Collaborative Testing Services, Inc
FORENSIC TESTING PROGRAM

P.O. Box 650820
Sterling, VA 20165-0820
e-mail: forensics@cts-interlab.com
Telephone: +1-571-434-1925
Web site: www.cts-forensics.com

Urine Drug Analysis
Test No. 21-5671 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 122 participants and are compiled into the following tables:

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)
Hydrocodone (1,980 ng/mL)	Oxazepam (800 ng/mL)	Zolpidem (100 ng/mL)
Norhydrocodone (2,900 ng/mL)	Nordiazepam (210 ng/mL)	
Hydromorphone (300 ng/mL)	Temazepam (160 ng/mL)	

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

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 122 participants who reported screening results for Item 1. Most commonly reported was the presence of Opiates/Opioids by 89 participants; 39 reported the presence of Hydrocodone/Hydromorphone/Norhydrocodone, and 18 reported the presence of Oxycodone/Oxymorphone. Of the 111 participants who reported confirmatory results for Item 1, 107 (96.4%) reported the presence of Hydrocodone, 89 (80.2%) reported the presence of Hydromorphone, and 25 (22.5%) reported the presence of Norhydrocodone.

There were 122 participants who reported screening results for Item 2. Most commonly reported was the presence of Benzodiazepines by 94 participants, and 38 reported the presence of Oxazepam/Nordazepam/Temazepam. Of the 111 participants who reported confirmatory results for Item 2, 102 (91.9%) reported the presence of Oxazepam, 106 (95.5%) reported the presence of Nordiazepam, and 98 (88.3%) reported the presence of Temazepam.

There were 120 participants who reported screening results for Item 3 with 79 reporting the presence of Zolpidem. Of the 107 participants who reported confirmatory results for Item 3, 100 (93.5%) reported the presence of Zolpidem.

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.

Participants who reported "No drugs/metabolites detected utilizing confirmatory methods" within Table 1/2/3B: Confirmatory Results, may have done so due to the laboratory's ability to confirm specific drugs/metabolites. Options for reporting are being reviewed to determine how to make this occurrence more clearly noted on the report.

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:

Case 1: A 28-year-old male was involved in a single vehicle accident. The victim was driving alone and said that he felt dizzy and lost control of his vehicle. The police officer noted that the man appeared calm at the scene. A urine sample was collected for analysis an hour after the incident had occurred.

Item Contents and Preparation Concentration: Hydrocodone (1,980 ng/mL)
Norhydrocodone (2,900 ng/mL)
Hydromorphone (300 ng/mL)

WebCode	Screening Results
2MAT36	Opiates
32QB9E	Hydrocodone, Hydromorphone
3GJZ7W	opiates (immunoassay) hydrocodone (gc/ms)
3U6DH7	Opiates
3YXG9P	No drugs detected utilizing screening methods.
44AMKP	Opiates
489YKV	Opiates
4LRJ6N	Opiates: hydrocodone, hydromorphone
4RVPFL	opioids
4TNFP7	No drugs detected utilizing screening methods.
63A4ZY	Hydrocodone Hydromorphone
662XYN	Opiates Oxycodone
69XLFV	Opiate Oxycodone
6CXXCV	Opiates
6V8URL	opioids hydrocodone
6VCCUQ	Opiates
78ZVML	Opiates
7UWAKW	Opiates
82P8HJ	Opiates
86PFPE	Certain Opioids

TABLE 1A: Screening Results - Item 1

WebCode	Screening Results
8VK9AE	Positive for common opioids Positive for hydrocodone and hydromorphone
99JR2Q	Hydromorphone, Hydrocodone, and Norhydrocodone
9TE3AY	Opiates
A7WEYE	opioids, hydrocodone
AAWKDK	Hydrocodone, Norhydrocodone, Hydromorphone
AB7THX	OPIATE
ACKWEB	Opiate class Buprenorphine class Hydrocodone
AFL3UG	opioids
AKGREU	hydromorphone, hydrocodone
ALALEJ	Opiates
AUJARH	Opiates/Opioids
B3PED8	opiates
BAERGG	Opiates, Oxycodone/Oxymorphone, Amphetamine
BZKQXH	Opiate
C7MC4Q	Hydrocodone Hydromorphone
C8HXWG	Opiate
C9CNZB	Hydrocodone Hydromorphone
CD8BWK	Opiaces
CWGCQH	OPIATES, OXYCODONE
D2BN3U	Opiates
DG4L34	common opioids
DNLUPF	Oxycodone Opiates
DPTAX7	N/A confirmation only
E9PUER	Opiates, Hydrocodone

TABLE 1A: Screening Results - Item 1

WebCode	Screening Results
EAZW3B	Opiates, Oxycodone/Oxymorphone
EFJ2VC	Opioids
ERZQUG	Opiates and Cannabinoids
EZR39H	Opiates
F2HMB9	hydrocodone, hydromorphone
FBPKYC	opiates
FL6GY9	common opioids
FUZC2D	Opiates
FVRDZA	opioids (hydrocodone)
GGUJ8F	Opiates
GKURDC	opiates
HGNN2F	Opiates
HV6NVK	Hydrocodone Hydromorphone
J9MV46	opioids
JCQTEX	opioids
JG68JR	OPIATES
JHXZEB	Hydrocodone, Hydromorphone, Norhydrocodone
JZHL2L	Opiates
JZWCMB	ELISA Opiates ELISA Oxycodone
K2MV7N	Hydrocodone, Norhydrocodone
K4B849	opiates, oxycodone
K93GD8	Immunoassay - No drugs or classes of drugs detected GC/MS - Hydrocodone, Norhydrocodone, Hydromorphone
K9KNEH	Opiate Class/Hydrocodone/Hydromorphone
KH9E2B	Hydrocodone; Hydromorphone
KQM3ZH	Hydrocodone, hydromorphone
L8NAP6	common opioids

TABLE 1A: Screening Results - Item 1

WebCode	Screening Results
L9YCDN	Opiates
LB8M98	Opiates
LEMY79	opiates
LFYTNU	Opiates
M4NJYJ	hydrocodone & hydromorphone
MAC2EF	hydrocodone, hydromorphone
MN9H4E	Hydrocodone, Hydromorphone
MV88JW	hydrocodone diphenhydramine hydromorphone
MZNARN	opiates
N8F8UG	Opiates
ND7KUJ	Opiates
NTKKQA	Positive OPIATES
NWVX43	Opiates Oxycodone
P9ACNF	Opiates
PMQ94C	Opiates Oxycodone
PPEJ2W	Opioids
QDF7HB	opiates, oxycodone
QTDHQF	No drugs detected utilizing screening methods.
R3CDMP	Hydrocodone, Hydromorphone
RB8BEY	Opiates, oxycodone/oxymorphone, amphetamine
RGXRN4	OPI, OXY
RKXX6V	Opioids
RNVEHP	Opioid
RRYDTG	Hydrocodone Hydromorphone

TABLE 1A: Screening Results - Item 1

WebCode	Screening Results
RTMPP2	ELISA Opiates ELISA Oxycodone
RTQ7R8	hydrocodone, hydromorphone
RX3C48	OPIOIDS: Hydrocodone and its metabolites hydromorphone and norhydrocodone. Norhydrocodone, hydrocodone metabolite, was identified searching in GC-MS and LC-MS-MS libraries. The lab does not have reference material for this compound.
TAU3LP	opioids
TNQKBN	opiates class
UFU7PT	opioids
UHGJR6	HYDROCODONE
UN8T34	Opiates
UPZPPC	Opioids
UXXE92	Hydromorphone; Hydrocodone
VPXGX4	Hydrocodone Hydromorphone
VZFXNP	Hydrocodone Hydromorphone
WRVJXP	opioids
WRX8F4	Opiates
X8P73W	hydrocodone, hydromorphone, norhydrocodone
XL9RNB	Opiates
XUHF3A	Hydrocodone
XXJG6R	Opiates, Oxycodone/oxymorphone
YADXR8	Opioids; Oxycodone
YDD9M8	oxycodon 1 - oxycodone 2 - opiates - opioids
YVQM63	Opiates, Oxycodone
YZP4HW	Opiate
Z2B6X4	Opiates
Z8YRQN	opioids

TABLE 1A: Screening Results - Item 1

WebCode	Screening Results
ZCEKJ3	hydrocodone, hydromorphone
ZE3WGM	Hydrocodone, hydromorphone
ZMW2CA	Opiates
ZNPVCY	Opiates

Screening Response Summary for Item 1	Participants: 122
Opiates/Opioids:	89
Hydrocodone/Norhydrocodone/Hydromorphone:	39
Oxycodone/Oxymorphone:	18
Other drugs/metabolites detected:	5
No drugs/metabolites detected Utilizing Screening Methods:	3

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:

Case 1: A 28-year-old male was involved in a single vehicle accident. The victim was driving alone and said that he felt dizzy and lost control of his vehicle. The police officer noted that the man appeared calm at the scene. A urine sample was collected for analysis an hour after the incident had occurred.

Item Contents and Preparation Concentration: Hydrocodone (1,980 ng/mL)
Norhydrocodone (2,900 ng/mL)
Hydromorphone (300 ng/mL)

What drugs/metabolites were detected in Item 1?

WebCode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
2MAT36	Hydrocodone	✓			
	Norhydrocodone	✓			
	Hydromorphone	✓			
32QB9E	Hydrocodone	✓			
	Hydromorphone	✓			
3GJZ7W	Hydrocodone	✓			
	Hydromorphone	✓			
3U6DH7	Hydrocodone	✓			
	Hydromorphone	✓			
3YXG9P	Hydrocodone	✓			
	Norhydrocodone				
	Hydromorphone				
44AMKP	Hydrocodone	✓			
	Norhydrocodone	✓			
	Hydromorphone	✓			
489YKV	Hydrocodone				
	Hydromorphone				
4LRJ6N	Hydrocodone	✓			
	Hydromorphone	✓			
4RVPFL	Hydrocodone	✓			
	Hydromorphone	✓			
4TNFP7	Hydrocodone	✓			
63A4ZY	Hydrocodone	✓			
	Hydromorphone	✓			
6CXXCV	Hydrocodone	✓			
	Hydromorphone	✓			

TABLE 1B: Confirmatory Results - Item 1

What drugs/metabolites were detected in Item 1?					
WebCode	**Analyte Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
6V8URL	Hydrocodone	✓			
	Hydromorphone	✓			
6VCCUQ	Hydrocodone	✓			
	Hydromorphone	✓			
78ZVML	Hydrocodone	✓			
	Hydromorphone	✓			
82P8HJ	Hydrocodone	✓			
	Norhydrocodone	✓			
86PFPE	Hydrocodone	✓			
	Hydromorphone	✓			
8VK9AE	Hydrocodone	✓			
	Hydromorphone	✓			
99JR2Q	Hydrocodone	✓			
	Norhydrocodone	✓			
	Hydromorphone	✓			
A7WEYE	Hydrocodone	✓			
	Hydromorphone	✓			
AAWKDK	Hydrocodone	✓			
	Norhydrocodone	✓			
	Hydromorphone	✓			
AB7THX	Hydrocodone	✓			
ACKWEB	No drugs/metabolites detected utilizing confirmatory methods.				
AFL3UG	Hydrocodone	✓			
	Hydromorphone	✓			
AKGREU	Hydrocodone		1614		ng/mL
	Hydromorphone		323		ng/mL
ALALEJ	Hydrocodone	✓			
	Norhydrocodone	✓			
	Hydromorphone	✓			
AUJARH	Hydrocodone	✓			
	Hydromorphone	✓			

