



## **Urine Drug Analysis Test No. 16-5671 Summary Report**

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This test was sent to 108 participants. A sample set contained three cases with individual scenarios, each containing one specimen bottle of human urine. Participants were requested to examine these items and report their findings. Data were returned from 88 participants (81% response rate) and are compiled into the following tables:

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This report contains the data received from the participants in this test. Since these participants are located in many countries around the world, and it is their option how the samples are to be used (e.g., training exercise, known or blind proficiency testing, research and development of new techniques, etc.), the results compiled in the Summary Report are not intended to be an overview of the quality of work performed in the profession and cannot be interpreted as such. The Summary Comments are included for the benefit of participants to assist with maintaining or enhancing the quality of their results. These comments are not intended to reflect the general state of the art within the profession.

Participant results are reported using a randomly assigned "WebCode". This code maintains participant's anonymity, provides linking of the various report sections, and will change with every report.

## Manufacturer's Information

The sample sets contained urine samples from three cases, each with an individual case scenario. Each case sample consisted of one specimen bottle containing 50mL of human urine. Participants were requested to analyze the urine samples and report the presence of any drugs/metabolites, any quantitative data obtained (including uncertainty), methods used, and any additional comments.

### SAMPLE PREPARATION-

The urine used in this test was from the same lot, which tested negative for a variety of common drugs and controlled substances prior to being obtained from a commercial supplier.

A stock solution of each drug was used to spike each item. Items were prepared at separate times using the following procedure, and different glassware was used for each item.

ITEM 1 (PREPARATION): Sample preparation consisted of adding the equivalent of 2% w/v sodium fluoride to a beaker containing human urine, which was then stirred. 50mL of the mixture was then transferred into each of the pre-labeled specimen bottles. All bottles were stored in a refrigerator immediately after production until the sample sets were prepared.

ITEMS 2, and 3 (PREPARATION): Sample preparation consisted of adding a predetermined amount of drug stock solution to a beaker containing human urine, where the equivalent of 2% w/v sodium fluoride was added and then stirred. 50mL of the mixture was then transferred into each of the pre-labeled specimen bottles. All bottles were stored in a refrigerator immediately after production until the sample sets were prepared.

SAMPLE SET ASSEMBLY: A sample set was created by packing Items 1, 2, and 3 together. Each sample set was placed into a Department of Transportation regulated shipping container and returned to the refrigerator until shipment.

### VERIFICATION-

All three of the laboratories that conducted predistribution analysis of the samples reported the expected drugs and/or a minimum of one expected metabolite per drug that were comparable to the preparation drug concentrations.

#### Item 1 Drug (Concentration)

No drugs/metabolites added

#### Item 2 Drug (Concentration)

Phencyclidine (250ng/mL)

#### Item 3 Drug (Concentration)

Oxazepam (650ng/mL)  
 Temazepam (120ng/mL)  
 Nordiazepam (150ng/mL)

Please note that the Preparation Value is the value used for calculations during the test preparation phase and may not necessarily represent the final concentration of the samples. It is advised to wait for the Grand Mean statistics available in the Summary and Individual Reports before evaluating performance.

## **Summary Comments**

This test was designed to allow participants to assess their proficiency in the examination for the presence and concentration of drugs and/or metabolites in urine. Each participant was supplied with one specimen bottle containing 50mL of human urine spiked with differing drugs and/or metabolites for each of three case scenarios. Participants were asked to report the presence of any drugs/metabolites, any quantitative data obtained (including uncertainty), methods used, and any additional comments. (Refer to the Manufacturer's Information for preparation details.)

Of the 87 participants who reported screening results for Item 1, 83 (95.4%) reported that no drugs/metabolites were detected. Four participants reported a response that fell within the "other" category. One participant reported the presence of benzodiazepines, one reported flunitrazepam, one reported caffeine, and one indicated that a drug was detected, but did not report any class or drug names. Of the 64 participants who reported confirmatory results for Item 1, 61 (95.3%) reported that no drugs/metabolites were detected. Two participants reported a response that fell within the "other" category. One participant reported the presence of caffeine and one reported dimethylphenobarbital.

Of the 85 participants who reported screening results for Item 2, 39 (45.9%) reported the presence of phencyclidine and 43 (50.6%) reported that no drugs/metabolites were detected. Four participants reported a response that fell within the "other" category. One participant reported the presence of ketamine, one reported caffeine, and two indicated that a drug was detected, but did not report any class or drug names. Of the 82 participants who reported confirmatory results for Item 2, 79 (96.3%) reported the presence of phencyclidine. Two participants reported that no drugs/metabolites were detected and one reported a response that fell within the "other" category. That one participant reported the presence of benzoylecgonine.

Of the 85 participants who reported screening results for Item 3, 74 (87.1%) participants reported the presence of benzodiazepines. Fourteen (16.5%) participants reported the presence of oxazepam, temazepam, and/or nordiazepam. Three reported a response that fell within the "other" category. One participant reported the presence of flunitrazepam and two indicated that a drug was detected, but did not report any class or drug names. Of the 81 participants who reported confirmatory results for Item 3, 72 (88.9%) reported the presence of oxazepam, 68 (84.0%) reported the presence of temazepam, and 76 (93.8%) reported the presence of nordiazepam. One participant reported a response that fell within the "other" category. That one participant reported the presence of diazepam.

One participant reported "GC/MS" as the confirmatory result for each of the three items.

For all three Items, immunoassay was the most common screening method and GC/MS was the most common confirmatory method utilized to analyze the samples.

If a participant indicated that the confirmatory quantitative result was a single determination, the conclusive quantitative result was included in the raw data table. Due to the small sample number of participants who reported quantitative information, no grand mean statistics were calculated or determinations regarding "extreme" data made.

# Screening Results - Item 1

TABLE 1A Item 1

**Item Scenario:**

Case 1: A 67 year old female was pulled over for speeding. The officer noted that the driver exhibited drowsiness, nervousness, and agitation. A urine sample was collected 1 1/2 hours after the incident occurred.

**Item Contents and Preparation Concentration:**      No drugs/metabolites added

Webcode	Screening Results
2ECT9B	No drugs/metabolites detected
2QJYY4	No drugs/metabolites detected
2WTZHL	No drugs/metabolites detected
3UJATH	No drugs/metabolites detected
46YF6C	No drugs/metabolites detected
49YRZC	No drugs/metabolites detected
6RK6R7	No drugs/metabolites detected
6VJGM7	No drugs/metabolites detected
6Y3BND	No drugs/metabolites detected
78FMG6	No drugs/metabolites detected
7EF7GE	No drugs/metabolites detected
7FMLNK	No drugs/metabolites detected
7M6UCG	No drugs/metabolites detected
7YLG4	No drugs/metabolites detected
848RB7	No drugs/metabolites detected
864AC8	No drugs/metabolites detected
8ETVH7	No drugs/metabolites detected

TABLE 1A Item 1

<b>Webcode</b>	<b>Screening Results</b>
8QMC88	No drugs/metabolites detected
96XCG3	No drugs/metabolites detected
9AWTTW	No drugs/metabolites detected
9BPJYB	No drugs/metabolites detected
9JY9DA	No drugs/metabolites detected
9KUQEB	No drugs/metabolites detected
9VCBY8	No drugs/metabolites detected
9WMBV2	No drugs/metabolites detected
ARTGXZ	No drugs/metabolites detected
BA4R2B	No drugs/metabolites detected
BJ8ZHV	No drugs/metabolites detected
BR2822	No drugs/metabolites detected
BTX8F	No drugs/metabolites detected
BWUA3F	No drugs/metabolites detected
D3YRED	No drugs/metabolites detected
DFLWNV	No drugs/metabolites detected
DJL9KV	No drugs/metabolites detected
DM7ZVX	No drugs/metabolites detected
E2HXD4	No drugs/metabolites detected
FGTYMY	No drugs/metabolites detected

TABLE 1A Item 1

<b>Webcode</b>	<b>Screening Results</b>
GDPM66	No drugs/metabolites detected
GFTHN8	No drugs/metabolites detected
GFU9UP	Caffeine
HCMCL7	No drugs/metabolites detected
HFPDNP	No drugs/metabolites detected
HGH4U4	No drugs/metabolites detected
J64AGP	No drugs/metabolites detected
JULPWT	Drug(s) detected [No class and/or drug names reported]
K7TUML	No drugs/metabolites detected
KXF7LR	No drugs/metabolites detected
LD9ZWX	No drugs/metabolites detected
M6CKKY	No drugs/metabolites detected
MWW23K	No drugs/metabolites detected
MXQR9Y	No drugs/metabolites detected
PU4R7N	No drugs/metabolites detected
PZQE2U	No drugs/metabolites detected
Q4KVQT	No drugs/metabolites detected
QC32PK	No drugs/metabolites detected
QRT9KX	No drugs/metabolites detected

TABLE 1A Item 1

<b>Webcode</b>	<b>Screening Results</b>
QT6ZDE	No drugs/metabolites detected
QUYQJT	No drugs/metabolites detected
RA786L	No drugs/metabolites detected
REP39D	No drugs/metabolites detected
RL4B8U	No drugs/metabolites detected
RUTWDT	No drugs/metabolites detected
T2ARTM	No drugs/metabolites detected
T7MD3U	No drugs/metabolites detected
TEJ82D	No drugs/metabolites detected
TX8THU	No drugs/metabolites detected
U4CP4F	No drugs/metabolites detected
U7GHVT	No drugs/metabolites detected
UCMBQN	No drugs/metabolites detected
UDF8DW	No drugs/metabolites detected
UPCBGQ	No drugs/metabolites detected
VGXP8M	No drugs/metabolites detected
VLRH6N	FLUNITRAZEPAM
VWPLAH	No drugs/metabolites detected
W929VN	No drugs/metabolites detected
WJF72R	No drugs/metabolites detected

TABLE 1A Item 1

<b>Webcode</b>	<b>Screening Results</b>
XBJQQD	No drugs/metabolites detected
XH4Q8Q	No drugs/metabolites detected
XKABWC	No drugs/metabolites detected
Y8ZVNL	Benzodiazepines
YJCK2G	No drugs/metabolites detected
YQR4LG	No drugs/metabolites detected
Z3FP6G	No drugs/metabolites detected
Z8AJ3H	No drugs/metabolites detected
ZHVNAH	No drugs/metabolites detected
ZLU2W8	No drugs/metabolites detected
ZMNR3L	No drugs/metabolites detected

<b>Response Summary for Item 1</b>		<b>Participants: 87</b>
No drugs/metabolites detected:	83	
Other:	4	
Totals may add up to more than the total number of participants because participants can report multiple classes/drug names.		



