Urine Drug Analysis Test No. 18-5671 Summary Report

A sample set contained one specimen bottle of human urine for each of the three case scenarios. Participants were requested to examine these items and report their findings. Data were returned from 93 participants 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 consisted of a specimen bottle containing 50mL of human urine from three cases, each with an individual case scenario. Participants were requested to analyze the urine samples and report the presence of any drugs/metabolites, any quantitative data obtained (including uncertainty), and the methods used.

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

ITEMS 1, 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. A 50mL aliquot of the mixture was then transferred into each of the pre-labeled specimen bottles. All bottles were stored in a refrigerator immediately after production and remained there 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: The three laboratories that conducted predistribution analysis of the samples indicated the presence of the expected drugs and/or a minimum of one expected metabolite per drug. All predistribution laboratories also reported the presence of cocaine in Item 1 in addition to the expected drugs, as shown in the table below.

Item 1 Drug (Concentration)

Benzoylecgonine (3,400 ng/mL)
Ecgonine methyl ester (1,650 ng/mL)
*Cocaine (<15 ng/mL)

Item 2 Drug (Concentration)

Zolpidem (60 ng/mL)

Item 3 Drug (Concentration)

6-Monoacetylmorphine (55 ng/mL)

Morphine (2,550 ng/mL)

Codeine (510 ng/mL)

Please note that the preparation concentration 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.

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^{*}The manufacturer confirmed that cocaine was likely a contaminant in the standards used to create Item 1. Based on the information provided by the manufacturer, an approximate concentration was calculated.

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 the three case scenarios. Participants were asked to report the presence of any drugs/metabolites, any quantitative data obtained (including uncertainty), and methods used. (Refer to the Manufacturer's Information for preparation details.)

Of the 91 participants who reported screening results for Item 1, 87 (95.6.%) reported the presence of cocaine, benzoylecgonine, and/or ecgonine methyl ester. Of the 87 participants who reported confirmatory results for Item 1, 81 (93.1%) reported the presence of benzoylecgonine, 46 (52.9%) participants reported the presence of cocaine, and 41 (47.1%) participants reported the presence of ecgonine methyl ester. Cocaine was not an intentional addition to the sample. After it was detected by all predistribution laboratories, the manufacturer confirmed that it was likely a contaminant present in very low concentrations in the benzoylecgonine, and/or ecgonine methyl ester standards used in the creation of this item.

Of the 90 participants who reported screening results for Item 2, 49 (54.4%) reported the presence of zolpidem and 39 (43.3%) reported "No drugs/metabolites detected". Of the 81 participants who reported confirmatory results for Item 2, 73 (90.1%) reported the presence of zolpidem. Since immunoassays for zolpidem are typically not used as often, this may explain the large number of participants who reported that they did not detect any drugs/metabolites as a result of screening testing. A majority of the participants that moved forward with further testing confirmed the presence of zolpidem.

Of the 89 participants who reported screening results for Item 3, 84 (94.4%) reported the presence of opiates, 6-monoacetylmorphine, morphine, and/or codeine. Of the 84 participants who reported confirmatory results for Item 3, 81 (96.4%) reported the presence of morphine and codeine. The presence of 6-monoacetylmorphine was reported by 78 (92.9%) participants.

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 and it was reported in ng/mL, the conclusive quantitative result was included in the raw data table. Due to the small number of participants who reported quantitative information, no grand mean statistics were calculated or determinations regarding "extreme" data made for any of the analytes in the three items.

Screening Results - Item 1

TABLE 1A Item 1

Item Scenario:

Case 1: A 23-year-old male was pulled over for speeding and aggressive driving. The officer noted that the individual exhibited dilated pupils, was very talkative, and energetic. A urine sample was collected for analysis 90 minutes later.

Item Contents and Preparation Concentration:

Benzoylecgonine (3,400 ng/mL) Ecgonine methyl ester (1,650 ng/mL) Cocaine (<15 ng/mL)

Webcode	Screening Results
23CWT8	Cocaine Metabolites
2EPUZW	Cocaine metabolite
2GWFMW	cocaine, benzoylecgonine
2W8XHH	Cocaine class
2WLKRJ	cocaine metabolite
3GDTQZ	Cocaine metabolite
43NBB2	In the screening performed, presence of cocaine was detected.
4BJF3G	Benzoylecgonine
4EHRZ3	Cocaine and its metabolites
4V7VPJ	Cocaine, Benzoylecgonine
7C2E9B	Cocaine and cocaine metabolites
83UUPE	cocaine positive
8BC73F	Cocaine metabolites.
8XKJTE	Cocaine class
9ABRTT	Cocaine
9DVJ3A	cocaine/cocaine metabolites
ACRE27	cocaine metabolites
AKNAZP	Cocaine/Benzoylecgonine
AMUY2D	Cocaine metabolites
AV9LEM	Cocaine metabolite
AW42QK	Benzoylecgonine
BFNKV3	Cocaine metabolite
BMAHLB	Benzoly ecgonine
CZBCUY	cocaine/cocaine metabolite
D7WN77	Benzoylecgonine, Cocaine
DCJQX9	cocaine type drugs
DHA288	Cocaine
EH7J2V	Carisoprodol/Soma; Cocaine
EMHNEG	Cocaine Metabolite (Benzoylecgonine)

Webcode	Screening Results
ENCEKV	Cocaine/cocaine metabolite
G37LTG	Benzoylecgonine, Methylecgonine
GD6JEV	Benzoylecgonine
GEVHTU	Cocaine metabolite
GFRZTB	cocaine/cocaine metabolites (via EIA)
GG6M7H	Cocaine & Benzoylecgonine, Fentanyl
GQTKV3	cocaine/cocaine metabolites
GTE3DN	[Participant reported that drugs were detected, but did not report the drug class or name]
HMAN8C	No drugs/metabolites detected
HNF9UC	[Participant reported that drugs were detected, but did not report the drug class or name]
HPAYZR	ELISA Cocaine/Benzoylecgonine, ELISA Fentanyl
J9GLY6	cocaine, benzoylecgonine
K4LB6W	Cocaine and cocaine metabolites.
KG9J2X	Cocaine and metabolite(s)
LBJ4B6	cocaine/cocaine metabolites
LGPYU6	Cocaine and cocaine metabolites
LNPGAG	No drugs/metabolites detected
M2NKA2	cocaine/metabolites
M3NHLH	Cocaine and metabolites
MV6G4K	Cocaine metabolite
N7FA8K	Cocaine Metabolite (Benzoylecgonine)
NZEVN6	Cocaine & Benzoylecgonine
P7BCAU	cocaine/metabolites
PHTNRY	Cocaine
Q8PXLG	cocaine metabolites
QKBBYC	Cocaine metabolite, Methylecgonine, cocaine
QKC6HH	Cocaine Metabolite
QT87YV	Cocaine Metabolite
R86G4T	cocaine/cocaine metabolites
R9CWCK	Specimen screened positive for Cocaine.
RA7H8W	Cocaine
RN7JKX	Cocaine
T82C7V	Cocaine
T8CDPA	Cocaine/Cocaine metabolite(s)
T9U8NX	Cocaine/cocaine metabolites
TD4LB4	cocaine metabolite

Webcode	Screening Results
TEY2MZ	BENZOYLECGONINE
TLFK3T	cocaine/cocaine metabolite
TXTX4U	Ecgonine methyl ester (EME), Benzoylecgonine (BZE)
U27YJX	Cocaine Metabolite
UNH3DU	cocaine/cocaine metabolites
VAGNVC	Cocaine metabolites
VFFAKQ	Cocaine
VRXRG4	Methylecgonine, Benzoylecgonine
VTT8UZ	cocain
VYVGX8	Cocaine, Benzoylecgoine, Methylecgonine
W93GAU	cocaine metabolites
WAAX76	Cocaine metabolites
WD9CNN	cocaine, cocaine metabolites
WVUXBZ	Ecgonine Methyl Ester, Benzoylecgonine
WWPDNW	Cocaine Class (IA)
X2XYCU	Cocaine
X8GHBM	Sample screened positive for cocaine
XDPM69	Benzoylecgonine - Ecgonine Methyl Ester - Cocaine
XEYV82	Methylecgonine, Benzoylecgonine
XLLH6R	Amphetamine/MDA, Cocaine Metabolite (Benzoylecgonine)
XQDRBJ	cocaine, bze
XW382C	Cocaine and Metabolites
XZ3HVQ	cocaine/cocaine metabolites
YUQR8B	Cocaine/Benzoylecgonine (ELISA), Fentanyl (ELISA)
ZAZZKJ	cocaine/cocaine metabolites
ZQ33XH	cocaine/cocaine metabolites

Response Summary for Item 1	Participants: 91
Cocaine, benzoylecgonine, and/or ecgonine methyl ester:	87
Other:	5
No drugs/metabolites detected:	2
Totals may add up to more than the to because participants can report mult	

Confirmatory Results - Item 1

What drugs/metabolites were detected in Item 1?

TABLE 1B Item 1

Item Scenario:

Case 1: A 23-year-old male was pulled over for speeding and aggressive driving. The officer noted that the individual exhibited dilated pupils, was very talkative, and energetic. A urine sample was collected for analysis 90 minutes later.

Item Contents and Preparation Concentration: Benzoylecgonine (3,400 ng/mL)

Ecgonine methyl ester (1,650 ng/mL)

Cocaine (<15 ng/mL)

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
23CWT8	benzoylecgonine ecgonine methyl ester	<i>J</i>		Í	
2EPUZW	Benzoylecgonine		>1000		ng/mL
2GWFMW	benzoylecgonine cocaine	√ √			
2W8XHH	Benzoylecognine Cocaine	√ √			
2WLKRJ	Benzoylecgonine Ecgonine methyl ester Cocaine	√ √ √			
3GDTQZ	Benzoylecgonine Methylecgonine Cocaine	<i>y y y</i>			
43NBB2	Benzoylecgonine Ecgonine Methyl Ester	√ √			
4BJF3G	Benzoylecgonine Methylecgonine	√ √			
4EHRZ3	Benzoylecgonine Ecgonine Methyl Ester Cocaine	<i>y y</i>			
4V7VPJ	Benzoylecgonine Cocaine	√ √			
7C2E9B	Benzoylecogonine Cocaine	√ √			
83UUPE	Benzoylecgonine	✓			
8BC73F	Benzoylecgonine Methylecgonine	√ √			
8XKJTE	Benzoylecgonine Cocaine	√ √			

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
9ABRTT	Benzoylecgonine Ecgonine methyl-ester	✓ ✓			
9DVJ3A	Benzoylecgonine Cocaine	✓ ✓			
ACRE27	benzoylecgonine ecgonine methyl ester cocaine	√ √ √			
AKNAZP	Benzoylecgonine	✓			
AMUY2D	Benzoylecgonine Ecgonine methylester	✓ ✓			
AV9LEM	Benzoylecgonine Ecgonine methyl ester Cocaine	<i>y</i>	2988		ng/ml
AW42QK	Benzoylecgonine Ecgonine Methyl ester	✓ ✓			
BFNKV3	Benzoylecgonine	✓			
BMAHLB	Benzoylecgonine		3.33	0.47	μ g/mL
CGZG3R	Benzoylecgonine Ecgonine Methyl Ester	✓ ✓			
D7WN77	Benzoylecgonine Cocaine	✓ ✓			
DCJQX9	benzoylecgonine ecgonine methyl ester	✓ ✓			
EH7J2V	Benzoylecgonine Ecgonine Methyl Ester	√ √			
EMHNEG	Benzoylecgonine Cocaine	✓ ✓			
ENCEKV	No drugs/metabolites detecte	ed			
G37LTG	Benzoylecgonine Methylecgonine	√ √			
GD6JEV	Benzoylecgonine	✓			
GEVHTU	ecgonine methylester	✓			
GFRZTB	benzoylecgonine cocaine	✓ ✓			
GG6M7H	Ecgonine Methyl Ester Cocaine	✓ ✓			
GQTKV3	benzoylecgonine cocaine	✓ ✓			

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
GTE3DN	Benzoylecgonine	✓			
	Ecgonine Methyl Ester	√			
	Cocaine	✓			
HMAN8C	No drugs/metabolites detec	ted			
HNF9UC	Methylecgonine	✓			
HPAYZR	Benzoylecgonine	✓			
	Methylecgonine	✓			
	Cocaine	V			
J9GLY6	benzoylecgonine	✓			
	cocaine	✓			
K4LB6W	Benzoylecgonine	✓			
	Cocaine	√			
KG9J2X	Benzoylecgonine	√			
	Cocaine				
LBJ4B6	benzoylecgonine	✓ ✓			
	cocaine	•			
LGPYU6	Benzoylecgonine	√			
	cocaine	· · · · · · · · · · · · · · · · · · ·			
LNPGAG	Benzoylecgonine	✓ ✓			
	Ecgonine Methyl Ester				
M2NKA2	benzoylecgonine cocaine	✓ ✓			
M3NHLH	Benzoylecgonine Ecgonine Methyl Ester	✓ ✓			
		v	22.47	//0	/ 1
MV6G4K	Benzoylecgonine		3347	669	ng/mL
N7FA8K	Benzoylecgonine	√			
	Cocaine	· · · · · · · · · · · · · · · · · · ·			
NZEVN6	Benzoylecgonine Cocaine	✓ ✓			
P7BCAU	benzoylecgonine cocaine	✓ ✓			
DI ITA IDA		v	10/0		/ 1
PHTNRY	Benzoylegconine Ecgoninemethyl ester		1968 481.0		ng/ml ng/ml
OODVI C					
Q8PXLG	Benzoylecgonine Ecgonine methyl ester	/	> 1000		ng/mL
QKBBYC	Benzoylecgonine				
אוממאע	Methylecgonine	√			
	Cocaine	✓			
QKC6HH	Benzoylecgonine				ng/mL
	, 5				J,