TABLE 1B: Confirmatory Results - Item 1

What drugs/metabolites were detected in Item 1?					
WebCode	**Analyte Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
B3PED8	Hydrocodone	✓			
	Hydromorphone	✓			
BZKQXH	Hydrocodone	✓			
	Norhydrocodone	✓			
	Hydromorphone	✓			
C7MC4Q	Hydrocodone	✓			
	Hydromorphone	✓			
C8HXWG	Hydrocodone	✓			
	Norhydrocodone	✓			
	Hydromorphone	✓			
C9CNZB	Hydrocodone	✓			
	Hydromorphone	✓			
CD8BWK	Hydrocodone	✓			
	Hydromorphone	✓			
CWGCQH	Hydrocodone	✓			
DG4L34	Hydrocodone	✓			
	Hydromorphone	✓			
DNLUPF	Hydrocodone	✓			
	Hydromorphone	✓			
DPTAX7	Hydrocodone	✓			
	Hydromorphone	✓			
E9PUER	Hydrocodone	✓			
	Hydromorphone	✓			
EAZW3B	No drugs/metabolites detected utilizing confirmatory methods.				
EFJ2VC	Hydrocodone	✓			
	Hydromorphone	✓			
ERZQUG	Hydrocodone	✓			
	Norhydrocodone	✓			
	Hydromorphone	✓			
EZR39H	Hydrocodone	✓			

TABLE 1B: Confirmatory Results - Item 1

What drugs/metabolites were detected in Item 1?					
WebCode	**Analyte Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
F2HMB9	Hydrocodone	✓			
	Hydromorphone	✓			
FBPKYC	Hydrocodone	✓			
	Hydromorphone	✓			
FL6GY9	Hydrocodone	✓			
	Hydromorphone	✓			
FUZC2D	Hydrocodone	✓			
	Norhydrocodone	✓			
	Hydromorphone	✓			
FVRDZA	Hydrocodone	✓			
	Hydromorphone	✓			
GGUJ8F	Hydrocodone	✓			
GKURDC	Hydrocodone	✓			
	Hydromorphone	✓			
HGNN2F	Hydrocodone	✓			
HV6NVK	Hydrocodone	✓			
	Hydromorphone	✓			
J9MV46	Hydrocodone	✓			
	Hydromorphone	✓			
JCQTEX	Hydrocodone	✓			
	Hydromorphone	✓			
JG68JR	Hydrocodone	✓			
	Hydromorphone	✓			
JHXZEB	Hydrocodone	✓			
	Norhydrocodone	✓			
	Hydromorphone	✓			
JZHL2L	Hydrocodone	✓			
	Hydromorphone	✓			
JZWCMB	Hydrocodone	✓			
	Norhydrocodone	✓			
	Hydromorphone	✓			

TABLE 1B: Confirmatory Results - Item 1

What drugs/metabolites were detected in Item 1?					
WebCode	**Analyte Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
K2MV7N	Hydrocodone	✓			
	Norhydrocodone	✓			
K4B849	Hydrocodone	✓			
	Norhydrocodone	✓			
K93GD8	Hydrocodone	✓			
	Norhydrocodone	✓			
	Hydromorphone	✓			
K9KNEH	Hydrocodone	✓			
	Hydromorphone	✓			
KH9E2B	Hydrocodone	✓			
	Hydromorphone	✓			
KQM3ZH	Hydrocodone	✓			
	Hydromorphone	✓			
L8NAP6	Hydrocodone	✓			
	Hydromorphone	✓			
L9YCDN	No drugs/metabolites detected utilizing confirmatory methods.				
LB8M98	Hydrocodone	✓			
	Norhydrocodone	✓			
	Hydromorphone	✓			
LEMY79	Hydrocodone	✓			
	Hydromorphone	✓			
LFYTNU	Hydrocodone	✓			
M4NJYJ	Hydrocodone	✓			
	Hydromorphone	✓			
MAC2EF	Hydrocodone	✓			
	Hydromorphone	✓			
MN9H4E	Hydrocodone	✓			
	Hydromorphone	✓			
MV88JW	Hydrocodone	✓			
	Hydromorphone	✓			
	diphenhydramine	✓			

TABLE 1B: Confirmatory Results - Item 1

What drugs/metabolites were detected in Item 1?					
WebCode	**Analyte Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
MZNARN	Hydrocodone	✓			
	Hydromorphone	✓			
N8F8UG	Hydrocodone	✓			
	Hydromorphone	✓			
NTKKQA	Hydrocodone	✓			
	Norhydrocodone	✓			
	Hydromorphone	✓			
NWVX43	Hydrocodone	✓			
	Hydromorphone		241	48	ng/mL
P9ACNF	Hydrocodone	✓			
	Hydromorphone	✓			
PMQ94C	Hydrocodone	✓			
	Hydromorphone	✓			
PPEJ2W	Hydrocodone	✓			
	Hydromorphone	✓			
QDF7HB	Hydrocodone	✓			
	Hydromorphone	✓			
R3CDMP	Hydrocodone	✓			
	Hydromorphone	✓			
RB8BEY	No drugs/metabolites detected utilizing confirmatory methods.				
RGXRN4	Hydrocodone	✓			
RKXX6V	Hydrocodone	✓			
	Hydromorphone	✓			
RNVEHP	Hydrocodone	✓			
	Hydromorphone	✓			
RRYDTG	Hydrocodone	✓			
	Hydromorphone	✓			
RTMPP2	Hydrocodone	✓			
	Norhydrocodone	✓			
RTQ7R8	Hydrocodone	✓			
	Norhydrocodone	✓			

TABLE 1B: Confirmatory Results - Item 1

What drugs/metabolites were detected in Item 1?					
WebCode	**Analyte Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
RX3C48	Hydrocodone	✓			
	Norhydrocodone	✓			
	Hydromorphone	✓			
TAU3LP	Hydrocodone	✓			
	Hydromorphone	✓			
TNQKBN	Hydrocodone		1.6	33%	ug/ml
	Hydromorphone	✓			
UFU7PT	Hydrocodone	✓			
	Hydromorphone	✓			
UHGJR6	Hydrocodone	✓			
UN8T34	Hydrocodone	✓			
	Norhydrocodone	✓			
UPZPPC	Hydrocodone	✓			
	Norhydrocodone	✓			
UXXE92	Hydrocodone	✓			
	Hydromorphone	✓			
VPXGX4	Hydrocodone	✓			
	Hydromorphone	✓			
VZFXNP	Hydrocodone	✓			
	Hydromorphone	✓			
WRVJXP	Hydrocodone	✓			
	Hydromorphone	✓			
WRX8F4	Hydrocodone	✓			
	Hydromorphone	✓			
X8P73W	Hydrocodone	✓			
	Norhydrocodone	✓			
	Hydromorphone	✓			
XL9RNB	Hydrocodone	✓			
	Hydromorphone	✓			
XUHF3A	Hydrocodone	✓			
XXJG6R	Hydrocodone	✓			

TABLE 1B: Confirmatory Results - Item 1

What drugs/metabolites were detected in Item 1?					
WebCode	**Analyte Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
YADXR8	Hydrocodone	✓			
	Hydromorphone	✓			
YDD9M8	Hydrocodone	✓			
	Norhydrocodone	✓			
	Hydromorphone	✓			
YVQM63	Hydrocodone	✓			
	Hydromorphone	✓			
Z2B6X4	Hydrocodone	✓			
	Hydromorphone	✓			
Z8YRQN	Hydrocodone	✓			
	Hydromorphone	✓			
ZE3WGM	Hydrocodone	✓			
	Hydromorphone	✓			
ZNPVCY	Hydrocodone	✓			
	Hydromorphone	✓			

Confirmatory Response Summary for Item 1	**Participants: 111**
Hydrocodone:	107 (96.4%)
Norhydrocodone:	25 (22.5%)
Hydromorphone:	89 (80.2%)
Other Identified Drugs/Metabolites:	1 (0.9%)
No Drugs/Metabolites Detected Utilizing Confirmatory Methods:	4 (3.6%)

Raw Data - Item 1

TABLE 1C

Item 1 Raw Data - Hydrocodone
Preparation concentration: (1,980 ng/mL)

WebCode	List of Raw Data determinations (ng/mL)
AKGREU	1,614.0
LEMY79	3,788.0
TNQKBN	1,620.0

Statistical Analysis for Item 1 - Hydrocodone

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

TABLE 1C: Raw Data - Item 1

Item 1 Raw Data - Norhydrocodone
Preparation concentration: (2,900 ng/mL)

WebCode	List of Raw Data determinations (ng/mL)

No Raw Data results were reported for this Drug/Analyte for Item 1.

TABLE 1C: Raw Data - Item 1

Item 1 Raw Data - Hydromorphone
Preparation concentration: (300 ng/mL)

WebCode	List of Raw Data determinations (ng/mL)
AKGREU	323.0
LEMY79	341.0
NWVX43	241.0

Statistical Analysis for Item 1 - Hydromorphone

Please note: Statistical 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	
WebCode	***If quantitative analysis was performed, the reported concentrations are:***
AB7THX	The mean of duplicate/several determinations.
AKGREU	A single determination.
NWVX43	A single determination.
TNQKBN	A single determination.