# Confirmatory Results - Item 1

*What drugs/metabolites were detected in Item 1?*

TABLE 1B Item 1

**Item Scenario:**

Case 1: A 67 year old female was pulled over for speeding. The officer noted that the driver exhibited drowsiness, nervousness, and agitation. A urine sample was collected 1 1/2 hours after the incident occurred.

**Item Contents and Preparation Concentration:** No drugs/metabolites added

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
2ECT9B	No drugs/metabolites detected				
2QJYY4	Dimethylphenobarbital	✓			
2WTZHL	No drugs/metabolites detected				
3UJATH	No drugs/metabolites detected				
6Y3BND	No drugs/metabolites detected				
78FMG6	No drugs/metabolites detected				
7EF7GE	No drugs/metabolites detected				
7FMLNK	No drugs/metabolites detected				
7M6UCG	No drugs/metabolites detected				
7YLG4	No drugs/metabolites detected				
864AC8	No drugs/metabolites detected				
8ETVH7	No drugs/metabolites detected				
96XCG3	No drugs/metabolites detected				
9AWTTW	No drugs/metabolites detected				
9BPJYB	No drugs/metabolites detected				

TABLE 1B Item 1

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
9JY9DA	No drugs/metabolites detected				
9KUQEB	No drugs/metabolites detected				
9VCBY8	No drugs/metabolites detected				
9WMBV2	No drugs/metabolites detected				
ARTGXZ	No drugs/metabolites detected				
BA4R2B	No drugs/metabolites detected				
BTVX8F	No drugs/metabolites detected				
DFLWNV	Caffeine	✓			
E2HXD4	No drugs/metabolites detected				
FGTYMY	No drugs/metabolites detected				
GDPM66	No drugs/metabolites detected				
GEYRHT	No drugs/metabolites detected				
GFTHN8	No drugs/metabolites detected				
GFU9UP	GC/MS	✓			
HCMCL7	No drugs/metabolites detected				
HFPDNP	No drugs/metabolites detected				
HGH4U4	No drugs/metabolites detected				
K7TUML	No drugs/metabolites detected				
KXF7LR	No drugs/metabolites detected				

TABLE 1B Item 1

<b>Webcode</b>	<b>Analyte Reported</b>	<b>Qualitative Only</b>	<b>Reported Concentration</b>	<b>Uncertainty</b>	<b>Units</b>
LD9ZWX	No drugs/metabolites detected				
M6CKKY	No drugs/metabolites detected				
MWW23K	No drugs/metabolites detected				
MXQR9Y	No drugs/metabolites detected				
PZQE2U	No drugs/metabolites detected				
Q4KVQT	No drugs/metabolites detected				
QC32PK	No drugs/metabolites detected				
QUYQJT	No drugs/metabolites detected				
RA786L	No drugs/metabolites detected				
REP39D	No drugs/metabolites detected				
RL4B8U	No drugs/metabolites detected				
RUTWDT	No drugs/metabolites detected				
T7MD3U	No drugs/metabolites detected				
TEJ82D	No drugs/metabolites detected				
U4CP4F	No drugs/metabolites detected				
U7GHVT	No drugs/metabolites detected				
UCMBQN	No drugs/metabolites detected				
UPCBGQ	No drugs/metabolites detected				
VGXP8M	No drugs/metabolites detected				

TABLE 1B Item 1

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
VWPLAH	No drugs/metabolites detected				
W929VN	No drugs/metabolites detected				
XBJQQD	No drugs/metabolites detected				
Y8ZVNL	No drugs/metabolites detected				
YJCK2G	No drugs/metabolites detected				
YQR4LG	No drugs/metabolites detected				
Z3FP6G	No drugs/metabolites detected				
Z8AJ3H	No drugs/metabolites detected				
ZHVNAH	No drugs/metabolites detected				
ZLU2W8	No drugs/metabolites detected				
ZMNR3L	No drugs/metabolites detected				

Response Summary for Item 1		Participants: 64
No drugs/metabolites detected:	61	
Other:	2	
Totals may add up to more than the total number of participants because participants can report multiple drugs/metabolites.		

# **Raw Data - Item 1**

*List of raw data determinations in ng/mL.*

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TABLE 1C Item 1

## **Item 1 Raw Data - No drugs/metabolites added**

<b>Webcode</b>	<b>Raw Data (ng/mL)</b>	<b>Raw Data (ng/mL)</b>	<b>Participant Mean</b>
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No raw data reported.

## Reporting Procedures - Item 1

*If quantitative analysis was performed, the reported concentrations are:*

TABLE 1D Item 1

Webcode	Quantitative Reporting Procedures	
96XCG3	A single determination.	
GEYRHT	A single determination.	

  

Response Summary for Item 1	Participants: 2
A single determination:	2 (100.0%)
The mean of duplicate/several determinations:	0 (0.0%)
Other:	0 (0.0%)

## Method of Analysis - Item 1

TABLE 1E Item 1

Webcode	Method	Screening	Confirmatory	Quantitation
2ECT9B	Immunoassay	✓		
	GC/MS	✓		
2QJYY4	Immunoassay	✓		
	GC/MS		✓	
2WTZHL	Immunoassay	✓		
	GC/MS		✓	
3UJATH	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
46YF6C	Immunoassay	✓		
	GC/MS	✓		
49YRZC	Immunoassay	✓		
6RK6R7	Immunoassay	✓		
	GC/MS	✓		
6VJGM7	GC/MS		✓	
6Y3BND	Immunoassay	✓		
	GC/MS		✓	
78FMG6	GC/MS	✓	✓	
	Milti Drug Test Cup	✓		
7EF7GE	Immunoassay	✓		
	GC/MS		✓	
7FMLNK	Immunoassay	✓		
	GC/MS	✓	✓	
7M6UCG	Immunoassay	✓		
	GC/MS		✓	
7YLG4	Immunoassay	✓		
	GC/MS	✓	✓	
848RB7	Immunoassay	✓		
864AC8	Immunoassay	✓		
	GC/MS		✓	
8ETVH7	Immunoassay	✓		
	GC/MS		✓	
8QMC88	LC/MS/MS	✓		
	Rapid Chromatographic Immunoassay	✓		

TABLE 1E Item 1

Webcode	Method	Screening	Confirmatory	Quantitation
96XCG3	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS	✓	✓	
9AWTTW	Immunoassay	✓		
	GC/MS	✓		
9BPJYB	Immunoassay	✓		
	GC/MS	✓	✓	
9JY9DA	Immunoassay	✓		
	GC/MS		✓	
9KUUQB	Immunoassay	✓		
	GC/MS		✓	
9VCBY8	Immunoassay	✓		
	GC/MS	✓		
9WMBV2	Immunoassay	✓		
	GC/MS	✓		
ARTGXZ	Immunoassay	✓		
	GC/MS		✓	
BA4R2B	Immunoassay	✓		
	GC/MS		✓	
BJ8ZHV	Immunoassay	✓		
	GC/MS	✓		
	LC/MS/MS	✓		
	GC-FID	✓		
BR2822	Immunoassay	✓		
BTX8F	Immunoassay	✓		
	LC-TOFMS	✓		
BWUA3F	Immunoassay	✓		
	GC/MS	✓		
D3YRED	Immunoassay	✓		
DFLWNV	Immunoassay	✓		
	LC/MS/MS		✓	
DM7ZVX	Immunoassay	✓		
	GC/MS	✓		
	NPD	✓		
E2HXD4	Immunoassay	✓		
	GC/MS	✓	✓	
	LC/MS/MS	✓		



TABLE 1E Item 1

Webcode	Method	Screening	Confirmatory	Quantitation
FGTYMY	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
GDPM66	Immunoassay	✓		
	GC/MS		✓	
GEYRHT	GC/MS		✓	
GFTHN8	Immunoassay	✓		
	GC/MS		✓	
GFU9UP	GC/MS	✓		
HCMCL7	Immunoassay	✓		
	GC/MS		✓	
HFPDNP	EIA , Immunocromatography	✓		
	LC/MS/MS	✓		
HGH4U4	Immunoassay	✓		
	GC/MS		✓	
J64AGP	Immunoassay	✓		
JULPWT	LC/MS	✓		
	LC/MS/MS		✓	
K7TUML	GC/MS	✓	✓	
KXF7LR	Immunoassay	✓		
	GC/MS	✓		
LD9ZWX	Immunoassay	✓		
	GC/MS	✓	✓	
M6CKKY	Immunoassay	✓		
	GC/MS	✓	✓	
MWW23K	Immunoassay	✓		
	GC/MS		✓	
MXQR9Y	Immunoassay	✓		
	GC/MS		✓	
PU4R7N	Immunoassay	✓		
PZQE2U	Immunoassay	✓		
	GC/MS		✓	
Q4KVQT	Immunoassay	✓		
	GC/MS	✓		
QC32PK	Immunoassay	✓		
	GC/MS	✓	✓	

TABLE 1E Item 1

Webcode	Method	Screening	Confirmatory	Quantitation
QRT9KX	Immunoassay	✓		
QT6ZDE	Immunoassay	✓		
QUYQJT	Immunoassay GC/MS	✓		✓
RA786L	LC/MS/MS	✓		✓
REP39D	Immunoassay GC/MS	✓ ✓		✓
RL4B8U	Immunoassay GC/MS	✓		✓
RUTWDT	Immunoassay GC/MS	✓		✓
T7MD3U	Immunoassay GC/MS	✓		✓
TEJ82D	Immunoassay GC/MS LC/MS/MS	✓ ✓ ✓		
TX8THU	Immunoassay GC/MS	✓ ✓		
U4CP4F	Immunoassay GC/MS	✓		✓
U7GHVT	Immunoassay GC/MS	✓		✓
UCMBQN	Immunoassay GC/MS	✓		✓
UDF8DW	Immunoassay	✓		
UPCBGQ	Immunoassay GC/MS	✓		✓
VGXP8M	Immunoassay GC/MS	✓		✓
VLRH6N	Immunoassay	✓		
VWPLAH	Immunoassay GC/MS	✓		✓
W929VN	Immunoassay GC/MS LC/MS/MS	✓		✓ ✓
WJF72R	Immunoassay	✓		