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
QT87YV	Benzoylecgonine (BZE)		3327		ng/mL
R86G4T	benzoylecgonine cocaine	√ ✓			
RA7H8W	Benzoylegconine Ecgoninemethyl ester		1983.6 508.4		ng/ml ng/ml
T82C7V	Benzoylegconine Ecgoninemethyl ester		1979.2 485.6		ng/ml ng/ml
T8CDPA	Benzoylecgonine Methylecgonine Cocaine Ethylecgonine	/ / /			
T9U8NX	benzoylecgonine cocaine	✓ ✓			
TD4LB4	benzoylecgonine ecgonine methyl ester	√ √			
TEY2MZ	BENZOYLECGONINE		3729.7	40%	ng/ml
TLFK3T	Benzoylecgonine		3.55	± 0.51	μ g/mL
TXTX4U	Benzoylecgonine Ecgonine methyl ester		3500 1200	±20% ±20%	ng/mL ng/mL
U27YJX	Benzoylecgonine	✓			
UNH3DU	benzoylecgonine cocaine	<i>J</i>			
VAGNVC	benzoylecgonine ecgonine methyl ester cocaine	√ √			
VRXRG4	Benzoylecgonine Methylecgonine	<i>J</i>			
VTT8UZ	benzoylecognine cocaethylene	/ /			
VYVGX8	Benzoylecgonine Methylecgonine Cocaine	√ √ √			
W93GAU	benzoylecgonine methylecgonine cocaine	√ √			
WAAX76	Benzoylecgonine Methylecgonine Cocaine	√ √ √			

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
WD9CNN	benzoylecgonine cocaine	√ √			
WVUXBZ	Benzoylecgonine Ecgonine Methyl Ester	✓ ✓			
WWPDNW	Benzoylecgonine	✓			
X2XYCU	Benzoylecgonine Ecgonine Methyl Ester Cocaine	√ √ √			
X8GHBM	Benzoylecgonine	✓			
XDPM69	Benzoylecgonine Ecgonine Methyl Ester Cocaine	<i>y y y</i>			
XEYV82	Benzoylecgonine Methylecgonine	√ √			
XLLH6R	Benzoylecgonine Cocaine	√ √			
XQDRBJ	bze cocaine	✓ ✓			
XW382C	Cocaine cocaine metabolites	✓ ✓			
XZ3HVQ	benzoylecognine cocaine	√ √			
YUQR8B	Benzoylecgonine Methylecgonine Cocaine	√ √ √			
ZAZZKJ	benzoylecogonine cocaine	√ √			
ZQ33XH	benzoylecgonine cocaine	√ √			

Response Summary for Item 1	Participants: 87
Benzoylecgonine:	81
Ecgonine methyl ester:	41
Cocaine:	46
No drugs/metabolites detected:	2
Other:	3
	n the total number of participants ort multiple drugs/metabolites.

Raw Data - Item 1

List of raw data determinations in ng/mL.

TABLE 1C Item 1

Item 1 Raw Data - Benzoylecgonine Preparation concentration: (3,400 ng/mL)

Webcode	Raw Data	(ng/mL)			
2EPUZW	3,927.3				
AV9LEM	2,924.2	3,051.6			
BMAHLB	3,336.0				
MV6G4K	3,347.0				
PHTNRY	2,008.8	1,927.2			
Q8PXLG	2,821.0				
QKC6HH	3,672.7				
QT87YV	3,315.4	3,340.0			
RA7H8W	2,055.2	1,912.0			
T82C7V	2,012.8	1,945.6			
TEY2MZ	3,729.7				
TLFK3T	3,556.0		 		
TXTX4U	3,517.0	3,417.0			

Statistical Analysis for Item 1 - Benzoylecgonine

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

TABLE 1C Item 1

Item 1 Raw Data - Ecgonine methyl ester Preparation concentration: (1,650 ng/mL)

Webcode	Raw Data	(ng/mL)
PHTNRY	472.5	489.6
RA7H8W	524.0	492.8
T82C7V	472.8	498.4
TXTX4U	1,217.0	1,182.0

Statistical Analysis for Item 1 - Ecgonine methyl ester

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

Reporting Procedures - Item 1

If quantitative analysis was performed, the reported concentrations are:

Webcode	Quantitative Reporting Procedures
2EPUZW	A single determination.
AV9LEM	The mean of duplicate/several determinations.
BMAHLB	A single determination.
MV6G4K	A single determination.
PHTNRY	The mean of duplicate/several determinations.
Q8PXLG	A single determination.
QT87YV	A single determination.
RA7H8W	The mean of duplicate/several determinations.
T82C7V	The mean of duplicate/several determinations.
TEY2MZ	The mean of duplicate/several determinations.
TLFK3T	A single determination.
TXTX4U	The mean of duplicate/several determinations.

Participants: 12	
6 (50.0%)	
6 (50.0%)	
	6 (50.0%)

Methods of Analysis - Item 1

Webcode	Method	Screening	Confirmatory	Quantitation
23CWT8	Immunoassay GC/MS	✓	√	
2EPUZW	Immunoassay LC/MS/MS	✓	✓	✓
2GWFMW	GC/MS	✓	✓	
2W8XHH	Immunoassay GC/MS	✓	✓	
2WLKRJ	Immunoassay GC/MS LC/MS/MS	✓	√ ✓	
3GDTQZ	Immunoassay GC/MS	√ √	√	
43NBB2	GC/MS Drug Test	✓	✓	
4BJF3G	Immunoassay GC/MS	✓	√	
4EHRZ3	GC/MS LC/MS/MS	√	√ √	
4V7VPJ	GC/MS LC/MS/MS LC-TOF	<i>J J</i>	√	
7C2E9B	Immunoassay GC/MS	√ √	✓	
83UUPE	Immunoassay GC/MS	✓	√	
8BC73F	Immunoassay GC/MS LC/MS/MS	✓ ✓	<i>,</i>	
8XKJTE	Immunoassay GC/MS	√ √	✓	
9ABRTT	Immunoassay GC/MS	✓	√	
9DVJ3A	Immunoassay GC/MS	√ √	√	
ACRE27	Immunoassay GC/MS HPLC/qTOF	√ ✓	√	
AKNAZP	Immunoassay GC/MS	√ √	√	
AMUY2D	Immunoassay GC/MS LC/MS/MS	✓ ✓	✓	

Webcode	Method	Screening	Confirmatory	Quantitation
AV9LEM	lmmunoassay	✓		
	GC/MS		√	✓
	LC/MS		√	
AW42QK	Immunoassay	✓	/	
DENII/O	GC/MS	/	<u> </u>	
BFNKV3	Immunoassay GC/MS	√	✓	
BMAHLB	Immunoassay	<u> </u>	<u> </u>	
DIVIALIED	GC/MS	•	✓	/
CGZG3R	GC/MS			<u> </u>
CZBCUY	Immunoassay	✓	•	
D7WN77	Immunoassay			
D/ WN//	GC/MS	•	✓	
DCJQX9	Immunoassay	✓	· · · · · · · · · · · · · · · · · · ·	
Desam	LC-TOFMS	·	✓	
DHA288	Immunoassay	✓		
EH7J2V	Immunoassay	✓		
	GC/MS		✓	
EMHNEG	Immunoassay	√		
	GC/MS '		✓	
ENCEKV	Immunoassay	✓		
G37LTG	Immunoassay	✓		
	GC/MS	✓	✓	
GD6JEV	Immunoassay	✓		
	GC/MS	✓	✓	
GEVHTU	Immunoassay	✓		
	GC/MS		✓	
GFRZTB	Immunoassay	✓		
	GC/MS		✓	
GG6M7H	Immunoassay	✓		
-	GC/MS		√	
GQTKV3	Immunoassay	✓		
	GC/MS		√	
GTE3DN	LC/MS	✓	,	
	LC/MS/MS		/	
HMAN8C	GC/MS	√		
HNF9UC	Immunoassay	✓	✓	
LIDAVZD	GC/MS		v	
HPAYZR	Immunoassay GC/MS	/	✓	
J9GLY6	Immunoassay	✓	•	
J7GLIU		√	✓	
K41 B6\\\/			•	
NALDOVV		▼	✓	
K4LB6W	GC/MS Immunoassay GC/MS	✓	· · · · · · · · · · · · · · · · · · ·	

Webcode	Method	Screening	Confirmatory	Quantitation
KG9J2X	Immunoassay GC/MS	✓	/	
LBJ4B6	Immunoassay GC/MS	/	√	
LGPYU6	Immunoassay GC/MS	√ ✓	✓	
LNPGAG	GC/MS		✓	
M2NKA2	Immunoassay GC/MS	✓	✓	
M3NHLH	Immunoassay GC/MS	✓	✓	
MV6G4K	Immunoassay GC/MS	✓	√	√
N7FA8K	Immunoassay GC/MS	✓	√	
NZEVN6	LC/MS/MS	✓	✓	
P7BCAU	Immunoassay GC/MS	/	√	
PHTNRY	Immunoassay GC/MS LC/MS/MS	√ √	<i>y</i>	√
Q8PXLG	Immunoassay LC/MS/MS	/	✓ ·	✓
QKBBYC	Immunoassay GC/MS	√ √	√	
QKC6HH	Immunoassay GC/MS	√ √	√	√
QT87YV	Immunoassay GC/MS	✓	√	
R86G4T	Immunoassay GC/MS	√ √	√	
RA7H8W	Immunoassay GC/MS LC/MS/MS	1	/	✓
RN7JKX	Immunoassay	✓		
T82C7V	Immunoassay GC/MS LC/MS/MS	1	√ ✓	√
T8CDPA	Immunoassay GC/MS	√ ✓	/	
T9U8NX	Immunoassay GC/MS	✓	/	
TD4LB4	Immunoassay GC/MS	✓	/	
TEY2MZ	LC/MS/MS	✓	✓	✓

Webcode	Method	Screening	Confirmatory	Quantitation
TLFK3T	Immunoassay GC/MS	√	✓	1
TXTX4U	Immunoassay GC/MS LC/MS/MS QToF	<i>y y</i>		<i>y y</i>
U27YJX	Immunoassay GC/MS	✓	√	
UNH3DU	Immunoassay GC/MS	1	√	
VAGNVC	Immunoassay GC/MS LC-QTOF	✓	√	
VFFAKQ	Immunoassay	✓		
VRXRG4	Immunoassay GC/MS	√ √	√	
VTT8UZ	Immunoassay GC/MS LC/MS/MS	✓	√	
VYVGX8	Immunoassay GC/MS	√ √	√	
W93GAU	Immunoassay GC/MS	✓	√	
WAAX76	Immunoassay GC/MS	✓	√	
WD9CNN	Immunoassay GC/MS	✓	√	
WVUXBZ	GC/MS LC/MS/MS	✓	√ √	
Ro	ipid Chromatographic Immunoassay	✓		
WWPDNW	Immunoassay GC/MS	✓ ✓	√	
X2XYCU	Immunoassay GC/MS LC/MS/MS	✓	✓ ✓	
X8GHBM	Immunoassay GC/MS	✓	✓	
XDPM69	LC/MS LC/MS/MS	✓	✓	
XEYV82	Immunoassay GC/MS	✓	√	
XLLH6R	Immunoassay GC/MS	✓	/	
XQDRBJ	Immunoassay GC/MS	✓	√	

Webcode	Method	Screening	Confirmatory	Quantitation
XW382C	Immunoassay GC/MS	✓	✓	
XZ3HVQ	Immunoassay GC/MS	✓	√	
YUQR8B	Immunoassay GC/MS	✓	√	
ZAZZKJ	Immunoassay GC/MS	✓	√	
ZQ33XH	Immunoassay GC/MS	✓	J	

Response Summary for Item 1			Participants: 91
	Screening	Confirmatory	Quantitation
Immunoassay:	79	0	0
GC/MS:	25	75	6
LC/MS:	2	1	0
LC/MS/MS:	7	16	7
Other:	4	3	0

