

## Urine Drug Analysis Test No. 22-5671 Summary Report

Each sample set contained urine samples from three individual cases with unique scenarios. 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. Data were returned from 118 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 contained urine samples from three individual cases with unique scenarios. 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), 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 laboratories that conducted predistribution testing reported results for all three items that correlated with production data and consensus responses.

Item 1 Drug (Concentration)	Item 2 Drug (Concentration)	Item 3 Drug (Concentration)
Morphine (2,400 ng/mL) Oxycodone (800 ng/mL) 6-acetylmorphine (200 ng/mL)	Fentanyl (150 ng/mL) Norfentanyl (1,000 ng/mL)	Amphetamine (600 ng/mL)
Please note that the preparation conc phase and may not necessarily repres Grand Mean statistics available in the	ent the final concentration of the sar	mples. It is advised to wait for the

## **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. The sample sets provided to participants contained urine samples from three individual cases with unique scenarios. 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), and the methods used. (Refer to the Manufacturer's Information for preparation details)

There were 118 participants who reported screening results for Item 1. Most commonly reported was the presence of Opiates/Opioids by 79 participants; 77 reported the presence of Oxycodone; 43 reported the presence of Morphine, and 47 reported the presence of 6-acetylmorphine/Monoacetylmorphine. Of the 108 participants who reported confirmatory results for Item 1, 102 (94.4%) reported the presence of Morphine, 100 (92.6%) reported the presence of Oxycodone, and 102 (94.4%) reported the presence of 6-acetylmorphine.

There were 117 participants who reported screening results for Item 2. Most commonly reported was the presence of Fentanyl by 81 participants, and 35 reported the presence of Norfentanyl. Of the 103 participants who reported confirmatory results for Item 2, 90 (87%) reported the presence of Fentanyl, and 55 (53%) reported the presence of Norfentanyl.

There were 116 participants who reported screening results for Item 3 with 87 reporting the presence of Amphetamine. Of the 103 participants who reported confirmatory results for Item 3, 95 (92%) reported the presence of Amphetamine.

For all three items, immunoassay was the most common screening method and GC/MS was the most common confirmatory method used 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 Scenario:

A 26-year-old male was subject to a routine drug test as part of a drug and alcohol rehabilitation program. A urine sample was collected for analysis.

### Item Contents and Preparation Concentration:

Morphine (2,400 ng/mL) Oxycodone: (800 ng/mL) 6-acetylmorphine: (200 ng/mL)

	o-acetyimorphine: (200 ng/mL)
WebCode	Screening Results
2JBUGR	common opioids
3743CY	6-monoacetylmorphine
	Morphine
	Oxycodone
3AZRVQ	Opioids> morphine, oxycodone, 6-monoacetyl-morphine
3RJMAY	Opiates, Oxycodone
43TPZP	No drugs detected utilizing screening methods.
4AFBFN	morphine
	oxycodone
	6-MAM
4AVRBG	Morphine
	6-monoacetylmorphine
	oxycodone
4AYEMP	Opioids: morphine, oxycodone, 6-monoacetyl-morphine (6-MAM)
4ET9KQ	Opioids
4YW39M	Opiates, Morphine, Oxycodone
6CGVE9	6-monoacetylmorphine
	morphine
	oxycodone
6M2633	opiates
6XECWG	Opiates, oxycodone, 6-acetylmorphine
76V339	Opiates
	6-Acetyl-Morphine
	Oxycodone
7AN9EP	Opiates
7E32DV	No drugs detected utilizing screening methods.
7TJU33	Opiate
	Oxycodone

WebCode	Screening Results
83PYUJ	6-monoacetyl morphine
	morphine
	oxycodone
8J9TG2	opiates, oxycodone
8WWUYT	Opiates (ELISA)
	Oxycodone/Oxymorphone (ELISA)
96RG6J	opioids
98BFDM	Opiates
9K27GY	Methamphetamine
	Opiates
	Oxycodone/Oxymorphone
	Amphetamine
9N397Z	Opiates
	Oxycodone
9PUCTF	Opiates (class); 6-Monoacetylmorphine (Heroin metabolite), Morphine, Oxycodone.
A4APRT	Morphine, 6-O-Monoacetylmorphine, Oxycodone
A7X4G3	POSITIVE OPIATES
A87HGG	6 AM- 6 Acetyl Morphine
	OPI- Opiates
	OXY- Oxycodone
AF6VNC	Opiates
AFYTRC	Barbiturates
	Cannabinoids
	Opiates
	Oxycodone
ALQUEK	Opioids
AMM82D	Monoacetylmorphine (6-MAM), morphine, oxycodone
AUKY62	Morphine
	6-acetylmorphine
	Oxycodone
B2Y873	opiates
BDRNV4	Opiates
	6-Acetyl-Morphine
	Oxycodone

WebCode	Screening Results
BMJ8CX	Opiates, oxycodone
BP6NUH	Opioids class
BT9L24	Opiates
C6TL8W	Opiate Oxycodone
CB3NBD	Opiate Morphine Oxycodone 6-Monoacetylmorphine (Heroin Metabolite)
CDMTP3	Opiates
CT4N6Y	Morphine O6-MonoacetyImorphine Oxycodone
D6DJZN	No drugs detected utilizing screening methods.
DJTMJX	Morphine, Oxycodone, 6-Monoacetylmorphine
EJPEUB	oxycodone, morphine, 6-MAM
EMPQQB	morphine oxycodone 6-monoacetylmorphine
EPD7WD	6AM- 6 Acetyl Morphine OPI- Opiates OXY- Oxycodone
EWB2UB	Opiates.
F6LKQF	Opiates
FF8JPX	Opiates
FJ7VLX	Opiates (Morphine, Monoacetylmorphine, Oxycodone )
FXK3FA	Opiates, Oxycodone
G3QAED	common opioids
GFG7GB	opioids
GRAEFD	1. Opiates 2. Oxycodone/ Oxymorphone

WebCode	Screening Results
GUKA4Q	Opiates/Oxycodone/6-AcetyImorphine
	Benzodiazepines Zela ideaz
	Zolpidem
GZLQ96	opiates, oxycodone, 6-acetylmorphine
GZP7MQ	morphine
	oxycodone
	6-monoacetylmorphine
HBLHEA	6AM- 6 acetyl morphine
	OPI- Opiates
	OXY- Oxycodone
HPHQEX	Opiate positive EMIT
HQF42P	Opiates, oxycodone/oxymorphone
JQ9FTB	Opiates
KNE3R4	No drugs detected utilizing screening methods.
KVY39G	Opiates
	Oxycodone
L2447P	Opioids: Morphine, oxycodone and 6-monoacetylmorphine were detected
LDU3QZ	Opiates
	Oxycodone
LDZAZM	oxycodone, opiates
LERDM3	Opiates
LHPWN2	opiates
LQMJMT	6-acetylmorphine
	morphine
	oxycodone
LX6WJ7	Oxycodone
LYVVX6	Opiates
M4Q32Y	Drug class positive: 6-Monoacetylmorphine, Opiates, Oxycodone.
	Drugs detected present: 6-MAM, Morphine, Oxycodone
M6VYZ9	Monoacetylmorphine
	Morphine
	Oxycodone
M9UBV9	Oxycodone 1, Oxycodone2, Opiates, Opioids

WebCode	Screening Results
MGR2KP	Morphine, 6-Monoacethylmorphine, Oxycodone
MNWK33	Opiate - Morphine, 6-monoacetylmorphine, Oxycodone
MU2CDL	Opiate, Oxycodone
MUJMT7	opioids
NK7TCH	Morphine Oxycodone
NYNLZP	Opiates
P7KZZG	Morphine Oxycodone
PG4AQV	Opiates
PXQTHB	ELISA Opiates, ELISA Oxycodone
Q4EUZ2	Morphine, Oxycodone, 6-monoacetyl-morphine
Q63FMW	Morphine Oxycodone
QKXQGU	6-monoacetylmorphine, acetaminophen, benzoylecgonine, morphine/hydromorphone, oxycodone
QQJTDY	Opiates Oxycodone
QXKXCA	6-monoacetylmorphine, morphine, oxycodone
RDB8PZ	6 AM- 6 Acetyl Morphine OPI- Opiates OXY- Oxycodone
RQLHHW	Opiates
RYRJG2	morphine and 6-monoacetylmorphine and oxycodone and heroin .
TG94UK	Opiate
TLRYZX	morphine oxycodone 6-monoacetyl morphine
TMFE6Z	6AM- 6 Acetyl-Morphine OPI- Opiates OXY- Oxycodone
TNT2PY	Opiates

WebCode	Screening Results
TQFMCV	Opiates
TRTAUA	Morphine, 6-acetylmorphine, Oxycodone
TUGNHJ	morphine, 6-acetylmorphine, oxicodone
UR8YTF	Opiates
UTH8CZ	6-acetylmorphine, morphine, codeine, oxycodone
UY9DEG	Opiates Oxycodone 6-mam
V2AXJT	morphine oxycodone 6-acetylmorphine
VMBUCG	No drugs detected utilizing screening methods.
VV46MC	Opiates, oxycodone/oxymorphone, amphetamine
WWVHMA	Morphine Oxycodone
X4AVWT	Opiate Class
XCKWHT	Opiates (Morphine and oxycodone)
XHU9GF	Morphine 6-monoacetylmorphine (6MAM) Oxycodone
XTEFHP	6 Mono acetylmorphine Morphine Oxycodone
XZPYEU	morphine, 6-monoacetyl-morphine, oxycodone
YCZT6D	No drugs detected utilizing screening methods.
YNDT4R	opioids
YQGNMV	opioids (morphine, 6-monoacetylmorphine) and oxycodone
Z4ZQF7	Opiates and Oxycodone/Oxymorphone
ZBKTMA	Opiates, Oxycodone
ZGR6XN	Opiates
ZVQ26T	opiates

Screening Response Summary for Item 1	Participants: 118
Opiates/Opioids:	79
Oxycodone:	77
6-acetylmorphine/Monoacetylmorphine/6-MAM	48
Morphine	43
Other drugs/metabolites detected:	17
No drugs/metabolites detected Utilizing Screening Methods:	6

Total number of screening responses provided may be more than the number of participants due to multiple drugs/metabolites being reported.

## **Confirmatory Results - Item 1**

TABLE 1B

### Item Scenario:

A 26-year-old male was subject to a routine drug test as part of a drug and alcohol rehabilitation program. A urine sample was collected for analysis.

Item Contents and Preparation Concentration:

Morphine (2,400 ng/mL) Oxycodone: (800 ng/mL) 6-acetylmorphine: (200 ng/mL)

What drug	gs/metabolites were detected in Item 1?					
WebCode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units	
2JBUGR	morphine	1				
	oxycodone	$\checkmark$				
	6-monoacetyl-morphine	$\checkmark$				
3743CY	Morphine	1				
	Oxycodone	$\checkmark$				
	6-monoacetylmorphine	$\checkmark$				
3AZRVQ	morphine	1				
	oxycodone	$\checkmark$				
	6-monoacetyl-morphine	$\checkmark$				
3RJMAY	morphine		2,514 ng/mL	85	ng/mL	
	Oxycodone	$\checkmark$				
	6-Monoacetylmorphine	$\checkmark$				
43TPZP	No drugs/metabolites detected utilizi confirmatory methods.	ng				
4AFBFN	morphine	1				
	oxycodone	$\checkmark$				
	6-MAM	$\checkmark$				
4AVRBG	morphine	1				
	oxycodone	$\checkmark$				
	6-monoacetylmorphine	1				
4AYEMP	morphine	1				
	oxycodone	$\checkmark$				
	6-monoacetyl-morphine	1				
4ET9KQ	morphine	1				
	oxycodone	$\checkmark$				
	6-monoacetyl morphine	$\checkmark$				

what arog	s/metabolites were detected				
WebCode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
4YW39M	Morphine	✓			
	Oxycodone	$\checkmark$			
	6-Monoacetylmorphine	$\checkmark$			
6CGVE9	morphine	1			
	oxycodone	1			
	6-monoacetylmorpine	$\checkmark$			
6M2633	morphine	1			
	oxycodone	$\checkmark$			
	6-monoacetylmorphine	$\checkmark$			
76V339	Morphine	✓			
	Oxycodone	1			
	6-Monoacetylmorphine		>200		ng/mL
7E32DV	Morphine	1			
	Oxycodone	1			
	6-Acetylmorphine	$\checkmark$			
7TJU33	Morphine	1			
	Oxycodone	1			
	6-Monoacetylmorphine	$\checkmark$			
83PYUJ	morphine	1			
	oxycodone	$\checkmark$			
	6-monoacetyl morphine	$\checkmark$			
8J9TG2	morphine	1			
	oxycodone	1			
	6-monoacetylmorphine	$\checkmark$			
8WWUYT	Morphine	✓			
	Oxycodone	$\checkmark$			
	6-Acetylmorphine	$\checkmark$			
96RG6J	morphine	✓			
	oxycodone	$\checkmark$			
	6-monoacetyl-morphine	$\checkmark$			
98BFDM	Morphine		2203		ng/mL
	Oxycodone	$\checkmark$			
	6-MAM		160		ng/mL

WebCode	s/metabolites were detected ir Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
9K27GY	Ephedrine/Pseudoephedrine	✓ ✓			
9N397Z	morphine	1			
/110//2	oxycodone				
	6-monoacetylmorphine	1			
9PUCTF	Morphine	1			
POCIF	Oxycodone				
	6-Monoacetylmorphine (Heroin metabolite)	√ √			
A4APRT	Morphine	1			
	Oxycodone	1			
	6-O-Monoacetylmorphine	1			
A7X4G3	Morphine	1			
	oxicodone	1			
	6-monoacetylmorphine	$\checkmark$			
AF6VNC	Morphine	1			
	Oxycodone	1			
	6-monoacetylmorphine	$\checkmark$			
AFYTRC	Morphine	1			
	Oxycodone	1			
	6-Monoacetylmorphine	1			
ALQUEK	Morphine	✓			
	Oxycodone	1			
	6-Monoacetylmorphine	✓			
AMM82D	Morphine	1			
	Oxycodone	1			
	Monoacetylmorphine (6-MAM)	1			
AUKY62	Morphine	1			
	Oxycodone	1			
	6-acetylmorphine	1			
B2Y873	morphine	1			
	Oxycodone	1			
	6-Monoacetylmorphine	1			

		Qualitative	Reported		
WebCode	Analyte Reported	Only	Concentration	Uncertainty	Units
BDRNV4	Morphine	$\checkmark$			
	Oxycodone	$\checkmark$			
	6-Monoacetylmorphine		190.02	19.00	ng/mL
BMJ8CX	Morphine	$\checkmark$			
	Oxycodone	$\checkmark$			
	6-monoacetylmorphine	$\checkmark$			
BP6NUH	morphine	1			
	oxycodone	$\checkmark$			
	6-monoacetyl morphine (6-MAM)	$\checkmark$			
BT9L24	Morphine	1			
	Oxycodone	$\checkmark$			
	6-Monoacetylmorphine	$\checkmark$			
C6TL8W	Morphine	✓			
	Oxycodone	$\checkmark$			
	6-Monoacetylmorphine	1			
CB3NBD	Morphine	$\checkmark$			
	Oxycodone	$\checkmark$			
	6-Monoacetylmorphine (Heroin metabolite)	1			
CDMTP3	morphine	1			
	oxycodone	$\checkmark$			
	6-monoacetylmorphine	$\checkmark$			
CT4N6Y	Morphine		2404		ng/ml
	Oxycodone	$\checkmark$			
	O6-Monoacetylmorphine		178		ng/ml
D6DJZN	Morphine	✓			
	Oxycodone	1			
	6-Acetylmorphine	$\checkmark$			
DJTMJX	Morphine	1			
	Oxycodone	1			
	6-Acetylmorphine	1			

WebCode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
EJPEUB	morphine	1			
	oxycodone	$\checkmark$			
	6-MAM	$\checkmark$			
EMPQQB	morpine	✓			
	oxycodone	$\checkmark$			
	6-monacetylmorphone	$\checkmark$			
EWB2UB	Morphine	$\checkmark$			
	Oxycodone	$\checkmark$			
	6-monoacetylmorphine	$\checkmark$			
F6lkQF	Morphine	1			
	Oxycodone	$\checkmark$			
	Monoacetymorphine	$\checkmark$			
FF8JPX	Morphine	$\checkmark$			
	Oxycodone	$\checkmark$			
	6-Monoacetylmorphine	$\checkmark$			
FJ7VLX	Morphine	$\checkmark$			
	Oxycodone	$\checkmark$			
	Monoacetylmorphine	$\checkmark$			
FXK3FA	Morphine	$\checkmark$			
	Oxycodone	$\checkmark$			
	6-Acetylmorphine	$\checkmark$			
G3QAED	morphine	$\checkmark$			
	oxycodone	$\checkmark$			
	6-MAM (6-monoacetyl-morphine)	$\checkmark$			
GFG7GB	morphine	$\checkmark$			
	oxycodone	$\checkmark$			
	6-monoacetyl morphine	$\checkmark$			
GRAEFD	Morphine	1			
	Oxycodone	$\checkmark$			
	6-Monoacetylmorphine	$\checkmark$			
GUKA4Q	Morphine	✓			
	Oxycodone	$\checkmark$			
	6-Monoacetylmorphine	$\checkmark$			

Test	22-5671	

What drug	s/metabolites were detected in	Item 1?			
WebCode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
gzp7mq	morphine		2,5		mg/l
	oxycodone		0,68		mg/l
	6-monoacetylmorphine		0,15		mg/l
HPHQEX	Morphine	1			
	Oxycodone	1			
	6-monoacetylmorphine	1			
HQF42P	Oxycodone	1			
	6-Acetylmorphine (6-MAM)	1			
JQ9FTB	Morphine	1			
	Oxycodone	1			
	6-acetylmorphine	1			
KNE3R4	Morphine	✓			
	oxycodone	1			
	monoacetylmorphine	1			
KVY39G	Morphine	1			
	Oxycodone	1			
	6-monoacetylmorphine (6MAM)	1			
L2447P	Morphine	1			
	Oxycodone	1			
	6-monoacetylmorphine	1			
LDU3QZ	Morphine	1			
	Oxycodone	1			
	6-Monoacetylmorphine	1			
LDZAZM	morphine	1			
	oxycodone	1			
	6-acetylmorphine	1			
LERDM3	Morphine	1			
	Oxycodone	1			
	6-Monoacetylmorphine (Heroin Metabolite)	1			
LHPWN2	morphine	1			
	oxycodone				
	(6-acetylmorphine)	1			