Response Summary for Item 1	Participants: 4
A single determination:	3 (75.0%)
The mean of duplicate/several determinations:	1 (100.0%)
Other:	0 (0.0%)

Methods of Analysis - Item 1

TABLE 1E - Item 1

WebCode	Method	Screening	Confirmatory	Quantitation
2MAT36	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
32QB9E	Immunoassay	✓		
	GC/MS	✓		
	LC/MS/MS	✓	✓	
3GJZ7W	Immunoassay	✓		
	GC/MS	✓	✓	
3U6DH7	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
3YXG9P	Immunoassay	✓		
	GC/MS	✓	✓	
44AMKP	Immunoassay	✓		
	LC-QTOF		✓	
	GC/MS		✓	
489YKV	Immunoassay	✓		
	GC/MS		✓	
4LRJ6N	Immunoassay	✓		
	GC/MS		✓	
4RVPFL	Immunoassay	✓		
	LC/MS/MS		✓	
	GC/MS		✓	
4TNFP7	GC/MS	✓	✓	
63A4ZY	Immunoassay	✓		
	GC/MS	✓	✓	
662XYN	Immunoassay	✓		
69XLFV	Immunoassay	✓		
6CXXCV	Immunoassay	✓		
	LC/MS		✓	
6V8URL	Immunoassay	✓		
	GC/MS	✓	✓	
	LC/MS/MS	✓	✓	
6VCCUQ	Immunoassay	✓		
	GC/MS		✓	
78ZVML	Immunoassay	✓		
	GC/MS		✓	
7UWAKW	Immunoassay	✓		

TABLE 1E: Methods of Analysis - Item 1

WebCode	Method	Screening	Confirmatory	Quantitation
82P8HJ	Immunoassay	✓		
	GC/MS		✓	
86PFPE	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
8VK9AE	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS	✓	✓	
99JR2Q	LC/MS/MS	✓	✓	
	GC/MS	✓	✓	
	Rapid Chromatographic Immunoassay	✓		
9TE3AY	Immunoassay	✓		
A7WEYE	Immunoassay	✓		
	LC/MS/MS	✓	✓	
	GC/MS		✓	
AAWKDK	LC/MS/MS	✓	✓	
AB7THX	Immunoassay	✓		
	GC/MS		✓	
	LC/MS QTOF		✓	
ACKWEB	Immunoassay	✓		
	LC/MS/MS	✓		
AFL3UG	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
AKGREU	LC/MS/MS	✓		
	LC-HRMS	✓	✓	
	LC/MS			✓
	GC/MS		✓	
ALALEJ	Immunoassay	✓		
	LC-QTOF		✓	
AUJARH	Immunoassay	✓		
	GC/MS		✓	
B3PED8	Immunoassay	✓		
	GC/MS	✓	✓	
	LC/MS/MS	✓	✓	
BAERGG	Immunoassay	✓		
	LC/MS/MS		✓	
BZKQXH	Immunoassay	✓		
	LC-QTOF		✓	
C7MC4Q	LC/MS/MS	✓	✓	
C8HXWG	Immunoassay	✓		
	LC-QTOF		✓	

TABLE 1E: Methods of Analysis - Item 1

WebCode	Method	Screening	Confirmatory	Quantitation
C9CNZB	LC-High Resolution Tandem Mass Spectrometry	✓		
	GC/MS		✓	
CD8BWK	Immunoassay	✓		
	GC/MS		✓	
CWGCQH	Immunoassay	✓		
	GC/MS		✓	
D2BN3U	Immunoassay	✓		
DG4L34	GC/MS		✓	
	LC/MS		✓	
	Immunoassay	✓		
DNLUPF	Immunoassay	✓		
	GC/MS		✓	
DPTAX7	LC-TOFMS		✓	
E9PUER	Immunoassay	✓		
	GC/MS	✓	✓	
EAZW3B	Immunoassay	✓		
EFJ2VC	Immunoassay	✓		
	LC/MS/MS		✓	
	GC/MS		✓	
ERZQUG	Immunoassay	✓		
	GC/MS	✓	✓	
	LC/MS/MS		✓	
EZR39H	Immunoassay	✓		
	GC/MS		✓	
F2HMB9	Immunoassay	✓		
	LC/MS/MS	✓	✓	
	GC/MS	✓	✓	
FBPKYC	Immunoassay	✓		
	GC/MS		✓	
FL6GY9	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
FUZC2D	Immunoassay	✓		
	LC-QTOF		✓	
FVRDZA	GC/MS	✓	✓	
	LC/MS/MS	✓	✓	
	Immunoassay	✓		
GGUJ8F	Immunoassay	✓		
	GC/MS	✓	✓	
GKURDC	Immunoassay	✓		
	GC/MS		✓	

TABLE 1E: Methods of Analysis - Item 1

WebCode	Method	Screening	Confirmatory	Quantitation
HGNN2F	GC/MS		✓	
	Immunoassay	✓		
HV6NVK	LC/MS/MS	✓	✓	
	GC/MS	✓		
J9MV46	Immunoassay	✓		
	LC/MS/MS		✓	
	GC/MS		✓	
JCQTEX	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
JG68JR	Immunoassay	✓		
	GC/MS		✓	
JHXZEB	LC/MS/MS	✓	✓	
JZHL2L	Immunoassay	✓		
	GC/MS		✓	
JZWCMB	Immunoassay	✓		
	GC/MS	✓	✓	
K2MV7N	Immunoassay	✓		
	GC/MS	✓	✓	
	LC/MS/MS		✓	
K4B849	Immunoassay	✓		
	GC/MS		✓	
K93GD8	Immunoassay	✓		
	GC/MS	✓	✓	
K9KNEH	Immunoassay	✓		
	GC/MS	✓	✓	
KH9E2B	GC/MS	✓	✓	
KQM3ZH	GC/MS	✓	✓	
	LC/MS/MS	✓	✓	
L8NAP6	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
L9YCDN	GC/MS		✓	✓
	Immunoassay	✓		
LB8M98	Immunoassay	✓		
	GC/MS		✓	
	LC/QTOF		✓	
LEMY79	Immunoassay	✓		
	LC/MS/MS		✓	
LFYTNU	Immunoassay	✓		
	GC/MS		✓	

TABLE 1E: Methods of Analysis - Item 1

WebCode	Method	Screening	Confirmatory	Quantitation
M4NJYJ	LC/MS/MS	✓	✓	
MAC2EF	LC/MS/MS	✓	✓	
MN9H4E	LC/MS/MS		✓	
MV88JW	LC/MS/MS	✓	✓	
MZNARN	Immunoassay	✓		
	GC/MS		✓	
N8F8UG	Immunoassay	✓		
	GC/MS	✓	✓	
ND7KUJ	Immunoassay	✓		
NTKKQA	Immunoassay	✓		
	GC/MS		✓	
NWVX43	Immunoassay	✓		
	LC/MS/MS		✓	✓
P9ACNF	Immunoassay	✓		
	GC/MS	✓	✓	
PMQ94C	Immunoassay	✓		
	GC/MS	✓		
	LC/MS/MS		✓	
PPEJ2W	Immunoassay	✓		
	LC/MS/MS		✓	
	GC/MS		✓	
QDF7HB	Immunoassay	✓		
	LC/MS/MS		✓	
	GC/MS	✓		
QTDHQF	Immunoassay	✓		
R3CDMP	LC/MS/MS		✓	
	QTOF Screen	✓		
RB8BEY	Immunoassay	✓		
	LC/MS/MS		✓	
RGXRN4	Immunoassay	✓		
	GC/MS		✓	
RKXX6V	Immunoassay	✓		
	GC/MS	✓	✓	
	LC/MS/MS	✓	✓	
RNVEHP	Immunoassay	✓		
	GC/MS		✓	
RRYDTG	LC/MS/MS	✓		
	LC/MS/MS		✓	
RTMPP2	Immunoassay	✓		
	GC/MS	✓	✓	

TABLE 1E: Methods of Analysis - Item 1

WebCode	Method	Screening	Confirmatory	Quantitation
RTQ7R8	LC/MS/MS	✓		
	GC/MS		✓	
RX3C48	GC/MS	✓		
	LC/MS/MS		✓	
TAU3LP	Immunoassay	✓		
	GC/MS		✓	
	LC/MS		✓	
TNQKBN	Immunoassay	✓		
	GC/MS		✓	✓
UFU7PT	Immunoassay	✓		
	LC/MS/MS		✓	
	GC/MS		✓	
UHGJR6	LC/MS	✓		
	LC/MS/MS		✓	
UN8T34	Immunoassay	✓		
	GC/MS		✓	
UPZPPC	Immunoassay	✓		
	GC/MS		✓	
UXXE92	GC/MS	✓	✓	
VPXGX4	Orbitrap LC/MS	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
VZFXNP	Immunoassay	✓		
	LC/QTOF/MS	✓	✓	
	GC/MS	✓	✓	
WRVJXP	Immunoassay	✓		
	LC/MS/MS		✓	
	GC/MS		✓	
WRX8F4	Immunoassay	✓		
	LC/MS		✓	
X8P73W	LC/MS/MS	✓	✓	
XL9RNB	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
XUHF3A	GCMS and HPLC-DAD	✓		
XXJG6R	Immunoassay	✓		
	GC/MS		✓	
YADXR8	Immunoassay	✓		
	GC/MS	✓	✓	
YDD9M8	Immunoassay	✓		
	GC/MS		✓	

TABLE 1E: Methods of Analysis - Item 1

WebCode	Method	Screening	Confirmatory	Quantitation
YVQM63	Immunoassay	✓		
	LC/MS/MS		✓	
	GC/MS	✓		
YZP4HW	Immunoassay	✓		
Z2B6X4	Immunoassay	✓		
	GC/MS		✓	
Z8YRQN	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
ZCEKJ3	LC/MS	✓	✓	
ZE3WGM	LC-HR-MS/MS	✓		
	GC/MS		✓	
ZMW2CA	Immunoassay	✓		
ZNPVCY	Immunoassay	✓		
	GC/MS	✓	✓	

Response Summary for Item 1 **Participants: 122**

	Screening	Confirmatory	Quantitation
Immunoassay:	96	0	0
GC/MS:	32	81	2
LC/MS:	2	5	1
LC/MS/MS:	22	48	1
Other:	8	10	0

Additional Comments for Item 1

TABLE 1F

WebCode	Item Comments
32QB9E	istds for GCMS=ethinamate and cyproheptadine. istd for LCMSMS= diazepam-D5.
3U6DH7	Codiene D3 used as Internal Standard
3YXG9P	Internal standards - Methohexital, Mepivacaine and Nalorphine
44AMKP	LC-QTOF was used to confirm all drugs. GC/MS, only hydrocodone std was injected.
489YKV	Nalorphine utilized as an internal standard.
4RVPFL	The internal standard used was mepivacaine.
63A4ZY	Nalorphine used as Internal Standard for Opiate Extraction
662XYN	Opiates assay cutoff: 10 ng/mL. Oxycodone assay cutoff: 10 ng/mL.
69XLFV	No confirmatory testing performed.
6CXXCV	Hydrocodone cutoff 50 ng/mL. Hydromorphone cutoff 50 ng/mL.
7UWAKW	Opiate assay cut-off 300ng/ml. Creatinine normal.
86PFPE	Internal Standard: Mepivacaine, Nalorphine
8VK9AE	Mepivacaine and nalorphine were used as internal standards
99JR2Q	Alere iCassette (THC) test device was used to screen for THC, referred to in 1-4 [Table 1E: Methods of Analysis] as rapid chromatographic immunoassay. The cutoff concentration for the assay is 50 ng/mL.
9TE3AY	Tests performed by [Examiner]
A7WEYE	internal standards: mepivacaine, nalorphine, THCA d9
AFL3UG	internal standard: mepivacaine, nalorphine
B3PED8	internal standards mepivacaine and nalorphine
BAERGG	The Immunoassay hit presumptive positive on opiates, oxycodone/oxymorphone and amphetamines. Our lab is currently only able to quantitate and confirm amphetamine. After it was run on the LCMSMS, no amphetamine was detected in the sample.
BZKQXH	Internal standards used for the LC-QTOF method: Fentanyl-D5 Imipramine-D3 MDMA-D5 Methaqualone-D7 Triazolam-D4
C9CNZB	Internal standards used: Mepivacaine and nalorphine.
D2BN3U	Testing performed by [Examiner]
DG4L34	Internal standards used include nalorphine and mepivacaine
DNLUPF	Nalorphine as Internal Standard. Hydrocodone 50ng/mL method capability. Hydromorphone 50ng/mL method capability.
EZR39H	Hexobarbital and phenyltoloxamine added as internal reference material. Norhydrocodone not confirmed. Reference material not available.
F2HMB9	Internal Standard for LC/MS/MS screen - mepivacaine. Internal Standard for GC/MS - mepivacaine/nalorphine.