Additional Comments for Item 1

Webcode	Item 1 - Comments
23CWT8	SKF-525A internal standard
2EPUZW	Results are above our upper limit of quantitation (1000ng/mL).
2GWFMW	Sample analyzed twice by GC/MS.
2W8XHH	Internal Standards: Mepivacaine and Nalorphine
43NBB2	The internal standard (STI) used on the analysis is tetracosane, the detection limit establish is 300 ng/mL . [The following data was removed from Table 1C - Raw Data Item 1 since the participant indicated it is the detection limit - Benzoylecgonine: "300", Ecgonine methyl ester: "300"]
4BJF3G	Zolpidem was indicated by Immunoassay but not confirmed by GCMS.
7C2E9B	Mepavicaine, Nalorphine-butyl derivative
83UUPE	Internal Standard use Codeine-d3. The sample was liquid liquid extraction with and without derivatisation using TMS
8BC73F	The cut-off value we use at our lab in urine samples for cocaine and metabolites is 50 ng/mL, despite that we detect cocaine in the sample it was below the cut-off value.
9DVJ3A	Mepivaciane\Nalorphine used as internal standards.
BMAHLB	IS: BE-D3. Screen c/o 300 ng/mL, confirm LOD 0.2 μ g/mL.
CGZG3R	Ethylmorphine was used as internal standard.
CZBCUY	Preliminary testing indicated the possible presence of cocaine/cocaine metabolite. Unable to pursue as analyst is not authorized to perform this type of confirmation testing.
D7WN77	Mepivacaine, Nalorphine
DCJQX9	cocaine was identified in the urine at a level that was too low to confirm.
DHA288	Only a screening test was performed since confirmations are currently beyond my competency. Classes screened - Benzodiazepines, THC, Cocaine, Methamphetamine, Opiates, PCP
EH7J2V	ELISA Soma Cutoff 500 ng/mL. ELISA Coc/BZE Cutoff 300 ng/mL
EMHNEG	Ecgonine Methyl Ester, (Pseudo)Ecgonine Methyl Ester and Benzoylecgonine Isopropyl Ester observed - No standard available for RRT. Doxylamine and Cocaethylene observed, not reported - poor abundance of diagnostic ions. Ecgonine Methyl Ester TMS - observed no standard available for RRT
ENCEKV	Preliminary testing indicated the possible presence of cocaine/cocaine metabolite. Unable to pursue as the analyst is not authorized to perform this type of confirmation testing.
GEVHTU	Would also report: Inconclusive for cocaine, as it does not meet the [laboratory] criteria for identification. This is due to insufficient sample response to meet [laboratory] confirmation criteria.
GFRZTB	mepivacaine and nalorphine were used as various internal standards during testing.
GQTKV3	Internal standards used were mepivacaine and nalorphine. Butylation was used.
HPAYZR	N-Propylamphetamine, alphaprodine and hexobarbital were used as internal standards. Fentanyl ELISA presented a positive result, but Fentanyl was not detected via confirmatory testing (GC/MS). No presumptive screening results are reported by this laboratory. GC/MS LOD for Cocaine: 10 ng/mL. GC/MS LOD for Methylecgonine: 50 ng/mL GC/MS LOD for Benzoylecgonine: 250 ng/mL

Webcode	Item 1 - Comments
K4LB6W	Internal standards used include mepivacaine and benzoylecgonine-d8.
KG9J2X	The internal standard used was Mepivacaine to obtain the relative retention time for Cocaine and Benzoylecgonine. Nalorphine was also used as an internal standard in an extraction to ensure that butylation occurred. Nalorphine and benzoylecgonine both were butylated in this extraction.
LBJ4B6	Internal Standards: mepivacaine, nalorphine
LNPGAG	Flurazepam was used as Internal Standard.
M2NKA2	internal standards: mepivacaine, nalorphine
MV6G4K	Benzoylecgonine: Internal Standard: Benzolyecgonine-d9; LOD/LOQ: 25 ng/mL
QKC6HH	Internal Standard for GC/MS Screen: Phenyltoloxamine; Internal Standard for GC/MS Quantitation Confirmation: Benzoylecgonine-D3. Benzoylecgonine(BE)% error for control: Injection #1: +3.76% (518.78ng/mL), Injection #2: +3.30% (516.51ng/mL). Control data within 3 standard deviations on ongoing control data as required per procedure. % error acceptable. Per [legislation], in order to identify BE in a urine sample, the concentration of BE must be above 500ng/mL.
QT87YV	Internal Standard -BZE d3. Six point standard curve 50ng/mL - 2000ng/mL
R86G4T	internal standards: mepivacaine
RN7JKX	Cocaine cutoff: 150 ng/mL. Creatinine: Normal
T9U8NX	Internal standards used - mepivacaine & nalorphine
TD4LB4	SKF-525A used as internal standard
TLFK3T	Internal Standard Benzoylecgonine-D3. Limit of quantitation for confirmation: 0.200 μ g/mL. Limit of Detection for screening: 0.966 O.D. / 300 ng/mL Benzoylecgonine.
TXTX4U	Deuterated (D3) internal standards of target analytes. Limit of detection (LoD) of BZE and EME is 250 ng/mL, LoD of cocaine is 750 ng/mL.
UNH3DU	internal standards: mepivacaine, nalorphine
VFFAKQ	The sample was screened for the following type/class of drugs: Amphetamines, Benzodiazepines, Cannabinoids, Cocaine, Opiates, PCP. No confirmatory method was used on this samples as it is beyond my current qualifications.
VYVGX8	Nalorphine ISTD for Combined Drugs extraction
W93GAU	internal standard - phenyltoloxamine
WD9CNN	mepivacaine, nalorphine, bze-d8
WVUXBZ	Alere iCassette (THC) test device was used to screen for THC, referred to in 1-4 [Table 1E Methods of Analysis - Item 1] as rapid chromatographic immunoassay, The cutoff for the assay is 50 ng/mL.
X8GHBM	Confirmation cut off level was 50 ng/mL.
XDPM69	Estazolam = Internal Standard
XLLH6R	GC/MS Internal standard (base extraction): Mepivacaine. GC/MS Internal standards (derivatized base extraction): Nalorphine, Mepivacaine. GC/MS Internal standards (phenethylamine extraction): Mepivacaine, Amphetamine-D11, Methamphetamine-D11. Analysis did not confirm the presence of Amphetamine/MDA.
XQDRBJ	Mepivacaine was used as the internal standard for confirmation testing.

Webcode	Item 1 - Comments
YUQR8B	Alphaprodine, n-Propylamphetamine, and Hexobarbital used as internal standards. Fentanyl ELISA presented a positive result, but Fentanyl was not detected via confirmatory testing (GC/MS). No presumptive screening results are reported by this laboratory. GC/MS limits of detection: Methylecgonine 50 ng/mL. Benzoylecgonoine 250 ng/mL. Cocaine 10 ng/mL
ZAZZKJ	mepivacaine and nalorphine used as internal standards
ZQ33XH	internal standards: mepivacaine and nalorphine

Screening Results - Item 2

TABLE 2A Item 2

Item Scenario:

A 57-year-old female was subject to a pre-employment drug test. A urine sample was collected for analysis.

Item Contents and Preparation Concentration: Zolpidem (60 ng/mL)

Webcode	Screening Results
23CWT8	Zolpidem
2EPUZW	Zolpidem
2GWFMW	zolpidem
2W8XHH	zolpidem
2WLKRJ	No drugs/metabolites detected
3GDTQZ	Zolpidem
43NBB2	No drugs/metabolites detected
4BJF3G	No drugs/metabolites detected
4EHRZ3	Zolpidem
4V7VPJ	Zolpidem
7C2E9B	Zolpidem
83UUPE	No drugs/metabolites detected
8BC73F	No drugs/metabolites detected
8XKJTE	Zolpidem
9ABRTT	No drugs/metabolites detected
9DVJ3A	No drugs/metabolites detected
ACRE27	zolpidem
AKNAZP	Zolpidem
AMUY2D	Zolpidem
AV9LEM	Zolpidem
AW42QK	Zolpidem
BFNKV3	Zolpidem
BMAHLB	No drugs/metabolites detected
CZBCUY	No drugs/metabolites detected
D7WN77	Zolpidem
DCJQX9	zolpidem
DHA288	No drugs/metabolites detected
EH7J2V	No drugs/metabolites detected
ENCEKV	No drugs/metabolites detected
G37LTG	Zolpidem
GD6JEV	Zolpidem