Oxycodone·6-monoacetylmorphine·M4Q32YMorphine·Oxycodone·6-MAM·M6VY29Morphine·Oxycodone·Oxycodone·Monoacetylmorphine·M9UBV9Morphine·Oxycodone·Oxycodone·Oxycodone·Oxycodone·6-MonoAcetyl Morphine·MOR2KPMorphine·Oxycodone·6-Monoacetylmorphine·MVWK33Morphine·Oxycodone·6-Monoacetylmorphine·MU2CDLMorphine·MU2CDLMorphine·MU2CDLMorphine·MU2CDLMorphine·MU2CDLMorphine·MUJM17Morphine·MVL2PMorphine·NYNLZPMorphine·NYNLZPMorphine·P7KZZGMorphine·P7KZZGMorphine·	WohCode	Angleto Deposited	Qualitative	Reported		lleite
Negretaria in oxycodone o-acetylmorphine VVWA6 Marphine Oxycodone 6-monoacetylmorphine VA4Q32Y Marphine Oxycodone 6-MAM M6VYZ9 Morphine Oxycodone 6-Manoacetylmorphine V M9UBV9 Morphine Oxycodone 6-Monoacetylmorphine V MGR2KP Morphine Oxycodone 6-Monoacetylmorphine V MK33 Morphine Oxycodone 6-Monoacetylmorphine V MVW33 Morphine V MVW33 Morphine V MVW33 Morphine V MVW33 Morphine V MVW33 Morphine V MVW34 Morphine V MVW34 Morphine V MVW35 Morphine V MVW35 Morphine V MVW35 Morphine V MVW35 Morphine V MVW35 Morphine V MVW45 MU2CDL Morphine V MUJM17 Morphine V MUJM17 Morphine V MVW45 MUJM17 Morphine V MVW45 MUJM17 Morphine V MVW45 MUJM17 Morphine V MVW45 MUJM17 Morphine V MVW45 MU2CDL Morphine V MVW45 MUJM17 Morphine V MVW45 MU2CDL Morphine V MUJM17 Morphine V MU2CDL Morphine V MUJM17 Morphine V MU2CDL Morphine V MU2CDL Morphine V MUJM17 Morphine V MU2CDL Morphine V MU2CDL Morphine V MU2CDL Morphine V MU3 Morphine V MU3 MORPHINE V MORPHINE V MU3 MORPHINE V MU3 MORPHINE V MU3 MORPHINE MU3 MORPHINE V MU3 MORPHINE V MU3 MORPHINE V MU3 MORPHINE V MU3 MORPHINE V MU3 MORPHINE M				Concentration	Uncertainty	Units
6-acetyImorphine       •         LWWX6       Morphine       •         Oxycodone       •         6-monoacetyImorphine       •         M4Q32Y       Morphine       •         Oxycodone       •         6-MAM       •         M6W29       Morphine       •         Oxycodone       •         6-MAM       •         M6W29       Morphine       •         Oxycodone       •         6-MonoacetyImorphine       •         M9UBV9       Morphine       •         Oxycodone       •         6-MonoacetyImorphine       •         MSR2KP       Morphine       •         Oxycodone       •       •	lqmjmt		1			
LYWX6 Morphine / Oxycodone / 6-monoacetylmorphine / M4Q32Y Morphine / Oxycodone / 6-MAM / M6WYZ9 Morphine / Oxycodone / Mnonacetylmorphine / M9UBV9 Morphine / Oxycodone / 6-Monoacetylmorphine / MSR2KP Morphine / MSR2KP Morphine / MVWK33 Morphine / Oxycodone / 6-Monoacetylmorphine / MNWK33 Morphine / MVWK33 Morphine / MU2CDL MORPHINE / MORPHINE / M			,			
Oxycodone·6-monoacetylmorphine·M4Q32YMorphine·Oxycodone·6-MAM·M6VY29Morphine·Oxycodone·Oxycodone·M9UBV9Morphine·Oxycodone·Oxycodone·Oxycodone·Oxycodone·Oxycodone·Oxycodone·Oxycodone·6-MonoAcetyl Morphine·MRR2KPMorphine·Oxycodone·6-Monoacetrylmorphine·MNWK33Morphine·Morphine·Oxycodone·6-Monoacetrylmorphine·MU2CDLMorphine·MU2CDLMorphine·MU2CDLMorphine·MUJM17Morphine·MVLTPMorphine·NK7TCHMorphine·NYNLZPMorphine·P7KZZGMorphine·P7KZZGMorphine·		6-acetylmorphine	V			
6-monoacetylmorphine       -         M4Q32Y       Morphine       -         Oxycodone       -       -         6-MAM       -       -         M6VYZ9       Morphine       -         Oxycodone       -       -         Monoacetylmorphine       -       -         M9UBV9       Morphine       -         Oxycodone       -       -         Oxycodone       -       -         MGR2KP       Morphine       -         Oxycodone       -       -	LYVVX6		1			
M4Q32Y Morphine / Oxycodone / 6-MAM / M6VYZ9 Morphine / Oxycodone / Monoacetylmorphine / M9UBV9 Morphine / Morphine / Oxycodone / 6-Monoacetyl Morphine / MGR2KP Morphine / MGR2KP Morphine / MGR2KP Morphine / MORPLAN / Morphine / Oxycodone / 6-Monoacetylmorphine / MNWK33 Morphine / Oxycodone / 6-monoacetylmorphine / MUZCDL Morphine / MUZCDL Morphine / MUZCDL Morphine / MUJATT Morphine / Oxycodone / 6-Monoacetylmorphine / MUJATT Morphine / MORPHINE / MUJATT MORPHINE / MUJATT / MUJATT MORPHINE / MUJATT /						
MCCCL       Marphine         Oxycodone       /         6-MAM       /         M6VYZ9       Morphine       /         Oxycodone       /         M9UBV9       Morphine       /         M9UBV9       Morphine       /         Oxycodone       /         6-MonoAcetyl Morphine       /         MGR2KP       Morphine       /         MNWK33       Morphine       /         Oxycodone       /       /         MNWK33       Morphine       /         Oxycodone       /       /         MNWK33       Morphine       /         Oxycodone       /       /         MUU2CDL       Morphine       /         Oxycodone       /       /         MUJMT7       Morphine       /         Oxycodone       /       /         Oxycodone       /       /         MUJMT7       Morphine       /         Oxycodone       /		6-monoacetylmorphine	<i>✓</i>			
6-MAM       /         Morphine       /         Oxycodone       /         Monoacetylmorphine       /         M9UBV9       Morphine       /         Oxycodone       /         MSR2KP       Morphine       /         MONOAcetyl Morphine       /         MGR2KP       Morphine       /         MNWK33       Morphine       /         MNWK33       Morphine       /         MU2CDL       Morphine       /         MUJ2CDL       Morphine       /         MUJMT7       Morphine       /         MUJMT7       Morphine       /         MXTCH       Morphine       /         MUJMT7       Morphine       /         MIJMT7       Morphine       /	M4Q32Y	Morphine	$\checkmark$			
M6VYZ9 Morphine / Morphine / Mnoocetylmorphine / M9UBV9 Morphine / Oxycodone / 6-MonoAcetyl Morphine / Oxycodone / 6-Monoacethylmorphine / MNWK33 Morphine / MNWK33 Morphine / Morphine / Oxycodone / 6-monoacetylmorphine / MUJCDL Morphine / Oxycodone / 6-monoacetylmorphine / MUJCDL Morphine / Oxycodone / 6-Monoacetylmorphine / MUJMT7 Morphine / Oxycodone / 6-Monoacetylmorphine / NK7TCH Morphine / NK7TCH Morphine / NK7TCH Morphine / NXNLZP Morphine / NXNLZP Morphine / P7KZZG Morphine / P7KZZG Morphine /		Oxycodone	$\checkmark$			
Normania       -         Oxycodone       -         M9UBV9       Morphine       -         Oxycodone       -         6-MonoAcetyl Morphine       -         MGR2KP       Morphine       -         MGR2KP       Morphine       -         Oxycodone       -       -         6-MonoAcetyl Morphine       -       -         MGR2KP       Morphine       -         Oxycodone       -       -         6-Monoacetylmorphine       -       -         MNWK33       Morphine       -         Oxycodone       -       -         6-monoacetylmorphine       -       -         MUJCDL       Morphine       -       -         Oxycodone       -       -       -         6-Monoacetylmorphine       -       -       -         MUJMT7       Morphine       -       -       -         NKTCH       Morphine       -       -       -         NKTCH       Morphine       -       -       -         NYNLZP       Morphine       -       -       -         Oxycodone       -       -       -       -		6-MAM	1			
Monoacetylmorphine       ✓         M9UBV9       Morphine       ✓         Oxycodone       ✓         6-MonoAcetyl Morphine       ✓         MGR2KP       Morphine       ✓         Oxycodone       ✓         6-Monoacethylmorphine       ✓         Oxycodone       ✓         6-Monoacethylmorphine       ✓         MNWK33       Morphine       ✓         Oxycodone       ✓         6-monoacethylmorphine       ✓         MU2CDL       Morphine       ✓         Oxycodone       ✓         6-Monoacetylmorphine       ✓         MU2CDL       Morphine       ✓         Oxycodone       ✓         6-Monoacetylmorphine       ✓         MUJMT7       Morphine       ✓         Oxycodone       ✓         6-Monoacetyl Morphine       ✓         NK7TCH       Morphine       ✓         Oxycodone       ✓         6-Monoacetyl Morphine       ✓         Oxycodone       ✓         6-Monoacethylmorphine       ✓         NYNL2P       Morphine       ✓         PTKZZG       Morphine       ✓	M6VYZ9	Morphine	1			
M9UBV9 Morphine / Oxycodone / 6-MonoAcetyl Morphine / MGR2KP Morphine / Oxycodone / 6-Monoacethylmorphine / MNWK33 Morphine / Oxycodone / 6-monoacetylmorphine / MU2CDL Morphine / Oxycodone / 6-Monoacetylmorphine / Oxycodone / 6-Monoacetylmorphine / NKTCH Morphine / NxrTCH Morphine / Muzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz		Oxycodone	1			
MODUY       Morphine       ✓         Oxycodone       ✓         6-MonoAcetyl Morphine       ✓         MGR2KP       Morphine       ✓         Oxycodone       ✓         6-Monoacethylmorphine       ✓         MNWK33       Morphine       ✓         MNWK33       Morphine       ✓         MNWK33       Morphine       ✓         Oxycodone       ✓       ✓         Oxycodone       ✓       ✓         MU2CDL       Morphine       ✓         MU2CDL       Morphine       ✓         Oxycodone       ✓       ✓         NKTCH       Morphine       ✓         Oxycodone       ✓       ✓         NK7TCH       Morphine       ✓         Oxycodone       ✓       ✓         NYNLZP       Morphine       ✓         6-Monoacethylmorphine       ✓       ✓         P7KZZG       Morphine       ✓ </td <td></td> <td>Monoacetylmorphine</td> <td>1</td> <td></td> <td></td> <td></td>		Monoacetylmorphine	1			
A-MonoAcetyl Morphine       ✓         MGR2KP       Morphine       ✓         Oxycodone       ✓         6-Monoacethylmorphine       ✓         MWWK33       Morphine       ✓         Oxycodone       ✓         <	M9UBV9	Morphine	1			
MGR2KP Morphine / Oxycodone / 6-Monoacethylmorphine / MNWK33 Morphine / Oxycodone / 6-monoacetylmorphine / MU2CDL Morphine / Oxycodone / 6-Monoacetylmorphine / MUJMT7 Morphine / Oxycodone / 6-Monoacetylmorphine / NK7TCH Morphine / NK7TCH Morphine / NK7TCH Morphine / NK7TCH Morphine / PXKZZG Morphine /		Oxycodone	$\checkmark$			
Nicklin inspirate       Oxycodone       ✓         Oxycodone       ✓         MNWK33       Morphine       ✓         Oxycodone       ✓         ó-monoacetylmorphine       ✓         MU2CDL       Morphine       ✓         Oxycodone       ✓ </td <td></td> <td>6-MonoAcetyl Morphine</td> <td>1</td> <td></td> <td></td> <td></td>		6-MonoAcetyl Morphine	1			
6-Monoacethylmorphine       ✓         MNWK33       Morphine       ✓         Oxycodone       ✓         6-monoacetylmorphine       ✓         MU2CDL       Morphine       ✓         Oxycodone       ✓ <t< td=""><td>MGR2KP</td><td>Morphine</td><td>1</td><td></td><td></td><td></td></t<>	MGR2KP	Morphine	1			
MNWK33 Morphine / Oxycodone / 6-monoacetylmorphine / MU2CDL Morphine / Oxycodone / 6-Monoacetylmorphine / MUJMT7 Morphine / Oxycodone / 6-Monoacetyl Morphine / NK7TCH Morphine / NK7TCH Morphine / NX7TCH Morphine / PXKZZG Morphine /		Oxycodone	$\checkmark$			
Oxycodone✓6-monoacetylmorphine✓MU2CDLMorphine✓Oxycodone✓6-Monoacetylmorphine✓MUJMT7Morphine✓Oxycodone✓6-Monoacetyl Morphine✓NK7TCHMorphine✓NK7TCHMorphine✓Oxycodone✓Oxycodone✓6-Monoacetyl Morphine✓NK7TCHMorphine✓NYNLZPMorphine✓PTKZZGMorphine✓PTKZZGMorphine✓		6-Monoacethylmorphine	1			
6-monoacetylmorphine✓MU2CDLMorphine✓Oxycodone✓6-Monoacetylmorphine✓MUJMT7Morphine✓Oxycodone✓6-Monoacetyl Morphine✓NK7TCHMorphine✓NK7TCHMorphine✓NYNLZPMorphine✓PTKZZGMorphine✓PTKZZGMorphine✓	MNWK33	Morphine	1			
MU2CDL       Morphine       ✓         Oxycodone       ✓         6-MonoacetyImorphine       ✓         MUJMT7       Morphine       ✓         Oxycodone       ✓         NK7TCH       Morphine       ✓         NYNLZP       Morphine       ✓         YKZZG       Morphine       ✓		Oxycodone	1			
NO2CODE       Morphine         Oxycodone       ✓         6-MonoacetyImorphine       ✓         MUJMT7       Morphine       ✓         Oxycodone       ✓         6-MonoacetyI Morphine       ✓         NK7TCH       Morphine       ✓         Oxycodone       ✓         Oxycodone       ✓         Oxycodone       ✓         NK7TCH       Morphine       ✓         NYNLZP       Morphine       ✓         6-MonoacethyImorphine       ✓         P7KZZG       Morphine       ✓		6-monoacetylmorphine	1			
6-Monoacetylmorphine✓MUJMT7Morphine✓Oxycodone✓6-Monoacetyl Morphine✓NK7TCHMorphine✓Oxycodone✓Oxycodone✓Oxycodone✓PTKZZGMorphine✓	MU2CDL	Morphine	1			
MUJMT7       Morphine       ✓         Oxycodone       ✓         6-Monoacetyl Morphine       ✓         NK7TCH       Morphine       ✓         Oxycodone       ✓         Oxycodone       ✓         NK7TCH       Morphine       ✓         NYNLZP       Morphine       ✓         6-Monoacethylmorphine       ✓         P7KZZG       Morphine       ✓			1			
NKOJMITY       Morphine         Oxycodone       ✓         6-Monoacetyl Morphine       ✓         NK7TCH       Morphine       ✓         Oxycodone       ✓         OXycodone       ✓         NYNLZP       Morphine       ✓         6-Monoacethylmorphine       ✓         P7KZZG       Morphine       ✓		6-Monoacetylmorphine	1			
Oxycodone 6-Monoacetyl Morphine✓NK7TCHMorphine Oxycodone✓NYNLZPMorphine 6-Monoacethylmorphine✓PTKZZGMorphine Morphine✓	MUJMT7	Morphine	1			
6-Monoacetyl Morphine     ✓       NK7TCH     Morphine     ✓       Oxycodone     ✓       NYNLZP     Morphine     ✓       6-Monoacethylmorphine     ✓       P7KZZG     Morphine     ✓			1			
Oxycodone     ✓       NYNLZP     Morphine     ✓       6-Monoacethylmorphine     ✓       P7KZZG     Morphine     ✓			1			
Oxycodone✓NYNLZPMorphine✓6-Monoacethylmorphine✓PYKZZGMorphine✓	NK7TCH	Morphine	1			
NYNLZP Morphine 6-Monoacethylmorphine P7KZZG Morphine V	_		1			
6-Monoacethylmorphine P7KZZG Morphine	NYNI 7P		1			
P7KZZG Morphine 🗸			1			
		· · ·	./			
	F/KZZG	Oxycodone	•			

What drug	s/metabolites were detected in	•			
WebCode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
PG4AQV	Morphine	1			
	Oxycodone	1			
	6-Monoacetylmorphine (6-MAM)	1			
PXQTHB	Morphine	1			
	Oxycodone	$\checkmark$			
	6-Acetylmorphine	1			
Q4EUZ2	Morphine	1			
	Oxycodone	$\checkmark$			
	6-monoacetyl-morphine	1			
Q63FMW	morphine	1			
	oxycodone	$\checkmark$			
	6-monoacetylmorphine				
QKXQGU	morphine	1			
	oxycodone	1			
	6-monoacetylmorphine	$\checkmark$			
QQJTDY	Morphine	1			
	Oxycodone	$\checkmark$			
	6-Monoacetylmorphine	1			
QXKXCA	morphine	1			
	oxycodone	$\checkmark$			
	6-monoacetylmorphine	1			
RQLHHW	Morphine		2194		ng/mL
	6 monoacetylmorphine		183		ng/mL
RYRJG2	6-monoacetylmorphine	1			
TG94UK	Morphine	1			
	Oxycodone	1			
	6-Monoacetylmorphine	1			
TLRYZX	morphine	1			
	oxycodone	1			
	6-monoacetyl morphine	$\checkmark$			
TNT2PY	Morphine	1			
	Oxycodone	1			
	6-acetylmorphine	1			

What drug	s/metabolites were detected in It				
WebCode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
TQFMCV	Morphine	1			
	Oxycodone	1			
	6 monoacetylmorphine	1			
TRTAUA	Morphine	1			
	Oxycodone	1			
	6-Acetylmorphine	1			
TUGNHJ	morphine		2015		ng/mL
	oxicodone		895		ng/mL
	6-acetylmorphine		254		ng/mL
UR8YTF	Morphine	1			
	6-Monoacetylmorphine	1			
UTH8CZ	morphine	1			
	oxycodone	1			
	6-acetylmorphine	1			
	codeine	1			
V2AXJT	morphine		2300	15%	ug/L
	oxycodone		780	15%	ug/L
	6-acetylmorphine		190	15%	ug/L
VMBUCG	Morphine	1			
	Oxycodone	1			
	6-monoacetylmorphine	1			
W46MC	No drugs/metabolites detected utilizin confirmatory methods.	ıg			
WWVHMA	Morphine	1			
	Oxycodone	1			
X4AVWT	Morphine	1			
	Oxycodone	1			
	6-monoacetylmorpine	1			
XCKWHT	Morphine	1			
	Oxycodone	1			
	6-monoacetylmorphine	1			

WebCode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
XHU9GF	Morphine	✓ <b>(</b>	Concentration	encertainty	UIIIS
VI IOAGI	Oxycodone	1			
	6-monoacetylmorphine (6MAM)	· /			
VTEELID					
XTEFHP	morphine	•			
	oxycodone	•			
	6 mono acetylmorphine	×			
XZPYEU	morphine				
	oxycodone				
	6-monoacetyl-morphine				
YCZT6D	Morphine	1			
	Oxycodone	1			
	6-acetylmorphine	1			
YNDT4R	morphine	1			
	oxycodone	1			
	6-monoacetyl morphine	$\checkmark$			
YQGNMV	morphine	1			
	oxycodone	1			
	6-monoacetylmorphine	1			
Z4ZQF7	No drugs/metabolites detected utilizir confirmatory methods.	ng			
ZBKTMA	morphine	1			
	Oxycodone	$\checkmark$			
	6-monoacetylmorphine	1			
ZGR6XN	Morphine	1			
	Oxycodone	1			
	6monoacetylmorphine	1			
ZVQ26T	morphine	1			
	oxycodone	1			
	6-monoacetylmorphine	1			

Confirmatory Response Summary for Item 1	Participants: 108
Morphine:	102 (94.4%)
Oxycodone:	100 (92.6%)
6-acetylmorphine:	102 (94.4%)
Other Identified Drugs/Metabolites:	1 (0.9%)
No Drugs/Metabolites Detected Utilizing Confirmatory Methods:	3 (2.8%)

# Raw Data - Item 1 TABLE 1C

### Item 1 Raw Data - Morphine Preparation concentration: (2,400 ng/mL)

WebCode	List of Raw	Data determinations (ng/mL)
98BFDM	2,203.0	
CT4N6Y	2,404.7	
RQLHHW	2,214.0	2,174.0
TUGNHJ	2,015.0	
V2AXJT	2,249.0	2,350.0
Statistical A	nalysis for Iter	m 1 - Morphine
Plec	ase note: Statist	ical analysis has not been provided due to the low number of raw data responses.

