-0.13	Satisfactory
36	1.47	0.50	Satisfactory
37	0.90	-0.31	Satisfactory
39	0.25	-1.24	Satisfactory
40	0.70	-0.60	Satisfactory
41	1.75	0.90	Satisfactory
42	2.00	1.26	Satisfactory
44	1.40	0.40	Satisfactory
45	>1.00		
46	5.89	Outlier*	
47	0.80	-0.46	Satisfactory
48	1.07	-0.07	Satisfactory
49	0.83	-0.41	Satisfactory
50	1.29	0.24	Satisfactory
51	0.84	-0.40	Satisfactory
53	0.73	-0.56	Satisfactory
54	1.12	0.00	Satisfactory
55	1.26	0.20	Satisfactory
56	1.90	1.11	Satisfactory

Lab	MAM (ng/mg)	Z-score	Result
57	N		
58	1.63	0.72	Satisfactory
59	0.97	-0.21	Satisfactory
60	0.89	-0.33	Satisfactory
61	1.50	0.54	Satisfactory

\*Lab 46 has not been included in the statistical study

Average	1.20
SD	0.62
CV%	51.36
Median	1.12
Minimum	0.25
Quartile 25	0.80
Quartile 75	1.50
Maximum	3.86
Iqr	0.70



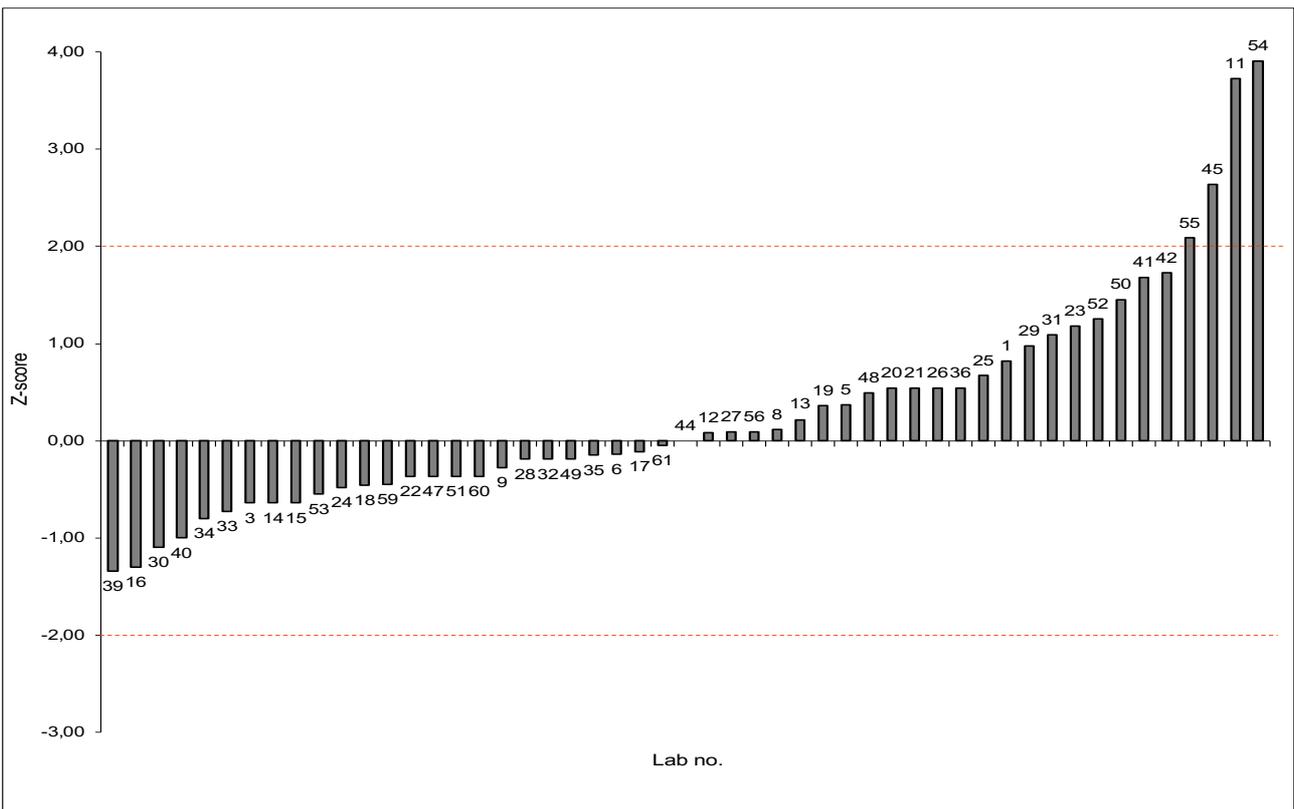
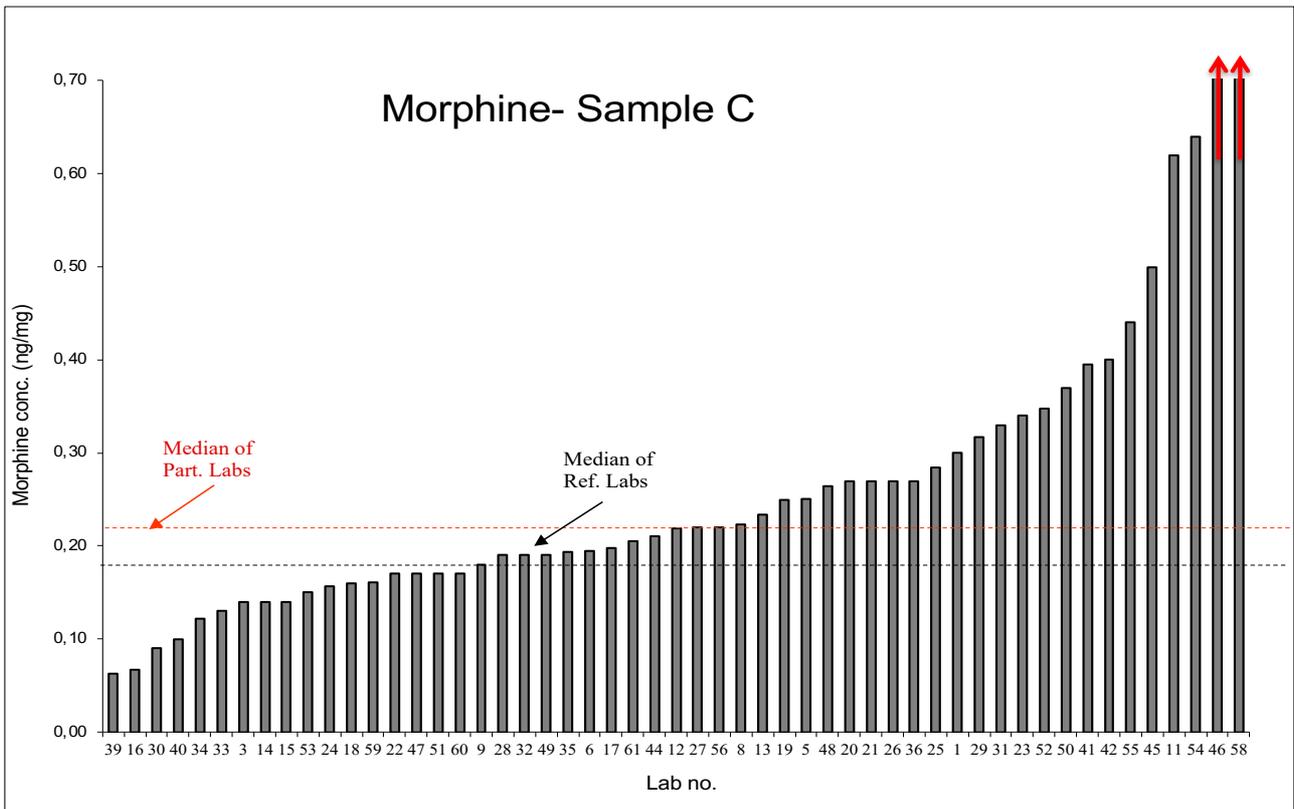
**MORPHINE**

Lab	Morphine (ng/mg)	Z-score	Result
1	0.30	0.82	Questionable
2	N		
3	0.14	-0.64	Satisfactory
4	N		
5	0.25	0.37	Satisfactory
6	0.20	-0.14	Satisfactory
7	N		
8	0.22	0.12	Satisfactory
9	0.18	-0.27	Satisfactory
11	0.62	3.73	Satisfactory
12	0.22	0.08	Satisfactory
13	0.23	0.22	Satisfactory
14	0.14	-0.64	Satisfactory
15	0.14	-0.64	Satisfactory
16	0.07	-1.30	Satisfactory
17	0.20	-0.11	Satisfactory
18	0.16	-0.45	Satisfactory
19	0.25	0.36	Satisfactory
20	0.27	0.55	Satisfactory
21	0.27	0.55	Satisfactory
22	0.17	-0.36	Satisfactory
23	0.34	1.18	Satisfactory
24	0.16	-0.48	Satisfactory
25	0.28	0.67	Satisfactory
26	0.27	0.55	Satisfactory
27	0.22	0.09	Satisfactory
28	0.19	-0.18	Satisfactory
29	0.32	0.97	Satisfactory
30	0.09	-1.09	Satisfactory
31	0.33	1.09	Satisfactory
32	0.19	-0.18	Satisfactory
33	0.13	-0.73	Satisfactory
34	0.12	-0.80	Satisfactory
35	0.19	-0.15	Satisfactory
36	0.27	0.55	Satisfactory
37	N		
39	0.06	-1.34	Satisfactory
40	0.10	-1.00	Satisfactory
41	0.40	1.68	Satisfactory
42	0.40	1.73	Satisfactory
44	0.21	0.00	Satisfactory
45	0.50	2.64	Satisfactory
46	0.95	Outlier*	
47	0.17	-0.36	Satisfactory
48	0.26	0.49	Satisfactory
49	0.19	-0.18	Satisfactory
50	0.37	1.45	Satisfactory
51	0.17	-0.36	Satisfactory
52	0.35	1.25	Satisfactory
53	0.15	-0.55	Satisfactory
54	0.64	3.91	Questionable
55	0.44	2.09	Questionable

Lab	Morphine (ng/mg)	Z-score	Result
56	0.22	0.09	Unsatisfactory
57	N		
58	1.09	Outlier*	
59	0.16	-0.45	
60	0.17	-0.36	
61	0.21	-0.05	

\*Outliers have not been included in the statistical study

Average	0.24
SD	0.12
CV%	50.34
Median	0.21
Minimum	0.06
Quartile 25	0.17
Quartile 75	0.28
Maximum	0.64
Iqr	0.11