TABLE 1F: Additional Comments for Item 1

WebCode	Item Comments
FL6GY9	Mepivacaine: Internal Standard
FVRDZA	Internal Standards = mepivcaine and nalorphine
GGUJ8F	Enzyme hydrolysis was performed on the extractions done on 04/13/21 and 04/15/21. The internal reference materials used were Phenyltoloxamine for the base fraction and the Hexobarbital for the acid fraction. Unconfirmed Norhydrocodone detected in the base fraction. Possible Caffeine noted in both the acid and base fractions.
HGNN2F	Internal standards used: Phenyltoloxamine and Heptabarbital. norhydrocodone was detected, but not confirmed.
J9MV46	The metabolite, norhydrocodone is not routinely tested for or reported at the lab.
JCQTEX	Internal standard used for GCMS and LCMSMS analysis is mepivacaine. Nalorphine was also used as an internal standard for gcms analysis. Hydromorphone was butylated for GCMS analysis.
JZWCMB	n-Propylamphetamine, Mepivacaine, and Hexobarbital internal standards utilized for GC/MS screening/confirmation. Hydromorphone confirmation quite challenging due to very similar retention times (coelution) between Hydrocodone/Norhydrocodone/Hydromorphone, many shared ions/extremely similar spectra between Norhydrocodone/Hydromorphone, and exceptionally high drug concentrations of Hydrocodone/Norhydrocodone with slight Hydromorphone concentration--not consistent with real-world samples.
K93GD8	Internal Standards: Mepivacaine, Nalorphine-diTMS. Substances indicated: Methamphetamine, Methamphetamine-acetyl, Diphenhydramine, Acetaminophen, 4-methoxy-N-methyl-morphinan-3-ol-6-one, N-acetyl-norhydrocodone, Etizolam.
K9KNEH	Opiate Confirmation: Nalorphine used as Internal Standard
L8NAP6	Internal Standards = mepivacaine, nalorphine
L9YCDN	Drugs included in the opiate mixed standard include -Dihydrocodeine, Codeine, Morphine, and 6-monoacetylmorphine. Drugs included in the mixed internal standard include - DHC- D6 and D3 compounds for each Morphine, Codeine and 6Mam. Calibration range used for 6Mam is 5ng/mL - 200ng/mL. Calibration range for HDC, Morphine and Codeine is 50ng/mL - 2ug/mL.
N8F8UG	Nalorphine used for internal standard in opiate confirmation. Only drugs on the [State] Police Drug Panel reported.
NTKKQA	* Internal standard: flurazepam / estazolam. * Sample preparation: L/L extraction. * The final extraction is derivatized with BSTFA and injected in GC-MS. * LOD hydrocodone / hydromorphone: 250 ng/mL. LOD norhydrocodone: No data.
NWVX43	Hydromorphone Internal Standard: Oxycodone-d6. LOD/LOQ: 10ng/mL. Hydrocodone Internal Standard: Oxycodone-d6. LOD: 10ng/mL.
P9ACNF	Nalorphine used as internal standard for opiate confirmation
PMQ94C	Hydrocodone is known to cross-react with our Oxycodone ELISA kit. LC/MS/MS LODs for Hydrocodone & Hydromorphone are 10 ng/mL, each.
PPEJ2W	Internal Standard for GC/MS Testing: mepivacaine and nalorphine. Internal Standard for LC/MS/MS Testing: mepivacaine.
QDF7HB	IS: d4-buprenorphine, d3-hydromorphone, d3-oxycodone
RRYDTG	Cut off value for hydrocodone and hydromorphone is 50 ng/mL
RTMPP2	N-Propylamphetamine, Mepivacaine, and Hexobarbital internal standards used for GC/MS testing. Hydromorphone ions present but unable to confirm due to coelution/interference with Norhydrocodone/Hydrocodone.

TABLE 1F: Additional Comments for Item 1

WebCode	Item Comments
RTQ7R8	We do not currently have a confirmatory method for hydromorphone in urine. Sample also screened for GHB by LCMSMS and was negative.
RX3C48	OPIOIDS DETECTED IN ITEM 1: Hydrocodone and its metabolites hydromorphone and norhydrocodone were detected. Norhydrocodone was identified searching in GC-MS and LC-MS-MS libraries, since the lab does not have reference material available). Internal standard: Flurazepam and aprobarbital. LoD: 10 ng/mL.
TAU3LP	Internal standards: mepivacaine, nalorphine
TNQKBN	Hydrocone-D3 for hydrocodone quantitation and Morphine-D3 for the qualitative hydromorphone.
UHGJR6	ESTAZOLAM WAS USED AS AN INTERNAL STANDARD.
UN8T34	Basic Internal Reference Material is Phenyltoloxamine. Acidic Internal Reference Material is Heptabarbital.
VZFXNP	D3 Morphine and D3 Hydromorphone as internal standards in the QTOF
WRVJXP	LCMSMS and GCMS Internal Standard - mepivacaine. GCMS Internal Standard - nalorphine
WRX8F4	Hydrocodone cutoff 50 ng/mL. Hydromorphone cutoff 50 ng/mL.
XL9RNB	Codeine D3 used as internal Standard
XUHF3A	Sample was extracted using Dichloromethane, partitioned into Acidic and Basic extracts and analysed on GCMS and HPLC-DAD.
XXJG6R	Confirmatory ISTD: NPA and SKF. Current LC/MS-MS method for the confirmation of oxycodone/oxymorphone is not validated for urine. Confirmation test used was a basic drug confirmation by GC/MS.
YVQM63	Hydrocodone cross reacts with Oxycodone assay. Internal Standard LCMSMS: d4-Buprenorphine, d3-Hydromorphone, d3-Oxycodone. Internal Standard GCMS: Phenyltoloxamine.
Z8YRQN	Mepivacaine is the internal standard used to determine relative retention times for the drugs found. Hydromorphone was confirmed by GC/MS. Hydrocodone was confirmed by GC/MS and LC/MS/MS
ZE3WGM	Mepivacaine
ZMW2CA	Opiates assay cut-off 300ng/ml. Creatinine normal.

Screening Results - Item 2

TABLE 2A

Item Scenario:

Case 2: A 45 year-old female 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: Oxazepam (800 ng/mL)
Nordiazepam (210 ng/mL)
Temazepam (160 ng/mL)

WebCode	Screening Results
2MAT36	Benzodiazepines
32QB9E	Nordiazepam, Oxazepam, Temazepam
3GJZ7W	benzodiazepines (immunoassay) nordiazepam (gc/ms)
3U6DH7	Benzodiazepines
3YXG9P	Benzodiazepines
44AMKP	Benzodiazepine
489YKV	Benzodiazepines
4LRJ6N	Benzodiazepines: Nordiazepam; Oxazepam; temazepam
4RVPFL	benzodiazepines
4TNFP7	Benzodiazepines /(Nordazepam -Oxazepam)
63A4ZY	Nordiazepam Oxazepam Temazepam
662XYN	Benzodiazepines
69XLFV	Benzodiazepines
6CXXCV	Benzodiazepines Cannabinoids
6V8URL	benzodiazepines temazepam nordiazepam oxazepam
6VCCUQ	Benzodiazepines
78ZVML	Benzodiazepines
7UWAKW	Benzodiazepines
82P8HJ	Benzodiazepines
86PFPE	Certain Benzodiazepines

TABLE 2A: Screening Results - Item 2

WebCode	Screening Results
8VK9AE	Positive for benzodiazepines Positive for nordiazepam and temazepam
99JR2Q	Oxazepam, Nordiazepam, Temazepam
9TE3AY	Benzodiazepines
A7WEYE	benzodiazepines, oxazepam, temazepam, nordiazepam
AAWKDK	Nordiazepam, Temazepam, Oxazepam
AB7THX	BENZODIAZEPINE
ACKWEB	Benzodiazepines class Buprenorphine class
AFL3UG	benzodiazepines
AKGREU	temazepam, oxazepam, nordazepam
ALALEJ	Benzodiazepines
AUJARH	Benzodiazepines
B3PED8	benzodiazepines
BAERGG	Benzodiazepines and Amphetamine
BZKQXH	Benzodiazepine
C7MC4Q	Nordiazepam Oxazepam Temazepam
C8HXWG	Benzodiazepine
C9CNZB	Nordiazepam Oxazepam Temazepam
CD8BWK	Benzodiacepines
CWGCQH	BENZODIAZEPINES
D2BN3U	Benzodiazepine
DG4L34	certain benzodiazepines
DNLUPF	Benzodiazepines
DPTAX7	N/A confirmation only
E9PUER	Benzodiazepines, Nordiazepam, Temazepam

TABLE 2A: Screening Results - Item 2

WebCode	Screening Results
EAZW3B	Benzodiazepines, Amphetamine
EFJ2VC	Benzodiazepines
ERZQUG	Benzodiazepines
EZR39H	Benzodiazepines
F2HMB9	nordiazepam, temazepam, oxazepam
FBPKYC	benzodiazepines
FL6GY9	certain benzodiazepines
FUZC2D	Benzodiazepine
FVRDZA	benzodiazepines (temazepam, nordiazepam, & oxazepam)
GGUJ8F	Benzodiazepines
GKURDC	benzodiazepines
HGNN2F	Benzodiazepines
HV6NVK	Nordiazepam Oxazepam Temazepam
J9MV46	benzodiazepines
JCQTEX	benzodiazepines
JG68JR	BENZODIAZEPOINES
JHXZEB	Nordiazepam, Oxazepam, Temazepam
JZHL2L	Benzodiazepines
JZWCMB	ELISA Benzodiazepines
K2MV7N	Oxazepam, Nordiazepam, Temazepam
K4B849	barbiturates, benzodiazepines
K93GD8	Benzodiazepines
K9KNEH	Benzodiazepine Class/Nordiazepam/Temazepam
KH9E2B	Nordazepam; Oxazepam; Temazepam
KQM3ZH	Nordiazepam, temazepam, oxazepam
L8NAP6	certain benzodiazepines
L9YCDN	Benzodiazepines

TABLE 2A: Screening Results - Item 2

WebCode	Screening Results
LB8M98	Benzodiazepine
LEMY79	benzodiazepines
LFYTNU	Benzodiazepines
M4NJYJ	nordiazepam, oxazepam, & temazepam
MAC2EF	nordiazepam, oxazepam, temazepam
MN9H4E	Nordiazepam, Oxazepam, Temazepam
MV88JW	diphenhydramine oxazepam nordiazepam temazepam
MZNARN	benzodiazepines
N8F8UG	Benzodiazepines
ND7KUJ	Benzodiazepine
NTKKQA	Positive BENZODIAZEPINES
NWVX43	Benzodiazepines
P9ACNF	Benzodiazepines
PMQ94C	Benzodiazepines
PPEJ2W	Benzodiazepines
QDF7HB	benzodiazepines
QTDHQF	Benzodiazepine
R3CDMP	Nordiazepam, Oxazepam, Temazepam
RB8BEY	Benzodiazepines, Zolpidem, Amphetamine
RGXRN4	BZO
RKXX6V	Benzodiazepines
RNVEHP	Benzodiazepines
RRYDTG	BENZODIAZEPINES : Nordiazepam Temazepam Oxazepam
RTMPP2	ELISA Benzodiazepines