### TABLE 1C: Raw Data - Item 1

### Item 1 Raw Data - Oxycodone Preparation concentration: (800 ng/mL)

WebCode	List of Raw	Data determinations (ng/mL)
TUGNHJ	895.0	
V2AXJT	771.0	789.0
Statistical A	nalysis for Ite	m 1 - Oxycodone
Pleo	ase note: Statis	tical analysis has not been provided due to the low number of raw data responses.

### TABLE 1C: Raw Data - Item 1

### Item 1 Raw Data - 6-acetylmorphine Preparation concentration: (200 ng/mL)

WebCode	List of Raw	Data determinations (ng/mL)
76V339	283.3	
98BFDM	160.0	
BDRNV4	190.0	
CT4N6Y	179.0	
RQLHHW	182.0	185.0
TUGNHJ	254.0	
V2AXJT	185.0	190.0
Statistical A	nalysis for Ite	em 1 - 6-acetylmorphine
Pleo	ase note: Statis	stical analysis has not been provided due to the low number of raw data responses.

## **Reporting Procedures - Item 1**

TABLE 1D - Item 1

	Quantitative Reporting Procedures
WebCod	e If quantitative analysis was performed, the reported concentrations are:
<b>3</b> RJMAY	A single determination.
76V339	A single determination.
98BFDM	A single determination.
9K27GY	Run in duplicate and compared to a reference material for qualitative identification.
BDRNV4	A single determination.
CT4N6Y	A single determination.
GZP7MQ	A single determination.
RQLHHW	The mean of duplicate/several determinations.
TUGNHJ	A single determination.
V2AXJT	The mean of duplicate/several determinations.
Response	e Summary for Item 1 Participants: 10
	A single determination: 7 (70.0%)
	The mean of duplicate/several determinations: 2 (20.0%)

Other:

1 (10.0%)

## Methods of Analysis - Item 1

TABLE 1E - Item 1

WebCode	Method	Screening	Confirmatory	Quantitation
2JBUGR	Immunoassay GC/MS LC/MS/MS	$\checkmark$	\ \	
3743CY	LC/MS/MS	✓	1	
3AZRVQ	lmmunoassay LC/MS/MS GC/MS	5 5 5	✓ ✓	
3RJMAY	Immunoassay GC/MS	1	✓	1
43TPZP	LC/MS/MS	1	1	1
4AFBFN	LC-HRMS/MS GC/MS	1	1	
4AVRBG	Immunoassay LC-QTOF GC/MS LC/MS/MS	✓ ✓ ✓	\ \	
4AYEMP	Immunoassay GC/MS LC/MS/MS	1	\ \	
4ET9KQ	Immunoassay GC/MS LC/MS/MS	1	<i>J</i> <i>J</i>	
4YW39M	Immunoassay GC/MS	√ ✓	✓	
6CGVE9	Immunoassay GC/MS	$\checkmark$	✓	
6M2633	Immunoassay GC/MS	1	✓	
6XECWG	Immunoassay	1		
76V339	lmmunoassay LC/MS/MS	1	1	1
7AN9EP	Immunoassay	1		
7E32DV	Immunoassay LC-QTOF-MS GC/MS	5 5	✓	
7TJU33	Immunoassay LC-QTOF GC/MS	1	J J	
83PYUJ	High resolution accurate mass GC/MS	1	1	

		Nethods of Analys	is - Item I	
WebCode	Method	Screening	Confirmatory	Quantitation
8J9TG2	Immunoassay LC-QTOF	1	1	
8WWUYT	Immunoassay GC/MS	√ √	1	
96RG6J	Immunoassay LC/MS GC/MS	1	√ √	
98BFDM	Immunoassay GC/MS	✓	1	1
9K27GY	lmmunoassay LC/MS/MS	1	✓	
9N397Z	Immunoassay GC/MS	1	✓	
9PUCTF	Immunoassay GC/MS	√ ✓	$\checkmark$	
A4APRT	LC/MS/MS GC/MS	1	$\checkmark$	
A7X4G3	Immunoassay GC/MS	1	✓	
A87HGG	Immunoassay	1		
AF6VNC	Immunoassay GC/MS LC/MS/MS	1	√ √	
AFYTRC	Immunoassay LC/MS/MS GC/MS	1	<i>J</i> <i>J</i>	
ALQUEK	Immunoassay LC/MS GC/MS	1 1	۲ ۲	
AMM82D	LC/MS/MS GC/MS	√ ✓	✓	
AUKY62	GC/MS		1	
B2Y873	Immunoassay GC/MS	√ √	✓	
BDRNV4	Immunoassay LC/MS/MS	1	1	1
ВМЈ8СХ	Immunoassay LC-QTOF	1	1	
BP6NUH	Immunoassay LC/MS/MS GC/MS	\ \	\ \	

WebCode	Method	Screening	Confirmatory	Quantitation
BT9L24	Immunoassay	1		
	GC/MS		1	
C6TL8W	Immunoassay	1		
	GC/MS		$\checkmark$	
	LC-QTOF		$\checkmark$	
CB3NBD	Immunoassay	1		
	GC/MS	1	1	
CDMTP3	Immunoassay	1		
	GC/MS	1	1	
CT4N6Y	Immunoassay	1		
	Orbitrap-LC/MS	1		
	GC/MS		1	<i>✓</i>
	LC/MS/MS		$\checkmark$	$\checkmark$
D6DJZN	Immunoassay	1		
	GC/MS	$\checkmark$	$\checkmark$	
DJTMJX	LC/MS/MS	1		
	GC/MS		1	
	Rapid Chromatographic Immunoassay	$\checkmark$		
EJPEUB	GC/MS		1	
	LC/HRMS	1	1	
EMPQQB	GC/MS		1	
	hrms	1		
EPD7WD	Immunoassay	1		
EWB2UB	Immunoassay	1		
	GC/MS		1	
F6lkQF	LC/MS/MS		1	
	GC/MS	1	1	
FF8JPX	Immunoassay	1		
	GC/MS	1	1	
FJ7VLX	Immunoassay	1		
I J / V L/\	GC/MS		1	
FXK3FA	Immunoassay	1		
	GC/MS		5	
	LC/MS/MS	÷	· ✓	
	GC/NPD	$\checkmark$	-	
G3QAED	Immunoassay	✓		
	GC/MS	•	1	
	LC/MS		✓ ✓	
	Immunoassay	1		
GFG7GB	immunoassav	v		
GFG/GB	GC/MS	1	1	

Immunoassay GC/MS Immunoassay GC/MS LC/MS/MS Immunoassay	√ √	J J	
GC/MS LC/MS/MS	1	✓	
Immunoassay		1	
	1		
LC/MS/MS			1
Immunoassay	1		
lmmunoassay GC/MS	√ √	✓	
Immunoassay GC/MS	$\checkmark$	1	
Immunoassay GC/MS	✓	✓	
LC/MS/MS	1	1	
Immunoassay GC/MS	✓	✓	
GC/MS LC/MS/MS	$\checkmark$	✓	
Immunoassay GC/MS LC/MS/MS	√ √	✓	
Immunoassay GC/MS	$\checkmark$	$\checkmark$	
Immunoassay GC/MS	√ ✓	✓	
Immunoassay GC/MS	✓	✓	
LC/MS/MS GC/MS	$\checkmark$	$\checkmark$	
GC/MS	1		
Immunoassay GC/MS	√ ✓	✓	
lmmunoassay LC/MS/MS	√ ✓	✓	
LC/MS/MS GC/MS	1	1	
	ImmunoassayImmunoassayGC/MSImmunoassayGC/MSImmunoassayGC/MSLC/MS/MSImmunoassayGC/MSLC/MS/MSImmunoassayGC/MSLC/MS/MSImmunoassayGC/MSImmunoassayGC/MSImmunoassayGC/MSImmunoassayGC/MSImmunoassayGC/MSImmunoassayGC/MSImmunoassayGC/MSImmunoassayGC/MSImmunoassayGC/MSImmunoassayGC/MSImmunoassayGC/MSImmunoassayGC/MSImmunoassayGC/MSImmunoassayGC/MSImmunoassayLC/MS/MSLC/MS/MSLC/MS/MS	Immunoassay✓Immunoassay GC/MS✓Immunoassay GC/MS✓Immunoassay GC/MS✓Immunoassay GC/MS✓Ic/MS/MS✓Immunoassay GC/MS✓GC/MS GC/MS✓Immunoassay GC/MS✓GC/MS LC/MS/MS✓Immunoassay GC/MS✓Immunoassay GC/MS✓Immunoassay GC/MS✓Immunoassay GC/MS✓Immunoassay GC/MS✓Immunoassay GC/MS✓Immunoassay GC/MS✓Immunoassay GC/MS✓Immunoassay GC/MS✓Immunoassay GC/MS✓Immunoassay GC/MS✓Immunoassay GC/MS✓Immunoassay GC/MS✓Immunoassay GC/MS✓Immunoassay GC/MS✓Immunoassay GC/MS✓Immunoassay GC/MS✓Ic/MS/MS GC/MS✓	Immunoassay✓Immunoassay✓GC/MS✓Immunoassay✓GC/MS✓Immunoassay✓GC/MS✓Immunoassay✓GC/MS✓Immunoassay✓GC/MS✓Immunoassay✓GC/MS✓Immunoassay✓GC/MS✓Immunoassay✓GC/MS✓Immunoassay✓GC/MS✓Immunoassay✓GC/MS✓Immunoassay✓GC/MS✓Immunoassay✓GC/MS✓Immunoassay✓GC/MS✓Immunoassay✓GC/MS✓Immunoassay✓GC/MS✓Immunoassay✓IC/MS/MS✓Immunoassay✓Immunoassay✓Ic/MS/MS✓Ic

(29)

TABLE 1E: Methods of Analysis - Item 1
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		lethods of Analys		
WebCode	Method	Screening	Confirmatory	Quantitation
M9UBV9	Immunoassay	$\checkmark$		
	GC/MS		<i>J</i>	
	LCQTOF			
MGR2KP	LC/MS/MS	1	1	
MNWK33	Immunoassay	$\checkmark$		
	GC/MS	<i>✓</i>	1	
MU2CDL	Immunoassay	1		
	LC-QTOF			
	GC/MS		✓	
MUJMT7	Immunoassay	$\checkmark$		
	GC/MS			
	LC/MS/MS		1	
NK7TCH	LC/MS/MS	$\checkmark$	$\checkmark$	
NYNLZP	GC/MS	1	1	
P7KZZG	LC/MS/MS	1	1	
PG4AQV	Immunoassay	1		
	GC/MS		1	
PXQTHB	Immunoassay	1		
	GC/MS	$\checkmark$	1	
Q4EUZ2	LC-HRMS/MS	1	1	
	GC/MS		1	
Q63FMW	Immunoassay	1		
	LC/MS/MS		1	
	GC/MS		$\checkmark$	
QKXQGU	LC/MS/MS		1	
	Immunoassay	$\checkmark$		
	LC-QTOF-MS	1		
QQJTDY	Immunoassay	1		
	GC/MS			
	LC/MS/MS		1	
QXKXCA	LC/MS/MS	1	<i>✓</i>	
RDB8PZ	Immunoassay	1		
RQLHHW	Immunoassay	1		
	GC/MS		1	1
	GC-FID		1	<i>✓</i>
RYRJG2	GC/MS	1	1	
TG94UK	Immunoassay	✓		
	GC/MS		$\checkmark$	
TLRYZX	LC-HRMS/MS	1		
	GC/MS		$\checkmark$	

	TABLE TE: Methods of Analysis - Item T				
WebCode	Method	Screening	Confirmatory	Quantitation	
TMFE6Z	Immunoassay	1			
TNT2PY	Immunoassay LC/MS/MS	1	1		
TQFMCV	Immunoassay GC/MS	$\checkmark$	<i>✓</i>		
TRTAUA	GC/MS Immunoassay	٠ ٠	1		
TUGNHJ	LC/MS/MS LC/MS LC/HRMS	J J	$\checkmark$	1	
UR8YTF	Immunoassay GC/MS	$\checkmark$	<i>✓</i>		
UTH8CZ	LC/MS/MS	1	1		
UY9DEG	Immunoassay	1			
V2AXJT	LC/MS GC/MS LC/MS/MS	/ /		1	
VMBUCG	GC/MS		$\checkmark$		
W46MC	lmmunoassay LC/MS/MS	1	✓		
WWVHMA	LC/MS/MS	1	1		
X4AVWT	Immunoassay GC/MS	√ √	$\checkmark$		
XCKWHT	Immunoassay GC/MS	\$ \$	✓		
XHU9GF	LC/MS	✓	✓		
XTEFHP	LC/MS/MS Immunoassay	\$ \$	$\checkmark$		
XZPYEU	LC-HRMS/MS GC/MS	1	✓		
YCZT6D	GC/MS		1		
YNDT4R	lmmunoassay GC/MS LC/MS/MS	/ /	✓ ✓		
YQGNMV	lmmunoassay GC/MS LC/MS/MS	/ /	۲ ۲		
Z4ZQF7	Immunoassay LC/MS/MS	1	1		

WebCode	Method	Screening	Confirmatory	Quantitation
ZBKTMA	lmmunoassay LC-QTOF	$\checkmark$	<i>✓</i>	
ZGR6XN	lmmunoassay GC/MS	✓	✓	
ZVQ26T	lmmunoassay LC/MS/MS GC/MS	\ \ \	√ √	

esponse Summary for Item 1 - Methods of Analysis		Participants: 118	
	Screening	Confirmatory	Quantitation
Immunoassay:	86	0	0
GC/MS:	30	81	4
LC/MS:	3	5	1
LC/MS/MS:	22	39	6
Other:	14	10	1

## Additional Comments for Item 1

TABLE 1F

WebCode	Item Comments
3AZRVQ	Internal standards used include: mepivacaine and nalorphine
43TPZP	Drugs included in panel: Cyclobenzaprine, Imipramine, MDPV, Meperidine, Mitragynine, Normeperidine, Phencyclidine, Quetiapine, and Zolpidem.
4AFBFN	internal standards: mepivacaine, mephobarbital (Screen); internal standards: mepivacaine, nalorphine (confirmation)
4AYEMP	internal standards: mepivacaine, nalorphine
4ET9KQ	Mepivacaine was the internal standard used for all analysis.
6XECWG	Opiate cutoff: 300ng/mL. Oxycodone cutoff: 100ng/mL. 6-acetylmorphine cutoff: 10 mg/mL. Creatinine: Normal
76V339	6-Monoacetylmorphine results are above our upper limit of quantitation (200ng/mL). Oxycodone Cutoff 50 ng/mL. Morphine Cutoff 50 ng/mL
7E32DV	Pseudephedrine and Heroin indicated- not confirmed. Caffine and Fluconazole- not reported
83PYUJ	internal standard: mepivacaine
8WWUYT	n-Propylamphetamine, Mepivacaine, and Hexobarbital used as internal standards.
96RG6J	Mepivacaine and nalorphine used as internal standards
98BFDM	Internal standard used for Opiates Analysis was Nalorphine
9K27GY	Deuterated standards are used for compounds we can quantitate. Our lab is currently only able to quantitate samples that could contain basic drugs or cannabinoids. I have included the list of drugs the lab can quantitate or qualitatively identify: Amphetamine, Methamphetamine, MDA, MDMA, Ketamine, Mescaline (Qualitatively only), Phentermine, Diphenhydramine, LSD, Psilocin (qualitatively only), Ephedrine/Pseudoephedrine (qualitatively only), THC-OH, THC, THC-COOH.
9PUCTF	Opiate Confirm: Internal Standard - Nalorphine
A7X4G3	* Internal standard: flurazepam / estazolam. * Sample preparation: L/L extraction. * The final extraction is derivatized with BSTFA and injected by GC/MS. * LOD morphyne: 30 ng/mL. LOD 6-monoacetylmorphine: 15 ng/mL. LOD oxicodone: 30 ng/mL.
A87HGG	All substances detected using immunoassay testing, cutoffs are listed below. 6AM- 10 ng/mL, AMP- 1,000 ng/mL, BNZ- 200 ng/mL, COC- 300 ng/mL, CR- 20 mg/dL, THC- 50 ng/mL, OPI- 300 ng/mL, OXY- 100 ng/mL, FEN- 1 ng/mL.
AF6VNC	Fluconazole indicated by GCMS. Not confirmed or reported.
BDRNV4	Oxycodone Cutoff 50 ng/mL. Morphine Cutoff 50 ng/mL
CB3NBD	Nalorphine was used as an internal standard.
D6DJZN	Internal Standard: Mepivacaine, Nalorphine, Methohexital. Fluconazole - Not reported, no standard available for comparison
DJTMJX	Alere iCassette (THC) test device was used to screen for THC, referred to in 1-5 as rapid chromatographic immunoassay. The cutoff concentration for the assay is 50 ng/mL.
EMPQQB	Internal standards: Mepivacaine/Mephobarbital (HRMS) and Mepivacaine/Naloprhine (GCMS)
EPD7WD	All substances detected using immunoassay testing, cutoffs are listed below. 6AM- 10 ng/mL, AMP- 1,000 ng/mL, BNZ- 200 ng/mL, COC- 300 ng/mL, CR- 20 mg/dL, THC- 50 ng/mL, OPI- 300 ng/mL, OXY- 100 ng/mL, FEN- 1 ng/mL.