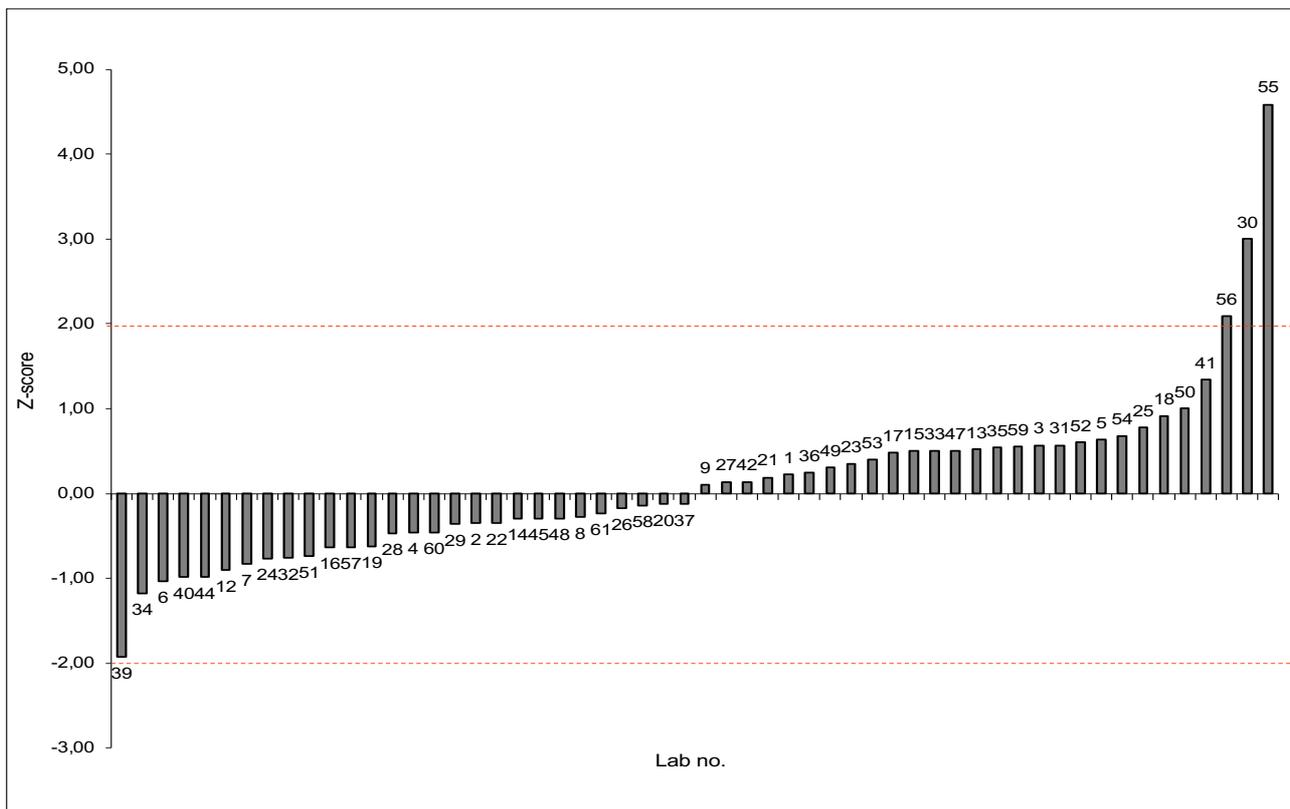
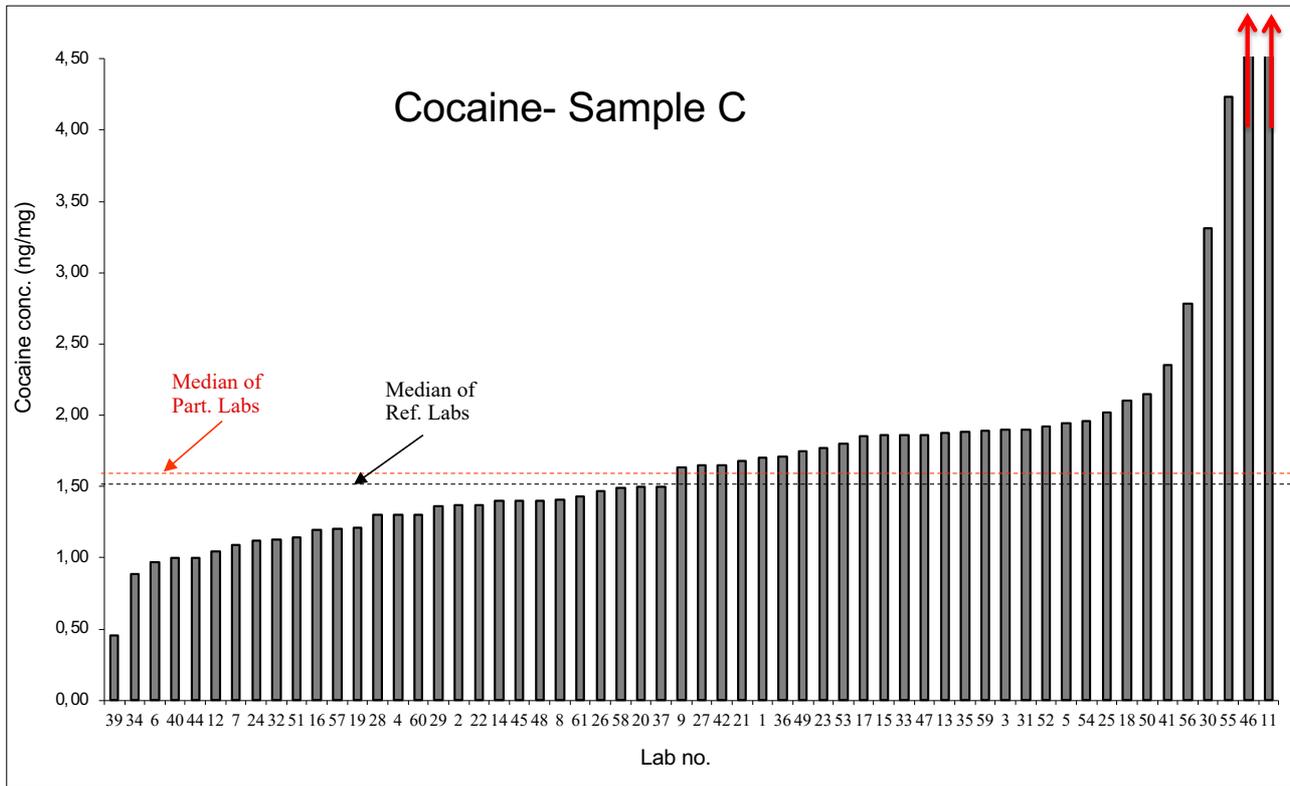
**COCAINE**

Lab	Cocaine (ng/mg)	Z-score	Result
1	1.70	0.22	Satisfactory
2	1.37	-0.34	Satisfactory
3	1.90	0.57	Satisfactory
4	1.30	-0.47	Satisfactory
5	1.94	0.64	Satisfactory
6	0.97	-1.03	Satisfactory
7	1.09	-0.83	Satisfactory
8	1.41	-0.28	Satisfactory
9	1.63	0.10	Satisfactory
11	10.90	Outlier*	
12	1.05	-0.90	Satisfactory
13	1.88	0.53	Satisfactory
14	1.40	-0.29	Satisfactory
15	1.86	0.50	Satisfactory
16	1.20	-0.64	Satisfactory
17	1.85	0.48	Satisfactory
18	2.10	0.91	Satisfactory
19	1.21	-0.62	Satisfactory
20	1.50	-0.12	Satisfactory
21	1.68	0.19	Satisfactory
22	1.37	-0.34	Satisfactory
23	1.77	0.34	Satisfactory
24	1.12	-0.77	Satisfactory
25	2.02	0.78	Satisfactory
26	1.47	-0.17	Satisfactory
27	1.65	0.14	Satisfactory
28	1.30	-0.47	Satisfactory
29	1.36	-0.36	Satisfactory
30	3.31	3.00	Unsatisfactory
31	1.90	0.57	Satisfactory
32	1.13	-0.76	Satisfactory
33	1.86	0.50	Satisfactory
34	0.89	-1.18	Satisfactory
35	1.89	0.54	Satisfactory
36	1.71	0.24	Satisfactory
37	1.50	-0.12	Satisfactory
39	0.45	-1.92	Satisfactory
40	1.00	-0.98	Satisfactory
41	2.35	1.34	Satisfactory
42	1.65	0.14	Satisfactory
44	1.00	-0.98	Satisfactory
45	1.40	-0.29	Satisfactory
46	7.77	Outlier*	
47	1.86	0.50	Satisfactory
48	1.40	-0.29	Satisfactory
49	1.75	0.31	Satisfactory
50	2.15	1.00	Satisfactory
51	1.14	-0.74	Satisfactory
52	1.92	0.60	Satisfactory
53	1.80	0.40	Satisfactory
54	1.96	0.67	Satisfactory
55	4.23	4.59	Unsatisfactory

Lab	Cocaine (ng/mg)	Z-score	Result
56	2.78	2.09	Questionable
57	1.20	-0.64	Satisfactory
58	1.49	-0.14	Satisfactory
59	1.89	0.55	Satisfactory
60	1.30	-0.47	Satisfactory
61	1.43	-0.24	Satisfactory

\*Outliers have not been included in the statistical study

Average	1.63
SD	0.58
CV%	35.61
Median	1.57
Minimum	0.45
Quartile 25	1.30
Quartile 75	1.88
Maximum	4.23
Iqr	0.58



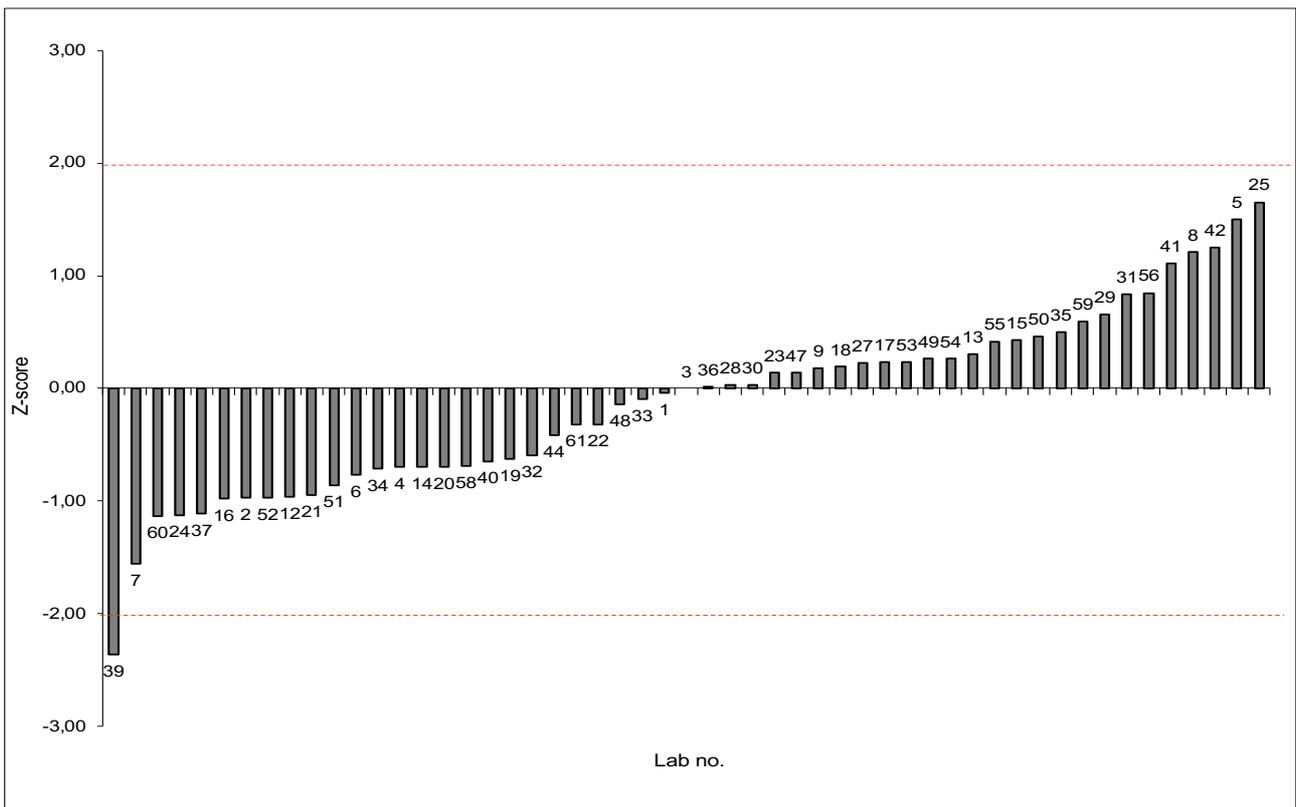
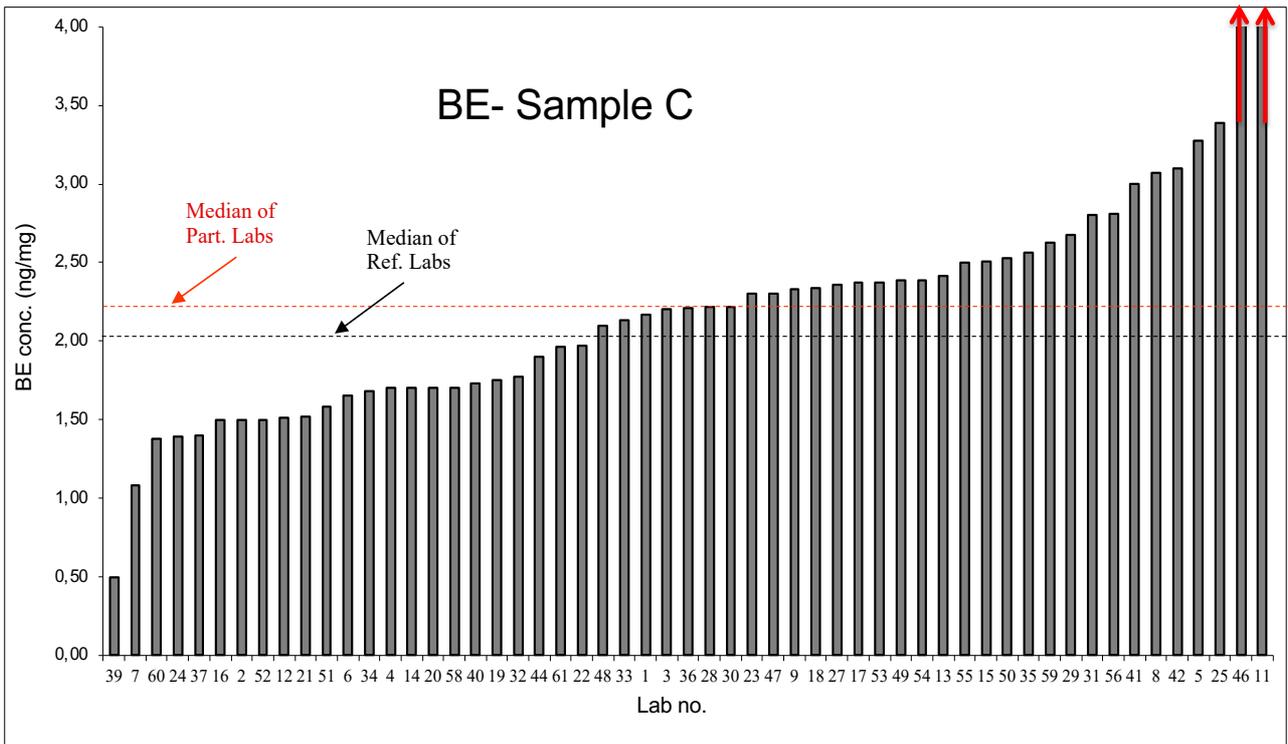
**BENZOYLECGONINE (BE)**