TABLE 1E Item 1

Webcode	Method	Screening	Confirmatory	Quantitation
XBJQQD	GC/MS	✓	✓	
XH4Q8Q	Immunoassay	✓		
XKABWC	Immunoassay	✓		
Y8ZVNL	Immunoassay	✓		
	GC/MS	✓		
	LC/MS/MS		✓	
YJCK2G	Immunoassay	✓		
	GC/MS	✓		
YQR4LG	Immunoassay	✓		
	GC/MS		✓	
Z3FP6G	Immunoassay	✓		
	GC/MS		✓	
Z8AJ3H	Immunoassay	✓		
	GC/MS		✓	
ZHVNAH	Immunoassay	✓		
	GC/MS		✓	
ZLU2W8	Immunoassay	✓		
	GC/MS		✓	
ZMNR3L	Immunoassay	✓		
	GC/MS	✓	✓	

Response Summary for Item 1			Participants: 86		
	Screening	Confirmatory	Quantitation		
<b>Immunoassay:</b>	76	0	0		
<b>GC/MS:</b>	28	51	0		
<b>LC/MS:</b>	1	0	0		
<b>LC/MS/MS:</b>	7	8	0		
<b>Other:</b>	6	0	0		

# Additional Comments for Item 1

TABLE 1F Item 1

Webcode	Item 1 - Comments
2QJYY4	NOTE1 : Based on the clinical discription of the case, we decided to perform the acid - base extraction and screening on the sample. NOTE2: The screening with GCMS showed the presence of Dimethylphenobarbital.
2WTZHL	Mepivacaine was the internal standard used for all confirmatory analysis.
6VJGM7	ETAZOLAM WAS USED AS INTERNAL STANDART
6Y3BND	internal standard: mepivacaine
78FMG6	This sample created some confusion because it has a cloudy sade very similar to item 3 and we throw negative result
7EF7GE	Internal standards - mepivacaine & nalorphine
7FMLNK	Methaqualone used as internal standard for pH basic liquid/liquid extraction for GC-MS. Barbital used as internal standard for pH acidic/neutral liquid/liquid extraction for GC-MS.
8QMC88	Alere iCassette (THC) test device was used to screen for THC, referred to in 1-4 [Table 1E- Method of Analysis-Item 1] as rapid chromatographic immunoassay.
96XCG3	IN ITEM 1 CAFFEINA WAS DETECTED (GC/MS -LC/MS/MS)
9BPJYB	internal standard: SKF-525A
ARTGXZ	internal standard : codeine d3
BA4R2B	Internal standards - mepivacaine and nalorphine
BWUA3F	LCMS-QToF screening performed on this sample. GCMS - ISTD = prazepam. IMMUNOASSAY - standard kit positive and negative controls used. QToF - ISTD includes 12 deuterated analytes and prazepam (inc D3Sertraline, D5Methamphetamine).
GDPM66	Internal standard: mepivacaine
GEYRHT	NO COLD CHAIN
GFTHN8	URTBA ISTD: Mepivacaine & Nalorphine. BENZO ISTD: Mepivacaine.
HFPDNP	In our Lab we performed EIA e Inmunocromatography, and LC/MS/MS for screening purpose . The screening not include zaleplon.
HGH4U4	Internal standard used: Mepivacaine.
LD9ZWX	internal standard=mepivacaine
M6CKKY	Internal Standard: Mepivacaine
MWW23K	Internal Standard - Mepivacaine
PU4R7N	Confirmation not performed as screening results were negative.
QC32PK	Internal standards used were barbital and SKF-525A.
QUYQJT	confirmation testing performed on 11-7-2016
RUTWDT	Mepivacaine and Nalorphine used as internal standard
U4CP4F	Mepivacaine used for Internal Standard

TABLE 1F Item 1

Webcode	Item 1 - Comments
U7GHVT	mepivacaine used as GCMS internal standard
UCMBQN	Mepivacaine, Nalorphine
VGXP8M	GCMS Internal Standard is mepivacaine (50 µg/L) and nalorphine (25 µg/L)
VLRH6N	Our lab uses an Enzymatic Assay (for Ethyl Alcohol) and ELISA (for 10 drug Panel) using Immunalysis Kits. Our lab does not report a specific analyte as positive (+) or negative (-). Calibrator Levels: ELISA Panels (ng/ml): Amphetamine - 50, Benzodiazepines - 50, Benzoylcegonine - 50, Flunitrazepam - 25, Ketamine - 10, Methamphetamine - 50, Opiates - 25, Oxycodone - 10, Delta-9-THC - 25, Zolpidem - 10. Enzymatic Assay (g/dl): Ethyl Alcohol - 0.01.
VWPLAH	Adiphenine was found , but is not reported as it is not listed in section 1308 of Title 21 of the CFR.
W929VN	Mepivacaine was used as a retention time internal standard.
Z8AJ3H	internal standards: mepivacaine, nalorphine
ZHVNAH	internal standard: mepivacaine, nalorphine
ZLU2W8	GC/MS Internal standard: Mepivacaine
ZMNR3L	internal standard used was mepivacaine

## Screening Results - Item 2

TABLE 2A Item 2

**Item Scenario:**

Case 2: A 42 year old male was arrested for assault. The arresting officer noted that the suspect appeared to be impaired and exhibited slurred speech, amnesia, and paranoia. A urine sample was collected 1 hour after the arrest.

**Item Contents and Preparation Concentration:**      Phencyclidine (250ng/mL)

Webcode	Screening Results
2ECT9B	PCP
2QJYY4	Phencyclidine (PCP)
2WTZHL	No drugs/metabolites detected
3UJATH	No drugs/metabolites detected
46YF6C	Phencyclidine
49YRZC	Phencyclidine
6RK6R7	Phencyclidine
6Y3BND	No drugs/metabolites detected
78FMG6	PCP (Phencyclidine)
7EF7GE	No drugs/metabolites detected
7FMLNK	Phencyclidine
7M6UCG	No drugs/metabolites detected
7YLG4	No drugs/metabolites detected
848RB7	Phencyclidine
864AC8	Phencyclidine
8ETVH7	Phencyclidine (PCP)

TABLE 2A Item 2

<b>Webcode</b>	<b>Screening Results</b>
8QMC88	PCP (Phencyclidine)
96XCG3	PHENCYCLIDINE (PCP)
9AWTTW	Phencyclidine
9BPJYB	phencyclidine
9JY9DA	No drugs/metabolites detected
9KUQEB	Phencyclidine
9VCBY8	No drugs/metabolites detected
ARTGXZ	phencyclidine
BA4R2B	No drugs/metabolites detected
BJ8ZHV	phencyclidine
BR2822	Phencyclidine
BTX8F	phencyclidine
BWUA3F	PCP (phencyclidine)
D3YRED	Screened positive for Phencyclidine
DFLWNV	PCP group
DJL9KV	Drug(s) detected [No class and/or drug names reported]
DM7ZVX	PCP
E2HXD4	No drugs/metabolites detected
FGTYMY	phencyclidine

TABLE 2A Item 2

Webcode	Screening Results
GDPM66	No drugs/metabolites detected
GFTHN8	No drugs/metabolites detected
GFU9UP	Caffeine, Phencyclidine
HCMCL7	No drugs/metabolites detected
HFPDNP	PCP
HGH4U4	No drugs/metabolites detected
J64AGP	No drugs/metabolites detected
JULPWT	Drug(s) detected [No class and/or drug names reported]
K7TUML	phencyclidine
KXF7LR	Phencyclidine
LD9ZWX	No drugs/metabolites detected
M6CKKY	phencyclidine
MWW23K	No drugs/metabolites detected
MXQR9Y	No drugs/metabolites detected
PU4R7N	Phencyclidine (PCP)
PZQE2U	No drugs/metabolites detected
Q4KVQT	No drugs/metabolites detected
QC32PK	phencyclidine
QRT9KX	Phencyclidine



TABLE 2A Item 2

Webcode	Screening Results
QT6ZDE	No drugs/metabolites detected
QUYQJT	No drugs/metabolites detected
RA786L	No drugs/metabolites detected
REP39D	No drugs/metabolites detected
RL4B8U	No drugs/metabolites detected
RUTWDT	No drugs/metabolites detected
T2ARTM	Phencyclidine (PCP)
T7MD3U	No drugs/metabolites detected
TEJ82D	Phencyclidine
TX8THU	Phencyclidine
U4CP4F	No drugs/metabolites detected
U7GHVT	No drugs/metabolites detected
UCMBQN	No drugs/metabolites detected
UDF8DW	Phencyclidine
UPCBGQ	No drugs/metabolites detected
VGXP8M	No drugs/metabolites detected
VLRH6N	KETAMINE
VWPLAH	No drugs/metabolites detected
W929VN	No drugs/metabolites detected

TABLE 2A Item 2

<b>Webcode</b>	<b>Screening Results</b>
WJF72R	No drugs/metabolites detected
XBJQQD	PCP
XH4Q8Q	No drugs/metabolites detected
XKABWC	No drugs/metabolites detected
Y8ZVNL	Phencyclidine
YJCK2G	Phencyclidine
YQR4LG	No drugs/metabolites detected
Z3FP6G	No drugs/metabolites detected
Z8AJ3H	No drugs/metabolites detected
ZHVNAH	No drugs/metabolites detected
ZLU2W8	No drugs/metabolites detected
ZMNR3L	No drugs/metabolites detected

<b>Response Summary for Item 2</b>		<b>Participants: 85</b>
Phencyclidine:	39	
Other:	4	
No drugs/metabolites detected:	43	
<p><b>Totals may add up to more than the total number of participants because participants can report multiple drugs/analytes.</b></p>		

## Confirmatory Results - Item 2

*What drugs/metabolites were detected in Item 2?*

TABLE 2B Item 2

**Item Scenario:**

Case 2: A 42 year old male was arrested for assault. The arresting officer noted that the suspect appeared to be impaired and exhibited slurred speech, amnesia, and paranoia. A urine sample was collected 1 hour after the arrest.