### TABLE 1F: Additional Comments for Item 1

WebCode	Item Comments
G3QAED	mepivacaine and nalorphine were used as internal standards.
GFG7GB	Internal standards used were mepivacaine and nalorphine.
GRAEFD	Internal Standards: 1. SKF-525A 2. Hexobarbital
GUKA4Q	ELISA Benzodiazepines and zolpidem cut-offs set at 10ng/mL and 25ng/mL, respectively. ELISA Benzodiazepines and zolpidem screened at 126 and 105, respectively (slightly positive). LC/MS/MS confirmations for benzodiazepines and zolpidem were negative.
GZLQ96	Opiate cutoff: 300ng/mL. Oxycodone cutoff: 100ng/mL. 6-acetylmorphine cutoff: 10 mg/mL. Creatinine: normal
HBLHEA	All substances detected using immunoassay testing, cutoffs are listed below. 6AM- 10 ng/mL, AMP- 1,000 ng/mL, BNZ- 200 ng/mL, COC- 300 ng/mL, CR- 20 mg/dL, THC- 50 ng/mL, OPI- 300 ng/mL, OXY- 100 ng/mL, FEN- 1 ng/mL.
HQF42P	Confirmatory ISTD: NPA and SKF
KNE3R4	Note: samples are not screened by an immunoassay screening method. All screening and confirmation conducted by LCMS
KVY39G	Sample was hydrolyzed so drugs represented are "total" not "free"
L2447P	Internal standard: Flurazepam and aprobarbital. LoD: 10 ng/mL.
LDU3QZ	Phenyltoloxamine, Buprenorphine-D4, Hydromorphone-D3, Oxycodone-D3
LYVVX6	Nalorphine used for opiate confirmation internal standard
M4Q32Y	LOQs: 6-MAM 1 ng/mL, morphine 10 ng/mL, oxycodone 10 ng/mL. Deuterated internal standards used for screening EMIT for immunoassay.
MNWK33	Nalorphine used as Internal Standard for Opiate Extraction.
MU2CDL	IS used in QTOF analyses: Fentanyl-D5, Imipramine-D3, MDMA-D5, Methaqualone-D7, and Triazolam-D4. Caffeine, Ephedrine/Pseudoephedrine, and Fluconazole disregarded.
MUJMT7	Internal standards utilized were mepivacaine and nalorphine. Morphine was butylated for analysis.
NK7TCH	Morphine-d6 ISTD LOD 5ng/ml; Oxycodone-d6 ISTD LOD 5ng/ml
P7KZZG	Morphine: ISTD: Morphine-d6; LOD: 5ng/mL. Oxycodone: ISTD: Oxycodone-d6; LOD: 5ng/mL
PG4AQV	At the time of this proficiency test, the laboratory temporarily suspended the reporting of quantitative results for opiates. Therefore, no quantitative results for opiates will be reported for this proficiency test. Only qualitative results will be reported.
PXQTHB	N-Propylamphetamine, Mepivacaine, and Hexobarbital were used as Internal Standards.
Q4EUZ2	For LC-HRMS/MS testing, mepivacaine and mephobarbital were used as internal standards. For GC/MS testing, mepivacaine and nalorphine were used as internal standards.
Q63FMW	The cut off of morphine is 50 ng/mL. The cut off of oxycodone is 50 ng/mL. The cut off of 6-monacetylmorphine is 25 ng/mL.
QKXQGU	Confirmatory testing for acetaminophen not performed.
QXKXCA	ephedrine/pseudoephedrine detected in confirmation method- not reported as per provider- "verification testing showed low levels of ephedrine, fluconazole and pseudoephedrine in all three samples, please disregard these"
RDB8PZ	All substances detected using immunoassay testing, cutoffs are listed below. 6AM- 10 ng/mL, AMP- 1,000 ng/mL, BNZ- 200 ng/mL, COC- 300 ng/mL, CR- 20 mg/dL, THC- 50 ng/mL, OPI- 300 ng/mL, OXY- 100 ng/mL, FEN- 1 ng/mL.

### TABLE 1F: Additional Comments for Item 1

WebCode	Item Comments
RQLHHW	Morphine D3 internal standard. Calibration Curve for Morphine r2= 0.99. GC/FID for Alcohol confirmation - LLQ 20mg/dL - report less than 20mg/dL
TMFE6Z	All substances detected using immunoassay testing, cutoffs are listed below. 6AM- 10 ng/mL, AMP- 1,000 ng/mL, BNZ- 200 ng/mL, COC- 300 ng/mL, CR- 20 mg/dL, THC- 50 ng/mL, OPI- 300 ng/mL, OXY- 100 ng/mL, FEN- 1 ng/mL.
TQFMCV	Codeine-D3 is used as an internal standard
TRTAUA	Screening GC/MS internal standards were Mepivacaine, Methohexital, and Nalorphine-diTMS. Confirmatory GC/MS internal standard was Mepivacaine.
UY9DEG	Analytes tested for and cutoffs provided below: Fentanyl 2 ng/ml, AB-Pinaca 2.5 ng/ml, Methamphetamine 200 ng/ml, Barbs 200 ng/ml, Benzos 150 ng/ml, Methadone 300 ng/ml, Opiates 200 ng/ml, Creatinine 20 mg/dl, Benzoylecgonine 150 ng/ml, Oxycodone 50 ng/ml, Tramadol 5 ng/ml, THC 20 ng/ml, TCA 150 ng/ml, Amphetamine 200 ng/ml, Buprenorphine 1 ng/ml, 6-mam 10 ng/ml, JWH-018 20 ng/ml, alpha-PVP 5 ng/ml, UR-144 10 ng/ml.
V2AXJT	oxycodone quantification ISD; d3-oxycodone morphine quantification ISD; d3-morphine 6-acetyImorphine quantification ISD; d3-acetyImorphine.
W46MC	Item 1 screened presumptive positive for amphetamine using immunoassay. This is why confirmation was run, but no analytes were detected during the confirmation. The [Laboratory] does not currently have a validated method to confirm opiates or oxycodone/oxymorphone so no confirmatory testing was performed for these classes.
WWVHMA	Morphine-d6, LOD 5 ng/mL. Oxycodone-d6, LOD 5 ng/mL
X4AVWT	Opiate Confirmation : Internal Standard - Nalorphine
XCKWHT	Nalorphine used as internal standard for opiate confirmation
XHU9GF	Estazolam was used as internal standard.
XZPYEU	IS: mepivacaine, mephobarbital
YCZT6D	Internal standard: Flurazepam.
YNDT4R	mepivacaine was used as an retention time internal standard. Caffeine not reported.
YQGNMV	Mepivacaine and Nalorphine used as internal standards
ZGR6XN	Codeine-D3 is used as an internal standard
ZVQ26T	Internal standards: mepivacaine nalorphine

## **Screening Results - Item 2**

### TABLE 2A

### Item Scenario:

A 30-year-old male was pulled over for swerving in between lanes. He was driving alone and seemed confused and drowsy. A urine sample was collected for analysis an hour after the incident had occurred.

### Item Contents and Preparation Concentration:

Fentanyl (150 ng/mL) Norfentanyl (1,000 ng/mL)

WebCode	Screening Results
2JBUGR	No drugs detected utilizing screening methods.
3743CY	Fentanyl Norfentanyl
3AZRVQ	Fentanyl
<b>3RJMAY</b>	Fentanyl
43TPZP	No drugs detected utilizing screening methods.
4AFBFN	fentanyl
4AVRBG	Fentanyl norfentanyl
4AYEMP	fentanyl
4ET9KQ	No drugs detected utilizing screening methods.
4YW39M	Fentanyl, Norfentanyl
6CGVE9	fentanyl norfentanyl
6M2633	fentanyl, norfentanyl
6XECWG	Fentanyl
76V339	Fentanyl
7AN9EP	No drugs detected utilizing screening methods.
7TJU33	No drugs detected utilizing screening methods.
83PYUJ	fentanyl
8J9TG2	No drugs detected utilizing screening methods.
8WWUYT	Fentanyl (ELISA)
96RG6J	No drugs detected utilizing screening methods.
98BFDM	No drugs detected utilizing screening methods.
9K27GY	Fentanyl Amphetamine

WebCode	Screening Results	
9N397Z	fentanyl	
9PUCTF	Fentanyl, Norfentanyl	
A4APRT	Methamphetamine, Norfentanyl, Fentanyl	
A7X4G3	No drugs detected utilizing screening methods.	
A87HGG	Fentanyl	
AF6VNC	Fentanyl	
AFYTRC	Barbiturates Cannabinoids Fentanyl Norfentanyl	
ALQUEK	No drugs detected utilizing screening methods.	
AMM82D	Fentanyl	
AUKY62	Fentanyl Norfentanyl	
B2Y873	fentanyl, norfentanyl	
BDRNV4	Fentanyl Gabapentin	
ВМЈ8СХ	No drugs detected utilizing screening methods.	
BP6NUH	fentanyl	
BT9L24	No drugs detected utilizing screening methods.	
C6TL8W	No drugs detected utilizing screening methods.	
CB3NBD	Fentanyl Norfentanyl	
CDMTP3	Fentanyl Norfentanyl	
CT4N6Y	Fentanyl Norfentanyl	
D6DJZN	No drugs detected utilizing screening methods.	
DJTMJX	Norfentanyl, Fentanyl	
EJPEUB	fentanyl	
EMPQQB	fentanyl	

WebCode	Screening Results
EPD7WD	Fentanyl
EWB2UB	No drugs detected utilizing screening methods.
F6LKQF	Opiates
FF8JPX	No drugs detected utilizing screening methods.
FJ7VLX	Fentanyl Norfentanyl
FXK3FA	Fentanyl, Norfentanyl
G3QAED	No drugs detected utilizing screening methods.
GFG7GB	fentanyl
GRAEFD	1. Fentanyl
GUKA4Q	Fentanyl Benzodiazepines
GZLQ96	Fentanyl
GZP7MQ	fentanyl norfentanyl
HBLHEA	Fentanyl
HPHQEX	No drugs detected utilizing screening methods.
HQF42P	fentanyl
JQ9FTB	No drugs detected utilizing screening methods.
KNE3R4	No drugs detected utilizing screening methods.
KVY39G	No drugs detected utilizing screening methods.
L2447P	OPIOIDS: Fentanyl and norfentanyl
LDU3QZ	Fentanyl Norfentanyl
LDZAZM	Fentanyl
LERDM3	Fentanyl Norfentanyl
LHPWN2	No drugs detected utilizing screening methods.
LQMJMT	fentanyl, norfentanyl
LX6WJ7	Fentanyl

WebCode	Screening Results	
LYVVX6	Fentanyl, Norfentanyl	
M4Q32Y	Fentanyl positive on immunoassay	
M6VYZ9	Fentanyl	
M9UBV9	Fentanyl	
MGR2KP	Fentanyl, Norfentanyl	
MNWK33	Norfentanyl Fentanyl	
MU2CDL	No drugs detected utilizing screening methods.	
MUJMT7	No drugs detected utilizing screening methods.	
NK7TCH	No drugs detected utilizing screening methods.	
NYNLZP	Fentanyl	
P7KZZG	No drugs detected utilizing screening methods.	
PG4AQV	Fentanyl and norfentanyl	
PXQTHB	ELISA Fentanyl	
Q4EUZ2	Fentanyl	
Q63FMW	Fentanyl	
QKXQGU	fentanyl, norfentanyl	
QQJTDY	Fentanyl Norfentanyl	
QXKXCA	fentanyl, norfentanyl	
RDB8PZ	Fentanyl	
RQLHHW	No drugs detected utilizing screening methods.	
RYRJG2	fentanyl	
TG94UK	No drugs detected utilizing screening methods.	
TLRYZX	fentanyl	
TMFE6Z	Fentanyl	
TNT2PY	Fentanyl	
TQFMCV	No drugs detected utilizing screening methods.	
TRTAUA	Fentanyl, Norfentanyl	
-		

WebCode	Screening Results
TUGNHJ	fentanyl, norfentanyl
UR8YTF	No drugs detected utilizing screening methods.
UTH8CZ	fentanyl
UY9DEG	Fentanyl
V2AXJT	fentanyl norfentanyl
VMBUCG	No drugs detected utilizing screening methods.
W46MC	Fentanyl, Amphetamine
WWVHMA	No drugs detected utilizing screening methods.
X4AVWT	Fentanyl Norfentanyl
XCKWHT	Fentanyl and Norfentanyl
XHU9GF	Fentanyl Norfentanyl
XTEFHP	Fentanyl Norfentanyl
XZPYEU	fentanyl
YCZT6D	No drugs detected utilizing screening methods.
YNDT4R	fentanyl
YQGNMV	fentanyl
Z4ZQF7	Fentanyl
ZBKTMA	No drugs detected utilizing screening methods.
ZGR6XN	No drugs detected utilizing screening methods.
ZVQ26T	fentanyl

Screening Response Summary for Item 2	Participants: 117
Fentanyl:	81
Norfentanyl:	35
Other drugs/metabolites detected:	8
No drugs/metabolites detected Utilizing Screening Methods:	35

Total number of screening responses provided may be more than the number of participants due to multiple drugs/metabolites being reported.

# **Confirmatory Results - Item 2**

TABLE 2B

#### Item Scenario:

A 30-year-old male was pulled over for swerving in between lanes. He was driving alone and seemed confused and drowsy. A urine sample was collected for analysis an hour after the incident had occurred.

Item Contents and Preparation Concentration:

Fentanyl (150 ng/mL) Norfentanyl (1,000 ng/mL)

What drug	s/metabolites were detected in l			1	
WebCode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
2JBUGR	fentanyl	$\checkmark$			
3743CY	Fentanyl	1			
	Norfentanyl	$\checkmark$			
3AZRVQ	Fentanyl	1			
<b>3RJMAY</b>	fentanyl	1			
	Norfentanyl	$\checkmark$			
43TPZP	No drugs/metabolites detected utilizin confirmatory methods.	ng			
4AFBFN	fentanyl	1			
4AVRBG	fentanyl	1			
	Norfentanyl	$\checkmark$			
4AYEMP	fentanyl	1			
4ET9KQ	fentanyl	1			
4YW39M	Fentanyl	1			
	Norfentanyl	$\checkmark$			
6CGVE9	fentanyl	1			
	Norfentanyl	$\checkmark$			
6M2633	fentanyl	1			
	Norfentanyl	$\checkmark$			
76V339	Fentanyl	1			
	Norfentanyl	$\checkmark$			
7AN9EP	No drugs/metabolites detected utilizin confirmatory methods.	ng			
7TJU33	Fentanyl	1			
	Norfentanyl	$\checkmark$			
83PYUJ	fentanyl	1			
8J9TG2	fentanyl	1			
	Norfentanyl	$\checkmark$			

		Qualitative	Reported		
WebCode	Analyte Reported	Only	Concentration	Uncertainty	Units
8WWUYT	Fentanyl				
	Norfentanyl	1			
96RG6J	fentanyl	1			
98BFDM	Fentanyl	1			
9K27GY	Ephedrine/Pseudoephedrine	1			
9N397Z	fentanyl	1			
	Norfentanyl	1			
9PUCTF	Fentanyl	1			
	Norfentanyl	1			
A4APRT	Fentanyl	1			
	Norfentanyl	1			
A7X4G3	Fentanyl	1			
AF6VNC	Fentanyl	1			
	Norfentanyl	1			
AFYTRC	Fentanyl	1			
	Norfentanyl	$\checkmark$			
ALQUEK	fentanyl	1			
AMM82D	Fentanyl	1			
AUKY62	Fentanyl	1			
	Norfentanyl	$\checkmark$			
B2Y873	fentanyl	1			
	Norfentanyl	$\checkmark$			
BDRNV4	Fentanyl	1			
	Norfentanyl	1			
ВМЈ8СХ	Fentanyl	1			
	Norfentanyl	1			
BP6NUH	fentanyl	1			
BT9L24	Fentanyl	1			
	Norfentanyl	1			
C6TL8W	Fentanyl	1			
-	, Norfentanyl	1			

What drug	s/metabolites were detected in It				
WebCode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
CB3NBD	Fentanyl	1			
	Norfentanyl	1			
CDMTP3	Fentanyl	1			
	Norfentanyl	1			
CT4N6Y	Fentanyl	1			
	Norfentanyl	1			
D6DJZN	Fentanyl	1			
	Norfentanyl	1			
DJTMJX	Fentanyl	1			
	Norfentanyl	1			
EJPEUB	fentanyl	1			
EMPQQB	fentanyl	1			
EWB2UB	Fentanyl	1			
	Norfentanyl	1			
F6lkQF	Fentanyl	1			
	Norfentanyl	1			
FF8JPX	Fentanyl	1			
	Norfentanyl	1			
FJ7VLX	Fentanyl	1			
	Nrfentanyl	$\checkmark$			
FXK3FA	Fentanyl	1			
	Norfentanyl	$\checkmark$			
G3QAED	fentanyl	1			
GFG7GB	fentanyl	1			
GRAEFD	Fentanyl	1			
	Norfentanyl	1			
GUKA4Q	No drugs/metabolites detected utilizin confirmatory methods.	ng			
GZP7MQ	fentanyl		0,12		mg/l
	Norfentanyl		0,40		mg/l
HPHQEX	Fentanyl	1			
	Norfentanyl	1			

Test 22-5671

	s/metabolites were detected in It	Qualitative	Reported		
WebCode	Analyte Reported	Only	Concentration	Uncertainty	Units
HQF42P	Fentanyl	1			
	Norfentanyl				
	acetyl fentanyl	1			
JQ9FTB	Fentanyl	1			
KNE3R4	fentanyl	1			
KVY39G	Fentanyl	1			
	Norfentanyl	1			
L2447P	Fentanyl	1			
	Norfentanyl	1			
LDU3QZ	Fentanyl	1			
	Norfentanyl	1			
LDZAZM	Fentanyl	1			
LERDM3	Fentanyl	1			
	Norfentanyl	1			
LHPWN2	fentanyl	1			
	Norfentanyl	1			
lqmjmt	fentanyl	1			
	Norfentanyl	1			
LYVVX6	Fentanyl	1			
	Norfentanyl	1			
M4Q32Y	No drugs/metabolites detected utilizin confirmatory methods.	9			
M6VYZ9	Fentanyl	1			
M9UBV9	Fentanyl	1			
	Norfentanyl	1			
MGR2KP	Fentanyl	1			
	Norfentanyl	$\checkmark$			
MNWK33	Fentanyl				
	Norfentanyl	1			
MU2CDL	Fentanyl	1			
	Norfentanyl	1			
MUJMT7	Fentanyl	1			

What drugs/metabolites were detected in Item 2?					
WebCode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
NYNLZP	Fentanyl	✓			
PG4AQV	Fentanyl	1			
	Norfentanyl	$\checkmark$			
PXQTHB	Fentanyl	1			
	Norfentanyl	$\checkmark$			
Q4EUZ2	Fentanyl	$\checkmark$			
Q63FMW	Fentanyl	1			
QKXQGU	fentanyl	1			
QQJTDY	Fentanyl				
	Norfentanyl				
QXKXCA	fentanyl	1			
	Norfentanyl	$\checkmark$			
RYRJG2	No drugs/metabolites detected utilizin confirmatory methods.	ng			
TG94UK	Fentanyl	$\checkmark$			
	Norfentanyl	$\checkmark$			
TLRYZX	fentanyl	$\checkmark$			
TNT2PY	Fentanyl	$\checkmark$			
TQFMCV	Fentanyl	1			
TRTAUA	Fentanyl	1			
	Norfentanyl	1			
TUGNHJ	fentanyl		86.4	13,6%	ng/mL
	Norfentanyl		>500		ng/mL
UTH8CZ	fentanyl	$\checkmark$			
V2AXJT	fentanyl				
	Norfentanyl				
VMBUCG	Fentanyl	$\checkmark$			
	Norfentanyl	✓			
VV46MC	No drugs/metabolites detected utilizin confirmatory methods.	ng			
(4AVWT	Fentanyl	1			
	Norfentanyl	$\checkmark$			

		Qualitative	Reported		
WebCode	Analyte Reported	Only	Concentration	Uncertainty	Units
XCKWHT	Fentanyl	1			
	Norfentanyl	1			
XHU9GF	Fentanyl	1			
	Norfentanyl	1			
XTEFHP	Fentanyl	1			
	Norfentanyl	1			
XZPYEU	fentanyl	1			
YCZT6D	Fentanyl	1			
YNDT4R	fentanyl	1			
YQGNMV	fentanyl	1			
Z4ZQF7	No drugs/metabolites detected utilizin confirmatory methods.	g			
ZBKTMA	Fentanyl	1			
	Norfentanyl	1			
ZGR6XN	Fentanyl	1			
ZVQ26T	fentanyl	1			

Confirmatory Response Summary for Item 2	Participants: 103
Fentanyl:	95 (92.2%)
Norfentanyl:	60 (58.3%)
Other Identified Drugs/Metabolites:	1 (1.0%)
No Drugs/Metabolites Detected Utilizing Confirmatory Methods:	7 (6.8%)

# Raw Data - Item 2 TABLE 2C

#### Item 2 Raw Data - Fentanyl Preparation concentration: (150 ng/mL)

WebCode List of Raw Data determinations (ng/mL)

TUGNHJ 86.40

Statistical Analysis for Item 2 - Fentanyl

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

#### TABLE 2C: Raw Data - Item 2

#### Item 2 Raw Data - Norfentanyl Preparation concentration: (1,000 ng/mL)

WebCode	List of Raw Data determinations (ng/mL)			
TUGNHJ	626.0			
Statistical Analysis for Item 2 - Norfentanyl				
Please note: Statistical analysis has not been provided due to the low number of raw data responses.				