TABLE 2A: Screening Results - Item 2

WebCode	Screening Results
RTQ7R8	nordiazepam, oxazepam, temazepam
RX3C48	Benzodiazepinas: Oxazepam, temazepam, nordazepam.
TAU3LP	benzodiazepines
TNQKBN	Benzodiazepines
UFU7PT	benzodiazepines
UHGJR6	Temazepam Oxazepam Nordazepam
UN8T34	Benzodiazepines
UPZPPC	Benzodiazepines
UXXE92	Nordazepam; Oxazepam
VPXGX4	Nordiazepam Oxazepam Temazepam
VZFXNP	Desmethyldiazepam Temazepam Oxazepam
WRVJXP	benzodiazepines
WRX8F4	Benzodiazepines
X8P73W	nordiazepam, oxazepam, temazepam
XL9RNB	Bnzodiazepines
XUHF3A	Flunitrazepam and Temazepam
XXJG6R	Benzodiazepines
YADXR8	Benzodiazepines
YDD9M8	BENZODIAZEPINES 1
YVQM63	Benzodiazepines
YZP4HW	Benzodiazepine
Z2B6X4	Benzodiazepines
Z8YRQN	benzodiazepines
ZCEKJ3	oxazepam, temazepam, nordazepam

TABLE 2A: Screening Results - Item 2

WebCode	Screening Results
ZE3WGM	Nordiazepam, Oxazepam, Temazepam
ZMW2CA	Benzodiazepines
ZNPVCY	Benzodiazepines

Screening Response Summary for Item 2	Participants: 122
Benzodiazepines:	94
Oxazepam/Nordiazepam/Temazepam:	38
Other drugs/metabolites detected:	8
No drugs/metabolites detected Utilizing Screening Methods:	0

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:

Case 2: A 45 year-old female 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: Oxazepam (800 ng/mL)
Nordiazepam (210 ng/mL)
Temazepam (160 ng/mL)

What drugs/metabolites were detected in Item 2?

WebCode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
2MAT36	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
32QB9E	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
3GJZ7W	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
3U6DH7	Oxazepam	✓			
	Nordazepam	✓			
	Temazepam	✓			
3YXG9P	Nordiazepam	✓			
44AMKP	Nordiazepam	✓			
	Temazepam	✓			
489YKV	Oxazepam				
	Nordiazepam				
	Temazepam				
4LRJ6N	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
4RVPFL	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
4TNFP7	Oxazepam	✓			
	Noradazepam	✓			

TABLE 2B: Confirmatory Results - Item 2

What drugs/metabolites were detected in Item 2?					
WebCode	**Analyte Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
63A4ZY	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
6CXXCV	Oxazepam	✓			
	N-Desmethyldiazepam	✓			
	Temazepam	✓			
6V8URL	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
6VCCUQ	No drugs/metabolites detected utilizing confirmatory methods.				
78ZVML	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
82P8HJ	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
86PFPE	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
8VK9AE	Oxazepam				
	Nordiazepam	✓			
	Temazepam	✓			
99JR2Q	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
A7WEYE	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
AAWKDK	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
AB7THX	Oxazepam	✓			

TABLE 2B: Confirmatory Results - Item 2

What drugs/metabolites were detected in Item 2?					
WebCode	**Analyte Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
ACKWEB	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
AFL3UG	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
AKGREU	Oxazepam		849		ng/ml
	Nordazepam		143		ng/ml
	Temazepam		184		ng/mL
ALALEJ	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
AUJARH	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
B3PED8	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
BZKQXH	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
C7MC4Q	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
C8HXWG	Nordiazepam				
	Temazepam	✓			
C9CNZB	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
CD8BWK	Oxazepam	✓			
	Nordazepam	✓			
	Temazepam	✓			

TABLE 2B: Confirmatory Results - Item 2

What drugs/metabolites were detected in Item 2?					
WebCode	**Analyte Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
CWGCQH	Oxazepam	✓			
	Nordiazepam	✓			
DG4L34	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
DNLUPF	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
DPTAX7	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
E9PUER	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
EAZW3B	No drugs/metabolites detected utilizing confirmatory methods.				
EFJ2VC	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
ERZQUG	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
EZR39H	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
F2HMB9	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
FBPKYC	Oxaxepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			

TABLE 2B: Confirmatory Results - Item 2

What drugs/metabolites were detected in Item 2?					
WebCode	**Analyte Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
FL6GY9	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
FUZC2D	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
FVRDZA	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
GGUJ8F	Nordiazepam	✓			
	Temazepam	✓			
GKURDC	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
HGNN2F	Oxazepam	✓			
	Nordiazepam	✓			
HV6NVK	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
J9MV46	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
JCQTEX	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
JG68JR	Oxazepam	✓			
	Nordazepam	✓			
	Temazepam	✓			
JHXZEB	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			

TABLE 2B: Confirmatory Results - Item 2

What drugs/metabolites were detected in Item 2?					
WebCode	**Analyte Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
JZHL2L	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
JZWCMB	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
K2MV7N	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
K4B849	Oxazepam	✓			
	Nordiazepam	✓			
K93GD8	Nordiazepam	✓			
K9KNEH	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
KH9E2B	Oxazepam	✓			
	Nordazepam	✓			
	Temazepam	✓			
KQM3ZH	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
L8NAP6	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
L9YCDN	Oxazepam		451		ng/mL
	Nordiazepam		177		ng/mL
	Temazepam		129		ng/mL
LB8M98	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
LEMY79	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			

TABLE 2B: Confirmatory Results - Item 2

What drugs/metabolites were detected in Item 2?					
WebCode	**Analyte Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
LFYTNU	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
M4NJYJ	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
MAC2EF	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
MN9H4E	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
MV88JW	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
	diphenhydramine	✓			
MZNARN	Oxazepam	✓			
	Nordazepam	✓			
	Temazepam	✓			
N8F8UG	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
NTKKQA	Oxazepam	✓			
	Nordazepam	✓			
	Temazepam	✓			
NWVX43	Oxazepam		689	138	ng/mL
	Nordiazepam		183	37	ng/mL
	Temazepam		147	29	ng/mL
P9ACNF	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			

TABLE 2B: Confirmatory Results - Item 2

What drugs/metabolites were detected in Item 2?					
WebCode	**Analyte Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
PMQ94C	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
PPEJ2W	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
QDF7HB	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
R3CDMP	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
RB8BEY	No drugs/metabolites detected utilizing confirmatory methods.				
RGXRN4	Oxazepam	✓			
	Nordiazepam	✓			
RKXX6V	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
RNVEHP	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
RRYDTG	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
RTMPP2	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
RTQ7R8	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			

TABLE 2B: Confirmatory Results - Item 2

What drugs/metabolites were detected in Item 2?					
WebCode	**Analyte Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
RX3C48	Oxazepam	✓			
	Nordazepam	✓			
	Temazepam	✓			
TAU3LP	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
TNQKBN	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
UFU7PT	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
UHGJR6	Oxazepam	✓			
	Nordazepam	✓			
	Temazepam	✓			
UN8T34	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
UPZPPC	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
UXXE92	Oxazepam	✓			
	Nordazepam	✓			
VPXGX4	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
VZFXNP	Oxazepam		630	15%	ug/L
	Desmethyldiazepam		160	15%	ug/L
	Temazepam		140	15%	ug/L
WRVJXP	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			

TABLE 2B: Confirmatory Results - Item 2

What drugs/metabolites were detected in Item 2?					
WebCode	**Analyte Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
WRX8F4	Oxazepam	✓			
	N-Desmethyldiazepam	✓			
	Temazepam	✓			
X8P73W	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
XL9RNB	Oxazepam	✓			
	Nordazepam	✓			
	Temazepam	✓			
XUHF3A	Temazepam	✓			
	Flunitrazepam	✓			
XXJG6R	Oxazepam	✓			
	Nordiazepam	✓			
YADXR8	Oxazepam	✓			
	Nordiazpam	✓			
	Temazepam	✓			
YDD9M8	Oxazepam	✓			
	Nordazepam	✓			
	Temazepam	✓			
YVQM63	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
Z2B6X4	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
Z8YRQN	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			
ZE3WGM	Oxazepam	✓			
	Nordiazepam	✓			
	Temazepam	✓			

TABLE 2B: Confirmatory Results - Item 2

What drugs/metabolites were detected in Item 2?

WebCode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
ZNPVCY	Oxazepam	✓			
	Nordizepam	✓			
	Temazepam	✓			

Confirmatory Response Summary for Item 2 **Participants: 111**

Oxazepam:	102 (91.9%)
Nordiazepam:	106 (95.5%)
Temazepam:	98 (88.3%)
Other Identified Drugs/Metabolites:	2 (1.8%)
No Drugs/Metabolites Detected Utilizing Confirmatory Methods:	3 (2.7%)

Raw Data - Item 2

TABLE 2C

Item 2 Raw Data - Oxazepam
Preparation concentration: (800 ng/mL)

WebCode	List of Raw Data determinations (ng/mL)	
ACKWEB	805.0	
AKGREU	849.0	
L9YCDN	451.6	451.0
LEMY79	867.0	
NWVX43	689.0	
VZFXNP	630.0	

Statistical Analysis for Item 2 - Oxazepam

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 - Nordiazepam
Preparation concentration: (210 ng/mL)

WebCode	List of Raw Data determinations (ng/mL)	
ACKWEB	203.0	
AKGREU	143.0	
L9YCDN	178.9	176.7
LEMY79	191.0	
NWVX43	183.0	
VZFXNP	160.0	

Statistical Analysis for Item 2 - Nordiazepam

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 - Temazepam
Preparation concentration: (160 ng/mL)

WebCode	List of Raw Data determinations (ng/mL)	
ACKWEB	160.0	
AKGREU	184.0	
L9YCDN	129.2	129.3
LEMY79	142.0	
NWVX43	147.0	
VZFXNP	140.0	

Statistical Analysis for Item 2 - Temazepam

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

WebCode	Quantitative Reporting Procedures *If quantitative analysis was performed, the reported concentrations are:*
ACKWEB	A single determination.
AKGREU	A single determination.
L9YCDN	The mean of duplicate/several determinations.
NWVX43	A single determination.
TNQKBN	A single determination.
VZFXNP	The mean of duplicate/several determinations.