Lab	BE (ng/mg)	Z-score	Result
1	2.17	-0.04	Satisfactory
2	1.50	-0.97	Satisfactory
3	2.20	0.00	Satisfactory
4	1.70	-0.69	Satisfactory
5	3.28	1.50	Satisfactory
6	1.65	-0.76	Satisfactory
7	1.08	-1.56	Satisfactory
8	3.07	1.21	Satisfactory
9	2.33	0.18	Satisfactory
11	16.20	Outlier*	
12	1.51	-0.96	Satisfactory
13	2.42	0.30	Satisfactory
14	1.70	-0.69	Satisfactory
15	2.51	0.43	Satisfactory
16	1.50	-0.98	Satisfactory
17	2.37	0.24	Satisfactory
18	2.34	0.19	Satisfactory
19	1.75	-0.63	Satisfactory
20	1.70	-0.69	Satisfactory
21	1.52	-0.94	Satisfactory
22	1.97	-0.32	Satisfactory
23	2.30	0.14	Satisfactory
24	1.39	-1.12	Satisfactory
25	3.39	1.65	Satisfactory
26	P		
27	2.36	0.22	Satisfactory
28	2.22	0.03	Satisfactory
29	2.67	0.66	Satisfactory
30	2.22	0.03	Satisfactory
31	2.80	0.83	Satisfactory
32	1.77	-0.60	Satisfactory
33	2.13	-0.10	Satisfactory
34	1.69	-0.72	Satisfactory
35	2.56	0.50	Satisfactory
36	2.21	0.01	Satisfactory
37	1.40	-1.11	Satisfactory
39	0.50	-2.36	Questionable
40	1.73	-0.65	Satisfactory
41	3.00	1.11	Satisfactory
42	3.10	1.25	Satisfactory
44	1.90	-0.42	Satisfactory
45	>2.0		
46	12.40	Outlier*	
47	2.30	0.14	Satisfactory
48	2.10	-0.14	Satisfactory
49	2.39	0.26	Satisfactory
50	2.53	0.46	Satisfactory
51	1.58	-0.86	Satisfactory
52	1.50	-0.97	Satisfactory
53	2.37	0.24	Satisfactory
54	2.39	0.26	Satisfactory
55	2.50	0.42	Satisfactory

Lab	BE (ng/mg)	Z-score	Result
56	2.81	0.85	Satisfactory
58	1.70	-0.69	Satisfactory
59	2.63	0.59	Satisfactory
60	1.38	-1.14	Satisfactory
61	1.97	-0.32	Satisfactory

\*Outliers have not been included in the statistical study

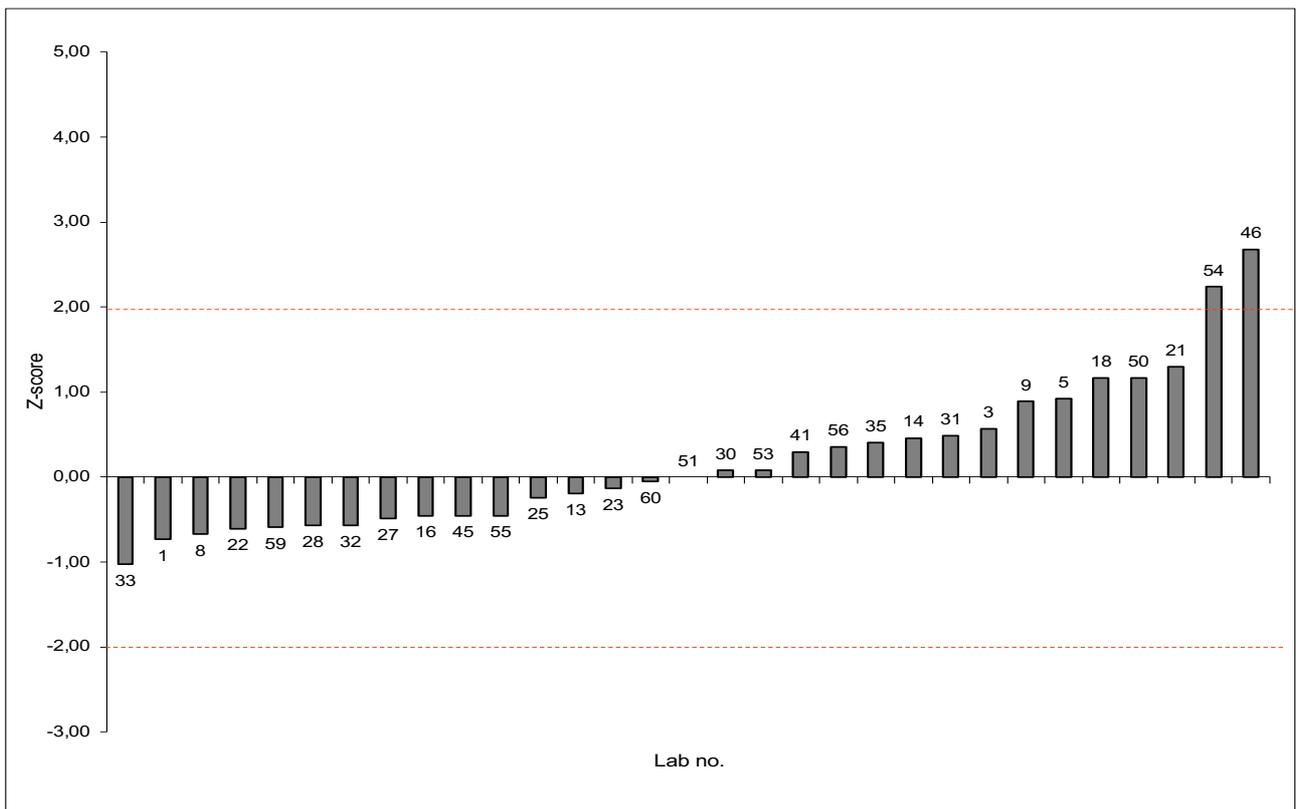
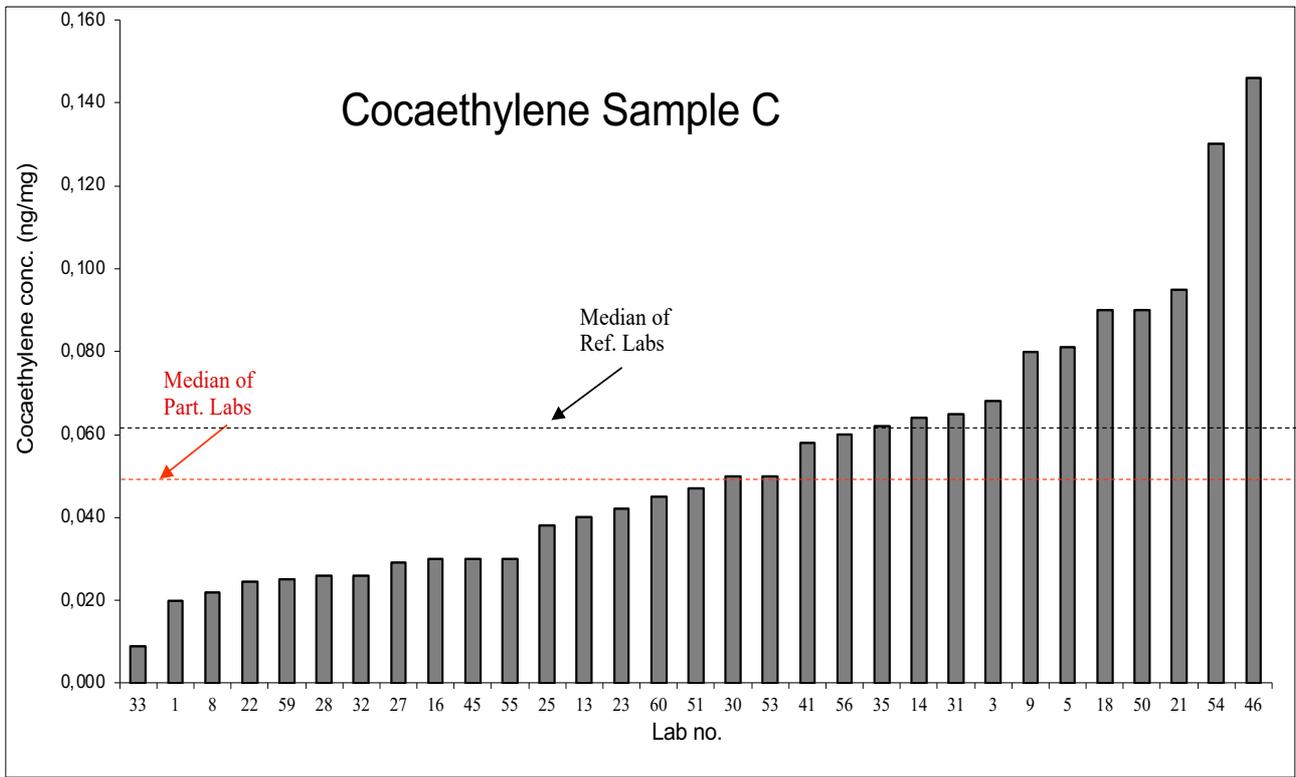
Average	2.11
SD	0.57
CV%	27.23
Median	2.20
Minimum	0.50
Quartile 25	1.70
Quartile 75	2.42
Maximum	3.39
Iqr	0.72



**COCAETHYLENE (Ethylbenzoylecgonine, EBE)**

Lab	EBE (ng/mg)	Z-score	Result
1	0.020	-0.73	Satisfactory
2	N		
3	0.068	0.57	Satisfactory
5	0.081	0.92	Satisfactory
7	N		
8	0.022	-0.68	Satisfactory
9	0.080	0.89	Satisfactory
12	N		
13	0.040	-0.19	Satisfactory
14	0.064	0.46	Satisfactory
15	<0.05		
16	0.030	-0.46	Satisfactory
18	0.090	1.16	Satisfactory
19	N		
21	0.095	1.30	Satisfactory
22	0.025	-0.61	Satisfactory
23	0.042	-0.14	Satisfactory
25	0.038	-0.24	Satisfactory
26	N		
27	0.029	-0.49	Satisfactory
28	0.026	-0.57	Satisfactory
30	0.050	0.08	Satisfactory
31	0.065	0.49	Satisfactory
32	0.026	-0.57	Satisfactory
33	0.009	-1.03	Satisfactory
34	N		
35	0.062	0.41	Satisfactory
36	N		
37	N		
39	N		
40	N		
41	0.058	0.30	Satisfactory
42	N		
44	P		
45	0.030	-0.46	Satisfactory
46	0.146	2.68	Questionable
48	N		
49	P		
50	0.090	1.16	Satisfactory
51	0.047	0.00	Satisfactory
53	0.050	0.08	Satisfactory
54	0.130	2.24	Questionable
55	0.030	-0.46	Satisfactory
56	0.060	0.35	Satisfactory
58	N		
59	0.025	-0.59	Satisfactory
60	0.045	-0.05	Satisfactory
61	N		

Average	0.054
SD	0.032
CV%	58.648
Median	0.047
Minimum	0.009
Quartile 25	0.030
Quartile 75	0.067
Maximum	0.146
Iqr	0.037