# **Reporting Procedures - Item 2**

TABLE 2D - Item 2

	Quantitative Reporting Procedures WebCode If quantitative analysis was performed, the reported concentrations are:		
I for qualitative identification.	9K27GY Run in duplicate and comp		
	TUGNHJ A single determination.		
Participants: 2	Response Summary for Item 2		
Participo	Response Summary for Item 2		

A single determination:	1 (50.0%)
The mean of duplicate/several determinations:	O (0.0%)
Other:	1 (50.0%)

# Methods of Analysis - Item 2

#### TABLE 2E - Item 2

WebCode	Method	Screening	Confirmatory	Quantitation
2JBUGR	Immunoassay	1		
	GC/MS	,		
	LC/MS/MS	1	1	
3743CY	LC/MS/MS	$\checkmark$	$\checkmark$	
3AZRVQ	Immunoassay	1		
	LC/MS/MS			
	GC/MS	<i></i>	1	
<b>3RJMAY</b>	Immunoassay	1		
	GC/MS		1	
43TPZP	LC/MS/MS	1	1	1
4AFBFN	LC-HRMS/MS	1		
	GC/MS		$\checkmark$	
4AVRBG	Immunoassay	1		
	LC-QOTF	1		
	GC/MS	1	1	
	LC/MS/MS		1	
4AYEMP	Immunoassay	1		
	GC/MS		1	
	LC/MS/MS		$\checkmark$	
4ET9KQ	Immunoassay	✓		
	GC/MS		$\checkmark$	
	LC/MS/MS		1	
4YW39M	Immunoassay	1		
	GC/MS	1	$\checkmark$	
6CGVE9	GC/MS	1	1	
6M2633	Immunoassay	1		
	GC/MS	1	1	
6XECWG	Immunoassay	1		
76V339	Immunoassay	1		
/0/00/	LC/MS/MS		1	
7AN9EP	Immunoassay	1		
7TJU33	Immunoassay	1		
/13033	LC-QTOF	-	1	
	GC/MS		1	
83PYUJ	High resolution accurate mass	✓		
001100	GC/MS		$\checkmark$	
8J9TG2	Immunoassay	1		
037102	LC-QTOF		1	
	GC/MS		1	

#### Test 22-5671

#### TABLE 2E: Methods of Analysis - Item 2

Method	Screening	Confirmatory	Quantitation
Immunoassay	1		
		•	
-	$\checkmark$	1	
GC/MS		1	
Immunoassav	✓		
GC/MS		1	
Immunoassay	✓		
LC/MS/MS		$\checkmark$	
Immunoassay	1		
LC/MS/MS		1	
Immunoassay		_	
GC/MS	$\checkmark$	<i>✓</i>	
LC/MS/MS	$\checkmark$		
GC/MS		<b>v</b>	
Immunoassay	$\checkmark$	/	
		V	
Immunoassay	<b>v</b>		
Immunoassay	$\checkmark$		
	/	•	
-		1	
LC/MS/MS	·	1	
	✓		
GC/MS	$\checkmark$	1	
LC/MS	$\checkmark$	1	
LC/MS/MS	1		
GC/MS		1	
GC/MS		1	
Immunoassay	$\checkmark$		
GC/MS	1	1	
Immunoassay	1		
LC/MS/MS		1	
GC/MS		1	
LC-QTOF		1	
Immunoassay	1		
	$\checkmark$		
	,	•	
Immunoassay	<i>√</i>		
	Immunoassay GC/MSImmunoassay LC/MS GC/MSImmunoassay GC/MSImmunoassay LC/MS/MSImmunoassay CC/MS/MSImmunoassay GC/MSImmunoassay GC/MSIc/MS/MS GC/MSImmunoassay GC/MSImmunoassay GC/MSImmunoassay GC/MSImmunoassay GC/MSImmunoassay GC/MSImmunoassay GC/MSImmunoassay GC/MSImmunoassay GC/MSImmunoassay GC/MSImmunoassay GC/MSImmunoassay GC/MSImmunoassay GC/MSImmunoassay GC/MSImmunoassay GC/MSImmunoassay GC/MSImmunoassay GC/MSIc/MS/MSGC/MSImmunoassay GC/MSGC/MSImmunoassay GC/MSImmunoassay CC/MS/MSImmunoassay CC/MS/MSImmunoassay CC/MS/MSImmunoassay CC/MS/MSGC/MSImmunoassay CC/MS/MSGC/MSImmunoassay CC/MS/MSGC/MSImmunoassay CC/MS/MSGC/MSImmunoassay CC/MS/MSGC/MSImmunoassay CC/MS/MSImmunoassay CC/MS/MSImmunoassay CC/MS/MSImmunoassay CC/MS/MSImmunoassay CC/MS/MSImmunoassay CC/MS/MSImmunoassay CC/MS/MSImmunoassay CC/MS/MSImmunoassay CC/MS/MSImmunoassay CO/MSImmunoassay CO/MSImmunoassay CO/MS <td>Immunoassay GC/MS·Immunoassay LC/MS GC/MS·Immunoassay GC/MS·Immunoassay LC/MS/MS·Immunoassay LC/MS/MS·Immunoassay CC/MS·Immunoassay GC/MS·Immunoassay LC/MS/MS GC/MS·Immunoassay LC/MS/MS GC/MS·Immunoassay LC/MS/MS GC/MS·</td> <td>Immunoassay GC/MSImmunoassay Immunoassay GC/MSImmunoassay Immunoassay GC/MSImmunoassay GC/MSImmunoassay Immunoassay IC/MS/MSImmunoassay Immunoassay IC/MS/MSImmunoassay GC/MSImmunoassay Immunoassay GC/MSImmunoassay Immunoassay Immunoassay Immunoassay GC/MSImmunoassay GC/MSImmunoassay Immunoassay Immunoassay GC/MSImmunoassay Immunoassay Immunoassay Immunoassay GC/MSImmunoassay GC/MSImmunoassay Immunoassay Immunoassay GC/MSImmunoassay Immunoassay Immunoassay Immunoassay Immunoassay Immunoassay GC/MSImmunoassay GC/MSImmunoassay Immunoassay Immunoassay Immunoassay Immunoassay IC/MS/MSImmunoassay Immunoassay Immunoassay Immunoassay Immunoassay IC/MS/MSImmunoassay GC/MSImmunoassay Immunoassay IC/MS/MSImmunoassay Immunoassay IC/MS/MSImmunoassay GC/MSImmunoassay Immunoassay IC/MS/MSImmunoassay Immunoassay IC/MS/MSImmunoassay GC/MSImmunoassay Immunoassay IC/MS/MSImmunoassay Immunoassay IC/MS/MSImmunoassay GC/MSImmunoassay Immunoassay IC/MS/MSImmunoassay Immunoassay IC/MS/MSImmunoassay IC/MS/MSImmunoassay Immunoassay IC/MS/MSImmunoassay Immunoassay IC/MS/MSImmunoassay IC/MS/MSImmunoassay Immunoassay IC/MS/MSImmunoassay Immunoassay IC/MS/MSImmunoassay IC/MS/MSImmunoassay Immunoassay IC/MS/MSImmunoassay Immunoassay Immunoassay Immunoassay Im</td>	Immunoassay GC/MS·Immunoassay LC/MS GC/MS·Immunoassay GC/MS·Immunoassay LC/MS/MS·Immunoassay LC/MS/MS·Immunoassay CC/MS·Immunoassay GC/MS·Immunoassay LC/MS/MS GC/MS·Immunoassay LC/MS/MS GC/MS·Immunoassay LC/MS/MS GC/MS·	Immunoassay GC/MSImmunoassay Immunoassay GC/MSImmunoassay Immunoassay GC/MSImmunoassay GC/MSImmunoassay Immunoassay IC/MS/MSImmunoassay Immunoassay IC/MS/MSImmunoassay GC/MSImmunoassay Immunoassay GC/MSImmunoassay Immunoassay Immunoassay Immunoassay GC/MSImmunoassay GC/MSImmunoassay Immunoassay Immunoassay GC/MSImmunoassay Immunoassay Immunoassay Immunoassay GC/MSImmunoassay GC/MSImmunoassay Immunoassay Immunoassay GC/MSImmunoassay Immunoassay Immunoassay Immunoassay Immunoassay Immunoassay GC/MSImmunoassay GC/MSImmunoassay Immunoassay Immunoassay Immunoassay Immunoassay IC/MS/MSImmunoassay Immunoassay Immunoassay Immunoassay Immunoassay IC/MS/MSImmunoassay GC/MSImmunoassay Immunoassay IC/MS/MSImmunoassay Immunoassay IC/MS/MSImmunoassay GC/MSImmunoassay Immunoassay IC/MS/MSImmunoassay Immunoassay IC/MS/MSImmunoassay GC/MSImmunoassay Immunoassay IC/MS/MSImmunoassay Immunoassay IC/MS/MSImmunoassay GC/MSImmunoassay Immunoassay IC/MS/MSImmunoassay Immunoassay IC/MS/MSImmunoassay IC/MS/MSImmunoassay Immunoassay IC/MS/MSImmunoassay Immunoassay IC/MS/MSImmunoassay IC/MS/MSImmunoassay Immunoassay IC/MS/MSImmunoassay Immunoassay IC/MS/MSImmunoassay IC/MS/MSImmunoassay Immunoassay IC/MS/MSImmunoassay Immunoassay Immunoassay Immunoassay Im

TABLE 2E: Methods of Analysis - Item 2
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WebCode	Method	Screening	Confirmatory	Quantitation
C6TL8W	lmmunoassay	1		
	GC/MS		$\checkmark$	
	LC-QTOF		1	
CB3NBD	lmmunoassay	1		
	GC/MS	1	1	
CDMTP3	lmmunoassay	✓		
	GC/MS	$\checkmark$	$\checkmark$	
CT4N6Y	Orbitrap-LC/MS	<i>✓</i>		
	LC/MS		1	
D6DJZN	Immunoassay	1		
-	GC/MS	1	1	
DJTMJX	LC/MS/MS	1		
Donnisit	GC/MS		1	
	Rapid Chromatographic Immunoassay	$\checkmark$		
EJPEUB	GC/MS		1	
	LC/HRMS	$\checkmark$	1	
EMPQQB	HRMS	✓		
	GC/MS		1	
EPD7WD	Immunoassay	1		
EWB2UB	Immunoassay	1		
	GC/MS		1	
F6lkQF	LC/MS/MS		1	
	GC/MS	$\checkmark$	1	
FF8JPX	Immunoassay	<ul> <li>Image: A start of the start of</li></ul>		
IT OJI A	GC/MS	1	1	
FJ7VLX	GC/MS	✓	<b>√</b>	
FXK3FA	Immunoassay	1		
	GC/MS	✓		
	LC/MS/MS		1	
	GC/NPD	$\checkmark$		
G3QAED	Immunoassay	1		
	GC/MS		1	
	LC/MS		$\checkmark$	
GFG7GB	LC/MS/MS	1		
	GC/MS		1	
	Immunoassay	1		
GRAEFD	Immunoassay	1		
	GC/MS		1	
GUKA4Q	Immunoassay	1		
	GC/MS		1	
	LC/MS/MS		1	

#### TABLE 2E: Methods of Analysis - Item 2

WebCode	Method	Screening	Confirmatory	Quantitation
GZLQ96	Immunoassay	1		
GZP7MQ	LC/MS/MS			
HBLHEA	Immunoassay	1		
HPHQEX	Immunoassay GC/MS	√ √	<i>✓</i>	
HQF42P	Immunoassay GC/MS LC/MS	1	\ \	
JQ9FTB	Immunoassay GC/MS	$\checkmark$	1	
KNE3R4	LC/MS/MS	1	$\checkmark$	
KVY39G	Immunoassay GC/MS	$\checkmark$	$\checkmark$	
L2447P	GC/MS LC/MS/MS	1	✓	
LDU3QZ	Immunoassay GC/MS LC/MS/MS	√ √	V	
LDZAZM	Immunoassay LC/MS/MS	$\checkmark$	✓	
LERDM3	Immunoassay GC/MS	√ ✓	✓	
LHPWN2	Immunoassay LC/MS/MS	✓	1	
LQMJMT	LC/MS/MS GC/MS	$\checkmark$	✓	
LX6WJ7	GC/MS	1		
LYVVX6	Immunoassay GC/MS	√ ✓	1	
M4Q32Y	Immunoassay LC/MS/MS	√ ✓	✓	
M6VYZ9	LC/MS/MS Immunoassay GC/MS	\$ \$	✓	
M9UBV9	Immunoassay GC/MS LCQTOF	1	✓ ✓	
MGR2KP	LC/MS/MS	1	1	
MNWK33	Immunoassay GC/MS	√ ✓	1	

#### TABLE 2E: Methods of Analysis - Item 2

WebCode	Method	Screening	Confirmatory	Quantitation
MU2CDL	lmmunoassay LC-QTOF GC/MS	1	✓ ✓	
MUJMT7	Immunoassay GC/MS LC/MS/MS	1	\ \	
NK7TCH	LC/MS/MS	1		
NYNLZP	GC/MS	1	1	
P7KZZG	LC/MS/MS	1		
PG4AQV	Immunoassay GC/MS	√ ✓	✓	
PXQTHB	Immunoassay GC/MS	√ ✓	✓	
Q4EUZ2	LC-HRMS/MS GC/MS	$\checkmark$	✓ ✓	
Q63FMW	Immunoassay LC/MS/MS	1	✓	
QKXQGU	LC-QTOF-MS LC/MS/MS Immunoassay	√ √	1	
QQJTDY	Immunoassay GC/MS LC/MS/MS	\$ \$	1	
QXKXCA	LC/MS/MS	1	✓	
RDB8PZ	Immunoassay	1		
RQLHHW	Immunoassay GC/FID	✓	1	1
ryrjg2	GC/MS	1	1	
TG94UK	lmmunoassay GC/MS	$\checkmark$	✓	
TLRYZX	LC-HRMS/MS GC/MS	$\checkmark$	✓	
TMFE6Z	Immunoassay	1		
TNT2PY	Immunoassay LC/MS/MS	✓	✓	
TQFMCV	Immunoassay GC/MS LC/MS/MS	1	√ √	
TRTAUA	GC/MS Immunoassay	✓ ✓	✓	

Urine Drug Analysis

#### TABLE 2E: Methods of Analysis - Item 2

WebCode	Method	Screening	Confirmatory	Quantitation
TUGNHJ	LC/MS/MS LC/HRMS	√ ✓	$\checkmark$	1
UR8YTF	Immunoassay	1		
UTH8CZ	LC/MS/MS	1	1	
UY9DEG	Immunoassay	1		
V2AXJT	GC/MS LC/MS	√ √		
VMBUCG	GC/MS		1	
W46MC	Immunoassay LC/MS/MS	1	✓	
WWVHMA	LC/MS/MS	1		
X4AVWT	Immunoassay GC/MS	\ \	1	
XCKWHT	Immunoassay GC/MS	\ \	1	
XHU9GF	LC/MS	1	1	
XTEFHP	LC/MS/MS Immunoassay	√ ✓	$\checkmark$	
XZPYEU	LC-HRMS/MS	1	<i>✓</i>	
YCZT6D	GC/MS		1	
YNDT4R	lmmunoassay GC/MS LC/MS/MS	✓ ✓	✓ ✓	
YQGNMV	Immunoassay LC/MS/MS GC/MS	√ √	<i>J</i> <i>J</i>	
Z4ZQF7	lmmunoassay LC/MS/MS	$\checkmark$	✓	
ZBKTMA	Immunoassay LC-QTOF GC/MS	1	√ √	
ZGR6XN	lmmunoassay GC/MS LC/MS/MS	✓	✓ ✓	
ZVQ26T	Immunoassay LC/MS/MS GC/MS	\ \ \	1	

(55)

esponse Summary for Item 2 - Methods of Analysis			Participants: 117
	Screening	Confirmatory	Quantitation
Immunoassay:	81	0	0
GC/MS:	37	73	0
LC/MS:	3	6	0
LC/MS/MS:	23	41	2
Other:	13	11	1

# **Additional Comments for Item 2**

TABLE 2F

WebCode	Item Comments
3743CY	There was an indication of acetylfentanyl and acetylnorfentanyl but they were both below our limits of confirmation (0.5ng/mL).
3AZRVQ	Internal standards used: Mepivacaine
43TPZP	Drugs included in panel: Cyclobenzaprine, Imipramine, MDPV, Meperidine, Mitragynine, Normeperidine, Phencyclidine, Quetiapine, and Zolpidem.
4AFBFN	internal standards: mepivacaine, mephobarbital (Screen). internal standards: mepivacaine (confirmation)
4AYEMP	internal standard: mepivacaine
4ET9KQ	Mepivacaine was the internal standard used for all analysis.
6XECWG	Fentanyl cutoff: 1.0 ng/mL, Creatinine: Normal
76V339	Fentanyl Cutoff 5 ng/mL. Norfentanyl Cutoff 5 ng/mL
83PYUJ	Internal standard: mepivacaine
8WWUYT	n-Propylamphetamine, Mepivacaine, and Hexobarbital used as internal standards.
96RG6J	Mepivacaine used as internal standard
9K27GY	Deuterated standards are used for compounds we can quantitate. Our lab is currently only able to quantitate samples that could contain basic drugs or cannabinoids. I have included the list of drugs the lab can quantitate or qualitatively identify: Amphetamine, Methamphetamine, MDA, MDMA, Ketamine, Mescaline (Qualitatively only), Phentermine, Diphenhydramine, LSD, Psilocin (qualitatively only), Ephedrine/Pseudoephedrine (qualitatively only), THC-OH, THC, THC-COOH, THC-COOH.
A4APRT	Methamphetamine was not detected by the confirmatory analysis.
A7X4G3	* Internal standard: flurazepam / estazolam. * Sample preparation: L/L extraction. * The final extraction is derivatized with BSTFA and injected by GC-MS. * LOD fentanyl: 15 ng/mL.
A87HGG	All substances detected using immunoassay testing, cutoffs are listed below. 6AM- 10 ng/mL, AMP- 1,000 ng/mL, BNZ- 200 ng/mL, COC- 300 ng/mL, CR- 20 mg/dL, THC- 50 ng/mL, OPI- 300 ng/mL, OXY- 100 ng/mL, FEN- 1 ng/mL
AF6VNC	Fluconazole indicated by GCMS. Not confirmed or reported.
BDRNV4	Fentanyl Cutoff 5 ng/mL. Norfentanyl Cutoff 5 ng/mL
D6DJZN	Internal Standard: Mepivacaine, Nalorphine, Methohexital Fluconazole - Not reported, no standard available for comparison
DJTMJX	Alere iCassette (THC) test device was used to screen for THC, referred to in 2-5 as rapid chromatographic immunoassay. The cutoff concentration for the assay is 50 ng/mL.
EMPQQB	Internal standards: Mepivacaine/Mephobarbital (HRMS) and Mepivacaine/Naloprhine (GCMS)
EPD7WD	All substances detected using immunoassay testing, cutoffs are listed below. 6AM- 10 ng/mL, AMP- 1,000 ng/mL, BNZ- 200 ng/mL, COC- 300 ng/mL, CR- 20 mg/dL, THC- 50 ng/mL, OPI- 300 ng/mL, OXY- 100 ng/mL, FEN- 1 ng/mL
G3QAED	mepivacaine was used as an internal standard.
GFG7GB	Internal standard used was mepivacaine.
	Internal Standards 1 SKE 5254.2 House arbital