GEVHTU No drugs/metabolites detected GF8ZTB No drugs/metabolites detected GG6M7H Zolpidem GGTKV3 No drugs/metabolites detected GT63DN [Participant reported that drugs were detected, but did not report the drug class or name] HMAN8C No drugs/metabolites detected HNF9UC [Participant reported that drugs were detected, but did not report the drug class or name] HMAN8C No drugs/metabolites detected HNF9UC [Participant reported that drugs were detected, but did not report the drug class or name] HPAYZR EUSA Zolpidem, EUSA Fentanyl J9G1V6 zolpidem K4LB6W No drugs/metabolites detected K69JZX No drugs/metabolites detected LBJ8B6 No drugs/metabolites detected LGPYU6 zolpidem LNPGAG No drugs/metabolites detected M2NKA2 No drugs/metabolites detected M3NHLH No drugs/metabolites detected M3NHLH No drugs/metabolites detected M7FABK Zolpidem NZEVN6 Zolpidem NZEVN6 Zolpidem NZEVN6 Zolpidem NZEVN6 Zolpidem QRPXLG zolpidem QRPXLG zolpidem QRPXLG zolpidem QRSXLG zolpidem QRSXLG zolpidem QKC6HH No drugs/metabolites detected QT87YV No drugs/metabolites detected R8GG4T zolpidem R9CWCK No drugs/metabolites detected R87HSW Zolpidem R9CWCK No drugs/metabolites detected R87HSW Zolpidem R9CWCK No drugs/metabolites detected R87HSW Zolpidem R9CDPA Zolpidem T9U8NX No drugs/metabolites detected T83C77 Zolpidem T9U8NX No drugs/metabolites detected T84CDPA Zolpidem T9U8NX No drugs/metabolites detected TXX4U Zolpidem	Webcode	Screening Results
GC6M/H Zolpidem GQTKV3 No drugs/metabolites detected GTE3DN [Participant reported that drugs were detected, but did not report the drug class or name] HMANRC No drugs/metabolites detected HNF9UC [Participant reported that drugs were detected, but did not report the drug class or name] HPAYZR ELISA Zolpidem, ELISA Fentanyl J9GLY6 zolpidem K4LB6W No drugs/metabolites detected KG912X No drugs/metabolites detected KG912X No drugs/metabolites detected LBJ4B6 No drugs/metabolites detected LBPU6 zolpidem LNPGAG No drugs/metabolites detected M2NKA2 No drugs/metabolites detected M2NKA2 No drugs/metabolites detected M2NKA2 No drugs/metabolites detected M7NFA8K Zolpidem N7FA8K Zolpidem NZEVN6 Zolpidem NZEVN6 Zolpidem NZEVN6 Zolpidem QRBYLG zolpidem QRBYLG zolpidem QRSBYLG zolpidem QRSBYLG zolpidem R9CKC6HH No drugs/metabolites detected R86G4T zolpidem R9CWCK No drugs/metabolites detected R87H8W Zolpidem RN7JKX No drugs/metabolites detected R87H8W Zolpidem RN7JKX No drugs/metabolites detected TB2C7V Zolpidem T9U8NX No drugs/metabolites detected T9U8NX No drugs/metabolites detected T9U8NX No drugs/metabolites detected TD4LB4 zolpidem TFY2MZ ZOLPIDEM TLFK3T No drugs/metabolites detected	GEVHTU	No drugs/metabolites detected
GGTKV3 No drugs/metabolites detected GTE3DN [Participant reported that drugs were detected, but did not report the drug class or name] HMANBC No drugs/metabolites detected HNF9UC [Participant reported that drugs were detected, but did not report the drug class or name] HMANBC REUSA Zolpidem, ELISA Fentanyl JPGLY6 zolpidem K4LB6W No drugs/metabolites detected K69J2X No drugs/metabolites detected LBJ4B6 No drugs/metabolites detected LBJ4B6 No drugs/metabolites detected LBJ4B6 No drugs/metabolites detected LBPYU6 zolpidem LNPGAG No drugs/metabolites detected M2NKA2 No drugs/metabolites detected M3NHLH No drugs/metabolites detected M3NHLH No drugs/metabolites detected M7FABK Zolpidem NZEVN6 Zolpidem NZEVN6 Zolpidem NZEVN6 Zolpidem QRBYLC zolpidem QRBYLC zolpidem QRBYLC zolpidem QRK6HH No drugs/metabolites detected QRBYC Zolpidem QKC6HH No drugs/metabolites detected QRBYV No drugs/metabolites detected R8AG4T zolpidem QKC6HH No drugs/metabolites detected R8AG4T zolpidem R9CWCK No drugs/metabolites detected R8AG4T zolpidem R9CWCK No drugs/metabolites detected R8AG54T zolpidem RN7JKX No drugs/metabolites detected R8AC1 Zolpidem RN7JKX No drugs/metabolites detected R8AC2 Zolpidem RN7JKX No drugs/metabolites detected TB2C7V Zolpidem TB2C7V Zolpidem TB2C7V Zolpidem TB2C7V Zolpidem TB2C7V Zolpidem TPUBNX No drugs/metabolites detected TD4LB4 zolpidem TFY2MZ ZOLPIDEM TLFK3T No drugs/metabolites detected	GFRZTB	No drugs/metabolites detected
GTE3DN [Participant reported that drugs were detected, but did not report the drug class or name] HMAN8C No drugs/metabolites detected HNF9UC [Participant reported that drugs were detected, but did not report the drug class or name] HPAYZR EUSA Zolpidem, EUSA Fentanyl J9GLY6 zolpidem K4LB6W No drugs/metabolites detected KG912X No drugs/metabolites detected LBJ4B6 No drugs/metabolites detected LBJ4B6 No drugs/metabolites detected LPPU6 zolpidem LNPGAG No drugs/metabolites detected M2NKA2 No drugs/metabolites detected M3NHLH No drugs/metabolites detected M3NHLH No drugs/metabolites detected M7FA8K Zolpidem N7FA8K Zolpidem NZEVN6 Zolpidem NZEVN6 Zolpidem QBPXLG zolpidem QBPXLG zolpidem QKC6HH No drugs/metabolites detected QT87YV No drugs/metabolites detected R86G4T zolpidem R9CWCK No drugs/metabolites detected R87H8W Zolpidem R87LYK No drugs/metabolites detected R87H8W Zolpidem R87LYK No drugs/metabolites detected R82LY Zolpidem R82CVV Zolpidem	GG6M7H	Zolpidem
HMANBC No drugs/metabolites detected HNF9UC [Participant reported that drugs were detected, but did not report the drug class or name] HPAYZR EUSA Zolpidem, EUSA Fentanyl J9GLY6 zolpidem KALB6W No drugs/metabolites detected KG9J2X No drugs/metabolites detected LBJ4B6 No drugs/metabolites detected LBJ4B6 No drugs/metabolites detected LBJ4B6 No drugs/metabolites detected LBPYU6 zolpidem LNPGAG No drugs/metabolites detected M2NKA2 No drugs/metabolites detected M3NHLH No drugs/metabolites detected M7NFA8K Zolpidem N7FA8K Zolpidem N7FA8K Zolpidem N7FA8K Zolpidem NZEVN6 Zolpidem Q8PXLG zolpidem Q8PXLG zolpidem Q8PXLG zolpidem QKC6HH No drugs/metabolites detected R86G4T zolpidem R9CWCK No drugs/metabolites detected R87H8W Zolpidem R9CWCK No drugs/metabolites detected R87H8W Zolpidem R87LYIKX No drugs/metabolites detected R87LYIKX No drugs/metabolites detected R87LYIKX No drugs/metabolites detected R8CDPA Zolpidem T8CDPA Zolpidem T9U8NX No drugs/metabolites detected TD4LB4 zolpidem TEY2MZ ZOLPIDEM TLFK3T No drugs/metabolites detected	GQTKV3	No drugs/metabolites detected
HNF9UC [Participant reported that drugs were detected, but did not report the drug class or name] HPAYZR ELISA Zolpidem, ELISA Fentanyl J9GLY6 zolpidem K4LB6W No drugs/metabolites detected KG9JZX No drugs/metabolites detected LBJ4B6 No drugs/metabolites detected LBJ4B6 No drugs/metabolites detected LBYU6 zolpidem LNPGAG No drugs/metabolites detected M2NKA2 No drugs/metabolites detected M3NHLH No drugs/metabolites detected M3NHLH No drugs/metabolites detected M7FABK Zolpidem N7FABK Zolpidem NZEVN6 Zolpidem NZEVN6 Zolpidem QRXLG zolpidem QRXLG zolpidem QRXLG zolpidem QRXLG zolpidem QRXC6HH No drugs/metabolites detected R86G4T zolpidem R9CWCK No drugs/metabolites detected R7H8W Zolpidem R9CWCK No drugs/metabolites detected R87H8W Zolpidem R9CWCK No drugs/metabolites detected R8CDPA Zolpidem T8CDPA Zolpidem T9U8NX No drugs/metabolites detected T04LB4 zolpidem TEY2MZ ZOLPIDEM TLFK3T No drugs/metabolites detected	GTE3DN	[Participant reported that drugs were detected, but did not report the drug class or name]
HPAYZR ELISA Zolpidem, ELISA Fentanyl J9GLY6 zolpidem K4LB6W No drugs/metabolites detected KG9J2X No drugs/metabolites detected LBJ4B6 No drugs/metabolites detected LBJ4B6 No drugs/metabolites detected LBJ4B6 No drugs/metabolites detected LNPGAG No drugs/metabolites detected M2NKA2 No drugs/metabolites detected M3NHLH No drugs/metabolites detected M7NFA8K Zolpidem NZEVN6 Zolpidem NZEVN6 Zolpidem P7BCAU No drugs/metabolites detected M8NHLY Zolpidem QRSYLG zolpidem QRSYLG zolpidem QKC6HH No drugs/metabolites detected QT87YV No drugs/metabolites detected R86G4T zolpidem R9CWCK No drugs/metabolites detected R87H8W Zolpidem RN7JKX No drugs/metabolites detected T82C7V Zolpidem T8CDPA Zolpidem T9U8NX No drugs/metabolites detected T04LB4 zolpidem TEY2MZ ZOLPIDEM TLFK3T No drugs/metabolites detected	HMAN8C	No drugs/metabolites detected
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M3NHLH No drugs/metabolites detected MV6G4K Zolpidem N7FA8K Zolpidem NZEVN6 Zolpidem P7BCAU No drugs/metabolites detected PHTNRY Zolpidem Q8PXLG zolpidem QK6BYC Zolpidem QK6BYC Zolpidem QKC6HH No drugs/metabolites detected QT87YV No drugs/metabolites detected R86G4T zolpidem R9CWCK No drugs/metabolites detected RA7H8W Zolpidem RN7JKX No drugs/metabolites detected T82C7V Zolpidem T9U8NX No drugs/metabolites detected TD4LB4 zolpidem TEY2MZ ZOLPIDEM TIFK3T No drugs/metabolites detected	LNPGAG	No drugs/metabolites detected
MV6G4K Zolpidem N7FA8K Zolpidem NZEVN6 Zolpidem P7BCAU No drugs/metabolites detected PHTNRY Zolpidem Q8PXLG zolpidem QKBBYC Zolpidem QKC6HH No drugs/metabolites detected QT87YV No drugs/metabolites detected R86G4T zolpidem R9CWCK No drugs/metabolites detected RA7H8W Zolpidem RN7JKX No drugs/metabolites detected T82C7V Zolpidem T9U8NX No drugs/metabolites detected TD4LB4 zolpidem TEY2MZ ZOLPIDEM TLFK3T No drugs/metabolites detected	M2NKA2	No drugs/metabolites detected
N7FA8K Zolpidem NZEVN6 Zolpidem P7BCAU No drugs/metabolites detected PHTNRY Zolpidem Q8PXLG zolpidem QKBBYC Zolpidem QKC6HH No drugs/metabolites detected QT87YV No drugs/metabolites detected R86G4T zolpidem R9CWCK No drugs/metabolites detected RA7H8W Zolpidem RN7JKX No drugs/metabolites detected T82C7V Zolpidem T9U8NX No drugs/metabolites detected TD4LB4 zolpidem TEY2MZ ZOLPIDEM TEY2MZ ZOLPIDEM TLFK3T No drugs/metabolites detected	M3NHLH	No drugs/metabolites detected
NZEVN6 Zolpidem P7BCAU No drugs/metabolites detected PHTNRY Zolpidem Q8PXLG zolpidem QKC6HH No drugs/metabolites detected QT87YV No drugs/metabolites detected R86G4T zolpidem R9CWCK No drugs/metabolites detected RA7H8W Zolpidem RN7JKX No drugs/metabolites detected T82C7V Zolpidem T9U8NX No drugs/metabolites detected TD4LB4 zolpidem TEY2MZ ZOLPIDEM TIFK3T No drugs/metabolites detected	MV6G4K	Zolpidem
P7BCAU No drugs/metabolites detected PHTNRY Zolpidem Q8PXLG zolpidem QKBBYC Zolpidem QKC6HH No drugs/metabolites detected QT87YV No drugs/metabolites detected R86G4T zolpidem R9CWCK No drugs/metabolites detected RA7H8W Zolpidem RN7JKX No drugs/metabolites detected T82C7V Zolpidem T8CDPA Zolpidem T9U8NX No drugs/metabolites detected TD4LB4 zolpidem TEY2MZ ZOLPIDEM TIFKST No drugs/metabolites detected	N7FA8K	Zolpidem
PHTNRY Zolpidem Q8PXLG zolpidem QKBBYC Zolpidem QKC6HH No drugs/metabolites detected QT87YV No drugs/metabolites detected R86G4T zolpidem R9CWCK No drugs/metabolites detected RA7H8W Zolpidem RN7JKX No drugs/metabolites detected T82C7V Zolpidem T8CDPA Zolpidem T9U8NX No drugs/metabolites detected TD4LB4 zolpidem TEY2MZ ZOLPIDEM TLFK3T No drugs/metabolites detected	NZEVN6	Zolpidem
Q8PXLG zolpidem QKC6HH No drugs/metabolites detected QT87YV No drugs/metabolites detected R86G4T zolpidem R9CWCK No drugs/metabolites detected RA7H8W Zolpidem RN7JKX No drugs/metabolites detected T82C7V Zolpidem T8CDPA Zolpidem T9U8NX No drugs/metabolites detected TD4LB4 zolpidem TEY2MZ ZOLPIDEM TLFK3T No drugs/metabolites detected	P7BCAU	No drugs/metabolites detected
QKC6HH No drugs/metabolites detected QT87YV No drugs/metabolites detected R86G4T zolpidem R9CWCK No drugs/metabolites detected RA7H8W Zolpidem RN7JKX No drugs/metabolites detected T82C7V Zolpidem T8CDPA Zolpidem T9U8NX No drugs/metabolites detected TD4LB4 zolpidem TEY2MZ ZOLPIDEM TLFK3T No drugs/metabolites detected	PHTNRY	Zolpidem
QKC6HH No drugs/metabolites detected QT87YV No drugs/metabolites detected R86G4T zolpidem R9CWCK No drugs/metabolites detected RA7H8W Zolpidem RN7JKX No drugs/metabolites detected T82C7V Zolpidem T8CDPA Zolpidem T9U8NX No drugs/metabolites detected TD4LB4 zolpidem TEY2MZ ZOLPIDEM TLFK3T No drugs/metabolites detected	Q8PXLG	zolpidem
QT87YV No drugs/metabolites detected R86G4T zolpidem R9CWCK No drugs/metabolites detected RA7H8W Zolpidem RN7JKX No drugs/metabolites detected T82C7V Zolpidem T8CDPA Zolpidem T9U8NX No drugs/metabolites detected TD4LB4 zolpidem TEY2MZ ZOLPIDEM TLFK3T No drugs/metabolites detected	QKBBYC	Zolpidem
R86G4T zolpidem R9CWCK No drugs/metabolites detected RA7H8W Zolpidem RN7JKX No drugs/metabolites detected T82C7V Zolpidem T8CDPA Zolpidem T9U8NX No drugs/metabolites detected TD4LB4 zolpidem TEY2MZ ZOLPIDEM TLFK3T No drugs/metabolites detected	QKC6HH	No drugs/metabolites detected
R9CWCK No drugs/metabolites detected RA7H8W Zolpidem RN7JKX No drugs/metabolites detected T82C7V Zolpidem T8CDPA Zolpidem T9U8NX No drugs/metabolites detected TD4LB4 zolpidem TEY2MZ ZOLPIDEM TLFK3T No drugs/metabolites detected	QT87YV	No drugs/metabolites detected
RA7H8W Zolpidem RN7JKX No drugs/metabolites detected T82C7V Zolpidem T8CDPA Zolpidem T9U8NX No drugs/metabolites detected TD4LB4 zolpidem TEY2MZ ZOLPIDEM TLFK3T No drugs/metabolites detected	R86G4T	zolpidem
RN7JKX No drugs/metabolites detected T82C7V Zolpidem T8CDPA Zolpidem T9U8NX No drugs/metabolites detected TD4LB4 zolpidem TEY2MZ ZOLPIDEM TLFK3T No drugs/metabolites detected	R9CWCK	No drugs/metabolites detected
T82C7V Zolpidem T8CDPA Zolpidem T9U8NX No drugs/metabolites detected TD4LB4 zolpidem TEY2MZ ZOLPIDEM TLFK3T No drugs/metabolites detected	RA7H8W	Zolpidem
T8CDPA Zolpidem T9U8NX No drugs/metabolites detected TD4LB4 zolpidem TEY2MZ ZOLPIDEM TLFK3T No drugs/metabolites detected	RN7JKX	No drugs/metabolites detected
T9U8NX No drugs/metabolites detected TD4LB4 zolpidem TEY2MZ ZOLPIDEM TLFK3T No drugs/metabolites detected	T82C7V	Zolpidem
TD4LB4 zolpidem TEY2MZ ZOLPIDEM TLFK3T No drugs/metabolites detected	T8CDPA	Zolpidem
TEY2MZ ZOLPIDEM TLFK3T No drugs/metabolites detected	T9U8NX	No drugs/metabolites detected
TLFK3T No drugs/metabolites detected	TD4LB4	zolpidem
	TEY2MZ	ZOLPIDEM
TXTX4U Zolpidem	TLFK3T	No drugs/metabolites detected
	TXTX4U	Zolpidem

Webcode	Screening Results
U27YJX	Zolpidem
UNH3DU	No drugs/metabolites detected
VAGNVC	Zolpidem
VFFAKQ	No drugs/metabolites detected
VRXRG4	Zolpidem
VTT8UZ	No drugs/metabolites detected
VYVGX8	Zolpidem
W93GAU	No drugs/metabolites detected
WAAX76	No drugs/metabolites detected
WD9CNN	No drugs/metabolites detected
WVUXBZ	Zolpidem
WWPDNW	Zolpidem (GC/MS)
X2XYCU	Zolpidem
X8GHBM	No drugs/metabolites detected
XDPM69	Zolpidem
XEYV82	Zolpidem
XLLH6R	Zolpidem
XQDRBJ	zolpidem
XW382C	Zolpidem
XZ3HVQ	No drugs/metabolites detected
YUQR8B	Zolpidem (ELISA), Fentanyl (ELISA)
ZAZZKJ	No drugs/metabolites detected
ZQ33XH	No drugs/metabolites detected

Response Summary for Item 2	Participants: 9
Zolpidem:	49
Other:	2
No drugs/metabolites detected:	39
Totals may add up to more than the total nu because participants can report multiple	

Confirmatory Results - Item 2

What drugs/metabolites were detected in Item 2?

TABLE 2B Item 2

Item Scenario:

A 57-year-old female was subject to a pre-employment drug test. A urine sample was collected for analysis.