**Item Contents and Preparation Concentration:** Phencyclidine (250ng/mL)

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
2ECT9B	Phencyclidine	✓			
2QJYY4	Phencyclidine (PCP)	✓			
2WTZHL	Phencyclidine	✓			
3UJATH	Phencyclidine	✓			
46YF6C	Phencyclidine	✓			
49YRZC	Phencyclidine	✓			
6RK6R7	Phencyclidine	✓			
6VJGM7	Phencyclidine	✓			
6Y3BND	Phencyclidine	✓			
78FMG6	Phencyclidine	✓			
7EF7GE	Phencyclidine	✓			
7FMLNK	Phencyclidine	✓			
7M6UCG	Phencyclidine	✓			
7YLG4	Phencyclidine (PCP)	✓			
864AC8	Phencyclidine	✓			
8ETVH7	Phencyclidine	✓			

TABLE 2B Item 2

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
8QMC88	PCP (Phencyclidine)	✓			
96XCG3	PENCYCLIDINE	✓			
9AWTTW	Phencyclidine	✓			
9BPJYB	Phencyclidine	✓			
9JY9DA	Phencyclidine	✓			
9KUQEB	Phencyclidine	✓			
9VCBY8	Phencyclidine	✓			
9WMBV2	Phencyclidine (Fenciclidina)	✓			
ARTGXZ	Phencyclidine	✓			
BA4R2B	Phencyclidine	✓			
BJ8ZHV	Phencyclidine	✓			
BR2822	Phencyclidine	✓			
BTVX8F	Phencyclidine	✓			
BWUA3F	Phencyclidine	✓			
D3YRED	Phencyclidine	✓			
DFLWNV	Phencyclidine	✓			
DJL9KV	Phencyclidine	✓			
DM7ZVX	PCP		266		ng/mL
E2HXD4	Phencyclidine	✓			
FGTYMY	Phencyclidine	✓			
GDPM66	Phencyclidine	✓			

TABLE 2B Item 2

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
GEYRHT	PHENCYCLINDINE	✓			
	BENZOILECGONINA	✓			
GFTHN8	Phencyclidine	✓			
GFU9UP	GC/MS	✓			
HCMCL7	Phencyclidine	✓			
HFPDNP	PCP(phencyclidine)	✓			
HGH4U4	Phencyclidine	✓			
JULPWT	PCP-PHENACYCLIDINE	✓			
K7TUML	phencyclidine	✓			
KXF7LR	Phencyclidine	✓			
LD9ZWX	Phencyclidine	✓			
M6CKKY	Phencyclidine	✓			
MWW23K	Phencyclidine (PCP)	✓			
MXQR9Y	Phencyclidine	✓			
PU4R7N	Phencyclidine	✓			
PZQE2U	Phencyclidine	✓			
Q4KVQT	Phencyclidine (PCP)	✓			
QC32PK	Phencyclidine	✓			
QRT9KX	Phencyclidine	✓			
QUYQJT	Phencyclidine (PCP)	✓			
RA786L	No drugs/metabolites detected				

TABLE 2B Item 2

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
REP39D	Phencyclidine	✓			
RL4B8U	Phencyclidine	✓			
RUTWDT	Phencyclidine	✓			
T2ARTM	Phencyclidine		279.3	30.7	ng/mL
T7MD3U	Phencyclidine	✓			
TEJ82D	Phencyclidine	✓			
TX8THU	Phencyclidine	✓			
U4CP4F	Phencyclidine	✓			
U7GHVT	Phencyclidine	✓			
UCMBQN	Phencyclidine	✓			
UDF8DW	Phencyclidine	✓			
UPCBGQ	Phencyclidine	✓			
VGXP8M	Phencyclidine	✓			
VWPLAH	Phencyclidine	✓			
W929VN	Phencyclidine	✓			
XBJQQD	PCP	✓			
XKABWC	No drugs/metabolites detected				
Y8ZVNL	Phencyclidine	✓			
YJCK2G	Phencyclidine	✓			
YQR4LG	Phencyclidine	✓			
Z3FP6G	Phencyclidine	✓			

TABLE 2B Item 2

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
Z8AJ3H	Phencyclidine (PCP)	✓			
ZHVNAH	Phencyclidine	✓			
ZLU2W8	Phencyclidine	✓			
ZMNR3L	Phencyclidine	✓			

Response Summary for Item 2		Participants: 82
Phencyclidine:	79	
No drugs/metabolites detected:	2	
Other:	1	
Totals may add up to more than the total number of participants because participants can report multiple drugs/metabolites.		

## **Raw Data - Item 2**

*List of raw data determinations in ng/mL.*

TABLE 2C Item 2

**Item 2 Raw Data - Phencyclidine**  
**Preparation concentration: (250ng/mL)**

<b>Webcode</b>	<b>Raw Data (ng/mL)</b>	<b>Participant Mean</b>
DM7ZVX	266.200	266.200
T2ARTM	279.310	279.310

### **Statistical Analysis for Item 2- Phencyclidine**

Please note statistical analysis has not been provided due to the low number of raw data responses.



## Reporting Procedures - Item 2

*If quantitative analysis was performed, the reported concentrations are:*

TABLE 2D Item 2

Webcode	Quantitative Reporting Procedures
96XCG3	A single determination.
DM7ZVX	A single determination.
GEYRHT	A single determination.
T2ARTM	A single determination.

Response Summary for Item 2	Participants: 4
A single determination:	4 (100.0%)
The mean of duplicate/several determinations:	0 (0.0%)
Other:	0 (0.0%)

## Method of Analysis - Item 2

TABLE 2E Item 2

Webcode	Method	Screening	Confirmatory	Quantitation
2ECT9B	Immunoassay	✓		
	GC/MS		✓	
2QJYY4	Immunoassay	✓		
	GC/MS		✓	
2WTZHL	Immunoassay	✓		
	GC/MS		✓	
3UJATH	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
46YF6C	Immunoassay	✓		
	GC/MS	✓	✓	
49YRZC	Immunoassay	✓		
	GC/MS		✓	
6RK6R7	Immunoassay	✓		
	GC/MS		✓	
6VJGM7	GC/MS		✓	
6Y3BND	Immunoassay	✓		
	GC/MS		✓	
78FMG6	GC/MS	✓	✓	
	Multi Drug Test Cup	✓		
7EF7GE	Immunoassay	✓		
	GC/MS		✓	
7FMLNK	Immunoassay	✓		
	GC/MS	✓	✓	
7M6UCG	Immunoassay	✓		
	GC/MS		✓	
7YLG4	Immunoassay	✓		
	GC/MS	✓	✓	
848RB7	Immunoassay	✓		
864AC8	Immunoassay	✓		
	GC/MS		✓	

TABLE 2E Item 2

Webcode	Method	Screening	Confirmatory	Quantitation
8ETVH7	Immunoassay	✓		
	GC/MS		✓	
8QMC88	LC/MS/MS	✓		
	Rapid Chromatographic Immunoassay	✓		
	GC/MS		✓	
96XCG3	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS	✓	✓	
9AWTTW	Immunoassay	✓		
	GC/MS	✓	✓	
9BPJYB	Immunoassay	✓		
	GC/MS		✓	
9JY9DA	Immunoassay	✓		
	GC/MS		✓	
9KUQEB	Immunoassay	✓		
	GC/MS		✓	
9VCBY8	GC/MS	✓	✓	
	Immunoassay	✓		
9WMBV2	LC/MS	✓		
	LC/MS/MS		✓	
ARTGXZ	Immunoassay	✓		
	GC/MS		✓	
BA4R2B	Immunoassay	✓		
	GC/MS		✓	
BJ8ZHV	Immunoassay	✓		
	GC/MS		✓	
BR2822	Immunoassay	✓		
	GC/MS		✓	
BTVX8F	Immunoassay	✓		
	LC-TOFMS	✓	✓	
BWUA3F	Immunoassay	✓		
	GC/MS	✓		

TABLE 2E Item 2

Webcode	Method	Screening	Confirmatory	Quantitation
D3YRED	Immunoassay	✓		
	GC/MS		✓	
DFLWNV	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS	✓	✓	
DJL9KV	GC/MS	✓	✓	
	LC/MS/MS	✓	✓	
DM7ZVX	Immunoassay	✓		
	GC/MS	✓	✓	
	NPD	✓		
E2HXD4	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS	✓		
FGTYMY	Immunoassay	✓		
	GC/MS		✓	
GDPM66	Immunoassay	✓		
	GC/MS		✓	
GEYRHT	GC/MS		✓	
GFTHN8	Immunoassay	✓		
	GC/MS		✓	
GFU9UP	GC/MS	✓		
HCMCL7	Immunoassay	✓		
	GC/MS		✓	
HFPDNP	Immunocromatography, EIA	✓		
	LC/MS/MS		✓	
HGH4U4	Immunoassay	✓		
	GC/MS		✓	
J64AGP	Immunoassay	✓		
JULPWT	LC/MS	✓		
	LC/MS/MS		✓	
K7TUML	GC/MS		✓	
KXF7LR	Immunoassay	✓		
	GC/MS		✓	

TABLE 2E Item 2

Webcode	Method	Screening	Confirmatory	Quantitation
LD9ZWX	Immunoassay	✓		
	GC/MS	✓		
M6CKKY	Immunoassay	✓		
	GC/MS	✓	✓	
MWW23K	Immunoassay	✓		
	GC/MS		✓	
MXQR9Y	Immunoassay	✓		
	GC/MS		✓	
PU4R7N	Immunoassay	✓		
	GC/MS		✓	
PZQE2U	Immunoassay	✓		
	GC/MS		✓	
Q4KVQT	GC/MS	✓	✓	
QC32PK	Immunoassay	✓		
	GC/MS	✓	✓	
QRT9KX	Immunoassay	✓		
	GC/MS		✓	
QT6ZDE	Immunoassay	✓		
QUYQJT	Immunoassay	✓		
	GC/MS		✓	
RA786L	LC/MS/MS	✓	✓	
REP39D	Immunoassay	✓		
	GC/MS	✓	✓	
RL4B8U	Immunoassay	✓		
	GC/MS		✓	
RUTWDT	Immunoassay	✓		
	GC/MS		✓	
T2ARTM	GC/MS		✓	✓
T7MD3U	Immunoassay	✓		
	GC/MS		✓	
TEJ82D	Immunoassay	✓		
	GC/MS	✓		
	LC/MS/MS	✓	✓	