Response Summary for Item 2	Participants: 6
A single determination:	4 (66.7%)
The mean of duplicate/several determinations:	2 (100.0%)
Other:	0 (0.0%)

Methods of Analysis - Item 2

TABLE 2E - Item 2

WebCode	Method	Screening	Confirmatory	Quantitation
2MAT36	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
32QB9E	Immunoassay	✓		
	GC/MS	✓		
	LC/MS/MS	✓	✓	
3GJZ7W	Immunoassay	✓		
	GC/MS	✓	✓	
3U6DH7	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
3YXG9P	Immunoassay	✓		
	GC/MS	✓	✓	
44AMKP	Immunoassay	✓		
	LC-QTOF		✓	
	GC/MS		✓	
489YKV	Immunoassay	✓		
	GC/MS		✓	
4LRJ6N	Immunoassay	✓		
	GC/MS		✓	
4RVPFL	Immunoassay	✓		
	LC/MS/MS		✓	
	GC/MS		✓	
4TNFP7	GC/MS	✓	✓	
63A4ZY	Immunoassay	✓		
	GC/MS	✓	✓	
662XYN	Immunoassay	✓		
69XLFV	Immunoassay	✓		
6CXXCV	Immunoassay	✓		
	LC/MS		✓	
	GC/MS		✓	
6V8URL	Immunoassay	✓		
	GC/MS	✓	✓	
	LC/MS/MS	✓	✓	
6VCCUQ	Immunoassay	✓		
78ZVML	Immunoassay	✓		
	GC/MS		✓	
7UWAKW	Immunoassay	✓		

TABLE 2E: Methods of Analysis - Item 2

WebCode	Method	Screening	Confirmatory	Quantitation
82P8HJ	Immunoassay	✓		
	GC/MS		✓	
86PFPE	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
8VK9AE	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS	✓	✓	
99JR2Q	LC/MS/MS	✓		
	GC/MS		✓	
	Rapid Chromatographic Immunoassay	✓		
9TE3AY	Immunoassay	✓		
A7WEYE	Immunoassay	✓		
	LC/MS/MS	✓	✓	
	GC/MS		✓	
AAWKDK	LC/MS/MS	✓	✓	
AB7THX	Immunoassay	✓		
	GC/MS		✓	
	LC/MS QTOF		✓	
ACKWEB	Immunoassay	✓		
	LC/MS/MS		✓	
AFL3UG	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
AKGREU	LC/MS/MS	✓		
	LC-HRMS	✓	✓	
	LC/MS			✓
	GC/MS		✓	
ALALEJ	Immunoassay	✓		
	LC-QTOF		✓	
AUJARH	Immunoassay	✓		
	GC/MS		✓	
B3PED8	Immunoassay	✓		
	GC/MS	✓	✓	
	LC/MS/MS	✓	✓	
BAERGG	Immunoassay	✓		
	LC/MS/MS		✓	
BZKQXH	Immunoassay	✓		
	LC-QTOF		✓	
C7MC4Q	LC/MS/MS	✓	✓	
C8HXWG	Immunoassay	✓		
	LC-QTOF		✓	

TABLE 2E: Methods of Analysis - Item 2

WebCode	Method	Screening	Confirmatory	Quantitation
C9CNZB	LC-High Resolution Tandem Mass Spectrometry	✓		
	GC/MS		✓	
CD8BWK	Immunoassay	✓		
	GC/MS		✓	
CWGCQH	Immunoassay	✓		
	GC/MS		✓	
D2BN3U	Immunoassay	✓		
DG4L34	LC/MS		✓	
	GC/MS		✓	
	Immunoassay	✓		
DNLUPF	Immunoassay	✓		
	GC/MS		✓	
DPTAX7	LC-TOFMS		✓	
E9PUER	Immunoassay	✓		
	GC/MS	✓	✓	
EAZW3B	Immunoassay	✓		
	LC/MS/MS		✓	
EFJ2VC	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
ERZQUG	Immunoassay	✓		
	GC/MS	✓		
	LC/MS/MS		✓	
EZR39H	Immunoassay	✓		
	GC/MS		✓	
F2HMB9	Immunoassay	✓		
	GC/MS	✓	✓	
	LC/MS/MS	✓	✓	
FBPKYC	Immunoassay	✓		
	GC/MS		✓	
FL6GY9	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
FUZC2D	Immunoassay	✓		
	LC-QTOF		✓	
FVRDZA	Immunoassay	✓		
	GC/MS	✓	✓	
	LC/MS/MS	✓	✓	
GGUJ8F	Immunoassay	✓		
	GC/MS	✓	✓	

TABLE 2E: Methods of Analysis - Item 2

WebCode	Method	Screening	Confirmatory	Quantitation
GKURDC	Immunoassay	✓		
	GC/MS		✓	
HGNN2F	GC/MS		✓	
	Immunoassay	✓		
HV6NVK	LC/MS/MS	✓	✓	
	GC/MS	✓		
J9MV46	Immunoassay	✓		
	LC/MS/MS		✓	
	GC/MS		✓	
JCQTEX	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
JG68JR	Immunoassay	✓		
	GC/MS		✓	
JHXZEB	LC/MS/MS	✓	✓	
JZHL2L	Immunoassay	✓		
	GC/MS		✓	
JZWCMB	Immunoassay	✓		
	GC/MS	✓	✓	
K2MV7N	Immunoassay	✓		
	GC/MS	✓	✓	
	LC/MS/MS		✓	
K4B849	Immunoassay	✓		
	GC/MS		✓	
K93GD8	Immunoassay	✓		
	GC/MS		✓	
K9KNEH	Immunoassay	✓		
	GC/MS	✓	✓	
KH9E2B	GC/MS	✓	✓	
KQM3ZH	GC/MS	✓	✓	
	LC/MS/MS	✓	✓	
L8NAP6	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
L9YCDN	Immunoassay	✓		
	GC/MS		✓	✓
LB8M98	Immunoassay	✓		
	GC/MS		✓	
	LC/QTOF		✓	
LEMY79	Immunoassay	✓		
	LC/MS/MS		✓	

TABLE 2E: Methods of Analysis - Item 2

WebCode	Method	Screening	Confirmatory	Quantitation
LFYTNU	Immunoassay	✓		
	GC/MS		✓	
M4NJYJ	LC/MS/MS	✓	✓	
MAC2EF	LC/MS/MS	✓	✓	
MN9H4E	LC/MS/MS		✓	
MV88JW	LC/MS/MS	✓	✓	
MZNARN	Immunoassay	✓		
	LC/MS		✓	
N8F8UG	Immunoassay	✓		
	GC/MS	✓	✓	
ND7KUJ	Immunoassay	✓		
NTKKQA	Immunoassay	✓		
	GC/MS		✓	
NWVX43	Immunoassay	✓		
	LC/MS/MS		✓	✓
P9ACNF	Immunoassay	✓		
	GC/MS	✓	✓	
PMQ94C	Immunoassay	✓		
	GC/MS	✓		
	LC/MS/MS		✓	
PPEJ2W	Immunoassay	✓		
	LC/MS/MS		✓	
	GC/MS		✓	
QDF7HB	Immunoassay	✓		
	LC/MS/MS		✓	
	GC/MS	✓		
QTDHQF	Immunoassay	✓		
R3CDMP	LC/MS/MS		✓	
	QTOF Screen	✓		
RB8BEY	Immunoassay	✓		
	LC/MS/MS		✓	
RGXRN4	Immunoassay	✓		
	GC/MS		✓	
RKXX6V	Immunoassay	✓		
	GC/MS	✓	✓	
	LC/MS/MS	✓	✓	
RNVEHP	Immunoassay	✓		
	GC/MS		✓	
RRYDTG	LC/MS/MS	✓		
	LC/MS/MS		✓	

TABLE 2E: Methods of Analysis - Item 2

WebCode	Method	Screening	Confirmatory	Quantitation
RTMPP2	Immunoassay	✓		
	GC/MS	✓	✓	
RTQ7R8	LC/MS/MS	✓		
	GC/MS		✓	
RX3C48	GC/MS	✓		
	LC/MS/MS		✓	
TAU3LP	Immunoassay	✓		
	GC/MS		✓	
	LC/MS		✓	
TNQKBN	Immunoassay	✓		
	GC/MS		✓	
UFU7PT	Immunoassay	✓		
	LC/MS/MS		✓	
	GC/MS		✓	
UHGJR6	LC/MS	✓		
	LC/MS/MS		✓	
UN8T34	Immunoassay	✓		
	GC/MS		✓	
UPZPPC	Immunoassay	✓		
	LC/MS/MS		✓	
UXXE92	GC/MS	✓	✓	
VPXGX4	Orbitrap LC/MS	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
VZFXNP	Immunoassay	✓		
	LC/MS/MS		✓	✓
WRVJXP	Immunoassay	✓		
	LC/MS		✓	
	GC/MS		✓	
WRX8F4	Immunoassay	✓		
	LC/MS		✓	
X8P73W	LC/MS/MS	✓	✓	
XL9RNB	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
XUHF3A	GCMS and HPLC-DAD	✓		
XXJG6R	Immunoassay	✓		
	GC/MS		✓	
YADXR8	Immunoassay	✓		
	GC/MS	✓	✓	

TABLE 2E: Methods of Analysis - Item 2

WebCode	Method	Screening	Confirmatory	Quantitation
YDD9M8	Immunoassay	✓		
	GC/MS		✓	
YVQM63	Immunoassay	✓		
	LC/MS/MS		✓	
	GC/MS	✓		
YZP4HW	Immunoassay	✓		
Z2B6X4	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
Z8YRQN	Immunoassay	✓		
	LC/MS/MS		✓	
	GC/MS		✓	
ZCEKJ3	LC/MS	✓	✓	
ZE3WGM	LC-HR-MS/MS	✓		
	GC/MS		✓	
ZMW2CA	Immunoassay	✓		
ZNPVCY	Immunoassay	✓		
	GC/MS	✓	✓	

Response Summary for Item 2 **Participants: 122**

	Screening	Confirmatory	Quantitation
Immunoassay:	96	0	0
GC/MS:	29	77	1
LC/MS:	2	7	1
LC/MS/MS:	21	51	2
Other:	7	9	0

Additional Comments for Item 2

TABLE 2F

WebCode	Item Comments
32QB9E	istds for GCMS=ethinamate and cyproheptadine. istd for LCMSMS= diazepam-D5.
3U6DH7	Codeine D3 used as Internal Standard
3YXG9P	Internal standards - Methohexital, Mepivacaine and Nalorphine. Oxazepam Breakdown and weak Temazepam detected.
4RVPFL	The internal standard used was mepivacaine.
662XYN	Benzodiazepines assay cutoff: 20 ng/mL
69XLFV	No confirmatory testing performed.
6CXXCV	Screened positive for cannabinoids but confirmed on GC/MS as below the Limit of Quantitation on 04/19/21. Temazepam cutoff 50 ng/mL. Oxazepam cutoff 50 ng/mL. N-Desmethyldiazepam cutoff 50 ng/mL.
6VCCUQ	I was unable to perform a confirmatory test on this sample as some of our supplies are on backorder. It screened positive for benzodiazepines using a 12 panel dip card.
7UWAKW	Benzodiazepine assay cut-off 300ng/ml. Creatinine normal.
86PFPE	Internal Standard: Mepivacaine
8VK9AE	Mepivacaine was used as internal standard
99JR2Q	Alere iCassette (THC) test device was used to screen for THC, referred to in 2-4 [Table 2E: Methods of Analysis] as rapid chromatographic immunoassay. The cutoff concentration for the assay is 50 ng/mL.
9TE3AY	Tests performed by [Examiner]
A7WEYE	internal standards: mepivacaine, THCA d9
AFL3UG	internal standard: mepivacaine
B3PED8	internal standard mepivacaine
BAERGG	The Immunoassay hit presumptive positive on benzodiazepines and amphetamines. Our lab is currently only able to quantitate and confirm amphetamine. After it was run on the LCMSMS, no amphetamine was detected in the sample.
BZKQXH	Internal standards used for the LC-QTOF method: Fentanyl-D5 Imipramine-D3 MDMA-D5 Methaqualone-D7 Triazolam-D4
C9CNZB	Internal standard(s) used: Mepivacaine
D2BN3U	Testing performed by [Examiner]
DG4L34	Internal standard used is mepivacaine
DNLUPF	Prazepam and Temazepam-d5 - Internal Standards. Scope includes the following drugs at a 50ng/mL method capability: Alprazolam, alpha-Hydroxyalprazolam, Clonazepam, 7-Aminoclonazepam, Diazepam, Nordiazepam, Oxazepam, Temazepam, Lorazepam, Midazolam.
EAZW3B	Amphetamine not detected in LCMSMS confirmation run
EZR39H	Hexobarbital and phenyltoloxamine added as internal reference material.