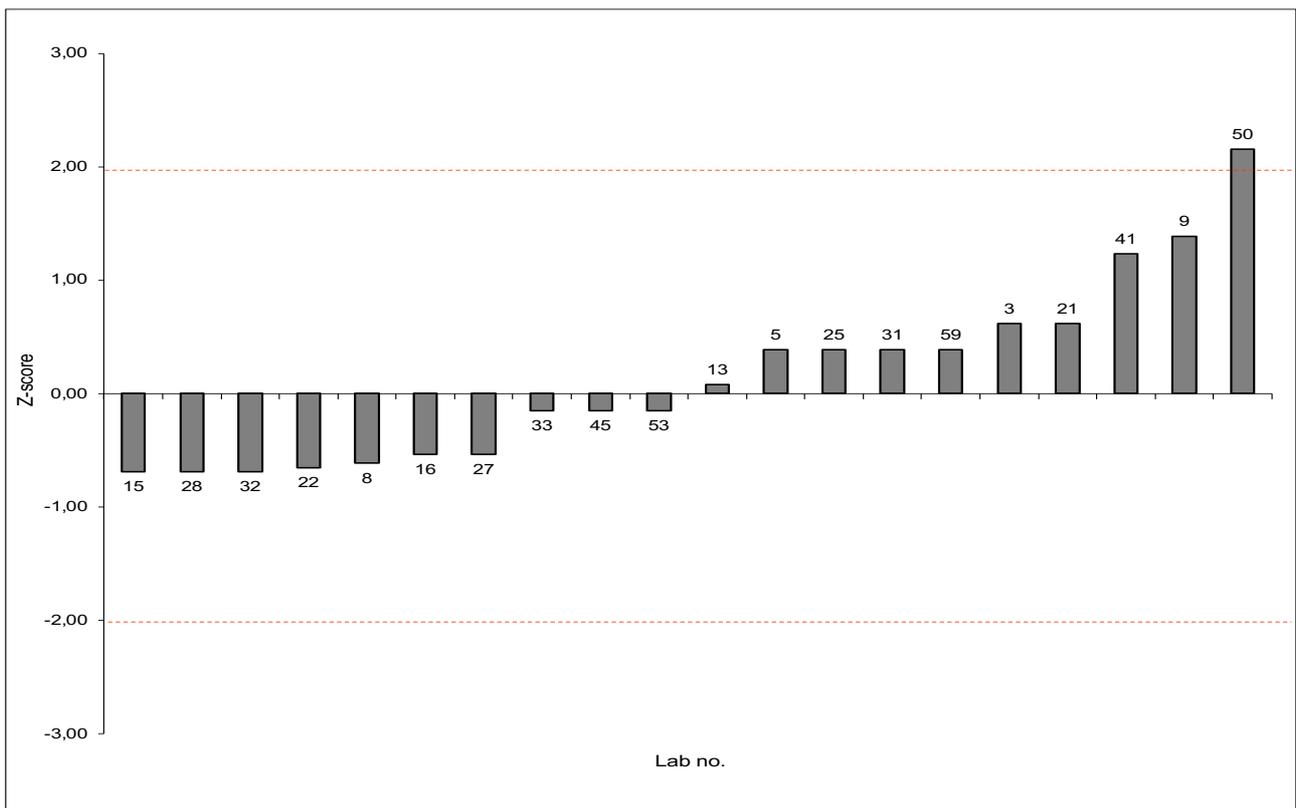
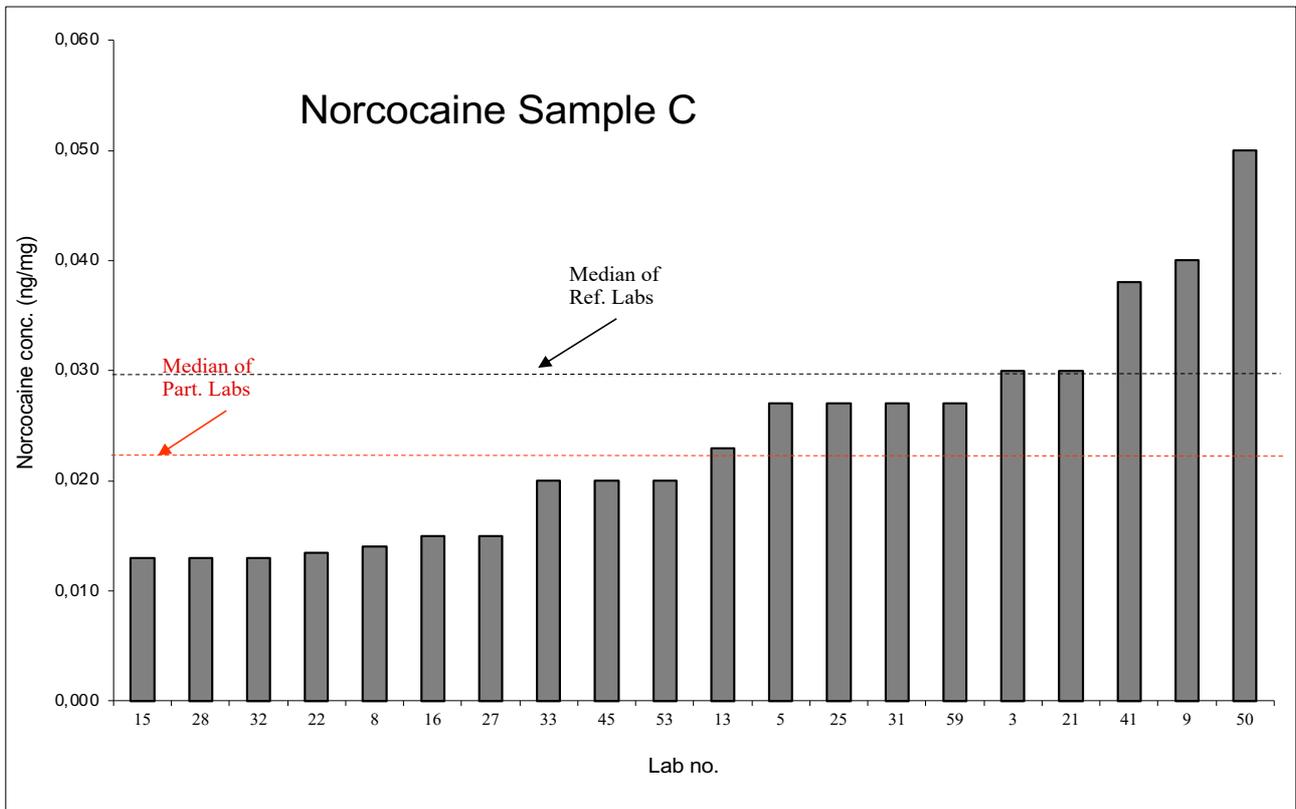


**NORCOCAINE (NorCOC)**

Lab	NorCOC (ng/mg)	Z-score	Result
1	N		
3	0.030	0.62	Satisfactory
5	0.027	0.38	Satisfactory
7	N		
8	0.014	-0.62	Satisfactory
9	0.040	1.38	Satisfactory
12	N		
13	0.023	0.08	Satisfactory
14	<0.02		
15	0.013	-0.69	Satisfactory
16	0.015	-0.54	Satisfactory
17	N		
21	0.030	0.62	Satisfactory
22	0.014	-0.65	Satisfactory
25	0.027	0.38	Satisfactory
27	0.015	-0.54	Satisfactory
28	0.013	-0.69	Satisfactory
31	0.027	0.38	Satisfactory
32	0.013	-0.69	Satisfactory
33	0.020	-0.15	Satisfactory
34	N		
35	<0.05		
36	N		
37	N		
40	N		
41	0.038	1.23	Satisfactory
42	N		
44	N		
45	0.020	-0.15	Satisfactory
46	N		
48	N		
49	N		
50	0.050	2.15	Questionable
53	0.020	-0.15	Satisfactory
56	N		
58	N		
59	0.027	0.38	Satisfactory
60	N		
61	N		

Average	0.024
SD	0.010
CV%	42.263
Median	0.022
Minimum	0.013
Quartile 25	0.015
Quartile 75	0.028
Maximum	0.050
Iqr	0.013

Norcocaine median concentration is below the cut-off proposed by SoHT (0.05 ng/mg)



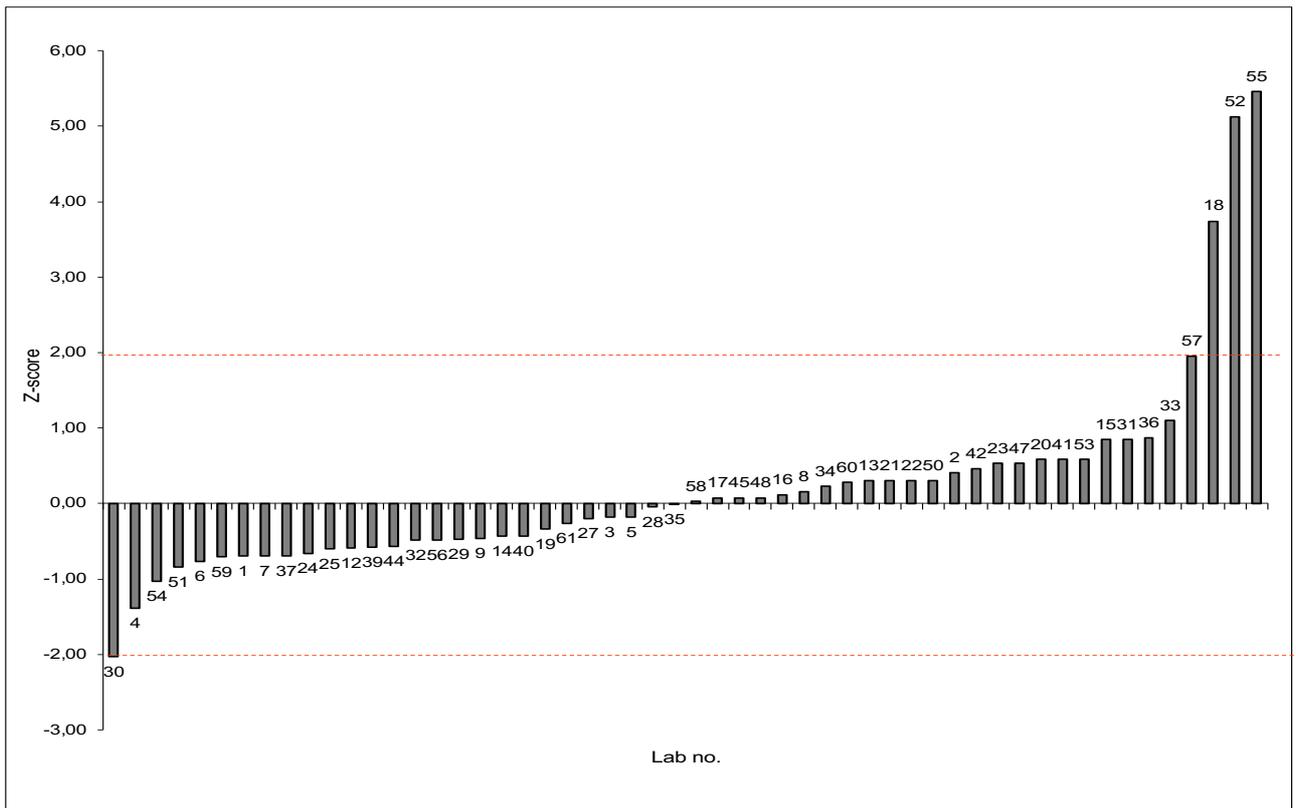
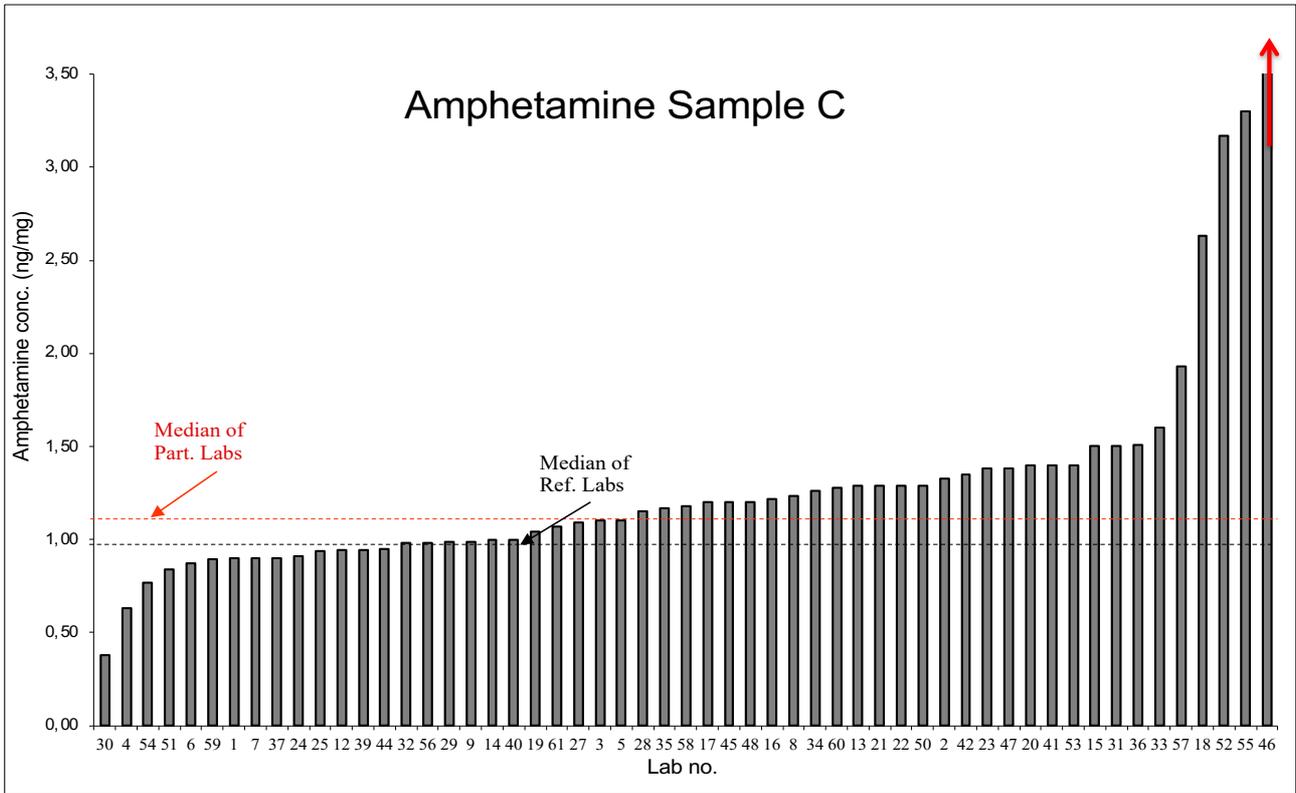
**AMPHETAMINE (AP)**

Lab	AP (ng/mg)	Z-score	Result
1	0.90	-0.69	Satisfactory
2	1.33	0.41	Satisfactory
3	1.10	-0.18	Satisfactory
4	0.63	-1.38	Satisfactory
5	1.10	-0.17	Satisfactory
6	0.87	-0.77	Satisfactory
7	0.90	-0.69	Satisfactory
8	1.23	0.16	Satisfactory
9	0.99	-0.46	Satisfactory
11	<0.05		
12	0.94	-0.59	Satisfactory
13	1.29	0.30	Satisfactory
14	1.00	-0.44	Satisfactory
15	1.50	0.85	Satisfactory
16	1.22	0.12	Satisfactory
17	1.20	0.08	Satisfactory
18	2.63	3.74	Unsatisfactory
19	1.04	-0.33	Satisfactory
20	1.40	0.59	Satisfactory
21	1.29	0.31	Satisfactory
22	1.29	0.31	Satisfactory
23	1.38	0.54	Satisfactory
24	0.91	-0.66	Satisfactory
25	0.94	-0.59	Satisfactory
26	P		
27	1.09	-0.21	Satisfactory
28	1.15	-0.04	Satisfactory
29	0.99	-0.47	Satisfactory
30	0.38	-2.03	Questionable
31	1.50	0.85	Satisfactory
32	0.98	-0.49	Satisfactory
33	1.60	1.10	Satisfactory
34	1.26	0.23	Satisfactory
35	1.17	-0.01	Satisfactory
36	1.51	0.87	Satisfactory
37	0.90	-0.69	Satisfactory
39	0.95	-0.57	Satisfactory
40	1.00	-0.44	Satisfactory
41	1.40	0.59	Satisfactory
42	1.35	0.46	Satisfactory
44	0.95	-0.56	Satisfactory
45	1.20	0.08	Satisfactory
46	4.67	Outlier	Unsatisfactory
47	1.38	0.54	Satisfactory
48	1.20	0.08	Satisfactory
50	1.29	0.31	Satisfactory
51	0.84	-0.85	Satisfactory
52	3.17	5.13	Unsatisfactory
53	1.40	0.59	Satisfactory
54	0.77	-1.03	Satisfactory
55	3.30	5.46	Unsatisfactory
56	0.98	-0.49	Satisfactory