TABLE 2E Item 2

Webcode	Method	Screening	Confirmatory	Quantitation
TX8THU	Immunoassay	✓		
	GC/MS	✓	✓	
U4CP4F	Immunoassay	✓		
	GC/MS		✓	
U7GHVT	Immunoassay	✓		
	GC/MS		✓	
UCMBQN	Immunoassay	✓		
	GC/MS		✓	
UDF8DW	Immunoassay	✓		
	GC/MS		✓	
UPCBGQ	Immunoassay	✓		
	GC/MS		✓	
VGXP8M	Immunoassay	✓		
	GC/MS		✓	
VLRH6N	Immunoassay	✓		
VWPLAH	Immunoassay	✓		
	GC/MS		✓	
W929VN	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
WJF72R	Immunoassay	✓		
XBJQQD	GC/MS	✓	✓	
XH4Q8Q	Immunoassay	✓		
XKABWC	Immunoassay	✓		
Y8ZVNL	Immunoassay	✓		
	GC/MS	✓	✓	
YJCK2G	Immunoassay	✓		
	GC/MS	✓	✓	
YQR4LG	Immunoassay	✓		
	GC/MS		✓	
Z3FP6G	Immunoassay	✓		
	GC/MS		✓	

TABLE 2E Item 2

Webcode	Method	Screening	Confirmatory	Quantitation
Z8AJ3H	Immunoassay	✓		
	GC/MS		✓	
ZHVNAH	Immunoassay	✓		
	GC/MS		✓	
ZLU2W8	Immunoassay	✓		
	GC/MS			
ZMNR3L	Immunoassay	✓		
	GC/MS	✓	✓	

Response Summary for Item 2			Participants: 88		
	Screening	Confirmatory	Quantitation		
<b>Immunoassay:</b>	74	0	0		
<b>GC/MS:</b>	21	71	1		
<b>LC/MS:</b>	2	0	0		
<b>LC/MS/MS:</b>	7	10	0		
<b>Other:</b>	5	1	0		

## Additional Comments for Item 2

TABLE 2F Item 2

Webcode	Item 2 - Comments
2QJYY4	Internal standard used PCP-D5
2WTZHL	No mass spectral data obtained for PCP for confirmatory analysis done on 11.02.16. Used data obtained from analysis done on 10.26.16 and 10.28.16. Mepivacaine was the internal standard used for all confirmatory testing.
6VJGM7	ETAZOLAM WAS USED AS INTERNAL STANDAR
6Y3BND	internal standard: mepivacaine
78FMG6	The sample of urine very clean and translucent appearance
7EF7GE	Internal standards - mepivacaine & nalorphine
7FMLNK	Methaqualone - internal standard for pH basic liquid/liquid extraction on GCMS. Barbitol - internal standard used for pH acidic/neutral liquid/liquid extraction on GCMS.
8QMC88	Alere iCassette (THC) test device was used to screen for THC, referred to in 1-4 [Table 1E- Method of Analysis-Item 1] as rapid chromatographic immunoassay.
96XCG3	IN A ITEM 2 CAFFEINA WAS DETECTED (GC/MS-LC/MS/MS)
9BPJYB	internal standard: SKF-525A
ARTGXZ	internal standard: diazepam D5
BA4R2B	Internal standards - mepivacaine and nalorphine
BWUA3F	LCMS-QToF screening performed on this sample. GCMS - ISTD = prazepam. IMMUNOASSAY - PCP standard: LOD 25 ug/L (Randox). QToF - ISTD includes 12 deuterated analytes and prazepam (inc D3Sertraline, D5Methamphetamine).
D3YRED	Confirmation cut off level was 10 ng/mL.
DFLWNV	Caffeine detected using LC/MS/MS
DM7ZVX	Internal standard = D5 PCP, Limit of detection = 5 ng/mL, Limit of quant = 25 ng/mL
GDPM66	Internal standard: mepivacaine
GEYRHT	NO COLD CHAIN
GFTHN8	URTBA ISTD: Mepivacaine & Nalorphine. BENZO ISTD: Mepivacaine.
HCMCL7	GC/MS Confirmatory Internal Standard: mepivacaine
HFPDNP	The LC/MS/ MS is use to confirm in this case.
HGH4U4	Internal standard used: Mepivacaine.
LD9ZWX	internal standard=mepivacaine
M6CKKY	Internal Standard: Mepivacaine
MWW23K	Internal Standard - Mepivacaine
QC32PK	Internal standards used were barbitol and SKF-525A.



TABLE 2F Item 2

Webcode	Item 2 - Comments
QRT9KX	Internal Standard: PCP-D5. Confirmation cut off: 10 ng/mL.
RUTWDT	Mepivacaine and nalorphine used as internal standard.
T2ARTM	The confirmatory GC/MS result was determined by another forensic scientist.
U4CP4F	Mepivacaine used for Internal Standard
U7GHVT	mepivacaine used as GCMS internal standard
UCMBQN	Mepivacaine, Nalorphine
UDF8DW	Phencyclidine confirmation cutoff is 10 ng/mL.
VGXP8M	GCMS Internal Standard is mepivacaine (50 µg/L) and nalorphine (25 µg/L)
VLRH6N	Our lab uses an Enzymatic Assay (for Ethyl Alcohol) and ELISA (for 10 drug Panel) using Immunalysis Kits. Our lab does not report a specific analyte as positive (+) or negative (-). Calibrator Levels: ELISA Panels (ng/ml): Amphetamine - 50, Benzodiazepines - 50, Benzoyllecgonine - 50, Flunitrazepam - 25, Ketamine - 10, Methamphetamine - 50, Opiates - 25, Oxycodone - 10, Delta-9-THC - 25, Zolpidem - 10. Enzymatic Assay (g/dl): Ethyl Alcohol - 0.01.
W929VN	Mepivacaine was used as a retention time internal standard.
YJCK2G	Internal standards used: Hexobarbital (0.50 mg/L), SKF-525A (0.10 mg/L)
Z3FP6G	Confirmed using two different extractions on GC/MS.
Z8AJ3H	internal standards: mepivacaine, nalorphine
ZHVNAH	internal standard: mepivacaine, nalorphine
ZLU2W8	GC/MS Internal standard: Mepivacaine
ZMNR3L	internal standard used was mepivacaine

## Screening Results - Item 3

TABLE 3A Item 3

**Item Scenario:**

Case 3: A 30 year old male was subject to random drug testing by his employer.

**Item Contents and Preparation Concentration:** Oxazepam (650ng/mL)  
 Temazepam (120ng/mL)  
 Nordiazepam (150ng/mL)

Webcode	Screening Results
2ECT9B	Benzodiazepines
2QJYY4	Benzodiazepines (BZO)
2WTZHL	Benzodiazepines
3UJATH	Benzodiazepine-class compounds
46YF6C	Benzodiazepines
49YRZC	Benzodiazepine drug class
6RK6R7	Benzodiazepines
6Y3BND	benzodiazepines
78FMG6	Oxazepam, Nordiazepam
7EF7GE	benzodiazepines
7FMLNK	Benzodiazepines class +
7M6UCG	Benzodiazepines
7YLG4	Benzodiazepines
848RB7	Benzodiazepines
864AC8	Benzodiazepines/Nordiazepam
8ETVH7	Benzodiazepines

TABLE 3A Item 3

Webcode	Screening Results
8QMC88	Oxazepam, Nordiazepam and Temazepam
96XCG3	BENZODIAZEPINES
9AWTTW	Benzodiazepines
9BPJYB	benzodiazepines
9JY9DA	benzodiazepines
9KUQEB	Benzodiazepines
9VCBY8	Benzodiazepines
ARTGXZ	benzodizepens
BA4R2B	Benzodiazepines
BJ8ZHV	benzodiazepines, oxazepam, nordiazepam, temazepam
BR2822	Benzodiazepines
BTVX8F	benzodiazepines
BWUA3F	Oxazepam, temazepam, nordiazepam
D3YRED	Screened positive for Benzodiazepines
DFLWNV	Bezodiazepines group
DJL9KV	Drug(s) detected [No class and/or drug names reported]
DM7ZVX	Benzodiazepines
E2HXD4	Benzodiazepines
FGTYMY	benzodiazepines

TABLE 3A Item 3

Webcode	Screening Results
GDPM66	benzodiazepines
GFTHN8	Benzodiazepines
GFU9UP	Nordazepam (Nordiazepam)
HCMCL7	benzodiazepines
HFPDNP	oxacepam, nordiazepam y temazepam
HGH4U4	Benzodiazepines.
J64AGP	Benzodiazepines
JULPWT	Drug(s) detected [No class and/or drug names reported]
K7TUML	oxazepam,nordazepam
KXF7LR	Benzodiazepines
LD9ZWX	benzodiazepines
M6CKKY	benzodiazepines, nordiazepam, temazepam, oxazepam
MWW23K	Benzodiazepines
MXQR9Y	benzodiazepines
PU4R7N	Benzodiazepines (BNZ)
PZQE2U	Benzodiazepine(s) - Oxazepam, Nordiazepam, and Temazepam
Q4KVQT	Benzodiazepines
QC32PK	benzodiazepines
QRT9KX	Benzodiazepines

TABLE 3A Item 3

<b>Webcode</b>	<b>Screening Results</b>
QT6ZDE	Benzodiazepines (oxazepam)
QUYQJT	Benzodiazepines
RA786L	Oxazepam, Nordiazepam, Temazepam
REP39D	Benzodiazepines
RL4B8U	Class- benzodiazepines
RUTWDT	Benzodiazepine class
T2ARTM	Benzodiazepines
T7MD3U	certain benzodiazepines
TEJ82D	Benzodiazepines
TX8THU	Benzodiazepine
U4CP4F	Benzodiazepines
U7GHVT	class- benzodiazepines
UCMBQN	benzodiazepines
UDF8DW	Benzodiazepines
UPCBGQ	benzodiazepines
VGXP8M	benzodiazepines
VLRH6N	FLUNITRAZEPAM & BENZODIAZEPINES
VWPLAH	Benzodiazepines
W929VN	benzodiazepine class indicated

TABLE 3A Item 3

Webcode	Screening Results
WJF72R	Benzodiazepines
XBJQQD	TEMAZEPAM
XH4Q8Q	Benzodiazepines
XKABWC	Benzodiazepine
Y8ZVNL	Nordiazepam, Oxazepam, Temazepam
YJCK2G	Benzodiazepines
YQR4LG	Benzodiazepines
Z3FP6G	Benzodiazepines
Z8AJ3H	Benzodiazepines
ZHVNAH	benzodiazepines
ZLU2W8	Benzodiazepines
ZMNR3L	Certain Benzodiazepines

Response Summary for Item 3		Participants: 85
Benzodiazepines:	74	
Oxazepam, Temazepam, and/or Nordiazepam:	14	
Other:	3	
<p>Totals may add up to more than the total number of participants because participants can report multiple drugs/analytes.</p>		

## Confirmatory Results - Item 3

*What drugs/metabolites were detected in Item 3?*

TABLE 3B Item 3

**Item Scenario:**

Case 3: A 30 year old male was subject to random drug testing by his employer.