#### TABLE 2F: Additional Comments for Item 2

WebCode	Item Comments
GUKA4Q	No in-house confirmation test method for fentanyl in urine, this sample would have been sent to an outside laboratory for confirmation. ELISA Benzodiazepines cut-off set at 10ng/mL. ELISA Benzodiazepines screened at 115 (slightly positive). LC/MS/MS confirmation for benzodiazepines was negative.
GZLQ96	Fentanyl cutoff: 1.0 ng/mL, Creatinine: normal
HBLHEA	All substances detected using immunoassay testing, cutoffs are listed below. 6AM- 10 ng/mL, AMP- 1,000 ng/mL, BNZ- 200 ng/mL, COC- 300 ng/mL, CR- 20 mg/dL, THC- 50 ng/mL, OPI- 300 ng/mL, OXY- 100 ng/mL, FEN- 1 ng/mL.
HQF42P	Confirmatory GC/MS ISTD: NPA and SKF. Confirmatory LC/MS ISTD: Fentanyl-13C6 and Beta-hydroxythio-fentanyl-13C6
KNE3R4	Note: samples are not screened by an immunoassay screening method. All screening and confirmation conducted by LCMS
L2447P	The metabolite norfentanyl was identified by GC-MS and LC-MS-MS library match, as to the lab does not have reference material available. Internal standard: Flurazepam and aprobarbital. LoD: 10 ng/mL.
LDU3QZ	Phenyltoloxamine, Buprenorphine-D4, Hydromorphone-D3, Oxycodone-D3
M4Q32Y	Fentanyl immunoassay (EMIT) positive. Fentanyl and norfentanyl were below our LOD/LOQ for confirmation testing. LOQ for fentanyl was 1 ng/mL, norfentanyl is 10 ng/mL. Deuterated internal standards used.
MU2CDL	IS used in QTOF analyses: Fentanyl-D5, Imipramine-D3, MDMA-D5, Methaqualone-D7, and Triazolam-D4. Caffeine, Ephedrine/Pseudoephedrine, and Fluconazole disregarded.
MUJMT7	Internal standard utilized was mepivacaine.
PG4AQV	The immunoassay screening results were negative for drugs. The immunoassay method only screens for the following drugs/drug classes: Amphetamines, Benzodiazepines, Cannabinoids, Cocaine, Opiates, and PCP. Fentanyl does not react with the Opiates panel and is not part of the immunoassay screening panel. A GC/MS scan was performed as a secondary screen and fentanyl and norfentanyl were detected. Fentanyl and norfentanyl were then confirmed on the GC/MS.
PXQTHB	N-Propylamphetamine, Mepivacaine, and Hexobarbital were used as Internal Standards.
Q4EUZ2	For LC-HRMS/MS testing, mepivacaine and mephobarbital were used as internal standards. For GC/MS testing, mepivacaine and nalorphine were used as internal standards
Q63FMW	The cut off of fentanyl is 5 ng/mL
QXKXCA	ephedrine/pseudoephedrine detected in confirmation method- not reported as per provider- "verification testing showed low levels of ephedrine, fluconazole and pseudoephedrine in all three samples, please disregard these"
RDB8PZ	All substances detected using immunoassay testing, cutoffs are listed below. 6AM- 10 ng/mL, AMP- 1,000 ng/mL, BNZ- 200 ng/mL, COC- 300 ng/mL, CR- 20 mg/dL, THC- 50 ng/mL, OPI- 300 ng/mL, OXY- 100 ng/mL, FEN- 1 ng/mL
RQLHHW	GC/FID for Alcohol confirmation - LLQ 20mg/dL - report less than 20mg/dL
TMFE6Z	All substances detected using immunoassay testing, cutoffs are listed below. 6AM- 10 ng/mL, AMP- 1,000 ng/mL, BNZ- 200 ng/mL, COC- 300 ng/mL, CR- 20 mg/dL, THC- 50 ng/mL, OPI- 300 ng/mL, OXY- 100 ng/mL, FEN- 1 ng/mL.
TQFMCV	Codeine-D3 is used as an internal standard
TRTAUA	Screening GC/MS internal standards were Mepivacaine, Methohexital, and Nalorphine-diTMS. Confirmatory GC/MS internal standard was Mepivacaine.

#### TABLE 2F: Additional Comments for Item 2

WebCode	Item Comments
UY9DEG	Analytes tested for and cutoffs provided below: Fentanyl 2 ng/ml, AB-Pinaca 2.5 ng/ml, Methamphetamine 200 ng/ml, Barbs 200 ng/ml, Benzos 150 ng/ml, Methadone 300 ng/ml, Opiates 200 ng/ml, Creatinine 20 mg/dl, Benzoylecgonine 150 ng/ml, Oxycodone 50 ng/ml, Tramadol 5 ng/ml, THC 20 ng/ml, TCA 150 ng/ml, Amphetamine 200 ng/ml, Buprenorphine 1 ng/ml, 6-mam 10 ng/ml, JWH-018 20 ng/ml, alpha-PVP 5 ng/ml, UR-144 10 ng/ml.
V2AXJT	Confirmation by two screening techniques
W46MC	Item 1 screened presumptive positive for amphetamine using immunoassay. This is why confirmation was run, but no analytes were detected during the confirmation. The [Laboratory] does not currently have a validated method to confirm fentanyl so no confirmatory testing was performed for this class.
XHU9GF	Estazolam was used as internal standard.
XZPYEU	IS: mepivacaine, mephobarbital
YCZT6D	Internal standard: Flurazepam.
YNDT4R	Mepivacaine was used as an retention time internal standard. Caffeine not reported.
YQGNMV	Mepivacaine used as internal standard
ZGR6XN	Codeine-D3 is used as an internal standard
ZVQ26T	Internal standard: mepivacaine

# **Screening Results - Item 3**

#### TABLE 3A

#### Item Scenario:

A 17-year-old female high school student receiving an annual physical complained of being tired. She reported extreme mood swings and insomnia. A urine sample was collected for analysis.

Item Contents and Preparation Concentration: Amphe

Amphetamine (600ng/mL)

WebCode	Screening Results
2JBUGR	No drugs detected utilizing screening methods.
3743CY	Amphetamine
3AZRVQ	amphetamines> I-amphetamine and d-amphetamine
3RJMAY	No drugs detected utilizing screening methods.
43TPZP	No drugs detected utilizing screening methods.
4AFBFN	amphetamine
4AVRBG	amphetamine
4AYEMP	amphetamine
4ET9KQ	No drugs detected utilizing screening methods.
4YW39M	SMA
6CGVE9	amphetamine
6M2633	SMAs
6XECWG	[Participant reported that drugs were detected, but did not report the drug class or name]
76V339	No drugs detected utilizing screening methods.
7AN9EP	Amphetamines
7TJU33	Amphetamine
83PYUJ	amphetamine
8J9TG2	amphetamines
8WWUYT	Amphetamine (GC/MS)
96RG6J	No drugs detected utilizing screening methods.
98BFDM	Amphetamine
9K27GY	Benzoylecgonine/Cocaine Methamphetamine Amphetamine
9N397Z	No drugs detected utilizing screening methods.
9PUCTF	Amphetamine (class); Possible SMA (Sympathomimetic amine)

WebCode	Screening Results
A4APRT	Amphetamine
A7X4G3	UNCERTAIN AMPHETAMINES
A87HGG	No drugs detected utilizing screening methods.
AF6VNC	Amphetamines
AFYTRC	Cannabinoids Amphetamine
ALQUEK	No drugs detected utilizing screening methods.
AMM82D	Amphetamine
AUKY62	Amphetamine
B2Y873	amphetamines
BDRNV4	No drugs detected utilizing screening methods.
ВМЈ8СХ	Amphetamines
BP6NUH	amphetamine
BT9L24	Amphetamines
C6TL8W	Amphetamine
CB3NBD	SMA
CDMTP3	Amphetamine
CT4N6Y	Amphetamine
DJTMJX	Amphetamine
EJPEUB	l-amphetamine & d-amphetamine
EMPQQB	amphetamine
EPD7WD	No drugs detected utilizing screening methods.
EWB2UB	Amphetamine.
F6LKQF	Amphetamine
FF8JPX	Amphetamine
FJ7VLX	Amphetamine
FXK3FA	Amphetamine
G3QAED	No drugs detected utilizing screening methods.
GFG7GB	amphetamine

WebCode	Screening Results
GRAEFD	1. Amphetamine
GUKA4Q	Amphetamines
	Benzodiazepines
GZLQ96	[Participant reported that drugs were detected, but did not report the drug class or name]
GZP7MQ	ampetamine
HBLHEA	No drugs detected utilizing screening methods.
HPHQEX	Amphetamine EMIT positive
HQF42P	amphetamine
JQ9FTB	Amphetamine < cuttoff
KNE3R4	No drugs detected utilizing screening methods.
KVY39G	No drugs detected utilizing screening methods.
L2447P	Stimulants: Amphetamine
LDU3QZ	Amphetamine
LDZAZM	Amphetamine
LERDM3	SMA's
LHPWN2	No drugs detected utilizing screening methods.
LQMJMT	amphetamine
LX6WJ7	No drugs detected utilizing screening methods.
LYVVX6	Sympathomimetic Amines (SMA)
M4Q32Y	Immunoassay negative (amphetamine class deflected)
	Amphetamine confirmation present
M6VYZ9	Amphetamine
M9UBV9	Amphetamine
MGR2KP	Amphetamine
MNWK33	SMA- Amphetamine
MU2CDL	Amphetamine
MUJMT7	No drugs detected utilizing screening methods.
NK7TCH	Amphetamine
NYNLZP	No drugs detected utilizing screening methods.

WebCode	Screening Results
P7KZZG	Amphetamine
PG4AQV	No drugs detected utilizing screening methods.
PXQTHB	Amphetamine (GC/MS)
Q4EUZ2	l-amphetamine, d-amphetamine
Q63FMW	Amphetamine
QKXQGU	BMPEA/amphetamine
QQJTDY	Amphetamine
QXKXCA	amphetamine
RDB8PZ	No drugs detected utilizing screening methods.
RQLHHW	No drugs detected utilizing screening methods.
RYRJG2	amphetamine
TG94UK	Sympathomimetic amines
TLRYZX	l-amphetamine d-amphetamine
TMFE6Z	No drugs detected utilizing screening methods.
TNT2PY	Amphetamines
TQFMCV	No drugs detected utilizing screening methods.
TRTAUA	Amphetamine/MDA, Amphetamine
TUGNHJ	amphetamine
UR8YTF	Amphetamine
UTH8CZ	amphetamine
UY9DEG	Amphetamine
V2AXJT	amphetamine
VMBUCG	No drugs detected utilizing screening methods.
W46MC	Methamphetamine, amphetamine
WWVHMA	Amphetamine
X4AVWT	Amphetamine Class
XCKWHT	Amphetamines (SMAs)
XHU9GF	Amphetamine

WebCode	Screening Results
XTEFHP	Amphetamine
XZPYEU	d-amphetamine, l-amphetamine
YCZT6D	No drugs detected utilizing screening methods.
YNDT4R	amphetamine
YQGNMV	d-amphetamine, l-amphetamine
Z4ZQF7	Amphetamine
ZBKTMA	Amphetamine
ZGR6XN	No drugs detected utilizing screening methods.
ZVQ26T	amphetamine

Screening Response Summary for Item 3	Participants: 116
Amphetamine:	87
Other drugs/metabolites detected:	14
No drugs/metabolites detected Utilizing Screening Methods:	27

Total number of screening responses provided may be more than the number of participants due to multiple drugs/metabolites being reported.

# **Confirmatory Results - Item 3**

#### TABLE 3B

#### Item Scenario:

A 17-year-old female high school student receiving an annual physical complained of being tired. She reported extreme mood swings and insomnia. A urine sample was collected for analysis.

Item Contents and Preparation Concentration: Amphetamine (600ng/mL)

WebCode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
2JBUGR	d-amphetamine	1			
	l-amphetamine	1			
3743CY	Amphetamine	1			
3AZRVQ	d-amphetamine	1			
	l-amphetamine	1			
3RJMAY	amphetamine	1			
43TPZP	No drugs/metabolites detected utilizir confirmatory methods.	ng			
4AFBFN	d-amphetamine	1			
	l-amphetamine	1			
4AVRBG	amphetamine	1			
4AYEMP	d-amphetamine	1			
	l-amphetamine	1			
4ET9KQ	d-amphetamine	1			
	l-amphetamine				
4YW39M	Amphetamine	1			
6CGVE9	amphetamine	1			
6M2633	amphetamine	1			
7AN9EP	Amphetamine		579.56	2.32	ng/ml
7TJU33	Amphetamine	1			
83PYUJ	d-amphetamine	1			
	l-amphetamine	1			
8J9TG2	Amphetamine	1			
8WWUYT	Amphetamine	1			
96RG6J	d-amphetamine	1			
	l-amphetamine	1			
98BFDM	No drugs/metabolites detected utilizir confirmatory methods.	ıg			

What drugs/metabolites were detected in Item 3?					
WebCode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
9K27GY	Amphetamine		456	160	ng/ml
	Ephedrine/Pseudoephedrine	1			
9PUCTF	Amphetamine	1			
A4APRT	Amphetamine	1			
A7X4G3	Amphetamine	1			
AF6VNC	Amphetamine	1			
AFYTRC	Amphetamine	1			
ALQUEK	d-amphetamine	1			
	l-amphetamine	1			
AMM82D	Amphetamine	1			
AUKY62	Amphetamine	1			
B2Y873	Amphetamine	1			
ВМЈ8СХ	Amphetamine	1			
BP6NUH	d-amphetamine	1			
	l-amphetamine	1			
BT9L24	Amphetamine	1			
C6TL8W	Amphetamine	1			
CB3NBD	Amphetamine	1			
CDMTP3	Amphetamine	1			
CT4N6Y	Amphetamine		529		ng/ml
XIMTIC	Amphetamine	1			
EJPEUB	d-amphetamine	1			
	l-amphetamine	1			
EMPQQB	d-amphetamine	1			
	l-amphetamine	1			
EWB2UB	Amphetamine	1			
=6lKQF	Amphetamine	1			
F8JPX	Amphetamine	1			
=J7VLX	Amphetamine	1			
FXK3FA	Amphetamine	1			

	s/metabolites were detected in It	Qualitative	Reported		
WebCode	Analyte Reported	Only	Concentration	Uncertainty	Units
G3QAED	d-methamphetamine				
	l-amphetamine	1			
GFG7GB	d-amphetamine	1			
	l-amphetamine	<u> </u>			
GRAEFD	No drugs/metabolites detected utilizir confirmatory methods.	ig			
GUKA4Q	Amphetamine	1			
GZP7MQ	amphetamine		0,40		mg/l
HPHQEX	Amphetamine	1			
HQF42P	Amphetamine	1			
JQ9FTB	Amphetamine	1			
KNE3R4	amphetamine	1			
KVY39G	No drugs/metabolites detected utilizir confirmatory methods.	ng			
L2447P	Amphetamine	1			
LDU3QZ	Amphetamine	1			
LDZAZM	Amphetamine	1			
LERDM3	Amphetamine	1			
	Methamphetamine	✓			
LHPWN2	amphetamine	1			
lqmjmt	amphetamine	1			
LYVVX6	Amphetamine	1			
M4Q32Y	Amphetamine	1			
M6VYZ9	Amphetamine	1			
M9UBV9	Amphetamine	1			
MGR2KP	Amphetamine	1			
MNWK33	Amphetamine				
MU2CDL	Amphetamine	1			
MUJMT7	d-Amphetamine	1			
	I-Amphetamine	1			
NK7TCH	Amphetamine	1			