Item Contents and Preparation Concentration: Zolpidem (60 ng/mL)

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
23CWT8	zolpidem	✓			
2EPUZW	Zolpidem	✓			
2GWFMW	zolpidem	✓			
2W8XHH	zolpidem	✓			
2WLKRJ	Zolpidem	✓			
3GDTQZ	Zolpidem	✓			
43NBB2	No drugs/metabolites detected				
4BJF3G	No drugs/metabolites detected				
4EHRZ3	Zolpidem	✓			
4V7VPJ	Zolpidem	✓			
7C2E9B	Zolpidem	✓			
83UUPE	Zolpidem	✓			
8BC73F	No drugs/metabolites detected				
8XKJTE	Zolpidem	✓			
9DVJ3A	Zolpidem	✓			
ACRE27	zolpidem	✓			
AKNAZP	Zolpidem	✓			
AMUY2D	Zolpidem	✓			
AV9LEM	Zolpidem	✓			
AW42QK	Zolpidem	✓			
BFNKV3	Zolpidem	✓			
CGZG3R	No drugs/metabolites detected				
D7WN77	Zolpidem	✓			
DCJQX9	zolpidem	✓			
EH7J2V	No drugs/metabolites detected				
ENCEKV	No drugs/metabolites detected				
G37LTG	Zolpidem	✓			
GD6JEV	Zolpidem	✓			

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
GEVHTU	No drugs/metabolites detected				
GFRZTB	zolpidem	✓			
GG6M7H	Zolpidem	✓			
GQTKV3	zolpidem	✓			
GTE3DN	Zolpidem 2-Hydroxy Zolpidem	/ /			
HMAN8C	No drugs/metabolites detected				
HNF9UC	zolpidem	✓			
HPAYZR	Zolpidem	✓			
J9GLY6	zolpidem	✓			
K4LB6W	Zolpidem	✓			
KG9J2X	Zolpidem	✓			
LBJ4B6	zolpidem	✓			
LGPYU6	zolpidem	✓			
LNPGAG	Zolpidem	✓			
M2NKA2	zolpidem	✓			
M3NHLH	Zolpidem	✓			
MV6G4K	Zolpidem		53	11	ng/mL
N7FA8K	Zolpidem	✓			
NZEVN6	Zolpidem	✓			
P7BCAU	zolpidem	✓			
PHTNRY	Zolpidem		68.4		ng/ml
Q8PXLG	Zolpidem	✓			
QKBBYC	Zolpidem	✓			
QKC6HH	Zolpidem	✓			
R86G4T	zolpidem	✓			
RA7H8W	Zolpidem		64.4		ng/ml
T82C7V	Zolpidem		52.8		ng/ml
T8CDPA	Zolpidem	✓			
T9U8NX	zolpidem	✓			
TD4LB4	zolpidem	✓			
TEY2MZ	ZOLPIDEM		57.15	40%	ng/ml
TXTX4U	Zolpidem	✓	Detected		
U27YJX	Zolpidem	✓			
UNH3DU	zolpidem	✓			

Webcode	Analyte Reported	Qualitative Reported Only Concentration Uncertainty Units
VAGNVC	zolpidem	✓
VRXRG4	Zolpidem	✓
VTT8UZ	zolpidem	✓
VYVGX8	Zolpidem	✓
W93GAU	zolpidem	✓
WAAX76	Zolpidem	✓
WD9CNN	zolpidem	✓
WVUXBZ	Zolpidem	✓
WWPDNW	Zolpidem	✓
X2XYCU	Zolpidem	✓
XDPM69	Zolpidem	✓
XEYV82	Zolpidem	✓
XLLH6R	Zolpidem	✓
XQDRBJ	zolpidem	✓
XW382C	Zolpidem	✓
XZ3HVQ	zolpidem	1
YUQR8B	Zolpidem	1
ZAZZKJ	zolpidem	✓
ZQ33XH	zolpidem	✓

Response Summary for Item 2	Participants: 81
Zolpidem:	73
No drugs/metabolites detected:	8
Other:	1
Totals may add up to more than because participants can repo	

Raw Data - Item 2

List of raw data determinations in ng/mL.

TABLE 2C Item 2

Item 2 Raw Data - Zolpidem Preparation concentration: (60 ng/mL)

Webcode	Raw Data ((ng/mL)
MV6G4K	53.00	
PHTNRY	76.80	60.00
RA7H8W	72.00	56.80
T82C7V	51.20	54.40
TEY2MZ	55.50	58.80

Statistical Analysis for Item 2 - Zolpidem

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
MV6G4K	A single determination.
PHTNRY	The mean of duplicate/several determinations.
RA7H8W	The mean of duplicate/several determinations.
T82C7V	The mean of duplicate/several determinations.
TEY2MZ	The mean of duplicate/several determinations.

Response Summary for Item 2		Participants: 5
A single determination:	1 (20.0%)	
The mean of duplicate/several determinations:	4 (80.0%)	

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Methods of Analysis - Item 2

Webcode	Method	Screening	Confirmatory	Quantitation
23CWT8	Immunoassay GC/MS	1	1	
2EPUZW	Immunoassay LC/MS/MS	✓	✓	
2GWFMW	GC/MS	✓	✓	
2W8XHH	Immunoassay GC/MS	✓ ✓	√	
2WLKRJ	Immunoassay GC/MS LC/MS/MS	/	√ √	
3GDTQZ	Immunoassay GC/MS	√ √	✓	
43NBB2	GC/MS Drug Test	✓	✓	
4BJF3G	Immunoassay GC/MS	✓	✓	
4EHRZ3	LC/MS/MS	✓	✓	
4V7VPJ	GC/MS LC/MS LC-TOF	<i>y y y</i>	✓	
7C2E9B	Immunoassay GC/MS	√ √	✓	
83UUPE	Immunoassay GC/MS LC/MS/MS	/	√ √	
8BC73F	Immunoassay GC/MS LC/MS/MS	√ √	√ √	
8XKJTE	Immunoassay GC/MS	✓ ✓	✓	
9ABRTT	Immunoassay	✓		
9DVJ3A	GC/MS	✓	✓	
ACRE27	Immunoassay GC/MS HPLC/qTOF	<i>y</i>	√	
AKNAZP	Immunoassay GC/MS	√ √	√	
AMUY2D	Immunoassay GC/MS LC/MS/MS	√ √	√ √	
AV9LEM	GC/MS LC/MS/MS	1	✓	

Webcode	Method	Screening	Confirmatory	Quantitation
AW42QK	Immunoassay GC/MS	✓	✓	
BFNKV3	Immunoassay GC/MS	√ √	1	
BMAHLB	Immunoassay	✓		
CGZG3R	GC/MS		✓	
CZBCUY	Immunoassay	✓		
D7WN77	Immunoassay GC/MS	✓ ✓	✓	
DCJQX9	Immunoassay LC-TOFMS	√ √	√	
DHA288	Immunoassay	✓		
EH7J2V	Immunoassay GC/MS	✓	✓	
ENCEKV	Immunoassay	✓		
G37LTG	Immunoassay GC/MS	√ √	✓	
GD6JEV	Immunoassay GC/MS	√ √	√	
GEVHTU	Immunoassay GC/MS	✓	√	
GFRZTB	Immunoassay GC/MS	√	✓	
GG6M7H	Immunoassay GC/MS	✓	✓	
GQTKV3	Immunoassay GC/MS	✓	√	
GTE3DN	LC/MS LC/MS/MS	✓	√	
HMAN8C	GC/MS	✓		
HNF9UC	Immunoassay GC/MS	✓	√	
HPAYZR	Immunoassay GC/MS	✓	✓	
J9GLY6	Immunoassay GC/MS	√ √	✓	
K4LB6W	Immunoassay GC/MS	1	√	
KG9J2X	Immunoassay GC/MS	✓	✓	
LBJ4B6	Immunoassay GC/MS	✓	✓	
LGPYU6	Immunoassay GC/MS	✓ ✓	√	
LNPGAG	GC/MS		✓	

Webcode	Method	Screening	Confirmatory	Quantitation
M2NKA2	GC/MS		✓	
M3NHLH	Immunoassay	✓		
	GC/MS		✓	
MV6G4K	Immunoassay	✓		,
==	LC/MS/MS		✓	✓
N7FA8K	Immunoassay GC/MS	✓	/	
NZEVN6	LC/MS/MS	<u> </u>	<u> </u>	
P7BCAU			V	
P/BCAU	Immunoassay GC/MS	•	✓	
PHTNRY	Immunoassay	✓		
	GC/MS	✓		
	LC/MS/MS		✓	✓
Q8PXLG	GC/MS	✓	,	
	LC/MS/MS		✓	
QKBBYC	Immunoassay	<i>y</i>	/	
	GC/MS		V	
QKC6HH	Immunoassay GC/MS	✓	✓	
OT07W/		<u> </u>	V	
QT87YV	Immunoassay	✓		
R86G4T	Immunoassay GC/MS	√	/	
RA7H8W	Immunoassay	<u> </u>	•	
10-47110 **	GC/MS	<i>'</i>		
	LC/MS/MS		✓	✓
RN7JKX	Immunoassay	✓		
T82C7V	Immunoassay	✓		
	GC/MS	✓		
-	LC/MS/MS	✓	✓	
T8CDPA	Immunoassay	✓	,	
	GC/MS	✓	✓	
T9U8NX	Immunoassay	✓	✓	
	GC/MS		V	
TD4LB4	Immunoassay GC/MS	✓	✓	
TEY2MZ	LC/MS/MS	/	✓	✓
TLFK3T	Immunoassay	✓		
TXTX4U	Immunoassay	✓		
	GC/MS	✓		
	QToF	✓		
U27YJX	Immunoassay	✓	_	
	GC/MS		✓	
UNH3DU	Immunoassay GC/MS	✓	✓	

Webcode	Method	Screening	Confirmatory	Quantitation
VAGNVC	Immunoassay	✓		
	GC/MS		✓	
	LC-QTOF		✓	
VFFAKQ	Immunoassay	✓		
VRXRG4	GC/MS	✓	✓	
VTT8UZ	LC/MS		✓	
VYVGX8	GC/MS	✓	✓	
W93GAU	GC/MS	✓	✓	
WAAX76	GC/MS	✓	✓	_
WD9CNN	Immunoassay	✓		
	GC/MS	✓	✓	
WVUXBZ	GC/MS		✓	
	LC/MS/MS	✓		
	Rapid Chromatographic Immunoassay	✓		
WWPDNW	Immunoassay	✓	_	
	GC/MS	✓	✓	
X2XYCU	GC/MS	✓	_	
	LCMSQTOF		√	
X8GHBM	Immunoassay	✓		
XDPM69	LC/MS	✓		
	LC/MS/MS		√	
XEYV82	GC/MS	✓	✓	
XLLH6R	Immunoassay	✓		
	GC/MS		✓	
XQDRBJ	Immunoassay	✓		
	GC/MS		✓	
XW382C	GC/MS	✓	✓	
XZ3HVQ	Immunoassay	✓		
	GC/MS		✓	
YUQR8B	Immunoassay	✓		
	GC/MS		✓	
ZAZZKJ	Immunoassay	✓		
	GC/MS		✓	
ZQ33XH	GC/MS	✓	✓	

Response Summary for Item 2			Participants: 90
	Screening	Confirmatory	Quantitation
lmmunoassay:	65	0	0
GC/MS:	35	61	0
LC/MS:	3	2	0
LC/MS/MS:	7	16	4
Other:	5	4	0

Additional Comments for Item 2

Webcode	Item 2 - Comments
23CWT8	SKF-525A internal standard
2EPUZW	Above our qualitative cutoff of 20ng/mL
2GWFMW	Sample analyzed twice by GC/MS.
2W8XHH	Internal standard: Mepivacaine
43NBB2	STI tetracosane, 300 ng/mL limit of detection, liquid-liquid extraction.
4BJF3G	Zolpidem was indicated by Immunoassay but not confirmed by GCMS.
7C2E9B	Mepivacaine
83UUPE	Sample was extracted by liquid liquid extraction using codeine -d3 as internal standard with and without derivatisation using TMS. additional compounds were detected (caffeine and paracetamol)
8BC73F	Despite finding zolpidem in the urine sample, the amount was below the cut-off limit we set at the lab (50 ng/mL).
9DVJ3A	Mepivacaine used as internal standard.
BFNKV3	Internal standards: Hexobarbital, SKF-525a
BMAHLB	AMP 500 ng/mL, Benzo 300 ng/mL, COC 300 ng/mL, MAMP 500 ng/mL. OPI 300 ng/mL, THC 50 ng/mL.
CGZG3R	Ethylmorphine was used as internal standard.
D7WN77	Mepivacaine
DHA288	Only a screening test was performed since confirmations are currently beyond my competency. Classes screened - Benzodiazepines, THC, Cocaine, Methamphetamine, Opiates, PCP
GFRZTB	mepivacaine was used as the internal standard during testing.
GQTKV3	Internal standard used was mepivacaine.
GTE3DN	It was not possible to confirmante 2-Hydroxy Zolpidem by MS-MS. There is no Reference Material for this analyte.
HPAYZR	N-Propylamphetamine, alphaprodine and hexobarbital were used as internal standards. Fentanyl ELISA presented a positive result, but Fentanyl was not detected via confirmatory testing (GC/MS). No presumptive screening results are reported by this laboratory.
K4LB6W	Internal standard used was mepivacaine.
KG9J2X	Mepivacaine was used as an internal standard to obtain a relative retention time for Zolpidem.
LBJ4B6	Internal Standards: mepivacaine
LNPGAG	Flurazepam was used as Internal Standard.
M2NKA2	internal standards: mepivacaine, nalorphine
MV6G4K	Zolpidem: Internal Standard: Zolpidem-d6; LOD/LOQ: 20 ng/mL
N7FA8K	Internal Standard - Mepivacaine. Zolpidem: Immunoassay cutoff value - 20 ng/ml; GC/MS LOD - 12.5 ng/ml