**Item Contents and Preparation Concentration:** Oxazepam (650ng/mL)  
 Temazepam (120ng/mL)  
 Nordiazepam (150ng/mL)

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
2ECT9B	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
2QJYY4	Oxazepam	✓			
2WTZHL	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
3UJATH	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
46YF6C	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
49YRZC	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
6RK6R7	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			

TABLE 3B Item 3

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
6VJGM7	Oxazepam	✓			
	Temazepam	✓			
	DESMETHILDIAZEPAM	✓			
6Y3BND	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
78FMG6	Oxazepam	✓			
	Nordiazepam				
7EF7GE	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
7FMLNK	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
7M6UCG	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
7YLG4	Temazepam	✓			
	Nordiazepam	✓			
864AC8	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
8ETVH7	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			



TABLE 3B Item 3

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
8QMC88	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
96XCG3	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam				
9AWTTW	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
9BPJYB	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
9JY9DA	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
9KUUQB	Nordiazepam	✓			
9VCBY8	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
9WMBV2	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
ARTGXZ	Oxazepam	✓			
	Temazepam	✓			
	nordazepam	✓			

TABLE 3B Item 3

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
BA4R2B	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
BJ8ZHV	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
BR2822	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
BTVX8F	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
BWUA3F	Oxazepam		560	+/- 15%	ng/mL
	Temazepam		90	+/- 15%	ng/mL
	Nordiazepam		140	+/- 15%	ng/mL
DFLWNV	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
DJL9KV	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
DM7ZVX	Oxazepam		571		ng/mL
	Temazepam		119		ng/mL
	Nordiazepam		132		ng/mL

TABLE 3B Item 3

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
E2HXD4	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
FGTYMY	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
GDPM66	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
GEYRHT	OXACEPAM	✓			
	Nordiazepam	✓			
	DIAZEPAM	✓			
GFTHN8	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
GFU9UP	GC/MS	✓			
HCMCL7	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
HFPDNP	oxacepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
HGH4U4	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			

TABLE 3B Item 3

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
JULPWT	Oxazepam				
	TEMACEPAM				
	Nordiazepam				
K7TUML	Oxazepam	✓			
	nordazepam	✓			
KXF7LR	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
LD9ZWX	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
M6CKKY	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
MWW23K	Nordiazepam	✓			
MXQR9Y	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
PU4R7N	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
PZQE2U	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
Q4KVQT	Nordiazepam	✓			

TABLE 3B Item 3

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
QC32PK	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
QUYQJT	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
RA786L	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
REP39D	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
RL4B8U	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
RUTWDT	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
T2ARTM	Oxazepam		640.1	180.5	ng/mL
	Temazepam		123.5	19.1	ng/mL
	Nordiazepam		167.2	24.6	ng/mL
T7MD3U	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			

TABLE 3B Item 3

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
TEJ82D	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
TX8THU	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
U4CP4F	Nordiazepam	✓			
U7GHVT	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
UCMBQN	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
UPCBGQ	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
VGXP8M	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
VWPLAH	Oxazepam	✓			
	Nordiazepam	✓			
W929VN	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
WJF72R	Oxazepam		0.523	+/- 0.084	mcg/ml

TABLE 3B Item 3

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
XBJQQD	Temazepam	✓			
XH4Q8Q	Oxazepam		0.477µg/mL	+/- 0.072	µg/mL
XKABWC	Oxazepam		483		ng/mL
	Temazepam		80		ng/mL
	Nordiazepam		155		ng/mL
Y8ZVNL	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
YJCK2G	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
YQR4LG	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
Z3FP6G	Temazepam	✓			
	Nordiazepam	✓			
Z8AJ3H	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
ZHVNAH	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			
ZLU2W8	Nordiazepam	✓			

TABLE 3B Item 3

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
ZMNR3L	Oxazepam	✓			
	Temazepam	✓			
	Nordiazepam	✓			

Response Summary for Item 3	Participants: 81
Oxazepam: 72	
Temazepam: 68	
Nordiazepam: 76	
Other: 1	
Totals may add up to more than the total number of participants because participants can report multiple drugs/metabolites.	



## **Raw Data - Item 3**

*List of raw data determinations in ng/mL.*

TABLE 3C Item 3

**Item 3 Raw Data - Oxazepam**  
**Preparation concentration: (650ng/mL)**

<b>Webcode</b>	<b>Raw Data (ng/mL)</b>		<b>Participant Mean</b>
BWUA3F	575.000	549.000	562.000
DM7ZVX	571.180		571.180
T2ARTM	640.120		640.120
WJF72R	523.000		523.000
XH4Q8Q	447.000		447.000
XKABWC	483.450	482.840	483.145

### **Statistical Analysis for Item 3 - Oxazepam**

Please note statistical analysis has not been provided due to the low number of raw data responses.

TABLE 3C Item 3  
**Item 3 Raw Data - Temazepam**  
**Preparation concentration: (120ng/mL)**

<b>Webcode</b>	<b>Raw Data (ng/mL)</b>		<b>Participant Mean</b>
BWUA3F	95.000	93.000	94.000
DM7ZVX	118.950		118.950
T2ARTM	123.560		123.560
XKABWC	80.710	80.730	80.720

**Statistical Analysis for Item 3 - Temazepam**

Please note statistical analysis has not been provided due to the low number of raw data responses.

TABLE 3C Item 3  
Item 3 Raw Data - Nordiazepam  
Preparation concentration: (150ng/mL)

Webcode	Raw Data (ng/mL)		Participant Mean
BWUA3F	134.000	139.000	136.500
DM7ZVX	131.570		131.570
T2ARTM	167.210		167.210
XKABWC	155.140	155.800	155.470

#### Statistical Analysis for Item 3 - Nordiazepam

Please note statistical analysis has not been provided due to the low number of raw data responses.

## Reporting Procedures - Item 3

*If quantitative analysis was performed, the reported concentrations are:*

TABLE 3D Item 3

WebCode	Quantitative Reporting Procedures
96XCG3	A single determination.
BWUA3F	The mean of duplicate/several determinations.
DM7ZVX	A single determination.
GEYRHT	A single determination.
T2ARTM	A single determination.
WJF72R	A single determination.
XH4Q8Q	A single determination.
XKABWC	The mean of duplicate/several determinations.

Response Summary for Item 3	Participants: 8
A single determination:	6 (75.0%)
The mean of duplicate/several determinations:	2 (25.0%)
Other:	0 (0.0%)

## Method of Analysis - Item 3

TABLE 3E Item 3

WebCode	Method	Screening	Confirmatory	Quantitation
2ECT9B	Immunoassay	✓		
	GC/MS	✓	✓	
2QJYY4	Immunoassay	✓		
	GC/MS		✓	
2WTZHL	Immunoassay	✓		
	GC/MS		✓	
3UJATH	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
46YF6C	Immunoassay	✓		
	GC/MS	✓		
	LC/MS		✓	
49YRZC	Immunoassay	✓		
	GC/MS		✓	
6RK6R7	Immunoassay	✓		
	GC/MS		✓	
6VJGM7	GC/MS		✓	
6Y3BND	Immunoassay	✓		
	GC/MS		✓	
78FMG6	GC/MS	✓	✓	
	Multi Drug Test Cup	✓	✓	
7EF7GE	Immunoassay	✓		
	GC/MS		✓	
7FMLNK	Immunoassay	✓		
	GC/MS	✓	✓	
7M6UCG	Immunoassay	✓		
	GC/MS		✓	

TABLE 3E Item 3

WebCode	Method	Screening	Confirmatory	Quantitation
7YLG4	Immunoassay	✓		
	GC/MS		✓	
848RB7	Immunoassay	✓		
864AC8	Immunoassay	✓		
	GC/MS	✓	✓	
8ETVH7	Immunoassay	✓		
	GC/MS	✓	✓	
8QMC88	LC/MS/MS	✓		
	Rapid Chromatographic Immunoassay	✓		
	GC/MS		✓	
96XCG3	Immunoassay	✓		
	LC/MS/MS	✓	✓	
9AWTTW	Immunoassay	✓		
	GC/MS	✓		
	LC/MS/MS		✓	
9BPJYB	Immunoassay	✓		
	GC/MS		✓	
9JY9DA	Immunoassay	✓		
	GC/MS		✓	
9KUQEB	Immunoassay	✓		
	GC/MS		✓	
9VCBY8	Immunoassay	✓		
	GC/MS		✓	
9WMBV2	LC/MS	✓		
	LC/MS/MS		✓	
ARTGXZ	Immunoassay	✓		
	GC/MS		✓	
BA4R2B	Immunoassay	✓		
	GC/MS		✓	

TABLE 3E Item 3

WebCode	Method	Screening	Confirmatory	Quantitation
BJ8ZHV	Immunoassay	✓		
	GC/MS	✓		
	LC/MS/MS		✓	
BR2822	Immunoassay	✓		
	GC/MS		✓	
BTX8F	Immunoassay	✓		
	LC-TOFMS	✓	✓	
BWUA3F	Immunoassay	✓		
	GC/MS	✓	✓	
	LC/MS/MS			✓
D3YRED	Immunoassay	✓		
DFLWNV	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS	✓	✓	
DJL9KV	Immunoassay	✓		
	GC/MS	✓	✓	
	LC/MS/MS	✓	✓	
DM7ZVX	Immunoassay	✓		
	GC/MS	✓	✓	
	NPD	✓		
E2HXD4	Immunoassay	✓		
	GC/MS	✓		
	LC/MS/MS		✓	
FGTYMY	Immunoassay	✓		
	LC/MS/MS		✓	
GDPM66	Immunoassay	✓		
	GC/MS		✓	
GEYRHT	GC/MS		✓	
GFTHN8	Immunoassay	✓		
	GC/MS		✓	