NNLZP       No drugs/metabolites detected utilizing confirmatory methods.         YZKZG       Amphetamine         YXQTHB       Amphetamine         YQTHZ       d-amphetamine         Lamphetamine       /         QAEUZ2       d-amphetamine         Lamphetamine       /         QASTMW       Amphetamine         QASTMW       Amphetamine         QAUTOY       Amphetamine         QUTDY       Amphetamine         QUTDY       Amphetamine         QUTDY       Amphetamine         QUTOY       Amphetamine         VRIG2       No drugs/metabolites detected utilizing confirmatory methods.         ICG94UK       Amphetamine         ILRYZX       d-amphetamine         ILRYZX       d-amphetamine         ILRYZX       d-amphetamine         ILRYZX       d-amphetamine         ILRYZX       Amphetamine         ILQUNH	What drug	s/metabolites were detected in Ite	em 3?			
Interface         Interface           PTKZZG         Amphetamine         Interface           PTKZZG         Amphetamine         Interface           QAEUZ2         d-amphetamine         Interface           QAUTDY         Amphetamine         Interface           QAUTDY         Amphetamine         Interface           QAUTDY         Amphetamine         Interface           QAUTDY         Amphetamine         Interface           Confirmatory methods.         Interface         Interface           ITMP2X         d-amphetamine         Interface         Interface           ITMP2Y         Amphetamine         Interface         Interface           ITMP2Y         Amphetamine         Interface         Interface           ITMP2Y         Amphetamine         Interface         Interface           ITHECZ         Ampheta	WebCode				Uncertainty	Units
YNELO       Amphetamine         2XQTHB       Amphetamine         Lamphetamine       /         Lamphetamine       /         QAEUZ2       d-amphetamine         Lamphetamine       /         QAGSFMW       Amphetamine         QQJTDY       Amphetamine         QQJTDY       Amphetamine         QQJTQY       Amphetamine         QQJTQY       Amphetamine         VIXXCA       amphetamine         VIXXCA       amphetamine         VIXXCA       amphetamine         VIXXCA       amphetamine         VIXICS       d-amphetamine         VIXICS       confirmatory methods.         INT2PY       Amphetamine       /         INT2PY       Amphetamine       /         IXIGNUX       Amphetamine       /         VIXICY       Amphetamine       /         VIXICY       Amphetamine       /         VIXICS	NYNLZP		9			
QAEUZ2       d-amphetamine       /         QAEUZ2       d-amphetamine       /         L-amphetamine       /         QASTMW       Amphetamine       /         QAUTDY       Amphetamine       /         QQUTDY       Amphetamine       /         QQUTDY       Amphetamine       /         QXXXCA       amphetamine       /         QXXXCA       amphetamine       /         XYRJG2       No drugs/metabolites detected utilizing confirmatory methods.       /         IC994UK       Amphetamine       /         I-amphetamine       /       /         IC974UK       Amphetamine       /         IC1072Y       Amphetamine       /         INT2PY       Amphetamine       /         ICQEMCV       Amphetamine       /         IUQNHJ       amphetamine       /         IUQNHJ       amphetamine       /         JTH8CZ       amphetamine       /         ZAXJT	P7KZZG	Amphetamine	1			
I-amphetamine       I         Q63FMW       Amphetamine       Image: Constraints of the constraints o	PXQTHB	Amphetamine	1			
Q63FMW       Amphetamine       /         QRXQGU       BMPEA/amphetamine       /         QQJIDY       Amphetamine       /         QQJIDY       Amphetamine       /         QQJIDY       Amphetamine       /         QXKXCA       amphetamine       /         QXKXCA       amphetamine       /         YRJG2       No drugs/metabolites detected utilizing confirmatory methods.       /         IG94UK       Amphetamine       /         I-amphetamine       /       /         I-amphetamine       /       /         ITRYZX       d-amphetamine       /         I-amphetamine       /       /         ITRYZY       Amphetamine       /         ITNT2PY       Amphetamine       /         ITRTAUA       Amphetamine       /         ITRAUA       Amphetamine       /         V2AXIT       amphetamine       /         VAGMC       Amphetamine       /         VAMBUCG <td>Q4EUZ2</td> <td>d-amphetamine</td> <td>1</td> <td></td> <td></td> <td></td>	Q4EUZ2	d-amphetamine	1			
QUITHIN       Propositionaline         QRXQGU       BMPEA/amphetamine       ✓         QQJTDY       Amphetamine       ✓         QXKXCA       amphetamine       ✓         QXKXCA       amphetamine       ✓         QXKXCA       amphetamine       ✓         YRJG2       No drugs/metabolites detected utilizing confirmatory methods.       ✓         ITG94UK       Amphetamine       ✓         ILamphetamine       ✓       ✓         ILRYZX       d-amphetamine       ✓         ILRYZX       d-amphetamine       ✓         ILRYZX       d-amphetamine       ✓         ITMFE6Z       No drugs/metabolites detected utilizing confirmatory methods.       ✓         ITNT2PY       Amphetamine       ✓       ✓         ITRAUA       Amphetamine       ✓       ✓         ITRAUA       Amphetamine       ✓       ✓         JIRSYTF       Amphetamine       ✓       ✓         V2AXJT       amphetamine       ✓       ✓         VMBUCG       Amphetamine       ✓       ✓         VMAGC       Amphetamine       ✓       ✓         VMAGC       Amphetamine       ✓       ✓		l-amphetamine	1			
QQUTQY       Amphetamine       Impletamine         QXKXCA       amphetamine       Impletamine         XYRJG2       No drugs/metabolites detected utilizing confirmatory methods.       Impletamine         ICG94UK       Amphetamine       Impletamine       Impletamine         ICMFE6Z       No drugs/metabolites detected utilizing confirmatory methods.       Impletamine       Impletamine         INT2PY       Amphetamine       Impletamine       Impletamine       Impletamine       Impletamine         ICQENCV       Amphetamine       Impletamine       Impletamine       Impletamine       Impletamine         JTH8CZ       amphetamine       Impletamine       Impletamine       Impletamine       Impletamine         IVA6MC       Amphetamine       Impletamine	Q63FMW	Amphetamine	1			
QQUID1       Purprised mile       Implete defected utilizing confirmatory methods.         QXKXCA       amphetamine       Implete defected utilizing confirmatory methods.         ICG94UK       Amphetamine       Implete defected utilizing confirmatory methods.         ICRYZX       d-amphetamine       Implete defected utilizing confirmatory methods.         ITMFE6Z       No drugs/metabolites defected utilizing confirmatory methods.       Implete defected utilizing confirmatory methods.         ITNT2PY       Amphetamine       Implete defected utilizing confirmatory methods.       Implete defected utilizing confirmatory methods.         ITNT2PY       Amphetamine       Implete defected utilizing confirmatory methods.       Implete defected utilizing confirmatory methods.         ITNT2PY       Amphetamine       Implete defected utilizing confirmatory methods.       Implete defected utilizing confirmatory methods.         ITNT2PY       Amphetamine       Implete defected utilizing confirmatory methods.       Implete defected utilizing confirmatory methods.         ITNT2PY       Amphetamine       Implete defected utilizing confirmatory methods.       Implete defected utilizing confirmatory methods.         IUGNHJ       amphetamine       Implete defected utilizing confirmatory methods.       Implete defected utilizing confirmatory methods.         IUGNHJ       amphetamine       Impletamine       Impletamine defected utilizing confirmato	QKXQGU	BMPEA/amphetamine	$\checkmark$			
RYRJG2       No drugs/metabolites detected utilizing confirmatory methods.         ICG94UK       Amphetamine         I-amphetamine       ✓         I-amphetamine       ✓         I-amphetamine       ✓         I-Interpretation       ✓         INFE6Z       No drugs/metabolites detected utilizing confirmatory methods.         INT2PY       Amphetamine         INT2PY       Amphetamine         IRTAUA       Amphetamine         IRTAUA       Amphetamine         INGNHJ       amphetamine         INT2PY       Amphetamine         IRTAUA       Amphetamine         IRTAUA       Amphetamine         IRTAUA       Amphetamine         INTBCZ       amphetamine         INABUCG       Amphetamine         INABUCG       Amphetamine         INAG       <	QQJTDY	Amphetamine	1			
confirmatory methods.         IG94UK       Amphetamine         ILRYZX       d-amphetamine         I-amphetamine       /         IVEF6Z       No drugs/metabolites detected utilizing confirmatory methods.         ITNT2PY       Amphetamine         ITQFMCV       Amphetamine         ITRTAUA       Amphetamine	QXKXCA	amphetamine	1			
Control Contrection Contecontro Contecontrol Control Control Control Control Co	ryrjg2		9			
I-amphetamine       Impletamine         IMFE6Z       No drugs/metabolites detected utilizing confirmatory methods.         INT2PY       Amphetamine       Impletamine         IQFMCV       Amphetamine       Impletamine         IQFMCV       Amphetamine       Impletamine         IQFMCV       Amphetamine       Impletamine         IQFMCV       Amphetamine       Impletamine         IQGNHJ       amphetamine       Impletamine         IUGNHJ       amphetamine       Impletamine         JRSYTF       Amphetamine       Impletamine         IVAGNC       amphetamine       Impletamine         V2AXJT       amphetamine       Impletamine         IVA6MC       Amphetamine       Impletamine         Impletamine	TG94UK	Amphetamine	1			
INDERFECT       No drugs/metabolites detected utilizing confirmatory methods.         ITNT2PY       Amphetamine         ITQFMCV       Amphetamine         ITQFMCV       Amphetamine         ITQFMCV       Amphetamine         ITRTAUA       Amphetamine         ITRTAUA       Amphetamine         ITRTAUA       Amphetamine         ITUGNHJ       amphetamine         JIRSYTF       Amphetamine         JITHSCZ       amphetamine         JTHSCZ       amphetamine         V2AXJT       amphetamine         VA6MC       Amphetamine         VV46MC       Amphetamine         VV46MC       Amphetamine         V44AWVT       Amphetamine         V44AWVT       Amphetamine         VCKWHT       Amphetamine         V       XCKWHT         Amphetamine       V	TLRYZX	d-amphetamine	$\checkmark$			
confirmatory methods.         INT2PY       Amphetamine         IQFMCV       Amphetamine         IQFMCV       Amphetamine         IRTAUA       Amphetamine         ITUGNHJ       amphetamine         JR8YTF       Amphetamine         JR8YTF       Amphetamine         JTH8CZ       amphetamine         /2AXJT       amphetamine         /MBUCG       Amphetamine         /V46MC       Amphetamine      <		l-amphetamine	$\checkmark$			
TATT 211       Amphetamine       Impletamine         TQFMCV       Amphetamine       Impletamine         TRTAUA       Amphetamine       Impletamine         TUGNHJ       amphetamine       Impletamine         JRSYTF       Amphetamine       Impletamine         JTH8CZ       amphetamine       Impletamine         JTH8CZ       amphetamine       Impletamine         V2AXJT       amphetamine       Impletamine         V2AXJT       amphetamine       Impletamine         V46MC       Amphetamine       Impletamine         VV46MC       Amphetamine       Impletamine         VWVHMA       Amphetamine       Impletamine         KCKWHT       Amphetamine       Impletamine         KCKWHT       Amphetamine       Impletamine         KCKWHT       Amphetamine       Impletamine         KCKWHT       Amphetamine       Impletamine         KHU9GF       Amphetamine       Impletamine	TMFE6Z		]			
IRTAUA       Amphetamine       Impletamine         IRTAUA       Amphetamine       Impletamine         IUGNHJ       amphetamine       Impletamine         JR8YTF       Amphetamine       Impletamine         JR8YTF       Amphetamine       Impletamine         JTH8CZ       amphetamine       Impletamine         V2AXJT       amphetamine       Impletamine         V2AXJT       amphetamine       Impletamine         V2AXJT       amphetamine       Impletamine         V46MC       Amphetamine       Impletamine         V46MC       Amphetamine       Impletamine         V46MC       Amphetamine       Impletamine         Impletamine       Impletamine       Impletamine <td>TNT2PY</td> <td>Amphetamine</td> <td>1</td> <td></td> <td></td> <td></td>	TNT2PY	Amphetamine	1			
TUGNHJ       amphetamine       488       23,5       ng/mL         JR8YTF       Amphetamine       ✓       ✓         JTH8CZ       amphetamine       ✓       ✓         /2AXJT       amphetamine       ✓       ✓         /MBUCG       Amphetamine       ✓       ✓         /WBUCG       Amphetamine       ✓       ✓         /V46MC       Amphetamine       ✓       ✓         /V46MC       Amphetamine       ✓       ✓         (4AVWT       Amphetamine       ✓       ✓         (4AVWT       Amphetamine       ✓       ✓         (KHU9GF       Amphetamine       ✓       ✓	TQFMCV	Amphetamine	1			
JR8YTF Amphetamine JR8YTF Amphetamine /2AXJT amphetamine /2AXJT amphetamine /2AXJT amphetamine //MBUCG Amphetamine //MBU	TRTAUA	Amphetamine	1			
JTH CZ       amphetamine       ✓         JTH BCZ       amphetamine       ✓         V2AXJT       amphetamine       ✓         /MBUCG       Amphetamine       ✓         /V46MC       Amphetamine       ✓         /WVHMA       Amphetamine       ✓         (4AVWT       Amphetamine       ✓         (CKWHT       Amphetamine       ✓         (HU9GF       Amphetamine       ✓	TUGNHJ	amphetamine		488	23,5	ng/mL
/2AXJT       amphetamine       560       15%       ug/L         /MBUCG       Amphetamine       ✓            /V46MC       Amphetamine       ✓       418       140       ng/mL         /WWVHMA       Amphetamine       ✓            (4AVWT       Amphetamine       ✓            (KHU9GF       Amphetamine       ✓	UR8YTF	Amphetamine	$\checkmark$			
/MBUCG       Amphetamine       ✓         /V46MC       Amphetamine       ✓         /WVHMA       Amphetamine       ✓         (4AVWT       Amphetamine       ✓         (CKWHT       Amphetamine       ✓         (CKWHT       Amphetamine       ✓         (CKWHT       Amphetamine       ✓         (CKWHT       Amphetamine       ✓	UTH8CZ	amphetamine	$\checkmark$			
WWORK       Amphetamine       418       140       ng/mL         WWVHMA       Amphetamine       ✓       ✓         K4AVWT       Amphetamine       ✓       ✓         KCKWHT       Amphetamine       ✓       ✓         KHU9GF       Amphetamine       ✓       ✓	V2AXJT	amphetamine		560	15%	ug/L
WWVHMA Amphetamine   K4AVWT Amphetamine   KCKWHT Amphetamine   KHU9GF Amphetamine	VMBUCG	Amphetamine	✓			
K4AVWT     Amphetamine       KCKWHT     Amphetamine       KHU9GF     Amphetamine	VV46MC	Amphetamine		418	140	ng/mL
KCKWHT     Amphetamine     ✓       KHU9GF     Amphetamine     ✓	WWVHMA	Amphetamine	1			
KHU9GF Amphetamine 🗸	X4AVWT	Amphetamine	1			
	XCKWHT	Amphetamine	1			
<pre>KTEFHP Amphetamine</pre>	XHU9GF	Amphetamine	1			
	XTEFHP	Amphetamine	✓			

WebCode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
XZPYEU	d-amphetamine	1			
	l-amphetamine	1			
YCZT6D	Amphetamine	1			
YNDT4R	d-amphetamine	1			
	l-amphetamine	1			
YQGNMV	d-amphetamine	1			
	l-amphetamine	1			
Z4ZQF7	Amphetamine		567	190	ng/mL
ZBKTMA	Amphetamine	1			
ZGR6XN	Amphetamine	1			
ZVQ26T	d-amphetamine	1			
	l-amphetamine	1			

Confirmatory Response Summary for Item 3	Participants: 103
Amphetamine:	96 (93.2%)
Other Identified Drugs/Metabolites:	1 (1.0%)
No Drugs/Metabolites Detected Utilizing Confirmatory Methods:	7 (6.8%)

# Raw Data - Item 3 TABLE 3C

#### Item 3 Raw Data - Amphetamine Preparation concentration: (600 ng/mL)

List of Raw	v Data determ	inations (ng/mL
588.3	576.4	574.0
456.0	479.0	
529.7		
488.0		
554.0	572.0	
418.0	447.0	
567.0	580.0	
	588.3         456.0         529.7         488.0         554.0         418.0	456.0479.0529.7

#### Statistical Analysis for Item 3 - Amphetamine

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

# **Reporting Procedures - Item 3**

TABLE 3D - Item 3

Quantitative Reporting Procedures WebCode If quantitative analysis was performed, the reported concentrations are:				
7AN9EP	The mean of duplicate/several determinations.			
9K27GY	Lower of the duplicate samples is the concentration reported.			
CT4N6Y	A single determination.			
TUGNHJ	A single determination.			
V2AXJT	The mean of duplicate/several determinations.			
W46MC	The lowest of duplicate			
Z4ZQF7	Lowest of duplicate sample			
Response Su	ummary for Item 3	Participants: 7		

Response Summary for Item 3	Participants: 7
A single determination:	2 (28.6%)
The mean of duplicate/several determinations:	2 (28.6%)
Other:	3 (42.9%)

# Methods of Analysis - Item 3

TABLE 3E - Item 3

WebCode	Method	Screening	Confirmatory	Quantitation
2JBUGR	Immunoassay	1		
	GC/MS	,		
	LC/MS/MS	1	1	
3743CY	LC/MS/MS	1	✓	
3AZRVQ	Immunoassay	1		
	LC/MS/MS			
	GC/MS	1	1	
<b>3RJMAY</b>	Immunoassay	$\checkmark$		
	GC/MS		$\checkmark$	
43TPZP	LC/MS/MS	✓	✓	1
4AFBFN	LC-HRMS/MS	1		
	GC/MS		1	
4AVRBG	Immunoassay	1		
4AVKDG	LC-QTOF	· ·		
	GC/MS	1	1	
	LC/MS/MS		1	
4AYEMP	Immunoassay	1		
17 (1 <b>L</b> 1711	GC/MS		1	
	LC/MS/MS		1	
4ET9KQ	Immunoassay	1		
	GC/MS		$\checkmark$	
	LC/MS/MS		1	
4YW39M	Immunoassay	1		
	GC/MS	1	1	
6CGVE9	Immunoassay	1		
	GC/MS		$\checkmark$	
6M2633	Immunoassay	1		
0112000	GC/MS		1	
6XECWG	Immunoassay	1		
76V339	Immunoassay	1		
7AN9EP	LC/MS		1	
7TJU33	LC-QTOF			
	GC/MS		•	
83PYUJ	High resolution accurate mass GC/MS	1	1	
8J9TG2	Immunoassay	1		
	LC-QTOF		$\checkmark$	
8WWUYT	Immunoassay	1		
-	GC/MS	1	1	

WebCode	Method	Screening	Confirmatory	Quantitation
96RG6J	Immunoassay	1		
	LC/MS		✓	
	GC/MS		1	
98BFDM	Immunoassay	✓		
	LC/MS/MS		1	
9K27GY	Immunoassay	1		
	LC/MS/MS		1	1
9N397Z	Immunoassay	1		
9PUCTF	Immunoassay	1		
9FUC11	GC/MS	1	1	
A4APRT	LC/MS/MS	1		
Α4ΑΓΚΙ	GC/MS	·	1	
A7X4G3		1		
A7 A4G3	Immunoassay GC/MS	v	1	
A07400		1		
A87HGG	lmmunoassay			
AF6VNC	Immunoassay	1	1	
	GC/MS LC/MS/MS		<i>s</i>	
			•	
AFYTRC	Immunoassay GC/MS	<i>J</i> <i>J</i>	1	
			•	
ALQUEK	Immunoassay LC/MS	<i>s</i>	1	
	GC/MS	✓ ✓	v	
			•	
AMM82D	LC/MS/MS GC/MS	<i>J</i>	1	
		•		
AUKY62	GC/MS		1	
B2Y873	Immunoassay		_	
	GC/MS	1	1	
BDRNV4	Immunoassay	1		
ВМЈ8СХ	Immunoassay	1		
	LC-QTOF		1	
BP6NUH	Immunoassay	1		
	LC/MS/MS	$\checkmark$	1	
	GC/MS		$\checkmark$	
BT9L24	Immunoassay	1		
	GC/MS		1	
C6TL8W	Immunoassay	1		
	GC/MS		1	
	LC-QTOF		$\checkmark$	
CB3NBD	Immunoassay	1		
	GC/MS	✓	1	

#### Test 22-5671

WebCode	Method	Screening	Confirmatory	Quantitation
CDMTP3	Immunoassay GC/MS	J J	1	
CT4N6Y	Immunoassay Orbitrap-LC/MS LC/MS/MS	5 5	V	1
DJTMJX	LC/MS/MS GC/MS	J J	1	
EJPEUB	Rapid Chromatographic Immunoassay GC/MS LC/HRMS	✓ ✓	✓ ✓	
EMPQQB	GC/MS HRMS	<i>✓</i>	✓	
EPD7WD	Immunoassay	1		
EWB2UB	Immunoassay GC/MS	1	✓	
F6lKQF	LC/MS/MS GC/MS	1	\ \	
FF8JPX	Immunoassay GC/MS	\ \	1	
FJ7VLX	Immunoassay GC/MS	1	✓	
FXK3FA	lmmunoassay GC/MS GC/NPD	5 5 5	✓	
G3QAED	Immunoassay GC/MS LC/MS	V	√ √	
GFG7GB	Immunoassay LC/MS/MS GC/MS	5 5	\$ \$	
GRAEFD	Immunoassay GC/MS	✓	1	
GUKA4Q	Immunoassay GC/MS LC/MS/MS	J	<i>✓</i> <i>✓</i>	
GZLQ96	Immunoassay	1		
GZP7MQ	LC/MS/MS			
HBLHEA	Immunoassay	✓		
HPHQEX	Immunoassay GC/MS	\ \	1	

WebCode	Method	Screening	Confirmatory	Quantitation
HQF42P	Immunoassay GC/MS	$\checkmark$	1	
JQ9FTB	Immunoassay GC/MS	1	✓	
KNE3R4	LC/MS/MS	1	1	
KVY39G	Immunoassay GC/MS	1	✓	
L2447P	LC/MS/MS	1	1	
LDU3QZ	Immunoassay GC/MS	\ \	1	
LDZAZM	Immunoassay GC/MS	1	1	
LERDM3	Immunoassay GC/MS	√ ✓	1	
LHPWN2	Immunoassay GC/MS	$\checkmark$	1	
LQMJMT	LC/MS/MS GC/MS	$\checkmark$	✓	
LX6WJ7	GC/MS	1		
LYVVX6	Immunoassay GC/MS	√ ✓	1	
M4Q32Y	Immunoassay LC/MS/MS	√ ✓	✓	
M6VYZ9	LC/MS/MS Immunoassay GC/MS	√ ✓	✓	
M9UBV9	Immunoassay GC/MS LCQTOF	✓	√ √	
MGR2KP	LC/MS/MS	1	1	
MNWK33	Immunoassay GC/MS	√ ✓	✓	
MU2CDL	Immunoassay LC-QTOF GC/MS	1	\$ \$	
MUJMT7	Immunoassay GC/MS LC/MS/MS	1	✓ ✓	
NK7TCH	LC/MS/MS	1	1	
NYNLZP	GC/MS	✓	1	