Webcode	Item 2 - Comments
QKC6HH	Internal Standard for GC/MS Confirmation: Phenyltoloxamine. No limit of detection.
QT87YV	Screening for the following drugs only: Amphetamine, Benzodiazepines, Cocaine Metabolite, Ecstasy, Methadone, Opiate, Cannabinoids
R86G4T	internal standard: mepivacaine
RN7JKX	Creatinine normal. No drugs detected, all considered under cutoff levels. Cocaine cutoff: 150 ng/mL. Marijuana cutoff: 50 ng/mL. Amphetamines cutoff: 500 ng/mL. Benzodiazepines cutoff: 300 ng/mL. Opiates cutoff: 300 ng/mL
T9U8NX	Internal standards used - mepivacaine
TD4LB4	SKF-525A used as internal standard
TLFK3T	Limit of detection for screening: Amphetamine: 0.786 O.D. / 500ng/mL. Benzodiazepines: 1.077 O.D. / 300ng/mL oxazepam. Cocaine: 0.966 O.D. / 300ng/mL Benzoylecgonine. Methamphetamine: 0.611 O.D. / 500ng/mL. Opiates: 0.789 O.D / 300ng/mL Morphine. THC: 1.064 O.D. / 50ng/mL carboxy-THC.
UNH3DU	internal standard: mepivacaine
VFFAKQ	The sample was screened for the following type/class of drugs: Amphetamines, Benzodiazepines, Cannabinoids, Cocaine, Opiates, PCP
W93GAU	internal standard - phenyltoloxamine
WD9CNN	mepivacaine
WVUXBZ	Alere iCassette (THC) test device was used to screen for THC, referred to in 2-4 [Table 2E Methods of Analysis - Item 2] as rapid chromatographic immunoassay, The cutoff for the assay is 50 ng/mL.
XDPM69	Estazolam = Internal Standard
XLLH6R	GC/MS Internal standard (base extraction): Mepivacaine
XQDRBJ	Mepivacaine was used as internal standard for confirmation tests.
YUQR8B	Alphaprodine, n-Propylamphetamine, and Hexobarbital used as internal standards. Fentanyl ELISA presented a positive result, but Fentanyl was not detected via confirmatory testing (GC/MS). No presumptive screening results are reported by this laboratory.
ZAZZKJ	mepivacaine and nalorphine used as internal standards
ZQ33XH	internal standards: mepivacaine

Screening Results - Item 3

TABLE 3A Item 3

Item Scenario:

A 40-year-old male, previously arrested for an attempted burglary of a pharmacy, is now subject to random drug testing as part of probation. A urine sample was collected for analysis.

Item Contents and Preparation Concentration:

6-Monoacetylmorphine (55 ng/mL) Morphine (2,550 ng/mL)

Codeine (510 ng/mL)

Webcode	Screening Results
23CWT8	Opioids
2EPUZW	6MAM, Opiates
2GWFMW	codeine, morphine
2W8XHH	Opioids Class
2WLKRJ	opiates
3GDTQZ	Opiates
43NBB2	Opiates detected
4BJF3G	Opiates
4EHRZ3	Codeine; 6-Monoacetylmorphine and Morphine
4V7VPJ	6-monoacetylmorphine, Morphine, Codeine
7C2E9B	No drugs/metabolites detected
83UUPE	opiates
8BC73F	Opiates.
8XKJTE	Opiates class
9ABRTT	Opiates
9DVJ3A	common opioids
ACRE27	opiates
AKNAZP	Opiates / 6-Monoacetylmorphine
AMUY2D	opiates
AV9LEM	Opiates
AW42QK	Opiates and Opioids
BFNKV3	Opiates
BMAHLB	Codeine, Morphine
CZBCUY	opiate/opiate metabolite
D7WN77	Codeine, Morphine, 6-monoacetyl-morphine (6-MAM)
DCJQX9	opiate-type drugs, monoacetylmorphine
DHA288	Opiates
EH7J2V	Opiate/Morphine, Oxycodone
EMHNEG	Opiates
ENCEKV	Opiate class compound(s)
GD6JEV	Opiates

Webcode	Screening Results
GEVHTU	opiates
GFRZTB	common opiates (via EIA)
GQTKV3	opioids
GTE3DN	[Participant reported that drugs were detected, but did not report the drug class or name]
HMAN8C	No drugs/metabolites detected
HNF9UC	[Participant reported that drugs were detected, but did not report the drug class or name]
HPAYZR	ELISA Opiates/Oxycodone/Oxymorphone, ELISA Fentanyl
J9GLY6	codeine, morphine
K4LB6W	Opioids
KG9J2X	Opioids
LBJ4B6	opioids
LGPYU6	Opioids
LNPGAG	No drugs/metabolites detected
M2NKA2	opioids
M3NHLH	Opiates
MV6G4K	Opiates
NZEVN6	6-monoacetylmorphine, morphine, and codeine
P7BCAU	opioids
PHTNRY	Opiates
Q8PXLG	opioids
QKBBYC	Opiates, monoacetylmorphine, morphine, codeine
QKC6HH	Opiates per Immunoassay, Codeine & Morphine per GC/MS
QT87YV	Opiate
R86G4T	opioids
R9CWCK	Specimen screened positive for Opiates.
RA7H8W	Caffeine, 6-monoacetylmorphine, Codeine, Morphine, Hydrocodone, Hydromorphone
RN7JKX	Opiates
T82C7V	Opiates
T8CDPA	Codeine, Morphine, 6-monoacetylmorphine
T9U8NX	common opioids
TD4LB4	opiates
TEY2MZ	6-MAM, CODEINE, HYDROCODONE, MORPHINE
TLFK3T	Opiates
TXTX4U	Morphine, Codeine, Monoacetylmorphine
U27YJX	Opiates
UNH3DU	common opioids
VAGNVC	opiates
VFFAKQ	Opiates

TABLE 3A Item 3

Webcode	Screening Results
VRXRG4	Codeine, Morphine, 6-monoacetylmorphine
VTT8UZ	opiate group
VYVGX8	Codeine, Morphine, Monoacetylmorphine
W93GAU	opiates
WAAX76	Opiates
WD9CNN	opiates
WVUXBZ	Morphine, Codeine, 6-o-acetylmorphine
WWPDNW	Opioid Class (IA)
X2XYCU	Opiates
X8GHBM	Sample screened positive for opiates
XDPM69	Morphine, Codeine, 6-Acetylmorphine
XEYV82	Opiates
XLLH6R	Amphetamine/MDA, Opiates
XQDRBJ	codeine, morphine, 6- monoacetyl morphine
XW382C	Fentanyl and Opiates
XZ3HVQ	opioids
Y9TF2P	Opiates
YUQR8B	Opiates (ELISA), Oxycodone/Oxymorphone (ELISA), Fentanyl (ELISA)
ZAZZKJ	opioids
ZQ33XH	common opioids

Response Summary for Item 3 Opiates, 6-MAM, morphine, and/or codeine: Other: 8 No drugs/metabolites detected: 3 Totals may add up to more than the total number of participants because participants can report multiple drugs/analytes.

Confirmatory Results - Item 3

What drugs/metabolites were detected in Item 3?

TABLE 3B Item 3

Item Scenario:

A 40-year-old male, previously arrested for an attempted burglary of a pharmacy, is now subject to random drug testing as part of probation. A urine sample was collected for analysis.

Item Contents and Preparation Concentration:

6-Monoacetylmorphine (55 ng/mL) Morphine (2,550 ng/mL) Codeine (510 ng/mL)

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
23CWT8	6-acetylmorphine morphine codeine	√ √ √			
2EPUZW	6-Monoacetylmorphine Morphine Codeine	<i>,</i>	53.86	4.30	ng/mL
2GWFMW	morphine codeine	<i>J J</i>			
2W8XHH	6 monoacetyl morphine Morphine Codeine	\ \ \			
2WLKRJ	6 monoacetylmorphine Morphine Codeine	\ \ \			
3GDTQZ	6 monoacetylmorphine Morphine Codeine	\ \ \			
43NBB2	6-Monoacetylmorphine Morphine Codeine	\ \ \			
4BJF3G	6-monoacetylmorphine Morphine Codeine	\ \ \			
4EHRZ3	6-Monoacetylmorphine Morphine Codeine	<i>y y y</i>			
4V7VPJ	6-monoacetylmorphine Morphine Codeine	<i>J J</i>			
7C2E9B	6-monoacetyl-morphine Morphine Codeine	√ √ √			

Webcode	e Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
83UUPE	6-MAM morphine codeine	√ √ √			
8BC73F	6-MAM Morphine Codeine	√ √ √			
8XKJTE	6-Monoacetylmorphine Morphine Codeine	√ √			
9ABRTT	6-Monoacetylmorphine Morphine Codeine	\ \ \			
9DVJ3A	6-Monoacetylmorphine Morphine Codeine	<i>y y y</i>			
ACRE27	6-monoacetylmorphine morphine codeine	<i>y y y</i>			
AKNAZP	6-Monoacetylmorphine Morphine Codeine	√ √			
AMUY2D	6-acetylmorphine Morphine Codeine	√ √			
AV9LEM	6-Monoacetylmorphine Morphine Codeine		50 2146 513		ng/ml ng/ml ng/ml
AW42QK	6-Acetyl-Morphine (6-MAM) Morphine Codeine	√ √			
BFNKV3	6-monoacetylmorphine Morphine Codeine	√ √ √			
BMAHLB	Morphine Codeine		2.52 0.495	0.43 0.097	μg/mL μg/mL
CGZG3R	6-Acetylmorphine Morphine Codeine	<i>y y y</i>			
D7WN77	6-monoacetyl-morphine (6-MAN Morphine Codeine	()			

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
DCJQX9	monoacetylmorphine morphine codeine	√ √			
EH7J2V	6-monacetylmorphine morphine codeine	<i>y y y</i>			
EMHNEG	6-Acetylmorphine Morphine Codeine	√ √ √			
ENCEKV	No drugs/metabolites detected				
GD6JEV	6-monoacetylmorphine Morphine Codeine	√ √ √			
GEVHTU	6-monoacetylmorphine morphine codeine	√ √ √			
GFRZTB	6-monoacetyl morphine (6MAM morphine codeine)			
GQTKV3	6-monoacetyl morphine morphine codeine	√ √ √			
GTE3DN	6-Acetylmorphine Morphine Codeine	√ √ √			
HMAN8C	No drugs/metabolites detected				
HNF9UC	6-monoacetylmorphine morphine codeine	<i>J J</i>			
HPAYZR	6-Acetylmorphine Morphine Codeine	\ \ \			
J9GLY6	6-monoacetyl morphine morphine codeine	√ √			
K4LB6W	6-mono acetyl morphine Morphine Codeine	√ √ √			
KG9J2X	6-monoacetyl morphine Morphine Codeine	√ √ √			

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
LBJ4B6	6-monoacetylmorphine	✓			
	morphine	✓			
	codeine	✓			
LGPYU6	6-monoacetyl-morphine	✓			
	morphine	✓			
	codeine	✓			
LNPGAG	6-Acetylmorphine	✓			
	Morphine	√			
	Codeine	✓			
M2NKA2	6-monoacetylmorphine	✓			
	morphine	✓			
	codeine	✓			
M3NHLH	6-Monoacetylmorphine	✓			
	Morphine	✓			
	Codeine	✓			
MV6G4K	6-acetylmorphine		54	11	ng/mL
	Morphine		2533	507	ng/mL
	Codeine		521	104	ng/mL
NZEVN6	6-monoacetylmorphine	✓			
	morphine	✓			
	codeine	✓			
P7BCAU	6-monoacetylmorphine	✓			
	morphine	✓			
	codeine	✓			
PHTNRY	6-monoacetylmorphine		17.2		ng/ml
	Morphine		1094.4		ng/ml
	Codeine		389.2		ng/ml
_	Caffeine		57.6		ng/ml
	Hydrocodone		33.6		ng/ml
	Hydromorphone		341.2		ng/ml
Q8PXLG	6-Acetylmorphine		69	13	ng/mL
	Morphine	✓			
	Codeine	✓			
QKBBYC	6-Monoacetylmorphine	✓			
	Morphine	✓			
	Codeine	✓			
QKC6HH	6-Monoacetylmorphine	✓			
QT87YV	6 Monoacetylmorphine		55		ng/mL
	Morphine		2698		ng/mL
	Codeine		491		ng/mL

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
R86G4T	6-monoacetyl morphine	✓			
	morphine	✓			
	codeine	√			
RA7H8W	6-monoacetylmorphine		16		ng/ml
	Morphine		1170.4		ng/ml
	Codeine		420		ng/ml
i	Caffeine	_	58.8		ng/ml
	Hydrocodone	_	35.6		ng/ml
	Hydromorphone		379.6		ng/ml
T82C7V	6-monoacetylmorphine		19.2		ng/ml
	Morphine		1127.6		ng/ml
	Codeine		384.4		ng/ml
ī	Caffeine		75.2		ng/ml
	Hydrocodone		31.6		ng/ml
	Hydromorphone		355.6		ng/ml
T8CDPA	6-monoacetylmorphine	✓			
	Morphine	✓			
	Codeine	✓			
T9U8NX	6-monoacetylmorphine (6-MAM) 🗸			
	morphine	✓			
	codeine	✓			
TD4LB4	morphine	1			
	codeine	✓			
TEY2MZ	6-MAM		60.8	40%	ng/ml
	Morphine		4701.1	40%	ng/ml
	CODEINE	<u></u>	476.9	40%	ng/ml
	HYDROCODONE		74.45	40%	ng/ml
TLFK3T	Morphine		2.58	± 0.44	μg/mL
121101	Codeine		0.491	± 0.096	μg/mL
TXTX4U	Monoacetylmorphine		52	±20%	ng/mL
ININAO	Morphine		2800	±20%	ng/mL
	Codeine		460	±20%	ng/mL
U27YJX	6-monoacetylmorphine	√			
UZ/TJX	Morphine	<i>'</i>			
	Codeine	✓			
UNH3DU		✓			
טטטוואוט	6-monoacetyl-morphine morphine	√			
	codeine	√			
\/A C \ I\ /C					
VAGNVC	6-monoacetylmorphine	✓ ✓			
	morphine codeine	√			
	Codeme	▼			