Lab	AP (ng/mg)	Z-score	Result
57	1.93	1.95	Satisfactory
58	1.18	0.03	Satisfactory
59	0.90	-0.70	Satisfactory
60	1.28	0.28	Satisfactory
61	1.07	-0.26	Satisfactory

\*Lab 46 has not been included in the statistical study

Average	1.24
SD	0.51
CV%	40.87
Median	1.17
Minimum	0.38
Quartile 25	0.96
Quartile 75	1.35
Maximum	3.30
Iqr	0.39

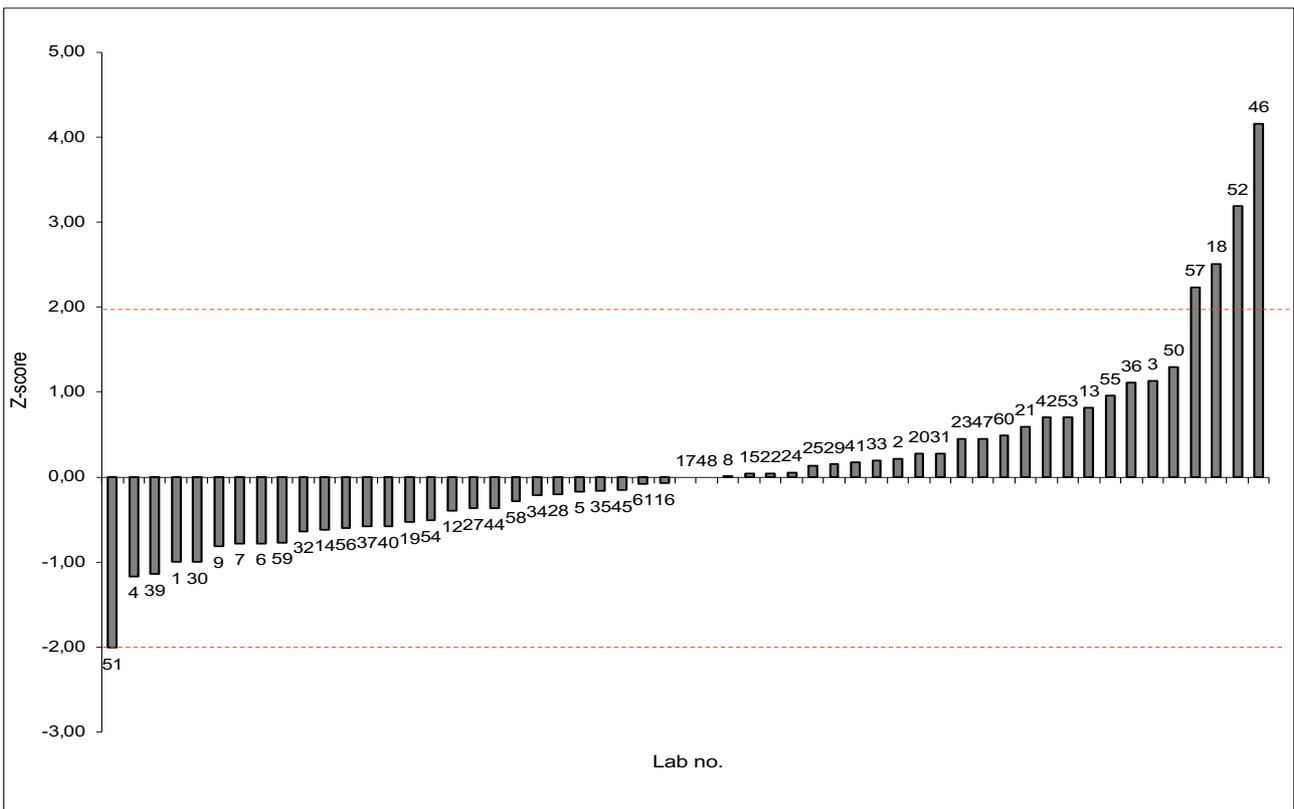
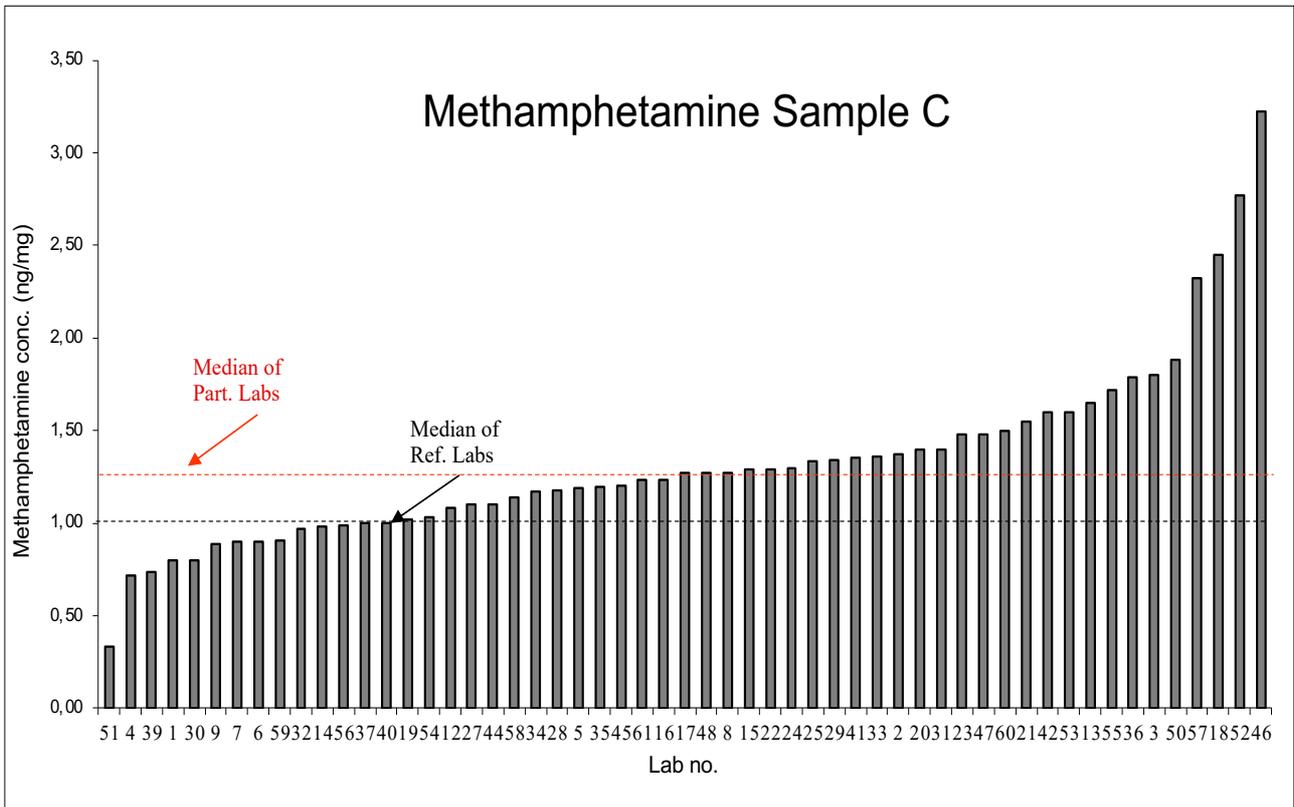


**METHAMPHETAMINE (MethAP)**

Lab	MethAP (ng/mg)	Z-score	Result
1	0.80	-1.00	Satisfactory
2	1.37	0.21	Satisfactory
3	1.80	1.13	Satisfactory
4	0.72	-1.17	Satisfactory
5	1.19	-0.17	Satisfactory
6	0.90	-0.79	Satisfactory
7	0.90	-0.79	Satisfactory
8	1.27	0.01	Satisfactory
9	0.89	-0.81	Satisfactory
11	<0.05		
12	1.08	-0.40	Satisfactory
13	1.65	0.81	Satisfactory
14	0.98	-0.62	Satisfactory
15	1.29	0.04	Satisfactory
16	1.24	-0.07	Satisfactory
17	1.27	0.00	Satisfactory
18	2.45	2.51	Questionable
19	1.02	-0.53	Satisfactory
20	1.40	0.28	Satisfactory
21	1.55	0.60	Satisfactory
22	1.29	0.04	Satisfactory
23	1.48	0.45	Satisfactory
24	1.30	0.06	Satisfactory
25	1.34	0.14	Satisfactory
26	N		
27	1.10	-0.36	Satisfactory
28	1.18	-0.20	Satisfactory
29	1.34	0.15	Satisfactory
30	0.80	-1.00	Satisfactory
31	1.40	0.28	Satisfactory
32	0.97	-0.64	Satisfactory
33	1.36	0.19	Satisfactory
34	1.17	-0.22	Satisfactory
35	1.20	-0.16	Satisfactory
36	1.79	1.11	Satisfactory
37	1.00	-0.57	Satisfactory
39	0.74	-1.14	Satisfactory
40	1.00	-0.57	Satisfactory
41	1.35	0.17	Satisfactory
42	1.60	0.70	Satisfactory
44	1.10	-0.36	Satisfactory
45	1.20	-0.15	Satisfactory
46	3.22	4.15	Unsatisfactory
47	1.48	0.45	Satisfactory
48	1.27	0.00	Satisfactory
50	1.88	1.30	Satisfactory
51	0.33	-2.00	Questionable
52	2.77	3.19	Unsatisfactory
53	1.60	0.70	Satisfactory
54	1.03	-0.51	Satisfactory
55	1.72	0.96	Satisfactory
56	0.99	-0.60	Satisfactory

Lab	MethAP (ng/mg)	Z-score	Result
57	2.32	2.23	Questionable
58	1.14	-0.28	Satisfactory
59	0.91	-0.77	Satisfactory
60	1.50	0.49	Satisfactory
61	1.23	-0.08	Satisfactory

Average	1.32
SD	0.49
CV%	37.12
Median	1.27
Minimum	0.33
Quartile 25	1.01
Quartile 75	1.48
Maximum	3.22
Iqr	0.47