#### Test 22-5671

NebCode	Method	Screening	Confirmatory	Quantitation
P7KZZG	LC/MS/MS	1	1	
PG4AQV	Immunoassay GC/MS	\ \		
PXQTHB	Immunoassay GC/MS	\ \	✓	
Q4EUZ2	LC-HRMS/MS GC/MS	1	$\checkmark$	
Q63FMW	Immunoassay LC/MS/MS	1	✓	
QKXQGU	LC-QTOF-MS Immunoassay LC/MS/MS	√ √	✓	
QQJTDY	Immunoassay GC/MS	\ \	✓	
QXKXCA	LC/MS/MS	1	1	
RDB8PZ	Immunoassay	1		
RQLHHW	GC/FID Immunoassay	✓	1	1
ryrjg2	GC/MS	1	1	
TG94UK	Immunoassay GC/MS	<i>√</i>	✓	
TLRYZX	lc-hrms/ms gc/ms	1	1	
TMFE6Z	Immunoassay	1		
TNT2PY	Immunoassay LC/MS/MS	1	✓	
TQFMCV	lmmunoassay GC/MS LC/MS/MS	✓	✓ ✓	
TRTAUA	GC/MS Immunoassay	√ √	$\checkmark$	
TUGNHJ	LC/MS/MS GC/MS LC/HRMS	✓ ✓	✓	✓
UR8YTF	Immunoassay GC/MS	1	1	
JTH8CZ	LC/MS/MS	1	1	
JY9DEG	Immunoassay	1		

WebCode	Method	Screening	Confirmatory	Quantitation
V2AXJT	GC/MS	$\checkmark$		
	LC/MS			
	Immunoassay	$\checkmark$		,
	LC/MS/MS			1
VMBUCG	GC/MS		$\checkmark$	
VV46MC	Immunoassay	$\checkmark$		
	LC/MS/MS		$\checkmark$	
WWVHMA	LC/MS/MS	$\checkmark$	1	
X4AVWT	Immunoassay	1		
	GC/MS	$\checkmark$	1	
XCKWHT	Immunoassay	1		
	GC/MS	$\checkmark$	$\checkmark$	
XHU9GF	LC/MS	1	1	
XTEFHP	LC/MS/MS	✓	1	
	Immunoassay	$\checkmark$		
XZPYEU	LC-HRMS/MS	<ul> <li>Image: A start of the start of</li></ul>		
	GC/MS		$\checkmark$	
YCZT6D	GC/MS		1	
YNDT4R	Immunoassay	✓		
	GC/MS		1	
	LC/MS/MS	$\checkmark$	$\checkmark$	
YQGNMV	Immunoassay	✓		
-	LC/MS/MS	1	1	
	GC/MS		$\checkmark$	
Z4ZQF7	Immunoassay	1		
	LC/MS/MS		1	
ZBKTMA	Immunoassay	✓		
	LC-QTOF		$\checkmark$	
ZGR6XN	Immunoassay	1		
	GC/MS		1	
	LC/MS/MS		$\checkmark$	
ZVQ26T	Immunoassay	1		
	LC/MS/MS	$\checkmark$	<i>✓</i>	
	GC/MS	1	1	

Response Summary for Item 3 - Methods	Participants: 116		
	Screening	Quantitation	
Immunoassay:	83	0	0
GC/MS:	30	75	1
LC/MS:	3	5	0
LC/MS/MS:	25	36	4
Other:	13	9	1

# Additional Comments for Item 3

TABLE 3F

WebCode	Item Comments
3AZRVQ	Internal standard used include Mepivacaine
<b>3RJMAY</b>	There was a significant Caffeine peak identified in the sample.
43TPZP	Drugs included in panel: Cyclobenzaprine, Imipramine, MDPV, Meperidine, Mitragynine, Normeperidine, Phencyclidine, Quetiapine, and Zolpidem.
4AFBFN	internal standards: mepivacaine, mephobarbital (screen) internal standards: mepivacaine, nalorphine (confirmation)
4AYEMP	internal standard: mepivacaine
4ET9KQ	mepivacaine was the internal standard used for all analytes.
83PYUJ	Internal standard: mepivacaine
8WWUYT	n-Propylamphetamine, Mepivacaine, and Hexobarbital used as internal standards.
96RG6J	Mepivacaine used as internal standard
98BFDM	Internal Standard used was MDA-D5
9K27GY	Deuterated standards are used for compounds we can quantitate. Our lab is currently only able to quantitate samples that could contain basic drugs or cannabinoids. I have included the list of drugs the lab can quantitate or qualitatively identify: Amphetamine, Methamphetamine, MDA, MDMA, Ketamine, Mescaline (Qualitatively only), Phentermine, Diphenhydramine, LSD, Psilocin (qualitatively only), Ephedrine/Pseudoephedrine (qualitatively only), THC-OH, THC, THC-COOH
A7X4G3	* Internal standard: flurazepam / estazolam. * Sample preparation: L/L extraction. * The final extraction is derivatized with BSTFA and injected by GC-MS. * LOD amphetamine: 400 ng/mL.
A87HGG	All substances detected using immunoassay testing, cutoffs are listed below. 6AM- 10 ng/mL, AMP- 1,000 ng/mL, BNZ- 200 ng/mL, COC- 300 ng/mL, CR- 20 mg/dL, THC- 50 ng/mL, OPI- 300 ng/mL, OXY- 100 ng/mL, FEN- 1 ng/mL.
AF6VNC	Fluconazole indicated by GCMS. Not confirmed or reported.
DJTMJX	Alere iCassette (THC) test device was used to screen for THC, referred to in 3-5 as rapid chromatographic immunoassay. The cutoff concentration for the assay is 50 ng/mL.
EMPQQB	Internal standards: Mepivacaine/Mephobarbital (HRMS) and Mepivacaine/Naloprhine (GCMS)
EPD7WD	All substances detected using immunoassay testing, cutoffs are listed below. 6AM- 10 ng/mL, AMP- 1,000 ng/mL, BNZ- 200 ng/mL, COC- 300 ng/mL, CR- 20 mg/dL, THC- 50 ng/mL, OPI- 300 ng/mL, OXY- 100 ng/mL, FEN- 1 ng/mL.
EWB2UB	Spectra was identified with ions associated with Ephedrine/Pseudoephedrine. Neither of these analytes are on the laboratory's drug panel and could not be reported.
G3QAED	mepivacaine was used as an internal standard.
GFG7GB	Internal standard used was mepivacaine.
GRAEFD	Internal Standards 1. SKF-525A 2. Hexobarbital
GUKA4Q	ELISA Benzodiazepines cut-off set at 10ng/mL. ELISA Benzodiazepines screened at 114 (slightly positive). LC/MS/MS confirmation for benzodiazepines was negative.
HBLHEA	All substances detected using immunoassay testing, cutoffs are listed below. 6AM- 10 ng/mL, AMP- 1,000 ng/mL, BNZ- 200 ng/mL, COC- 300 ng/mL, CR- 20 mg/dL, THC- 50 ng/mL, OPI- 300 ng/mL, OXY- 100 ng/mL, FEN- 1 ng/mL.

## TABLE 3F: Additional Comments for Item 3

WebCode	Item Comments
HQF42P	Confirmatory ISTD: NPA and SKF
KNE3R4	Note: samples are not screened by an immunoassay screening method. All screening and confirmation conducted by LCMS
L2447P	Internal standard: Flurazepam. LoD: 10 ng/mL.
LDU3QZ	Phenyltoloxamine
M4Q32Y	Amphetamines cutoff on immunoassay (EMIT) is 1000, sample deflected. LOQ for amphetamine is 25 ng/mL Deuterated IS
MU2CDL	IS used in QTOF analyses: Fentanyl-D5, Imipramine-D3, MDMA-D5, Methaqualone-D7, and Triazolam-D4. Caffeine, Ephedrine/Pseudoephedrine, and Fluconazole disregarded.
MUJMT7	Internal standard utilized was mepivacaine. Amphetamine was derivatized with (S)-(-)-N- (trifluoroacetyl)- prolyl chloride for GCMS analysis.
NK7TCH	Amphetamine-d11 ISTD; LOD 5ng/ml
P7KZZG	Amphetamine: ISTD: Amphetamine-d11; LOD: 5 ng/mL
PG4AQV	The sample was first screened using an immunoassay method. This immunoassay method only screens for the following drugs/drug classes: Amphetamines, Benzodiazepines, Cannabinoids, Cocaine, Opiates, and PCP. A GC/MS scan was used as a secondary screening method.
PXQTHB	N-Propylamphetamine, Mepivacaine, and Hexobarbital were used as Internal Standards.
Q4EUZ2	For LC-HRMS/MS testing, mepivacaine and mephobarbital were used as internal standards. For GC/MS testing, mepivacaine and nalorphine were used as internal standards
Q63FMW	The cut off of amphetamine is 50 ng/mL
QKXQGU	BMPEA and amphetamine cannot be distinguished by the methods used.
QXKXCA	ephedrine/pseudoephedrine detected in confirmation method- not reported as per provider- "verification testing showed low levels of ephedrine, fluconazole and pseudoephedrine in all three samples, please disregard these"
RDB8PZ	All substances detected using immunoassay testing, cutoffs are listed below. 6AM- 10 ng/mL, AMP- 1,000 ng/mL, BNZ- 200 ng/mL, COC- 300 ng/mL, CR- 20 mg/dL, THC- 50 ng/mL, OPI- 300 ng/mL, OXY- 100 ng/mL, FEN- 1 ng/mL.
RQLHHW	GC/FID for Alcohol confirmation - LLQ 20mg/dL - report less than 20mg/dL
TMFE6Z	All substances detected using immunoassay testing, cutoffs are listed below. 6AM- 10 ng/mL, AMP- 1,000 ng/mL, BNZ- 200 ng/mL, COC- 300 ng/mL, CR- 20 mg/dL, THC- 50 ng/mL, OPI- 300 ng/mL, OXY- 100 ng/mL, FEN- 1 ng/mL.
TQFMCV	Codeine-D3 and methamphetamine-D9 are used as internal standards
TRTAUA	Screening GC/MS internal standards were Mepivacaine, Methohexital, and Nalorphine-diTMS. Confirmatory GC/MS internal standard was Amphetamine-D11.
UY9DEG	Analytes tested for and cutoffs provided below: Fentanyl 2 ng/ml, AB-Pinaca 2.5 ng/ml, Methamphetamine 200 ng/ml, Barbs 200 ng/ml, Benzos 150 ng/ml, Methadone 300 ng/ml, Opiates 200 ng/ml, Creatinine 20 mg/dl, Benzoylecgonine 150 ng/ml, Oxycodone 50 ng/ml, Tramadol 5 ng/ml, THC 20 ng/ml, TCA 150 ng/ml, Amphetamine 200 ng/ml, Buprenorphine 1 ng/ml, 6-mam 10 ng/ml, JWH-018 20 ng/ml, alpha-PVP 5 ng/ml, UR-144 10 ng/ml
V2AXJT	quantification ISD d5-amphetamine
WWVHMA	Amphetamine-d11, LOD 5 ng/mL

## TABLE 3F: Additional Comments for Item 3

WebCode	Item Comments
XHU9GF	Estazolam was used as internal standard.
XZPYEU	IS: mepivacaine, mephobarbital
YCZT6D	Internal standard: Flurazepam.
YNDT4R	mepivacaine was used as an retention time internal standard. Caffeine not reported.
YQGNMV	Mepivacaine used as internal standard
ZGR6XN	Codeine-D3 and Methamphetamine-D9 are used as internal standards

ZVQ26T Internal standard: mepivacaine

# **Additional Test Comments**

TABLE 4

WebCode	Additional Comments
43TPZP	Drugs included in panel: Cyclobenzaprine, Imipramine, MDPV, Meperidine, Mitragynine, Normeperidine, Phencyclidine, Quetiapine, and Zolpidem.
9K27GY	Deuterated standards are used for compounds we can quantitate. Our lab is currently only able to quantitate samples that could contain basic drugs or cannabinoids. I have included the list of drugs the lab can quantitate or qualitatively identify: Amphetamine, Methamphetamine, MDA, MDMA, Ketamine, Mescaline (Qualitatively only), Phentermine, Diphenhydramine, LSD, Psilocin (qualitatively only), Ephedrine/Pseudoephedrine (qualitatively only), THC-OH, THC, THC-COOH.
A7X4G3	No data.
A87HGG	All substances detected using immunoassay testing, cutoffs are listed below. 6AM- 10 ng/mL, AMP- 1,000 ng/mL, BNZ- 200 ng/mL, COC- 300 ng/mL, CR- 20 mg/dL, THC- 50 ng/mL, OPI- 300 ng/mL, OXY- 100 ng/mL, FEN- 1 ng/mL.
EPD7WD	All substances detected using immunoassay testing, cutoffs are listed below. 6AM- 10 ng/mL, AMP- 1,000 ng/mL, BNZ- 200 ng/mL, COC- 300 ng/mL, CR- 20 mg/dL, THC- 50 ng/mL, OPI- 300 ng/mL, OXY- 100 ng/mL, FEN- 1 ng/mL.
F6LKQF	samples delivered by UPS were not cold or refrigerated
HBLHEA	All substances detected using immunoassay testing, cutoffs are listed below. 6AM- 10 ng/mL, AMP- 1,000 ng/mL, BNZ- 200 ng/mL, COC- 300 ng/mL, CR- 20 mg/dL, THC- 50 ng/mL, OPI- 300 ng/mL, OXY- 100 ng/mL, FEN- 1 ng/mL.
LYVVX6	Only tested for drugs that are included on the [Laboratory] drug panel.
M4Q32Y	There could be some improvements to data entry, this was a cumbersome way to enter data.
RDB8PZ	All substances detected using immunoassay testing, cutoffs are listed below. 6AM- 10 ng/mL, AMP- 1,000 ng/mL, BNZ- 200 ng/mL, COC- 300 ng/mL, CR- 20 mg/dL, THC- 50 ng/mL, OPI- 300 ng/mL, OXY- 100 ng/mL, FEN- 1 ng/mL.
TMFE6Z	All substances detected using immunoassay testing, cutoffs are listed below. 6AM- 10 ng/mL, AMP- 1,000 ng/mL, BNZ- 200 ng/mL, COC- 300 ng/mL, CR- 20 mg/dL, THC- 50 ng/mL, OPI- 300 ng/mL, OXY- 100 ng/mL, FEN- 1 ng/mL.
XZPYEU	possible contaminates found: pseudoephedrine, fluoxetine
YNDT4R	Thank you for clearly stating drugs that are part of the matrix, rather than PT targets.

Collaborative Testing Services ~ Forensic Testing Program

### Test No. 22-5671: Urine Drug Analysis

### DATA MUST BE SUBMITTED BY May 16, 2022, 11:59 p.m. TO BE INCLUDED IN THE REPORT

Participant Code: U1234J

WebCode: 2AJDRN

#### 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 26-year-old male was subject to a routine drug test as part of a drug and alcohol rehabilitation program. A urine sample was collected for analysis. Case 2: A 30-year-old male was pulled over for swerving in between lanes. He was driving alone and seemed confused and drowsy. A urine sample was collected for analysis an hour after the incident had occurred. Case 3: A 17-year-old female high school student receiving an annual physical complained of being tired. She reported extreme mood swings and insomnia. A urine sample was collected for analysis.

-Verification testing showed low levels of ephedrine, fluconazole and pseudoephedrine in all three samples, please disregard these as well as artifacts of production, methanol and acetonitrile.

\*\*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.

#### 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

#### 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). Was confirmatory analysis performed for this item? O Yes O No
- 1-3). What drugs/metabolites were detected in Item 1? If quantitative determinations were performed, please record raw data in the provided spaces in ng/mL.
   No drugs/metabolites detected utilizing confirmatory methods.

	Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units
					()
Date Analy	(s) Analysis Performed on yte:				
Raw	Data (ng/mL):				

1-4). If quantitative analysis was performed, are the reported concentrations above

 $\bigcirc$  A single determination?

- O Other? (Specify):
- 1-5). Please select the analysis method(s) performed and check whether it was used for screening, confirmatory testing, and/or quantitation. Please list each method only once.

○ The mean of duplicate / several determinations?

Method Used	Screening	Confirmatory	Quantitation

#### 1-6). Additional Comments for Item 1

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

**Please note:** Any additional formatting applied in the free form space below will not transfer to the Summary Report and may cause your information to be illegible. This includes additional spacing and returns that present your responses in lists and tabular formats.

#### 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:**

- Was confirmatory analysis performed for this item?  $\bigcirc$  Yes  $\bigcirc$  No 2-2).
- What drugs/metabolites were detected in Item 2? If quantitative determinations were performed, please record raw data in the 2-3). provided spaces in ng/mL. No drugs/metabolites detected utilizing confirmatory methods.

	Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units
					()
Date Analy	(s) Analysis Performed on yte:				
Raw	Data (ng/mL):				

If quantitative analysis was performed, are the reported concentrations above 2-4).

○ The mean of duplicate / several determinations?

 $\bigcirc$  A single determination?

- Other? (Specify):
- Please select the analysis method(s) performed and check whether it was used for screening, confirmatory testing, and/or quantitation. 2-5). Please list each method only once.

Method Used	Screening	Confirmatory	Quantitation

#### 2-6). Additional Comments for Item 2

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

Please note: Any additional formatting applied in the free form space below will not transfer to the Summary Report and may cause your information to be illegible. This includes additional spacing and returns that present your responses in lists and tabular formats.

#### 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). Was confirmatory analysis performed for this item? O Yes O No
- 3-3). What drugs/metabolites were detected in Item 3? If quantitative determinations were performed, please record raw data in the provided spaces in ng/mL.
   No drugs/metabolites detected utilizing confirmatory methods.

	Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units
					()
Date Analy	(s) Analysis Performed on yte:				
Raw	Data (ng/mL):				

3-4). If quantitative analysis was performed, are the reported concentrations above

 $\bigcirc$  A single determination?

- O Other? (Specify):
- 3-5). Please select the analysis method(s) performed and check whether it was used for screening, confirmatory testing, and/or quantitation. Please list each method only once.

○ The mean of duplicate / several determinations?

Method Used	Screening	Confirmatory	Quantitation

### 3-6). Additional Comments for Item 3

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

**Please note:** Any additional formatting applied in the free form space below will not transfer to the Summary Report and may cause your information to be illegible. This includes additional spacing and returns that present your responses in lists and tabular formats.

Date Samples Received:

#### Additional Comments on Test

**Please note:** Any additional formatting applied in the free form space below will not transfer to the Summary Report and may cause your information to be illegible. This includes additional spacing and returns that present your responses in lists and tabular formats.

### **RELEASE OF DATA TO ACCREDITATION BODIES**

The Accreditation Release is accessed by pressing the "Continue to Final Submission" button online and can be completed at any time prior to submission to CTS.

CTS submits external proficiency test data directly to ASCLD/LAB, ANAB, and/or 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 below must be completed.)

• This participant's data is **not** intended for submission to ASCLD/LAB, ANAB, and/or A2LA.

#### Have the laboratory's designated individual complete the following steps <u>only if your laboratory is accredited in this testing/calibration discipline</u> 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 Certificate here) A2LA Certificate No.				
Step 2: Complete the Laboratory Identifying Information in its entirety				
Authorized Contact Person and Title				
Laboratory Name				
Location (City/State)				