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
VRXRG4	6-monoacetylmorphine Morphine Codeine	√ √			
VTT8UZ	6-acetyl morphine morphine codeine	√ √ √			
VYVGX8	Monoacetylmorphine Morphine Codeine	√ √			
W93GAU	6-monoacetylmorphine morphine codeine	\ \ \			
WAAX76	6-Monoacetylmorphine Morphine Codeine	\ \ \			
WD9CNN	6-monoacetylmorphine morphine codeine	<i>y y y</i>			
WVUXBZ	6-o-acetylmorphine Morphine Codeine	<i>y y</i>			
WWPDNW	6-monoacetylmorphine Morphine Codeine	<i>J J</i>			
X2XYCU	6-Monoacetylmorphine Morphine Codeine	<i>y y</i>			
XDPM69	6-Acetylmorphine Morphine Codeine	<i>y y y</i>			
XEYV82	6-monoacetylmorphine Morphine Codeine	<i>J J</i>			
XLLH6R	6-Monoacetylmorphine (6-MAM Morphine Codeine	(i)			
XQDRBJ	6-monoacetyl morphine morphine codeine	√ √ √			

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
XW382C	6-Acetylmorphine	✓			
	Morphine	✓			
	Codeine	✓			
XZ3HVQ	6 monoacetylmorphine	1			
	morphine	✓			
	codeine	✓			
Y9TF2P	6-Monoacetylmorphine (6-MAM) 🗸			
	Morphine	✓			
	Codeine	✓			
YUQR8B	6-Acetylmorphine	1			
	Morphine	✓			
	Codeine	✓			
ZAZZKJ	6-monoacetyl morphine	1			
	morphine	✓			
	codeine	✓			
ZQ33XH	6-monoacetylmorphine	1			
	morphine	✓			
	codeine	✓			

Response Summary for Item 3	Participants: 84
6-Monoacetylmorphine:	78
Morphine:	81
Codeine:	81
No drugs/metabolites detected:	2
Other:	10
Totals may add up to more than because participants can repo	the total number of participants ort multiple drugs/metabolites.

Raw Data - Item 3

List of raw data determinations in ng/mL.

TABLE 3C Item 3

Item 3 Raw Data - 6-Monoacetylmorphine Preparation concentration: (55 ng/mL)

Webcode	Raw Data ((ng/mL)
2EPUZW	53.86	
AV9LEM	52.78	48.21
MV6G4K	54.00	
PHTNRY	16.80	17.60
Q8PXLG	69.00	
QT87YV	55.66	55.69
RA7H8W	16.00	16.00
T82C7V	16.80	21.60
TEY2MZ	62.90	58.70
TXTX4U	55.00	49.00

Statistical Analysis for Item 3 - 6-Monoacetylmorphine

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 - Morphine Preparation concentration: (2,550 ng/mL)

Webcode	Raw Data (ı	ng/mL)
AV9LEM	2,150.0	2,142.4
BMAHLB	2,529.0	
MV6G4K	2,533.0	
PHTNRY	1,074.4	1,114.4
QT87YV	2,697.8	2,698.3
RA7H8W	1,174.4	1,166.4
T82C7V	1,089.6	1,165.6
TEY2MZ	4,701.1	
TLFK3T	2,587.0	
TXTX4U	2,707.0	2,877.0

Statistical Analysis for Item 3 - Morphine

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 - Codeine Preparation concentration: (510 ng/mL)

Webcode	Raw Data	(ng/mL)
AV9LEM	518.4	508.3
BMAHLB	495.0	
MV6G4K	521.0	
PHTNRY	378.4	400.0
QT87YV	492.0	491.3
RA7H8W	425.6	414.4
T82C7V	390.4	378.4
TEY2MZ	433.9	519.9
TLFK3T	491.0	
TXTX4U	464.0	451.0

Statistical Analysis for Item 3 - Codeine

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 - Other

Webcode	Analyte	Raw D	Data (ng/mL)
PHTNRY	Caffeine	64.00	51.20
	Hydrocodone	33.60	33.60
	Hydromorphone	341.6	340.8
RA7H8W	Caffeine	72.80	44.80
	Hydrocodone	35.20	36.00
	Hydromorphone	382.4	376.8
T82C7V	Caffeine	73.60	76.80
	Hydrocodone	32.00	31.20
	Hydromorphone	342.4	368.8
TEY2MZ	HYDROCODONE	70.90	78.00

Statistical Analysis for Item 3 - Other

Please note statistical analysis is not provided for other drug responses.

Reporting Procedures - Item 3

If quantitative analysis was performed, the reported concentrations are:

WebCode	Quantitative Reporting Procedures
2EPUZW	A single determination.
AV9LEM	The mean of duplicate/several determinations.
BMAHLB	A single determination.
MV6G4K	A single determination.
PHTNRY	The mean of duplicate/several determinations.
Q8PXLG	A single determination.
QT87YV	A single determination.
RA7H8W	The mean of duplicate/several determinations.
T82C7V	The mean of duplicate/several determinations.
TEY2MZ	The mean of duplicate/several determinations.
TLFK3T	A single determination.
TXTX4U	The mean of duplicate/several determinations.

Response Summary for Item 3		Participants: 12
A single determination:	6 (50.0%)	
The mean of duplicate/several determinations:	6 (50.0%)	

Methods of Analysis - Item 3

WebCode	Method	Screening	Confirmatory	Quantitation
23CWT8	Immunoassay GC/MS	✓	√	
2EPUZW	Immunoassay LC/MS/MS	✓	✓	✓
2GWFMW	GC/MS	✓	✓	
2W8XHH	Immunoassay GC/MS	✓ ✓	✓	
2WLKRJ	Immunoassay GC/MS LC/MS/MS	✓	√ √	
3GDTQZ	Immunoassay GC/MS	✓ ✓	/	
43NBB2	GC/MS Drug Test	/	✓	
4BJF3G	Immunoassay GC/MS	✓	✓	
4EHRZ3	GC/MS LC/MS/MS	✓	✓	
4V7VPJ	GC/MS LC/MS/MS LC-TOF	✓ ✓ ✓	✓	
7C2E9B	Immunoassay GC/MS	√ √	✓	
83UUPE	Immunoassay GC/MS LC/MS/MS	√	√	
8BC73F	Immunoassay GC/MS LC/MS/MS	√ √	√	
8XKJTE	Immunoassay GC/MS	✓ ✓	✓	
9ABRTT	Immunoassay GC/MS	✓	/	
9DVJ3A	Immunoassay GC/MS	/ /	✓	
ACRE27	Immunoassay GC/MS HPLC/qTOF	1		
AKNAZP	Immunoassay GC/MS	/	/	
AMUY2D	Immunoassay LC/MS/MS	√ ✓	✓	

WebCode	Method	Screening	Confirmatory	Quantitation
AV9LEM	Immunoassay GC/MS LC/MS/MS	✓	<i>J J</i>	<i>I</i>
AW42QK	Immunoassay GC/MS	✓	✓	
BFNKV3	Immunoassay GC/MS	√ ✓	√	
BMAHLB	Immunoassay GC/MS	/	√	1
CGZG3R	GC/MS		✓	
CZBCUY	Immunoassay	✓		
D7WN77	Immunoassay GC/MS	✓	√	
DCJQX9	Immunoassay LC-TOFMS	✓	/	
DHA288	Immunoassay	✓		
EH7J2V	Immunoassay GC/MS	✓	√	
EMHNEG	Immunoassay GC/MS	✓	/	
ENCEKV	Immunoassay	✓		
GD6JEV	Immunoassay GC/MS	√ √	/	
GEVHTU	Immunoassay GC/MS	✓	✓	
GFRZTB	Immunoassay GC/MS	✓	✓	
GQTKV3	Immunoassay GC/MS	/	√	
GTE3DN	LC/MS LC/MS/MS	✓	/	
HMAN8C	GC/MS	✓		
HNF9UC	Immunoassay GC/MS	✓	✓	
HPAYZR	Immunoassay GC/MS	✓	√	
J9GLY6	Immunoassay GC/MS	√ √	/	
K4LB6W	Immunoassay GC/MS	✓	/	
KG9J2X	Immunoassay GC/MS	✓	/	
LBJ4B6	Immunoassay GC/MS	✓	✓	

WebCode	Method	Screening	Confirmatory	Quantitation
LGPYU6	Immunoassay GC/MS	√ √	√	
LNPGAG	GC/MS		✓	
M2NKA2	Immunoassay GC/MS	1	✓	
M3NHLH	Immunoassay GC/MS	✓	✓	
MV6G4K	Immunoassay LC/MS/MS	✓	✓	✓
NZEVN6	LC/MS/MS	✓	✓	
P7BCAU	Immunoassay GC/MS	✓	√	
PHTNRY	Immunoassay GC/MS	✓ ✓	✓	
	LC/MS/MS		✓	√
Q8PXLG	Immunoassay LC/MS/MS	√	√	✓
QKBBYC	Immunoassay GC/MS	✓ ✓	✓	
QKC6HH	Immunoassay GC/MS	✓ ✓	✓	
QT87YV	Immunoassay GC/MS	/	√	
R86G4T	Immunoassay GC/MS	√ √	/	
RA7H8W	Immunoassay GC/MS LC/MS/MS	✓	<i>,</i>	√
RN7JKX	Immunoassay	✓		
T82C7V	Immunoassay GC/MS LC/MS/MS	<i>,</i>	<i>,</i>	√
T8CDPA	Immunoassay GC/MS	√ ✓	√	
T9U8NX	Immunoassay GC/MS	✓	√	
TD4LB4	Immunoassay GC/MS	✓	√	
TEY2MZ	LC/MS/MS	✓	✓	✓
TLFK3T	Immunoassay GC/MS	✓	√	/
TXTX4U	Immunoassay GC/MS LC/MS/MS	√ √		/
	QToF	✓		

WebCode	Method	Screening	Confirmatory	Quantitation
U27YJX	Immunoassay GC/MS	/	√	
UNH3DU	Immunoassay GC/MS	/	✓	
VAGNVC	Immunoassay GC/MS LC-QTOF	✓	√ √	
VFFAKQ	Immunoassay	1		
VRXRG4	Immunoassay GC/MS	✓	✓	
VTT8UZ	Immunoassay GC/MS LC/MS	✓	√ ✓	
VYVGX8	Immunoassay GC/MS	✓	√	
W93GAU	Immunoassay GC/MS	✓	/	
WAAX76	Immunoassay GC/MS	✓	/	
WD9CNN	Immunoassay GC/MS	✓	/	
WVUXBZ	GC/MS LC/MS/MS Rapid Chromatographic Immunoassay	✓ ✓	✓	
WWPDNW	Immunoassay GC/MS	✓ ✓	✓	
X2XYCU	Immunoassay GC/MS LCMSQTOF	√	√ √	
X8GHBM	Immunoassay	✓		
XDPM69	LC/MS LC/MS/MS	✓	✓	
XEYV82	Immunoassay GC/MS	✓	✓	
XLLH6R	Immunoassay GC/MS	1	✓	
XQDRBJ	Immunoassay GC/MS	/	/	
XW382C	Immunoassay GC/MS LC/MS/MS	√ √	√	
XZ3HVQ	Immunoassay GC/MS	✓	✓	
Y9TF2P	Immunoassay GC/MS	✓	√	

WebCode	Method	Screening	Confirmatory	Quantitation
YUQR8B	Immunoassay	✓		
	GC/MS		✓	
ZAZZKJ	Immunoassay	✓		
	GC/MS		✓	
ZQ33XH	Immunoassay	✓		
	GC/MS		✓	

Response Summary for Item 3			Participants: 89
	Screening	Confirmatory	Quantitation
Immunoassay:	77	0	0
GC/MS:	25	70	3
LC/MS:	2	1	0
LC/MS/MS:	7	18	9
Other:	4	3	0

Additional Comments for Item 3

WebCode	Item 3 - Comments
23CWT8	SKF-525A internal standard
2EPUZW	Codeine and morphine are above the qualitative cutoff of 50ng/mL.
2GWFMW	Sample analyzed twice by GC/MS.
2W8XHH	Internal Standards: Mepivacaine and Nalorphine
3GDTQZ	Nalorphine - Internal Standard for Opiate Confirmation
43NBB2	The same method of analysis was used in the item 1 and 2. [The following data was removed from Table 3C - Raw Data Item 3 since the participant indicated it is the detection limit - 6-Monoacetylmorphine: "300", Morphine: "300", Codeine: "300"]
4BJF3G	Zolpidem was indicated by Immunoassay but not confirmed by GCMS.
7C2E9B	Mepivacaine, nalorphine - butyl derivative
83UUPE	Sample was extracted by liquid liquid extraction using codeine -d3 as internal standard with and without derivatisation using TMS. The GCMS general unknown screening revealed the presence of Protopine qualitatively
9DVJ3A	Mepivaciane\Nalorphine used as internal standards.
BMAHLB	IS: COD-D3, MOR-D3. Screen c/o 300 ng/mL. COD/MOR LOD 0.2 μ g/mL.
CGZG3R	Ethylmorphine was used as internal standard.
CZBCUY	Preliminary testing indicated the possible presence of opiate(s)/opiate metabolite(s). Unable to pursue as analyst is not authorized to perform this type of confirmation testing.
D7WN77	Mepivacaine, nalorphine
DHA288	Only a screening test was performed since confirmations are currently beyond my competency. Classes screened - Benzodiazepines, THC, Cocaine, Methamphetamine, Opiates, PCP
EMHNEG	Mepivacaine and Nalorphine - Internal Standards
ENCEKV	Preliminary testing indicated the possible presence of an opiate class compound(s). Unable to pursue as that analyst is not authorized to perform this type of confirmation testing.
GFRZTB	mepivacaine and nalorphine were used as various internal standards during testing.
GQTKV3	Internal standards used were mepivacaine and nalorphine. Butylation was used.
GTE3DN	A small signal for morphine glucuronide was detected. It was not possible to confirmate by MS-MS.
HPAYZR	N-Propylamphetamine, alphaprodine and hexobarbital were used as internal standards. Fentanyl ELISA presented a positive result, but Fentanyl was not detected via confirmatory testing (GC/MS). No presumptive screening results are reported by this laboratory. Oxycodone/Oxymorphone ELISA presented a positive result, but neither Oxycodone nor Oxymorphone were detected via confirmatory testing (GC/MS). No presumptive screening results are reported by this laboratory.
K4LB6W	Internal standards used include mepivacaine and nalorphine.