TABLE 2F: Additional Comments for Item 2

WebCode	Item Comments
F2HMB9	Internal Standard for LC/MS/MS screen - mepivacaine. Internal Standard for GC/MS - mepivacaine.
FL6GY9	mepivacaine: internal standard
FVRDZA	Internal Standard = mepivacaine
GGUJ8F	The internal reference materials used were Phenyltoloxamine for the base fraction and the Hexobarbital for the acid fraction. Possible Oxazepam detected in the acid fraction. Possible Caffeine noted in both the acid and base fractions.
HGNN2F	Internal standards used: Phenyltoloxamine and Heptabarbital. Temazepam was detected but not confirmed.
JCQTEX	Internal standard used for GCMS and LCMSMS analysis was mepivacaine.
JZWCMB	n-Propylamphetamine, Mepivacaine, and Hexobarbital internal standards utilized for GC/MS screening/confirmation. Laboratory does not offer ethanol testing in urine samples.
K93GD8	Internal Standards: Mepivacaine, Nalorphine-diTMS
L8NAP6	Internal Standard = mepivacaine, nalorphine
L9YCDN	Benzo drugs included in the mixed standard - Nordiazepam, Diazepam, Temazepam, Oxazepam, Lorazepam and Midazolam. Benzo Internal Standards in the mixed internal standard solution - D5 for all aforementioned compounds except Midazolam and Lorazepam, a D4 Midazolam and D4 Lorazepam compound was used instead. Quantitation range is 10ng/mL - 500ng/mL.
N8F8UG	Only drugs on the [State] Police Drug Panel reported.
NTKKQA	* Internal standard: flurazepam / estazolam. * Sample preparation: L/L extraction. * The final extraction is derivatized with BSTFA and injected in GC-MS. * LOD nordazepam / oxazepam: 33 ng/mL. LOD temazepam: No data.
NWVX43	Nordiazepam Internal Standard: Nordiazepam-d5. LOD/LOQ: 10ng/mL. Oxazepam Internal Standard: Oxazepam-d5. LOD/LOQ: 10ng/mL. Temazepam Internal Standard: Temazepam-d5. LOD/LOQ: 10ng/mL.
PMQ94C	LC/MS/MS LOD is 10 ng/mL for Nordiazepam, Temazepam, and Oxazepam.
PPEJ2W	Internal Standard GC/MS Testing: mepivacaine. Internal Standard LC/MS/MS Testing: mepivacaine.
QDF7HB	IS: d5-diazepam
QTDHQF	Benzodiazepine was detected on the screening analysis (specific to Oxazepam) using immunoassay technique. Unfortunately confirmatory analysis for Benzodiazepine, the lab was not able to perform the analysis at this time.
RRYDTG	The benzodiazepines cut off value in urine confirmatory assay is 10ng/mL .
RTMPP2	N-Propylamphetamine, Mepivacaine, and Hexobarbital internal standards were used for GC/MS testing, and also Nordiazepam-D5 and Oxazepam-D5 for directed Benzodiazepines testing. Lab does not offer ethanol testing in urine samples.
RTQ7R8	Sample also screened for GHB by LCMSMS and was negative.
RX3C48	Internal standard: Flurazepam and aprobarbital. LoD: 10 ng/mL.
TAU3LP	Internal standard: mepivacaine
TNQKBN	Prazepam is the internal standard for the qualitative run.

TABLE 2F: Additional Comments for Item 2

WebCode	Item Comments
UHGJR6	ESTAZOLAM WAS USED AS AN INTERNAL STANDARD.
UN8T34	Basic Internal Reference Material is Phenyltoloxamine. Acidic Internal Reference Material is Heptabarbital.
WRVJXP	GCMS and LCMS Internal standard - mepivacaine
WRX8F4	N-Desmethyldiazepam cutoff 50 ng/mL. Oxazepam cutoff 50 ng/mL. Temazepam cutoff 50 ng/mL.
XL9RNB	Codeine D3 used as internal Standard
XUHF3A	Sample was extracted using Dichloromethane, partitioned into Acidic and Basic extracts and analysed on GCMS and HPLC-DAD.
XXJG6R	Confirmatory ISTD: NPA and SKF
YVQM63	Internal Standard LCMSMS: d5-Diazepam. Internal Standard GCMS: Phenyltoloxamine.
Z8YRQN	Mepivacaine is the internal standard used to determine relative retention times for the drugs found. Nordiazepam and temazepam were confirmed by GC/MS and LC/MS/MS. Oxazepam was confirmed by GC/MS.
ZE3WGM	Mepivacaine
ZMW2CA	Benzodiazepine assay cut-off 300ng/ml. Creatinine normal.

Screening Results - Item 3

TABLE 3A

Item Scenario:

Case 3: A 25-year-old female with a history of mental illness was found unresponsive in her bed by her roommates. She was taken to the hospital and a urine sample was collected approximately 2 hours after her admittance.

Item Contents and Preparation Concentration: Zolpidem (100 ng/mL)

WebCode	Screening Results
2MAT36	Benzodiazepines
32QB9E	Zolpidem
3GJZ7W	immunoassay negative zolpidem (gc/ms)
3U6DH7	No drugs detected utilizing screening methods.
44AMKP	Zolpidem
489YKV	No drugs detected utilizing screening methods.
4LRJ6N	Zolpidem
4RVPFL	No drugs detected utilizing screening methods.
4TNFP7	No drugs detected utilizing screening methods.
63A4ZY	Zolpidem
662XYN	No drugs detected utilizing screening methods.
69XLFV	No drugs detected utilizing screening methods.
6CXXCV	Zolpidem
6V8URL	zolpidem
6VCCUQ	No drugs detected utilizing screening methods.
78ZVML	Zolpidem
7UWAKW	No drugs detected utilizing screening methods.
82P8HJ	No drugs detected utilizing screening methods.
86PFPE	Zolpidem
8VK9AE	Positive for zolpidem
99JR2Q	Zolpidem
9TE3AY	No drugs detected utilizing screening methods.
A7WEYE	zolpidem
AAWKDK	Zolpidem

TABLE 3A: Screening Results - Item 3

WebCode	Screening Results
AB7THX	No drugs detected utilizing screening methods.
ACKWEB	Buprenorphine class
AFL3UG	zolpidem
AKGREU	zolpidem
ALALEJ	Zolpidem
AUJARH	Zolpidem
B3PED8	zolpidem
BAERGG	Zolpidem and Amphetamine
BZKQXH	Zolpidem
C7MC4Q	Zolpidem
C8HXWG	Zolpidem
C9CNZB	Zolpidem
CD8BWK	No drugs detected utilizing screening methods.
CWGCQH	No drugs detected utilizing screening methods.
D2BN3U	No drugs detected utilizing screening methods.
DG4L34	No drugs detected utilizing screening methods.
DNLUPF	Zolpidem
DPTAX7	N/A - confirmation only
E9PUER	Zolpidem
EAZW3B	Zolpidem, Amphetamine
EFJ2VC	Zolpidem
ERZQUG	Zolpidem
EZR39H	Zolpidem
F2HMB9	zolpidem
FBPKYC	No drugs detected utilizing screening methods.
FL6GY9	zolpidem
FUZC2D	Zolpidem
FVRDZA	zolpidem

TABLE 3A: Screening Results - Item 3

WebCode	Screening Results
GGUJ8F	Zolpidem
GKURDC	zolpidem
HGNN2F	Zolpidem
HV6NVK	Zolpidem
J9MV46	No drugs detected utilizing screening methods.
JCQTEX	No drugs detected utilizing screening methods.
JG68JR	No drugs detected utilizing screening methods.
JHXZEB	Zolpidem
JZHL2L	No drugs detected utilizing screening methods.
JZWCMB	ELISA Zolpidem ELISA Fentanyl
K2MV7N	Zolpidem
K4B849	barbiturates, zolpidem
K9KNEH	Zolpidem
KH9E2B	Zolpidem
KQM3ZH	Zolpidem
L8NAP6	No drugs detected utilizing screening methods.
L9YCDN	No drugs detected utilizing screening methods.
LB8M98	Zolpidem
LEMY79	zolpidem
LFYTNU	Zolpidem
M4NJYJ	zolpidem
MAC2EF	zolpidem
MN9H4E	zolpidem
MV88JW	zolpidem diphenhydramine
MZNARN	No drugs detected utilizing screening methods.
N8F8UG	Zolpidem
ND7KUJ	No drugs detected utilizing screening methods.

TABLE 3A: Screening Results - Item 3

WebCode	Screening Results
NTKKQA	No drugs detected utilizing screening methods.
NWVX43	Zolpidem
P9ACNF	Zolpidem
PMQ94C	Zolpidem
PPEJ2W	No drugs detected utilizing screening methods.
QDF7HB	zolpidem
QTDHQF	No drugs detected utilizing screening methods.
R3CDMP	Zolpidem
RB8BEY	Zolpidem, Amphetamine
RGXRN4	No drugs detected utilizing screening methods.
RKXX6V	zolpidem
RNVEHP	Zolpidem
RRYDTG	Zolpidem
RTMPP2	ELISA Zolpidem ELISA Fentanyl
RTQ7R8	zolpidem
RX3C48	Nonbenzodiazepine hypnotics (z-drugs): Zolpidem.
TAU3LP	zolpidem
TNQKBN	No drugs detected utilizing screening methods.
UFU7PT	No drugs detected utilizing screening methods.
UHGJR6	Zolpidem
UN8T34	Zolpidem
UPZPPC	No drugs detected utilizing screening methods.
UXXE92	Zolpidem
VPXGX4	Zolpidem
VZFXNP	Zolpidem
WRVJXP	No drugs detected utilizing screening methods.
WRX8F4	Zolpidem
X8P73W	zolpidem

TABLE 3A: Screening Results - Item 3

WebCode	Screening Results
XL9RNB	No drugs detected utilizing screening methods.
XUHF3A	No drugs detected utilizing screening methods.
XXJG6R	zolpidem
YADXR8	No drugs detected utilizing screening methods.
YDD9M8	ZOLPIDEM
YVQM63	Zolpidem
YZP4HW	No drugs detected utilizing screening methods.
Z2B6X4	Zolpidem
Z8YRQN	No drugs detected utilizing screening methods.
ZCEKJ3	zolpidem
ZE3WGM	Zolpidem
ZMW2CA	No drugs detected utilizing screening methods.
ZNPVCY	Zolpidem

Screening Response Summary for Item 3	Participants: 120
Zolpidem:	79
Other drugs/metabolites detected:	9
No drugs/metabolites detected Utilizing Screening Methods:	38

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:

Case 3: A 25-year-old female with a history of mental illness was found unresponsive in her bed by her roommates. She was taken to the hospital and a urine sample was collected approximately 2 hours after her admittance.