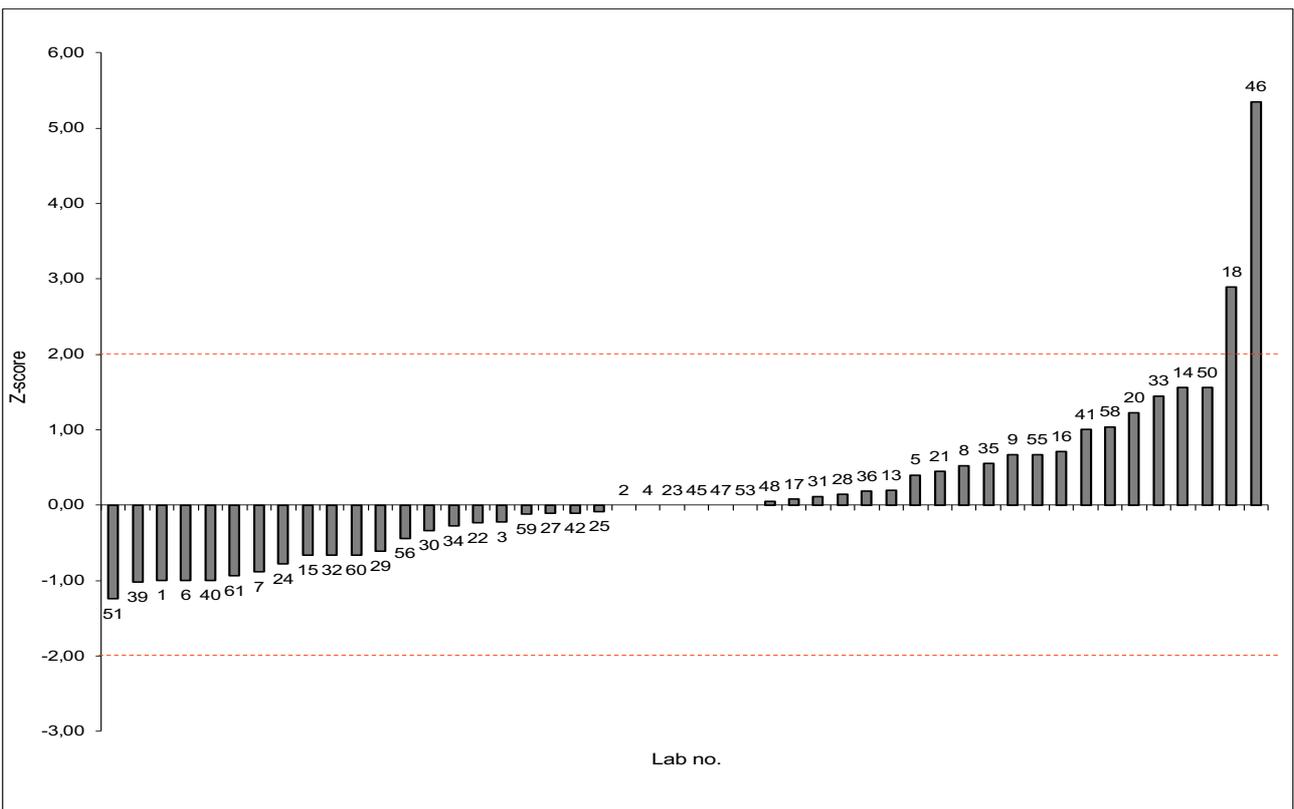
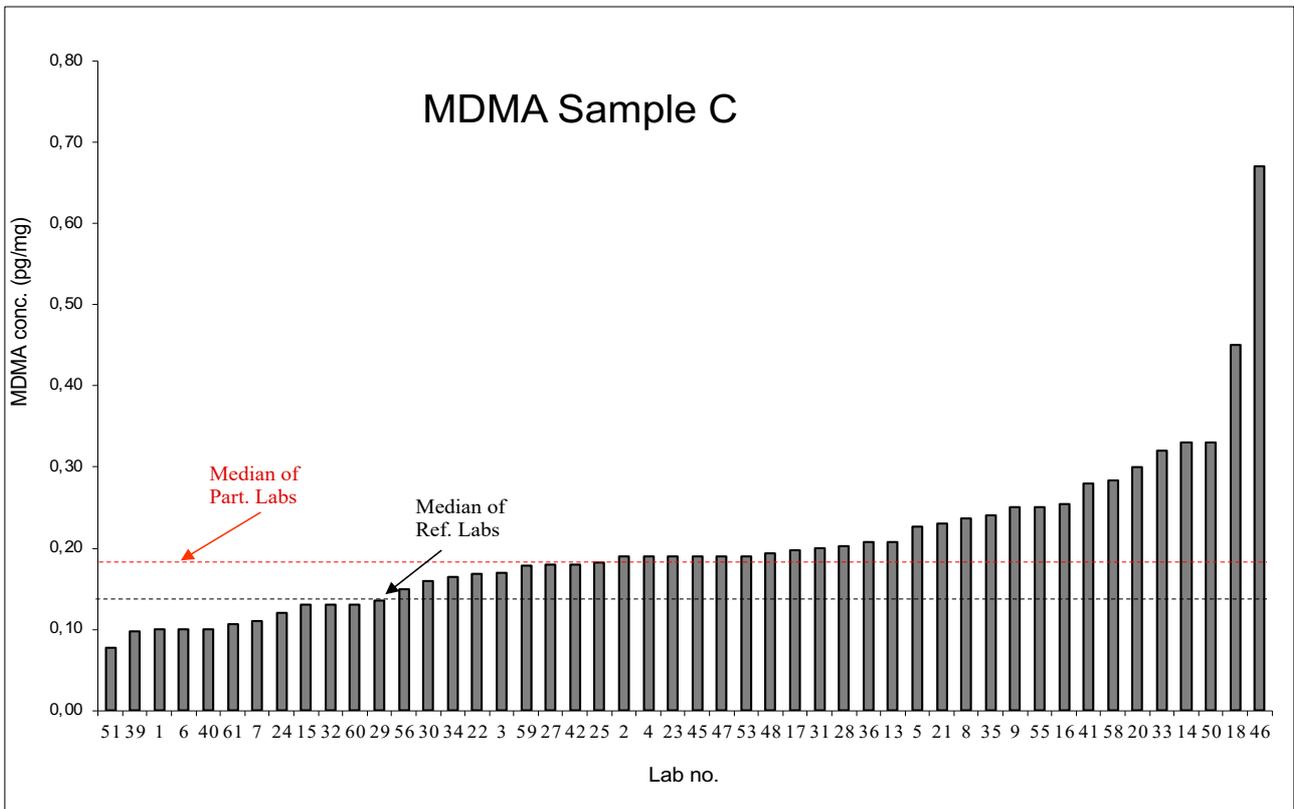


**3.4-METHYLENDIOXIMETHAMPHETAMINE (MDMA)**

Lab	MDMA (ng/mg)	Z-score	Result
1	0.10	-1.00	Satisfactory
2	0.19	0.00	Satisfactory
3	0.17	-0.22	Satisfactory
4	0.19	0.00	Satisfactory
5	0.23	0.40	Satisfactory
6	0.10	-1.00	Satisfactory
7	0.11	-0.89	Satisfactory
8	0.24	0.52	Satisfactory
9	0.25	0.67	Satisfactory
11	<0.05		
12	N		
13	0.21	0.20	Satisfactory
14	0.33	1.56	Satisfactory
15	0.13	-0.67	Satisfactory
16	0.25	0.71	Satisfactory
17	0.20	0.08	Satisfactory
18	0.45	2.89	Questionable
19	N		
20	0.30	1.22	Satisfactory
21	0.23	0.44	Satisfactory
22	0.17	-0.23	Satisfactory
23	0.19	0.00	Satisfactory
24	0.12	-0.78	Satisfactory
25	0.18	-0.09	Satisfactory
26	N		
27	0.18	-0.11	Satisfactory
28	0.20	0.14	Satisfactory
29	0.14	-0.61	Satisfactory
30	0.16	-0.33	Satisfactory
31	0.20	0.11	Satisfactory
32	0.13	-0.67	Satisfactory
33	0.32	1.44	Satisfactory
34	0.17	-0.28	Satisfactory
35	0.24	0.56	Satisfactory
36	0.21	0.19	Satisfactory
37	N		
39	0.10	-1.02	Satisfactory
40	0.10	-1.00	Satisfactory
41	0.28	1.00	Satisfactory
42	0.18	-0.11	Satisfactory
44	N		
45	0.19	0.00	Satisfactory
46	0.67	5.34	Unsatisfactory
47	0.19	0.00	Satisfactory
48	0.19	0.04	Satisfactory
50	0.33	1.56	Satisfactory
51	0.08	-1.24	Satisfactory
53	0.19	0.00	Satisfactory
54	N		
55	0.25	0.67	Satisfactory
56	0.15	-0.44	Satisfactory
57	N		

Lab	MDMA (ng/mg)	Z-score	Result
58	0.28	1.04	Satisfactory
59	0.18	-0.12	Satisfactory
60	0.13	-0.67	Satisfactory
61	0.11	-0.93	Satisfactory

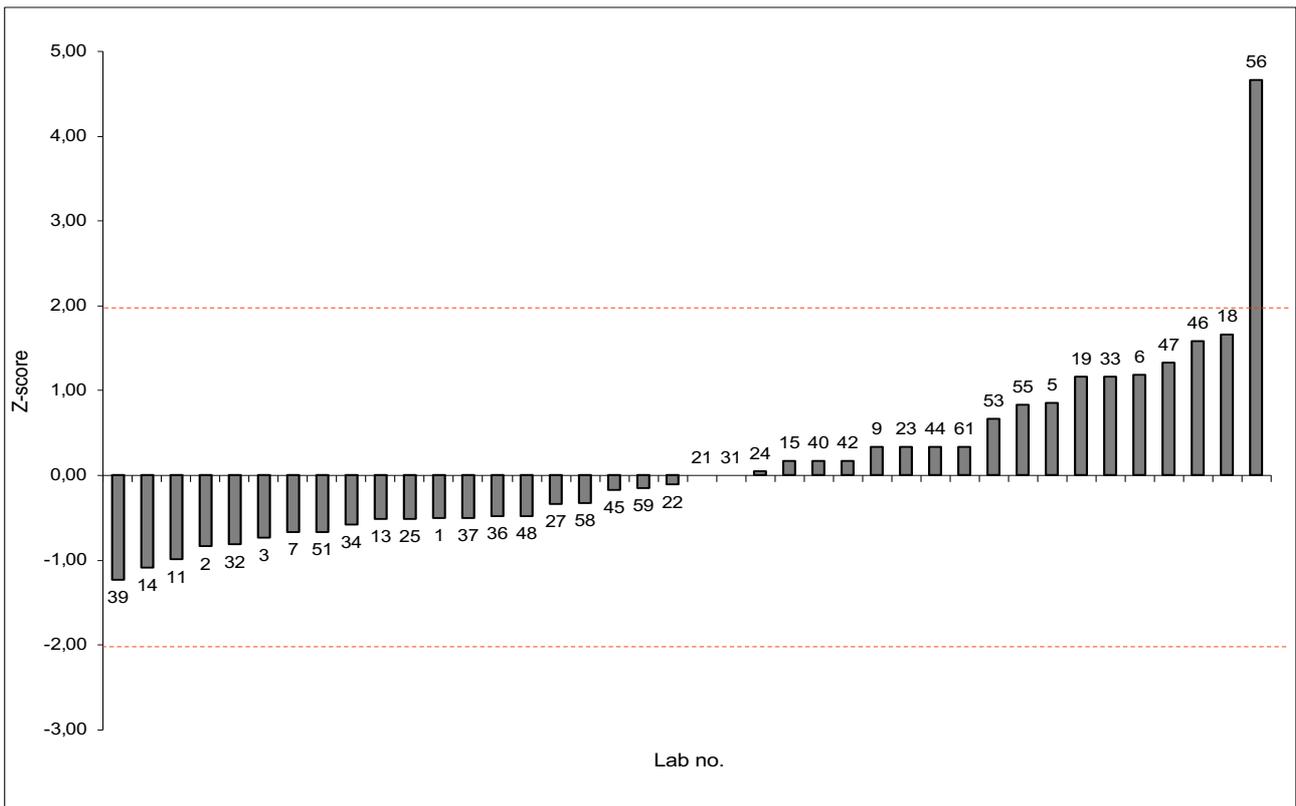
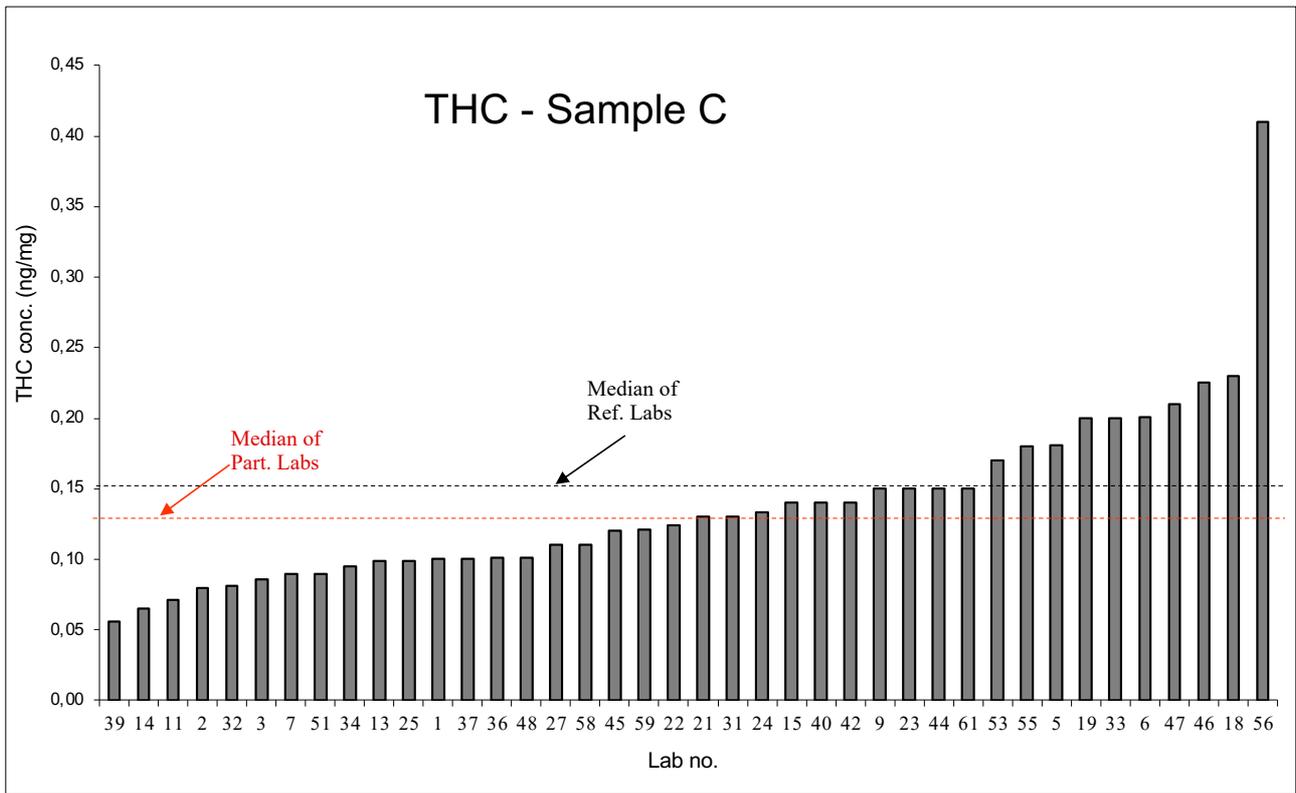
Average	0.21
SD	0.10
CV%	48.31
Median	0.19
Minimum	0.08
Quartile 25	0.15
Quartile 75	0.24
Maximum	0.67
Iqr	0.09