TABLE 3E Item 3

WebCode	Method	Screening	Confirmatory	Quantitation
GFU9UP	GC/MS	✓		
HCMCL7	Immunoassay	✓		
	GC/MS		✓	
HFPDNP	EIA , Immunocromatography	✓		
	LC/MS/MS	✓	✓	
HGH4U4	Immunoassay	✓		
	GC/MS		✓	
J64AGP	Immunoassay	✓		
JULPWT	LC/MS	✓		
	LC/MS/MS		✓	
K7TUML	GC/MS		✓	
KXF7LR	Immunoassay	✓		
	GC/MS		✓	
LD9ZWX	Immunoassay	✓		
	GC/MS	✓	✓	
M6CKKY	Immunoassay	✓		
	GC/MS	✓	✓	
MWW23K	Immunoassay	✓		
	GC/MS		✓	
MXQR9Y	Immunoassay	✓		
	GC/MS		✓	
PU4R7N	Immunoassay	✓		
	GC/MS		✓	
PZQE2U	Immunoassay	✓		
	GC/MS		✓	
Q4KVQT	Immunoassay	✓		
	GC/MS		✓	
QC32PK	Immunoassay	✓		
	GC/MS	✓	✓	



TABLE 3E Item 3

WebCode	Method	Screening	Confirmatory	Quantitation
QRT9KX	Immunoassay	✓		
QT6ZDE	Immunoassay	✓		
QUYQJT	Immunoassay	✓		
	LC/MS/MS		✓	
RA786L	LC/MS/MS	✓	✓	
REP39D	Immunoassay	✓		
	GC/MS	✓	✓	
RL4B8U	Immunoassay	✓		
	GC/MS		✓	
RUTWDT	Immunoassay	✓		
	GC/MS		✓	
T2ARTM	GC/MS		✓	✓
T7MD3U	Immunoassay	✓		
	GC/MS		✓	
TEJ82D	Immunoassay	✓		
	LC/MS/MS		✓	
TX8THU	Immunoassay	✓		
	GC/MS	✓	✓	
U4CP4F	Immunoassay	✓		
	GC/MS			
U7GHVT	Immunoassay	✓		
	GC/MS		✓	
UCMBQN	Immunoassay	✓		
	GC/MS		✓	
UDF8DW	Immunoassay	✓		
UPCBGQ	Immunoassay	✓		
	GC/MS		✓	
VGXP8M	Immunoassay	✓		
	GC/MS		✓	

TABLE 3E Item 3

WebCode	Method	Screening	Confirmatory	Quantitation
VLRH6N	Immunoassay	✓		
VWPLAH	Immunoassay	✓		
	GC/MS		✓	
W929VN	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
WJF72R	Immunoassay	✓		
	GC/MS		✓	✓
XBJQQD	GC/MS	✓	✓	
XH4Q8Q	Immunoassay	✓		
	GC/MS		✓	✓
XKABWC	Immunoassay	✓		
	GC/MS		✓	✓
Y8ZVNL	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
YJCK2G	Immunoassay	✓		
	GC/MS	✓		
	LC/MS/MS		✓	
YQR4LG	Immunoassay	✓		
	GC/MS		✓	
Z3FP6G	Immunoassay	✓		
	GC/MS		✓	
Z8AJ3H	Immunoassay	✓		
	GC/MS		✓	
ZHVNAH	Immunoassay	✓		
	GC/MS		✓	
ZLU2W8	Immunoassay	✓		
	GC/MS			

TABLE 3E Item 3

WebCode	Method	Screening	Confirmatory	Quantitation
ZMNR3L	Immunoassay	✓		
	GC/MS	✓	✓	

Response Summary for Item 3			Participants: 88	
	Screening	Confirmatory	Quantitation	
<b>Immunoassay:</b>	76	0	0	
<b>GC/MS:</b>	21	64	4	
<b>LC/MS:</b>	2	1	0	
<b>LC/MS/MS:</b>	6	17	1	
<b>Other:</b>	5	2	0	

## Additional Comments for Item 3

TABLE 3F Item 3

WebCode	Item 3 - Comments
2QJYY4	Internal standard used Oxazepam-D5
2WTZHL	Mepivacaine was the internal standard used for all confirmatory testing.
6VJGM7	ESTAZOLAM WAS USED AS INTERNAL STANDAR
6Y3BND	internal standard: mepivacaine
78FMG6	The sample presents cloudy appearance
7EF7GE	Internal standards - mepivacaine & nalorphine
7FMLNK	Methaqualone - internal standard used for pH basic liquid/liquid extraction for GCMS. Barbitol - internal standard used for pH acidic/neutral liquid/liquid extraction for GCMS. A derivatization benzodiazepines qualitative screen extraction was also performed to look for other possible contributing benzodiazepines. Deuterated benzodiazepine internal standards were used for this derivatization screen.
8QMC88	Alere iCassette (THC) test device was used to screen for THC, referred to in 1-4 [Table 1E- Method of Analysis-Item 1] as rapid chromatographic immunoassay.
96XCG3	IN A ITEM 2 CAFFEINA WAS DETECTED (GC/MS-LC/MS/MS)
9BPJYB	internal standards: SKF-525A, barbitol
ARTGXZ	internal standards : diazepam d5
BA4R2B	Internal standards - mepivacaine and nalorphine
BWUA3F	LCMS-QToF screening / confirmation performed on this sample. GCMS - ISTD = prazepam. IMMUNOASSAY - standard kit positive and negative controls used. QToF - ISTD includes 12 deuterated analytes and prazepam (inc D3Sertraline, D5Methamphetamine). Deuterated ISTDs were used for quantitation.
D3YRED	Our lab currently does not confirm benzodiazepines in urine.
DFLWNV	Caffeine detected using LC/MS/MS
DM7ZVX	Internal Standard = D5 Diazepam, D5 Oxazepam, D5 Temazepam. Limit of detection: Nordiazepam = 100 ng/mL. Oxazepam = 100 ng/mL, Temazepam = 100 ng/mL
GDPM66	Internal standard: mepivacaine
GEYRHT	NO COLD CHAIN
GFTHN8	URTBA ISTD: Mepivacaine & Nalorphine. BENZO ISTD: Mepivacaine.
HCMCL7	GC/MS Confirmatory Internal Standard: mepivacaine
HFPDNP	EIA, Immunocromatography are used from screening of benzodiazepines, LC/MS/MS is used for confirmation of benzodiazepines. We use enzymatic hidrolisis. The screening for LC/MS/MS not included zaleplon.
HGH4U4	Internal standard used: Mepivacaine.

TABLE 3F Item 3

WebCode	Item 3 - Comments
J64AGP	The cutoff for the benzodiazepines is 300 ng/mL
LD9ZWX	internal standard=mepivacaine
M6CKKY	Internal Standard: Mepivacaine
MWW23K	Internal Standard - Mepivacaine
QC32PK	Internal standards used were barbital and SKF-525A.
QRT9KX	No confirmation was performed on the urine specimen for benzodiazepines. [Laboratory] currently does not have a confirmatory method for benzodiazepines in urine specimen.
RUTWDT	Mepivacaine and nalorphine used as internal standards
T2ARTM	The confirmatory GC/MS results were determined by another forensic scientist.
U4CP4F	Mepivacaine used for Internal Standard
U7GHVT	mepivacaine used as GCMS internal standard
UCMBQN	Mepivacaine, Nalorphine
UDF8DW	No confirmatory analysis completed for item 3. Our laboratory currently does not perform urine benzodiazepine confirmations.
VGXP8M	GCMS Internal Standard is mepivacaine (50 µg/L) and nalorphine (25 µg/L)
VLRH6N	Our lab uses an Enzymatic Assay (for Ethyl Alcohol) and ELISA (for 10 drug Panel) using Immunalysis Kits. Our lab does not report a specific analyte as positive (+) or negative (-). Calibrator Levels: ELISA Panels (ng/ml): Amphetamine - 50, Benzodiazepines - 50, Benzoylcegonine - 50, Flunitrazepam - 25, Ketamine - 10, Methamphetamine - 50, Opiates - 25, Oxycodone - 10, Delta-9-THC - 25, Zolpidem - 10. Enzymatic Assay (g/dl): Ethyl Alcohol - 0.01.
W929VN	Mepivacaine was used as a retention time internal standard.
WJF72R	IS = OXA-D5, LOQ = 0.050 mcg/ml. Immunoassay screen for Amp, Meth, BE, Morphine, Oxazepam, and C-THC.
XH4Q8Q	Oxazepam LOD = 20 ng/mL. IS = Oxazepam D5
XKABWC	Internal Std - Nordiazepam-D5, Oxazepam-D5, Diazepam-D5, Lorazepam-D4, Temazepam-D5, Midazolam-D4. Limit of Detection for all analysts 10 ng/mL.
Z8AJ3H	internal standards: mepivacaine, nalorphine
ZHVNAH	internal standard: mepivacaine, nalorphine
ZLU2W8	GC/MS Internal standard: Mepivacaine
ZMNR3L	internal standard used was mepivacaine

## Additional Test Comments

TABLE 4

WebCode	Additional Comments
78FMG6	There is a doubt in item 1 because no drug was detected and has an appearance similar to item 3 and analysis by LC/MS is suggested
7EF7GE	Urine Immunoassay classes analyzed: opioids, amphetamines, barbiturates, cannabinoids, benzodiazepines, and cocaine
HFPDNP	In item 3 we have to correct . Please ignore the previous report for this item.
QC32PK	Item 1 and Item 3 were received on 08/26/2016. Item 2 was received on 09/30/2016.
RL4B8U	Not reporting caffeine in any of the samples.
RUTWDT	Caffeine was detected in all 3 samples but not reported (possible artifact per manufacturer)
XH4Q8Q	All samples screened for: amphetamine, cut off = 20 ng/mL; methamphetamine, cut off = 20 ng/mL; benzodiazepines, cut off = 50 ng/mL; benzoyllecgonine, cut off = 50 ng/mL; morphine, cut off = 20 ng/mL; C-THC, cut off = 20 ng/mL

# Appendix: Data Sheet

## Collaborative Testing Services ~ Forensic Testing Program **Test No. 16-5671: Urine Drug Analysis**

DATA MUST BE RECEIVED BY December 12, 2016 TO BE INCLUDED IN THE REPORT

Participant Code:

WebCode:

### **Accreditation Release Statement**

CTS submits external proficiency test data directly to ASCLD/LAB, ANAB, and A2LA. Please select one of the following statements to ensure your data is handled appropriately.