WebCode	Item 3 - Comments
KG9J2X	The internal standard used was Mepivacaine to obtain the relative retention time for Codeine, Morphine, and 6MAM. Nalorphine was also used as an internal standard in an extraction to ensure that butylation occurred. Nalorphine, 6MAM, and morphine were all butylated in this extraction.
LBJ4B6	Internal Standards: mepivacaine, nalorphine
LNPGAG	Flurazepam was used as Internal Standard.
M2NKA2	internal standards: mepivacaine, nalorphine
MV6G4K	6-acetylmorphine: Internal Standard: 6-acetylmorphine-d6. LOD/LOQ: 2 ng/mL. Codeine: Internal Standard: Codeine-d6. LOD/LOQ: 10 ng/mL. Morphine: Internal Standard: Morphine-d6. LOD/LOQ: 10 ng/mL
QKBBYC	Nalorphine used as internal standard for opiate confirmation.
QKC6HH	Internal Standard for GC/MS Confirmation: Phenyltoloxamine. No limit of detection.
QT87YV	Internal Standards: Morphine D3, Codeine D3, Mam D3. Six point curve- Morphine/ Codeine 50ng/mL - 2000ng/mL. MAM 5ng/mL - 200ng/mL
R86G4T	internal standard: mepivacaine, nalorphine
RN7JKX	Opiates cutoff: 300 ng/mL. Creatinine normal
T9U8NX	Internal standards used - mepivacaine & nalorphine
TD4LB4	SKF-525A used as internal standard
TLFK3T	Internal standard: codeine-D3 & morphine-D3. Limit of quantitation for confirmation: codeine: 0.200µg/mL; morphine: 1.0µg/mL. Limit of detection for confirmation: codeine: 0.200µg/mL; morphine: 0.200µg/mL. Limit of detection for screening: opiates: 0.789 O.D / 300ng/mL morphine.
TXTX4U	Deuterated (D3) standards of target analytes used as internal standards.
UNH3DU	internal standards: mepivacaine, nalorphine
VFFAKQ	The sample was screened for the following type/class of drugs: Amphetamines, Benzodiazepines, Cannabinoids, Cocaine, Opiates, PCP. No confirmatory method was used on this samples as it is beyond my current qualifications.
VYVGX8	Nalorphine ISTD for Combined Drugs extraction
W93GAU	internal standard - phenyltoloxamine
WD9CNN	mepivacaine nalorphine
WVUXBZ	Alere iCassette (THC) test device was used to screen for THC, referred to in 3-4 [Table 3E Methods of Analysis - Item 3] as rapid chromatographic immunoassay, The cutoff for the assay is 50 ng/mL.
X8GHBM	Our lab currently does not confirm opiates in urine.
XDPM69	Estazolam = Internal Standard

WebCode	Item 3 - Comments
XLLH6R	GC/MS Internal standard (base extraction): Mepivacaine. GC/MS Internal standards (derivatized base extraction): Nalorphine, Mepivacaine. GC/MS Internal standards (phenethylamine extraction): Mepivacaine, Amphetamine-D11, Methamphetamine-D11. Analysis did not confirm the presence of Amphetamine/MDA.
XQDRBJ	Mepivacaine was the internal standard used in confirmation testing.
Y9TF2P	Two extractions were performed that were run on GC/MS, one was a base extraction the other was a base derivatized extraction. Internal standards were Mepivacaine and Nalorphine-diTMS. Doxylamine was seen but not reported. Morphine related peaks were seen but not reported.
YUQR8B	Alphaprodine, n-Propylamphetamine, and Hexobarbital used as internal standards. Fentanyl ELISA presented a positive result, but Fentanyl was not detected via confirmatory testing (GC/MS). No presumptive screening results are reported by this laboratory. Oxycodone/Oxymorphone (ELISA) presented a positive result, but neither Oxycodone nor Oxymorphone were detected via confirmatory testing (GC/MS). No presumptive screening results are reported by this laboratory.
ZAZZKJ	mepivacaine and nalorphine used as internal standards
ZQ33XH	internal standards: mepivacaine/nalorphine

Additional Test Comments

TABLE 4

WebCode	Additional Comments
9DVJ3A	I am not sure what the concentration of the cocaine was intended to be (I assume small), but there is stability issues with cocaine in urine (acidic environment) which may have contributed to some lower recoveries.
CZBCUY	An immunoassay screen was performed on the sample for benzodiazepines class compounds, cannabinoid, cocaine, opiate class compounds, methamphetamine, and methadone. At this time, analyst is only signed off to perform screening methods on the ELISA and benzodiazepine confirmation on the LCMSQQQ for urine.
ENCEKV	Analyst is only authorized to perform immunoassay screening and benzodiazepine confirmation for urine samples. An Immunoassay Screen was performed on the samples for: Benzodiazepines Class Compounds, Cannabinoids, Cocaine, Opiate Class Compounds, Methamphetamine and Methadone.

Appendix: Data Sheet

Collaborative Testing Services ~ Forensic Testing Program

Test No. 18-5671: Urine Drug Analysis

DATA MUST BE RECEIVED BY May 14, 2018 TO BE INCLUDED IN THE REPORT

	Participant Code:	WebCode:
 	Accreditati	on Release Statement
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	• • • • • • • • • • • • • • • • • • • •	ata directly to ASCLD/LAB, ANAB, and A2LA. Please nts to ensure your data is handled appropriately.
		or submission to ASCLD/LAB, ANAB, and/or A2LA. last page must be completed and submitted.)
 	This participant's data is NOT inter	ided 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 23-year-old male was pulled over for speeding and aggressive driving. The officer noted that the individual exhibited dilated pupils, was very talkative, and energetic. A urine sample was collected for analysis 90 minutes later.

Case 2: A 57-year-old female was subject to a pre-employment drug test. A urine sample was collected for analysis.

Case 3: A 40-year-old male, previously arrested for an attempted burglary of a pharmacy, is now subject to random drug testing as part of probation. A urine sample was collected for analysis.

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.

-Samples may contain methanol, acetonitrile, and caffeine as artifacts from production.

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

Page 1 of 9

Screening Results for Item 1:

Printed: June 20, 2018

Participant Code: WebCode:

1-1.) Please indicate the	screening results fo	or Item 1		
No drugs detecte	d utilizing screening me	ethods.		
Drug(s) detected	(list each class and/or o	drug name below).		
Confirmatory Resul	ts for Item 1:			
1-2.) What drugs/metabo were performed, please		-		ons
		e the number of analytes rm following this layout.	•	pace is
No drugs/metabo	olites detected utilizing	confirmatory methods.		
Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units
Data(s) Anathraia Barfarmand an	Analista			,,
Date(s) Analysis Performed on Raw Data (ng/mL):	Analyte:			
	Qualitative	Reported		
Analyte	Only?	Concentration	Uncertainty	Units ()
Date(s) Analysis Performed on	Analyte:			
Raw Data (ng/mL):				
Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units
Date(s) Analysis Performed on	Amalista			
() , = : = : : : : : : : : : : : : : : : :	Analyle:			
Raw Data (ng/mL):	Analyle:			

Participant Code: WebCode:

Result	ts for	Item 1	(conti	inued):

If quantitative analysis was pe	rformed, are t	he reported cond	entrations for Item 1:
A single determination?	The mean of	duplicate / several a	determinations?
Other? (Specify):			
) Please check the methods used was for screening, confirmator			y whether each method
Method Used	Screening	<u>Confirmatory</u>	<u>Quantitation</u>
Immunoassay			
GC/MS			
LC/MS			
LC/MS/MS			
Other:			
Other:			
.) Additional Comments for Item Please include any relevant inform		ternal standard(s)	used, limits of detection,

Screening Results for Item 2:

Printed: June 20, 2018

Participant Code: WebCode:

2-1.) Please indicate the scree	ning results f	or Item 2		
No drugs detected utilizi	ing screening me	ethods.		
Drug(s) detected (list each	ch class and/or	drug name below).		
Confirmatory Results fo	r Item 2:			
2-2.) What drugs/metabolites were performed, please record				ons
The number of boxes shown oneeded, copy this page or att		•	•	pace is
No drugs/metabolites de	etected utilizing	confirmatory methods.		
Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units
	_ ⊔ _			()
Date(s) Analysis Performed on Analyte	e:			
Raw Data (ng/mL):				
		-		
Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units
Details Ameliain Boofeannad an Amelia	_			//
Date(s) Analysis Performed on Analyte	e:			
Raw Data (ng/mL):				
Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units
Date (A Aradas' B. C				1
Date(s) Analysis Performed on Analyte	e:			
Raw Data (ng/mL):				
				

Participant Code: WebCode:

Result	s for	Item 2	(conti	inued)):

2-3.) If quantitative analysis was per	rformed, are t	he reported cond	entrations for Item 2:
A single determination?	The mean of	duplicate / several c	determinations?
Other? (Specify):			
2-4.) Please check the methods used used was for screening, confirmatory			g whether each method
Method Used	<u>Screening</u>	Confirmatory	Quantitation
Immunoassay			
GC/MS			
LC/MS			
LC/MS/MS			
Other:			
Other:			
2-5.) Additional Comments for Item 2 Please include any relevant informa		ternal standard(s)	used, limits of detection, etc

Participant Code: WebCode:

3-1.) Please indicate the	screening results f	or Item 3		
No drugs detecte	ed utilizing screening me	ethods.		
Drug(s) detected	(list each class and/or	drug name below).		
Confirmatory Resu	Its for Item 3:			
3-2.) What drugs/metab were performed, please				ions
		e the number of analyte orm following this layout		space is
No drugs/metab	olites detected utilizing	confirmatory methods.		
Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units
				//
Date(s) Analysis Performed on	Analyte:			(
Date(s) Analysis Performed on Raw Data (ng/mL):	Analyte:			(
, ,	Analyte:			(
, ,	Analyte:Qualitative Only?	Reported Concentration	Uncertainty	Units
Raw Data (ng/mL):	Qualitative Only?	Concentration	Uncertainty	Units ()
Raw Data (ng/mL): Analyte	Qualitative Only?	Concentration	Uncertainty	Units ()
Analyte Date(s) Analysis Performed on	Qualitative Only?	Concentration	Uncertainty	Units ()
Analyte Date(s) Analysis Performed on	Qualitative Only?	Concentration	Uncertainty	Units ()
Raw Data (ng/mL): Analyte Date(s) Analysis Performed on Raw Data (ng/mL):	Qualitative Only? Analyte: Qualitative Only?	Reported Concentration		()

Participant Code: WebCode:

Resul	ts f	or	ltem	3 (conti	<u>inued</u>	<u>):</u>

3-3.) If quantitative analysis was per		•	
A single determination?	The mean of	duplicate / several o	determinations?
Other? (Specify):			
-4.) Please check the methods used sed was for screening, confirmatory			y whether each method
Method Used	<u>Screening</u>	Confirmatory	<u>Quantitation</u>
Immunoassay			
GC/MS			
LC/MS			
LC/MS/MS			
Other:			
Other:			
-5.) Additional Comments for Item 3 Please include any relevant informa		ternal standard(s)	used, limits of detection, etc.

Participa	nt	Code
V	/eb	Code

Date Samples Received:	
Additional Comments on Test	

Return Instructions: Data must be received via Participant Code:

online data entry, fax (please include a cover sheet), ONLINE DATA ENTRY: www.cts-portal.com

or mail by May 14, 2018 to be included in the

report. Emailed data sheets are not accepted. FAX: +1-571-434-1937

QUESTIONS?

TEL: +1-571-434-1925 (8 am - 4:30 pm EST)

MAIL: Collaborative Testing Services, Inc.

EMAIL: forensics@cts-interlab.com
P.O. Box 650820

www.ctsforensics.com Sterling, VA 20165-0820 USA

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. 18-5671: Urine Drug Analysis

This release page must be completed and received by <u>May 14, 2018</u> 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				
	ANAB Certificate No (Include ASCLD/LAB Certificates here)			
	A2LA Certificate No.			
Step 2: Complete	the Laboratory Identifying Information in its entirety			
Signature and Title				
Laboratory Name				
Location (City/State)				

Return Instructions

Please submit the completed Accreditation Release at the same time as your full data sheet. See Data Sheet Return Instructions on the previous page.

Questions? Contact us 8 am-4:30 pm EST
Telephone: +1-571-434-1925
email: forensics@cts-interlab.com

Accreditation Release