**$\Delta^9$ -TETRAHYDROCANNABINOL (THC)**

Lab	THC (ng/mg)	Z-score	Result
1	0.10	-0.50	Satisfactory
2	0.08	-0.83	Satisfactory
3	0.09	-0.73	Satisfactory
5	0.18	0.85	Satisfactory
6	0.20	1.18	Satisfactory
7	0.09	-0.67	Satisfactory
9	0.15	0.33	Satisfactory
11	0.07	-0.98	Satisfactory
13	0.10	-0.52	Satisfactory
14	0.07	-1.08	Satisfactory
15	0.14	0.17	Satisfactory
16	P		
18	0.23	1.67	Satisfactory
19	0.20	1.17	Satisfactory
20	N		
21	0.13	0.00	Satisfactory
22	0.12	-0.10	Satisfactory
23	0.15	0.33	Satisfactory
24	0.13	0.05	Satisfactory
25	0.10	-0.52	Satisfactory
26	P		
27	0.11	-0.33	Satisfactory
31	0.13	0.00	Satisfactory
32	0.08	-0.82	Satisfactory
33	0.20	1.17	Satisfactory
34	0.10	-0.58	Satisfactory
36	0.10	-0.48	Satisfactory
37	0.10	-0.50	Satisfactory
39	0.06	-1.23	Satisfactory
40	0.14	0.17	Satisfactory
42	0.14	0.17	Satisfactory
44	0.15	0.33	Satisfactory
45	0.12	-0.17	Satisfactory
46	0.23	1.58	Satisfactory
47	0.21	1.33	Satisfactory
48	0.10	-0.48	Satisfactory
51	0.09	-0.67	Satisfactory
52	N		
53	0.17	0.67	Satisfactory
54	N		
55	0.18	0.83	Satisfactory
56	0.41	4.67	Unsatisfactory
58	0.11	-0.32	Satisfactory
59	0.12	-0.15	Satisfactory
61	0.15	0.33	Satisfactory

Average	0.14
SD	0.06
CV%	45.19
Median	0.13
Minimum	0.06
Quartile 25	0.10
Quartile 75	0.16
Maximum	0.41
Iqr	0.06

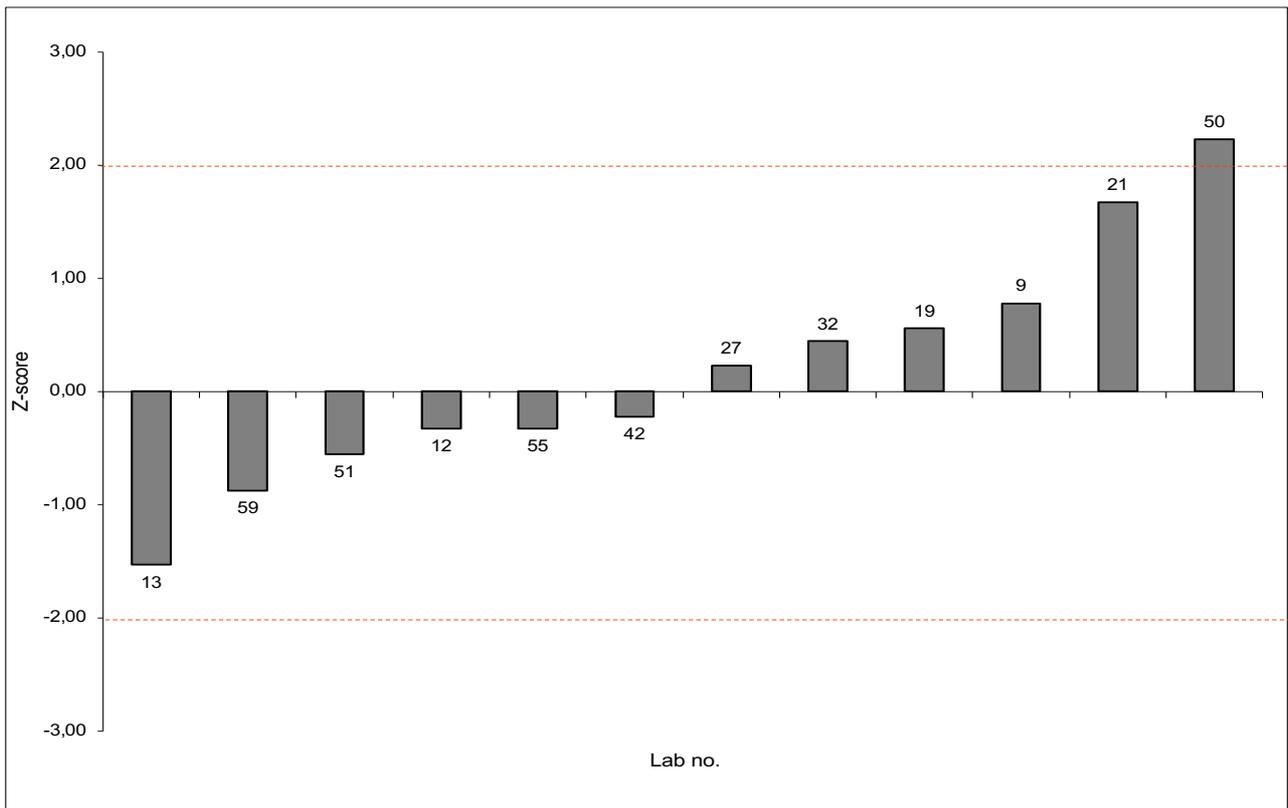
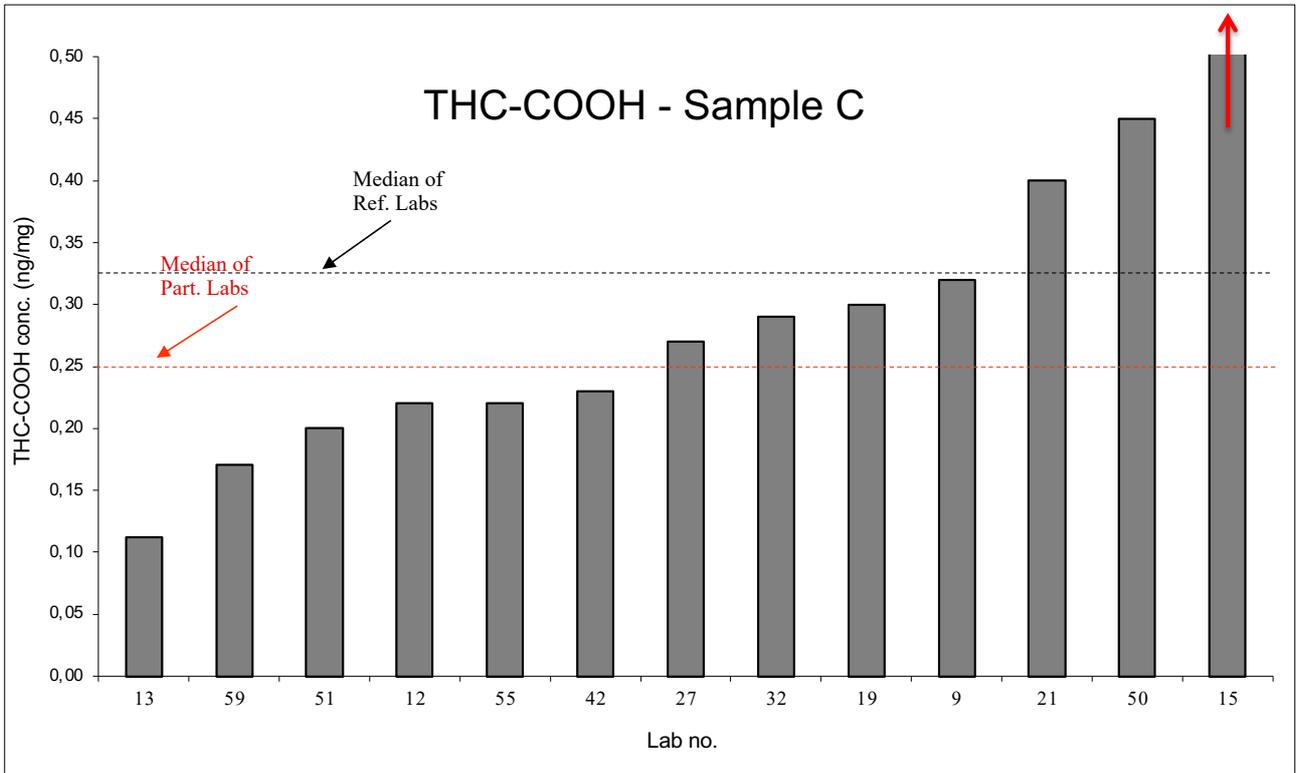


## 11-nor- $\Delta^9$ -TETRAHYDROCANNABINOL-9-CARBOXYLIC ACID (THC-COOH)

Lab	THC-COOH (pg/mg)	Z-score	Result
1	N		
7	N		
9	0.32	0.78	Satisfactory
12	0.22	-0.33	Satisfactory
13	0.11	-1.53	Satisfactory
15	1.50	Outlier	
18	N		
19	0.30	0.56	Satisfactory
21	0.40	1.67	Satisfactory
27	0.27	0.22	Satisfactory
31	N		
32	0.29	0.44	Satisfactory
37	N		
42	0.23	-0.22	Satisfactory
46	N		
50	0.45	2.22	Questionable
51	0.20	-0.56	Satisfactory
54	N		
55	0.22	-0.33	Satisfactory
58	N		
59	0.17	-0.88	Satisfactory

Average	0.27
SD	0.09
CV%	34.26
Median	0.25
Minimum	0.11
Quartile 25	0.22
Quartile 75	0.31
Maximum	0.45
Iqr	0.09

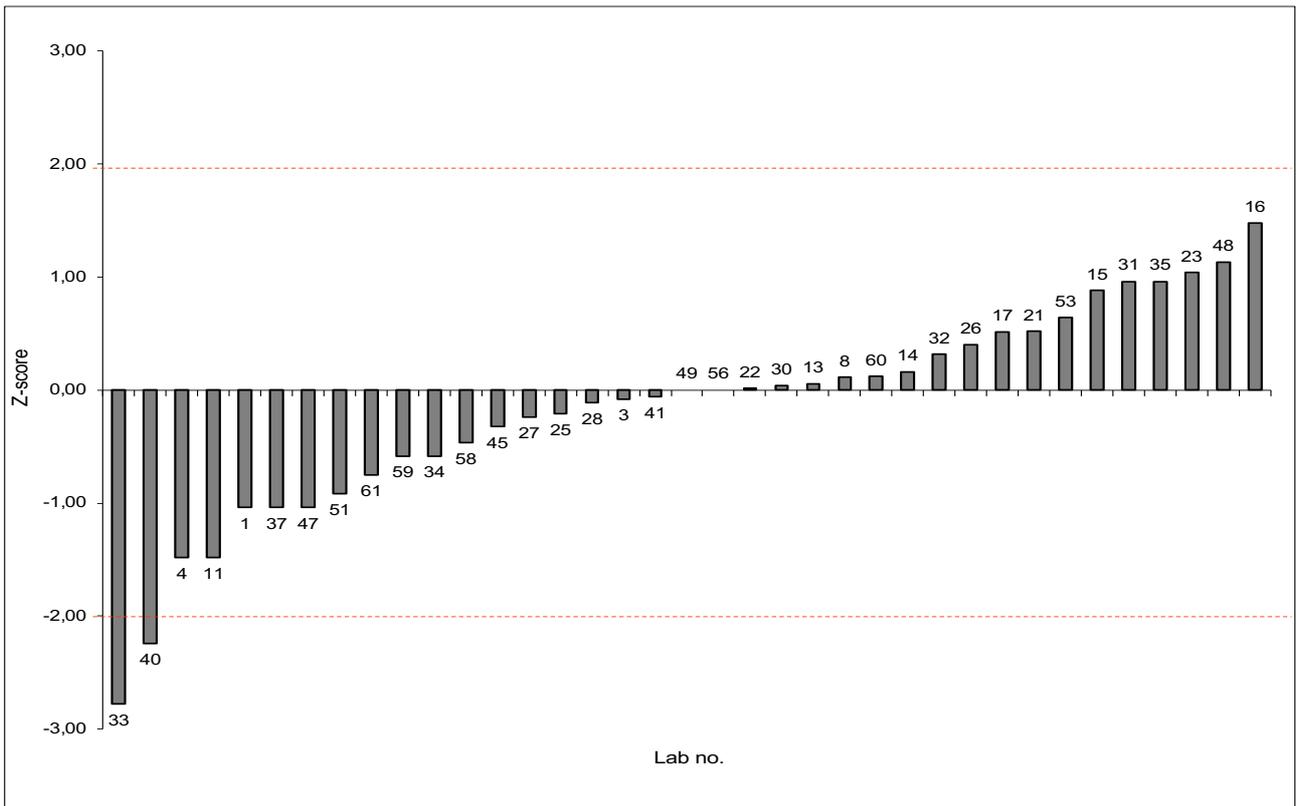
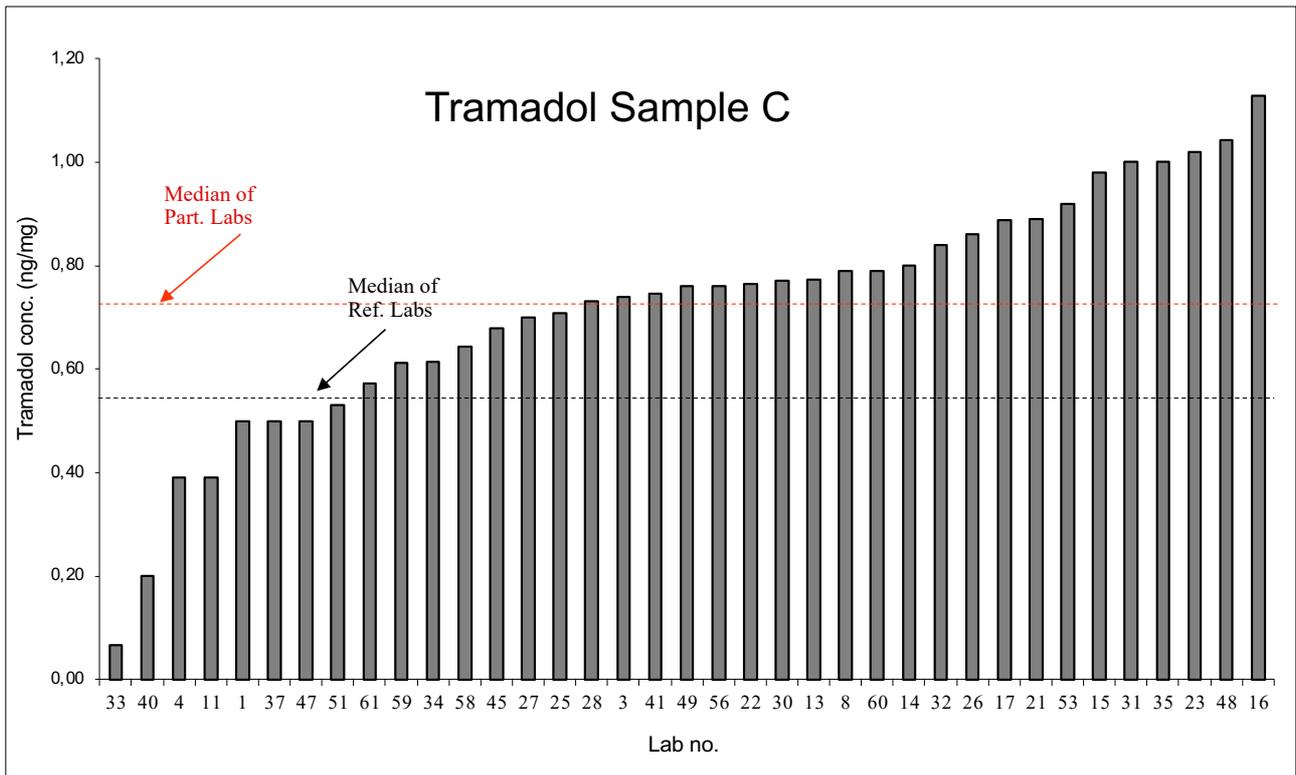
\* Lab 15 has not been included in the statistical study