This participant's data is intended for submission to ASCLD/LAB, ANAB, and/or A2LA. (Accreditation Release section on the last page must be completed and submitted.)

This participant's data is NOT intended for submission to ASCLD/LAB, ANAB or A2LA.

### **Scenario:**

Investigators have submitted three urine specimens from three separate cases for your analysis. Using your laboratory's procedures, analyze each sample and report the presence of any drugs and/or metabolites.

Case 1: A 67 year old female was pulled over for speeding. The officer noted that the driver exhibited drowsiness, nervousness, and agitation. A urine sample was collected 1 1/2 hours after the incident occurred.

Case 2: A 42 year old male was arrested for assault. The arresting officer noted that the suspect appeared to be impaired and exhibited slurred speech, amnesia, and paranoia. A urine sample was collected 1 hour after the arrest.

Case 3: A 30 year old male was subject to random drug testing by his employer.

### **Instructions:**

**\*\*PLEASE NOTE\*\*** *The purpose of this test is the examination of drugs listed in section 1308 of Title 21 Code of Federal Regulations under the United States Controlled Substances Act that fall into the following classes: benzodiazepines, nonbenzodiazepine hypnotics (z-drugs), barbiturates, opioids, illicit hallucinogens, illicit stimulants, illicit depressants, and cannabinoids. Please test accordingly.*

-Please do not report the presence/concentration of drugs in concentrations less than 10ng/mL.

-Samples may contain methanol and acetonitrile as artifacts from production. Other artifacts that may be present in the urine include caffeine.

### **Items Submitted (Sample Pack UDRG):**

Item 1: Urine sample from Case 1

Item 2: Urine sample from Case 2

Item 3: Urine sample from Case 3

**Please return all pages of this data sheet.**

Page 1 of 9

Participant Code:

WebCode:

**Screening Results for Item 1:**

**1-1.) Please indicate the screening results for Item 1**

- No drugs detected utilizing screening methods.
- Drug(s) detected (list each class and/or drug name below).

**Confirmatory Results for Item 1:**

**1-2.) What drugs/metabolites were detected in Item 1? If quantitative determinations were performed, please record raw data in the provided spaces in ng/mL.**

The number of boxes shown does not indicate the number of analytes present. If additional space is needed, copy this page or attach your own form following this layout.

- No drugs/metabolites detected utilizing confirmatory methods.

Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units
_____	<input type="checkbox"/>	_____	_____	( _____ )
Date(s) Analysis Performed on Analyte: _____				
<b>Raw Data (ng/mL):</b>				
_____	_____	_____	_____	_____

Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units
_____	<input type="checkbox"/>	_____	_____	( _____ )
Date(s) Analysis Performed on Analyte: _____				
<b>Raw Data (ng/mL):</b>				
_____	_____	_____	_____	_____

Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units
_____	<input type="checkbox"/>	_____	_____	( _____ )
Date(s) Analysis Performed on Analyte: _____				
<b>Raw Data (ng/mL):</b>				
_____	_____	_____	_____	_____

**Please return all pages of this data sheet.**



Participant Code:

WebCode:

**Results for Item 1 (continued):**

**1-3.) If quantitative analysis was performed, are the reported concentrations for Item 1:**

- A single determination?       The mean of duplicate / several determinations?
- Other? (Specify): \_\_\_\_\_

**1-4.) Please check the methods used to analyze Item 1 by selecting whether each method used was for screening, confirmatory testing and/or quantitation.**

<u>Method Used</u>	<u>Screening</u>	<u>Confirmatory</u>	<u>Quantitation</u>
Immunoassay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
GC/MS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LC/MS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LC/MS/MS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**1-5.) Additional Comments for Item 1**

Please include any relevant information such as internal standard(s) used, limits of detection, etc.

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**Please return all pages of this data sheet.**

Participant Code:

WebCode:

**Screening Results for Item 2:**

**2-1.) Please indicate the screening results for Item 2**

- No drugs detected utilizing screening methods.
- Drug(s) detected (list each class and/or drug name below).

**Confirmatory Results for Item 2:**

**2-2.) What drugs/metabolites were detected in Item 2? If quantitative determinations were performed, please record raw data in the provided spaces in ng/mL.**

The number of boxes shown does not indicate the number of analytes present. If additional space is needed, copy this page or attach your own form following this layout.

- No drugs/metabolites detected utilizing confirmatory methods.

Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units
_____	<input type="checkbox"/>	_____	_____	( _____ )
Date(s) Analysis Performed on Analyte: _____				
<b>Raw Data (ng/mL):</b>				
_____	_____	_____	_____	_____

Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units
_____	<input type="checkbox"/>	_____	_____	( _____ )
Date(s) Analysis Performed on Analyte: _____				
<b>Raw Data (ng/mL):</b>				
_____	_____	_____	_____	_____

Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units
_____	<input type="checkbox"/>	_____	_____	( _____ )
Date(s) Analysis Performed on Analyte: _____				
<b>Raw Data (ng/mL):</b>				
_____	_____	_____	_____	_____

**Please return all pages of this data sheet.**

Participant Code:

WebCode:

**Results for Item 2 (continued):**

**2-3.) If quantitative analysis was performed, are the reported concentrations for Item 2:**

- A single determination?       The mean of duplicate / several determinations?
- Other? (Specify): \_\_\_\_\_

**2-4.) Please check the methods used to analyze Item 2 by selecting whether each method used was for screening, confirmatory testing and/or quantitation.**

<u>Method Used</u>	<u>Screening</u>	<u>Confirmatory</u>	<u>Quantitation</u>
Immunoassay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
GC/MS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LC/MS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LC/MS/MS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**2-5.) Additional Comments for Item 2**

Please include any relevant information such as internal standard(s) used, limits of detection, etc.

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**Please return all pages of this data sheet.**

Participant Code:

WebCode:

**Screening Results for Item 3:**

**3-1.) Please indicate the screening results for Item 3**

- No drugs detected utilizing screening methods.
- Drug(s) detected (list each class and/or drug name below).

**Confirmatory Results for Item 3:**

**3-2.) What drugs/metabolites were detected in Item 3? If quantitative determinations were performed, please record raw data in the provided spaces in ng/mL.**

The number of boxes shown does not indicate the number of analytes present. If additional space is needed, copy this page or attach your own form following this layout.

- No drugs/metabolites detected utilizing confirmatory methods.

Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units
_____	<input type="checkbox"/>	_____	_____	( _____ )
Date(s) Analysis Performed on Analyte: _____				
<b>Raw Data (ng/mL):</b>				
_____	_____	_____	_____	_____

Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units
_____	<input type="checkbox"/>	_____	_____	( _____ )
Date(s) Analysis Performed on Analyte: _____				
<b>Raw Data (ng/mL):</b>				
_____	_____	_____	_____	_____

Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units
_____	<input type="checkbox"/>	_____	_____	( _____ )
Date(s) Analysis Performed on Analyte: _____				
<b>Raw Data (ng/mL):</b>				
_____	_____	_____	_____	_____

**Please return all pages of this data sheet.**

Participant Code:

WebCode:

**Results for Item 3 (continued):**

**3-3.) If quantitative analysis was performed, are the reported concentrations for Item 3:**

- A single determination?       The mean of duplicate / several determinations?
- Other? (Specify): \_\_\_\_\_

**3-4.) Please check the methods used to analyze Item 3 by selecting whether each method used was for screening, confirmatory testing and/or quantitation.**

<u>Method Used</u>	<u>Screening</u>	<u>Confirmatory</u>	<u>Quantitation</u>
Immunoassay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
GC/MS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LC/MS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LC/MS/MS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**3-5.) Additional Comments for Item 3**

Please include any relevant information such as internal standard(s) used, limits of detection, etc.

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**Please return all pages of this data sheet.**

Participant Code:

WebCode:

**Date Samples Received:** \_\_\_\_\_

**Additional Comments on Test**

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<p><b><u>Return Instructions:</u></b> Data must be received via online data entry, fax (please include a cover sheet), or mail by <i>December 12, 2016</i> to be included in the report. Emailed data sheets are not accepted.</p> <p>QUESTION?  TEL: +1-571-434-1925 (8 am - 4:30 pm EST)  EMAIL: <a href="mailto:forensics@cts-interlab.com">forensics@cts-interlab.com</a>  <a href="http://www.ctsforensics.com">www.ctsforensics.com</a></p>	<p>Participant Code:  ONLINE DATA ENTRY: <a href="http://www.cts-portal.com">www.cts-portal.com</a></p> <p>FAX: +1-571-434-1937</p> <p>MAIL: Collaborative Testing Services, Inc.  P.O. Box 650820  Sterling, VA 20165-0820 USA</p>
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**Please return all pages of this data sheet.**

Collaborative Testing Services ~ Forensic Testing Program

**RELEASE OF DATA TO ACCREDITATION BODIES**

The following Accreditation Releases will apply only to:

Participant Code:

WebCode:

for Test No. **16-5671: Urine Drug Analysis**

This release page must be completed and received by **December 12, 2016** to have this participant's submitted data included in the reports forwarded to the respective Accreditation Bodies.

Have the laboratory's designated individual complete the following steps **only if your laboratory is accredited in this testing/calibration discipline** by one or more of the following Accreditation Bodies.

**Step 1: Provide the applicable Accreditation Certificate Number(s) for your laboratory**

**ASCLD/LAB** Certificate No. \_\_\_\_\_

**ANAB** Certificate No. \_\_\_\_\_

**A2LA** Certificate No. \_\_\_\_\_

**Step 2: Complete the Laboratory Identifying Information in its entirety**

Signature and Title \_\_\_\_\_

Laboratory Name \_\_\_\_\_

Location (City/State) \_\_\_\_\_

<b>Accreditation Release</b>	
<p><b><u>Return Instructions</u></b>  <i>Please submit the completed Accreditation Release at the same time as your full data sheet. See Data Sheet Return Instructions on the previous page.</i></p>	<p><i>Questions? Contact us 8 am-4:30 pm EST                  Telephone: +1-571-434-1925                  email: forensics@cts-interlab.com</i></p>

**Please return all pages of this data sheet.**