**TRAMADOL**

Lab	Tramadol (ng/mg)	Z-score	Result
1	0.50	-1.04	Satisfactory
3	0.74	-0.08	Satisfactory
4	0.39	-1.48	Satisfactory
5	N		
8	0.79	0.12	Satisfactory
11	0.39	-1.48	Satisfactory
13	0.77	0.06	Satisfactory
14	0.80	0.16	Satisfactory
15	0.98	0.88	Satisfactory
16	1.13	1.48	Satisfactory
17	0.89	0.51	Satisfactory
18	N		
21	0.89	0.52	Satisfactory
22	0.76	0.02	Satisfactory
23	1.02	1.04	Satisfactory
25	0.71	-0.21	Satisfactory
26	0.86	0.40	Satisfactory
27	0.70	-0.24	Satisfactory
28	0.73	-0.11	Satisfactory
30	0.77	0.04	Satisfactory
31	1.00	0.96	Satisfactory
32	0.84	0.32	Satisfactory
33	0.07	-2.77	Questionable
34	0.61	-0.58	Satisfactory
35	1.00	0.96	Satisfactory
37	0.50	-1.04	Satisfactory
40	0.20	-2.24	Questionable
41	0.75	-0.06	Satisfactory
45	0.68	-0.32	Satisfactory
47	0.50	-1.04	Satisfactory
48	1.04	1.13	Satisfactory
49	0.76	0.00	Satisfactory
51	0.53	-0.92	Satisfactory
53	0.92	0.64	Satisfactory
56	0.76	0.00	Satisfactory
58	0.64	-0.47	Satisfactory
59	0.61	-0.59	Satisfactory
60	0.79	0.12	Satisfactory
61	0.57	-0.75	Satisfactory

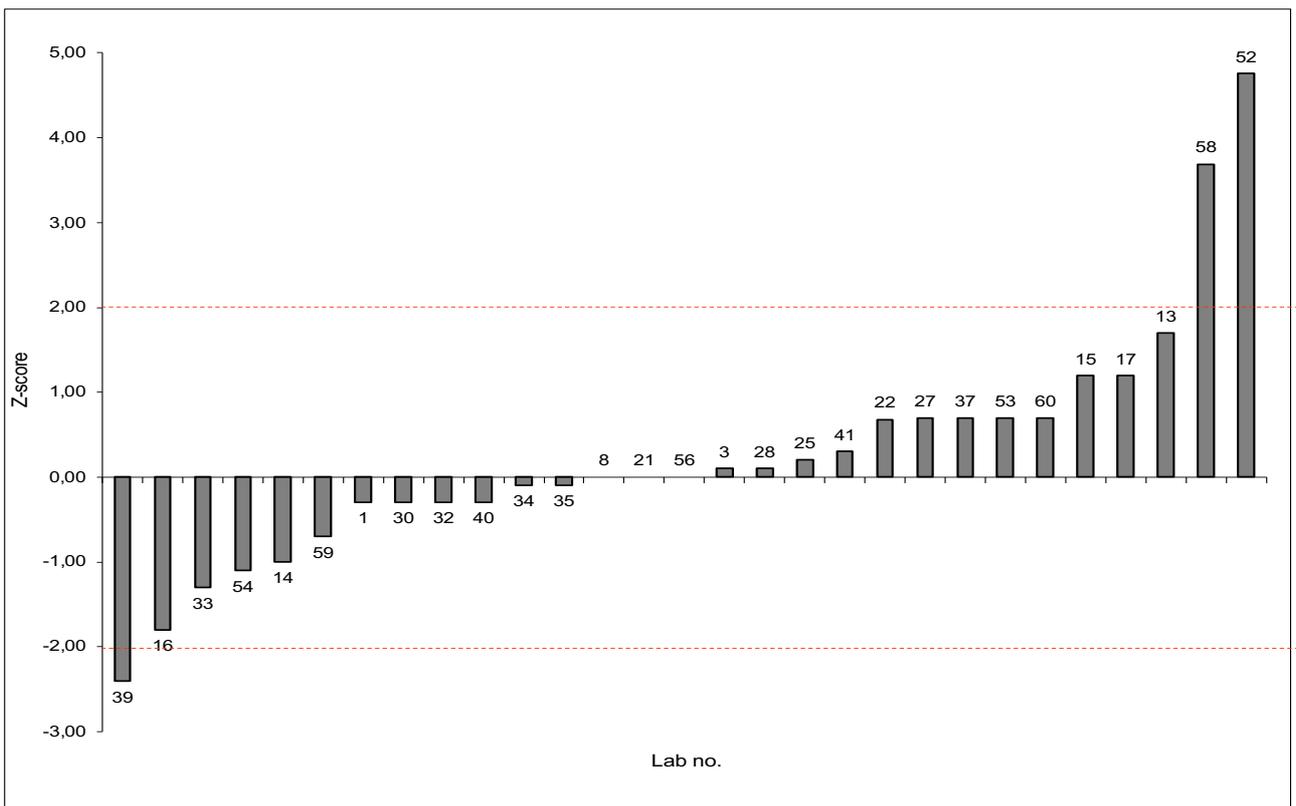
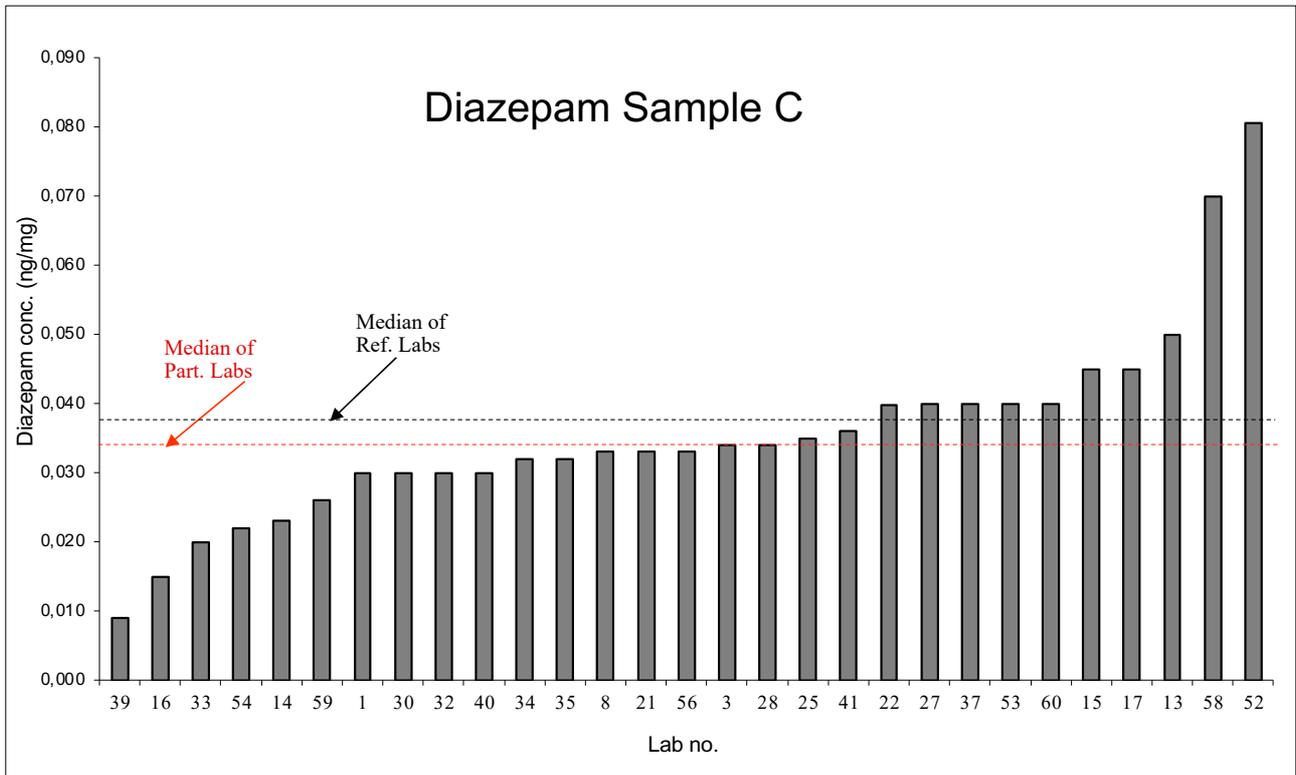
Average	0.72
SD	0.23
CV%	31.46
Median	0.76
Minimum	0.07
Quartile 25	0.61
Quartile 75	0.86
Maximum	1.13
Iqr	0.25



**DIAZEPAM**

Lab	Diazepam (ng/mg)	Z-score	Result
1	0.030	-0.30	Satisfactory
3	0.034	0.10	Satisfactory
5	N		
6	N		
8	0.033	0.00	Satisfactory
11	<0.05		
12	N		
13	0.050	1.70	Satisfactory
14	0.023	-1.00	Satisfactory
15	0.045	1.20	Satisfactory
16	0.015	-1.80	Satisfactory
17	0.045	1.20	Satisfactory
21	0.033	0.00	Satisfactory
22	0.040	0.68	Satisfactory
24	N		
25	0.035	0.20	Satisfactory
27	0.040	0.70	Satisfactory
28	0.034	0.10	Satisfactory
30	0.030	-0.30	Satisfactory
31	N		
32	0.030	-0.30	Satisfactory
33	0.020	-1.30	Satisfactory
34	0.032	-0.10	Satisfactory
35	0.032	-0.10	Satisfactory
37	0.040	0.70	Satisfactory
39	0.009	-2.40	Questionable
40	0.030	-0.30	Satisfactory
41	0.036	0.30	Satisfactory
44	N		
45	P		
48	P		
52	0.081	4.76	Unsatisfactory
53	0.040	0.70	Satisfactory
54	0.022	-1.10	Satisfactory
56	0.033	0.00	Satisfactory
58	0.070	3.69	Unsatisfactory
59	0.026	-0.70	Satisfactory
60	0.040	0.70	Satisfactory
61	N		

Average	0.035
SD	0.014
CV%	39.466
Median	0.033
Minimum	0.009
Quartile 25	0.030
Quartile 75	0.040
Maximum	0.081
Iqr	0.010



**NORDAZEPAM**

Lab	Nordazepam (ng/mg)	Z-score	Result
1	N		
3	0,009	-0,20	Satisfactory
5	N		
6	N		
8	0,015	1,00	Satisfactory
11	<0.05		
12	N		
13	0,015	1,00	Satisfactory
14	<0.01		
15	0,009	-0,20	Satisfactory
16	0,005	-1,00	Satisfactory
17	N		
21	0,090	Outlier	
22	0,028	3,62	Unsatisfactory
24	N		
25	0,011	0,20	Satisfactory
27	N		
28	N		
30	N		
31	N		
32	0,011	0,20	Satisfactory
33	0,007	-0,60	Satisfactory
34	N		
35	0,010	0,00	Satisfactory
37	N		
39	0,004	-1,20	Satisfactory
40	N		
41	N		
44	N		
45	N		
48	P		
52	0,055	Outlier	
53	0,020	2,00	Satisfactory
54	N		
56	N		
58	N		
59	0,012	0,40	Satisfactory
60	0,010	0,00	Satisfactory
60	0,010	0,00	

Average	0,012
SD	0,006
CV%	49,677
Median	0,010
Minimum	0,004
Quartile 25	0,009
Quartile 75	0,014
Maximum	0,028
Iqr	0,005

\*Outliers have not been included in the statistical study