Item Contents and Preparation Concentration: Zolpidem (100 ng/mL)

What drugs/metabolites were detected in Item 3?					
WebCode	**Analyte Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
2MAT36	Zolpidem	✓			
32QB9E	Zolpidem	✓			
3GJZ7W	Zolpidem	✓			
3U6DH7	Zolpidem	✓			
	Paracetamol	✓			
44AMKP	Zolpidem	✓			
489YKV	Zolpidem				
4LRJ6N	Zolpidem	✓			
4RVPFL	Zolpidem	✓			
4TNFP7	Zolpidem	✓			
63A4ZY	Zolpidem				
6CXXCV	Zolpidem	✓			
6V8URL	Zolpidem	✓			
6VCCUQ	No drugs/metabolites detected utilizing confirmatory methods.				
78ZVML	Zolpidem	✓			
82P8HJ	Zolpidem	✓			
86PFPE	Zolpidem	✓			
8VK9AE	Zolpidem	✓			
99JR2Q	Zolpidem	✓			
A7WEYE	Zolpidem	✓			
AAWKDK	Zolpidem	✓			
ACKWEB	Zolpidem	✓			
AFL3UG	Zolpidem	✓			
AKGREU	Zolpidem		239		ng/mL

TABLE 3B: Confirmatory Results - Item 3

What drugs/metabolites were detected in Item 3?					
WebCode	**Analyte Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
ALALEJ	Zolpidem	✓			
AUJARH	Zolpidem	✓			
B3PED8	Zolpidem	✓			
BZKQXH	Zolpidem	✓			
C7MC4Q	Zolpidem	✓			
C8HXWG	Zolpidem	✓			
C9CNZB	Zolpidem	✓			
CD8BWK	No drugs/metabolites detected utilizing confirmatory methods.				
CWGCQH	Zolpidem	✓			
DG4L34	Zolpidem	✓			
DNLUPF	Zolpidem	✓			
DPTAX7	Zolpidem	✓			
E9PUER	Zolpidem				
EAZW3B	No drugs/metabolites detected utilizing confirmatory methods.				
EFJ2VC	Zolpidem	✓			
ERZQUG	Zolpidem	✓			
EZR39H	Zolpidem	✓			
F2HMB9	Zolpidem	✓			
FBPKYC	Zolpidem	✓			
FL6GY9	Zolpidem	✓			
FUZC2D	Zolpidem	✓			
FVRDZA	Zolpidem	✓			
GGUJ8F	Zolpidem	✓			
GKURDC	Zolpidem	✓			
HGNN2F	Zolpidem	✓			
HV6NVK	Zolpidem	✓			
J9MV46	Zolpidem	✓			
JCQTEX	Zolpidem	✓			

TABLE 3B: Confirmatory Results - Item 3

What drugs/metabolites were detected in Item 3?					
WebCode	**Analyte Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
JHXZEB	Zolpidem	✓			
JZHL2L	Zolpidem	✓			
JZWCMB	Zolpidem	✓			
K2MV7N	Zolpidem	✓			
K4B849	Zolpidem	✓			
K9KNEH	Zolpidem	✓			
KH9E2B	Zolpidem	✓			
KQM3ZH	Zolpidem	✓			
L8NAP6	Zolpidem	✓			
L9YCDN	No drugs/metabolites detected utilizing confirmatory methods.				
LB8M98	Zolpidem	✓			
LEMY79	Zolpidem	✓			
LFYTNU	Zolpidem	✓			
M4NJYJ	Zolpidem	✓			
MAC2EF	Zolpidem	✓			
MN9H4E	Zolpidem	✓			
MV88JW	Zolpidem	✓			
	diphenhydramine	✓			
MZNARN	Zolpidem	✓			
N8F8UG	Zolpidem	✓			
NTKKQA	No drugs/metabolites detected utilizing confirmatory methods.				
NWVX43	Zolpidem		105	21	ng/mL
P9ACNF	Zolpidem	✓			
PMQ94C	Zolpidem				
PPEJ2W	Zolpidem	✓			
QDF7HB	Zolpidem	✓			
R3CDMP	Zolpidem	✓			
RB8BEY	No drugs/metabolites detected utilizing confirmatory methods.				

TABLE 3B: Confirmatory Results - Item 3

What drugs/metabolites were detected in Item 3?					
WebCode	**Analyte Reported**	**Qualitative Only**	**Reported Concentration**	**Uncertainty**	**Units**
RGXRN4	Zolpidem	✓			
RKXX6V	Zolpidem	✓			
RNVEHP	Zolpidem	✓			
RRYDTG	Zolpidem	✓			
RTMPP2	Zolpidem	✓			
RTQ7R8	Zolpidem	✓			
RX3C48	Zolpidem	✓			
TAU3LP	Zolpidem	✓			
TNQKBN	Zolpidem	✓			
UFU7PT	Zolpidem	✓			
UHGJR6	Zolpidem	✓			
UN8T34	Zolpidem	✓			
UPZPPC	Zolpidem	✓			
UXXE92	Zolpidem	✓			
VPXGX4	Zolpidem	✓			
VZFXNP	Zolpidem	✓			
WRVJXP	Zolpidem	✓			
WRX8F4	Zolpidem	✓			
X8P73W	Zolpidem	✓			
XL9RNB	Zolpidem	✓			
	Paracetamol	✓			
XUHF3A	No drugs/metabolites detected utilizing confirmatory methods.				
XXJG6R	Zolpidem	✓			
YADXR8	Zolpidem	✓			
YDD9M8	Zolpidem	✓			
YVQM63	Zolpidem	✓			
Z2B6X4	Zolpidem	✓			
Z8YRQN	Zolpidem	✓			
ZE3WGM	Zolpidem	✓			

TABLE 3B: Confirmatory Results - Item 3

What drugs/metabolites were detected in Item 3?

WebCode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
ZNPVCY	Zolpidem	✓			

Confirmatory Response Summary for Item 3 **Participants: 107**

Zolpidem:	100 (93.5%)
Other Identified Drugs/Metabolites:	3 (2.8%)
No Drugs/Metabolites Detected Utilizing Confirmatory Methods:	7 (6.5%)

Raw Data - Item 3

TABLE 3C

Item 3 Raw Data - Zolpidem
Preparation concentration: (100 ng/mL)

WebCode	List of Raw Data determinations (ng/mL)
ACKWEB	138.0
AKGREU	239.0
LEMY79	88.00
NWVX43	105.0

Statistical Analysis for Item 3 - Zolpidem

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:***
ACKWEB	A single determination.
AKGREU	A single determination.
NWVX43	A single determination.
TNQKBN	A single determination.

Response Summary for Item 3		Participants: 4
A single determination:	4 (100.0%)	
The mean of duplicate/several determinations:	0 (0.0%)	
Other:	0 (0.0%)	

Methods of Analysis - Item 3

TABLE 3E - Item 3

WebCode	Method	Screening	Confirmatory	Quantitation
2MAT36	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
32QB9E	Immunoassay	✓		
	GC/MS	✓		
	LC/MS/MS	✓	✓	
3GJZ7W	Immunoassay	✓		
	GC/MS	✓	✓	
3U6DH7	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
44AMKP	Immunoassay	✓		
	LC-QTOF		✓	
	GC/MS		✓	
489YKV	Immunoassay	✓		
	GC/MS	✓	✓	
4LRJ6N	GC/MS	✓	✓	
4RVPFL	Immunoassay	✓		
	LC/MS/MS		✓	
	GC/MS		✓	
4TNFP7	GC/MS	✓	✓	
63A4ZY	Immunoassay	✓		
	GC/MS	✓	✓	
662XYN	Immunoassay	✓		
69XLFV	Immunoassay	✓		
6CXXCV	Immunoassay	✓		
	LC/MS		✓	
6V8URL	Immunoassay	✓		
	GC/MS	✓	✓	
	LC/MS/MS	✓	✓	
6VCCUQ	Immunoassay	✓		
78ZVML	GC/MS	✓	✓	
7UWAKW	Immunoassay	✓		
82P8HJ	Immunoassay	✓		
	GC/MS		✓	
86PFPE	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	

TABLE 3E: Methods of Analysis - Item 3

WebCode	Method	Screening	Confirmatory	Quantitation
8VK9AE	Immunoassay	✓		
	LC/MS/MS	✓	✓	
	GC/MS		✓	
99JR2Q	LC/MS/MS	✓		
	GC/MS		✓	
	Rapid Chromatographic Immunoassay	✓		
9TE3AY	Immunoassay	✓		
A7WEYE	Immunoassay	✓		
	LC/MS/MS	✓		
	GC/MS		✓	
AAWKDK	LC/MS/MS	✓	✓	
AB7THX	Immunoassay	✓		
	GC/MS		✓	
	LC/MS QTOF		✓	
ACKWEB	Immunoassay	✓		
	LC/MS/MS		✓	
AFL3UG	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS	✓	✓	
AKGREU	LC/MS/MS	✓		
	LC-HRMS	✓	✓	
	LC/MS			✓
	GC/MS		✓	
ALALEJ	Immunoassay	✓		
	GC/MS		✓	
AUJARH	Immunoassay	✓		
	LC/MS/MS		✓	
B3PED8	Immunoassay	✓		
	GC/MS	✓	✓	
	LC/MS/MS	✓	✓	
BAERGG	Immunoassay	✓		
	LC/MS/MS		✓	
BZKQXH	Immunoassay	✓		
	GC/MS		✓	
C7MC4Q	LC/MS/MS	✓	✓	
C8HXWG	Immunoassay	✓		
	LC-QTOF		✓	
C9CNZB	LC-High Resolution Tandem Mass Spectrometry	✓		
	GC/MS		✓	
CD8BWK	Immunoassay	✓		
	GC/MS		✓	

TABLE 3E: Methods of Analysis - Item 3

WebCode	Method	Screening	Confirmatory	Quantitation
CWGCQH	Immunoassay	✓		
	GC/MS	✓	✓	
D2BN3U	Immunoassay	✓		
DG4L34	GC/MS		✓	
	LC/MS		✓	
	Immunoassay	✓		
DNLUPF	Immunoassay	✓		
	GC/MS		✓	
DPTAX7	LC-TOFMS		✓	
E9PUER	Immunoassay	✓		
	GC/MS	✓	✓	
EAZW3B	Immunoassay	✓		
	LC/MS/MS		✓	
EFJ2VC	GC/MS	✓		
	LC/MS/MS		✓	
ERZQUG	Immunoassay	✓		
	GC/MS	✓	✓	
EZR39H	Immunoassay	✓		
	GC/MS		✓	
F2HMB9	Immunoassay	✓		
	GC/MS	✓	✓	
	LC/MS/MS	✓	✓	
FBPKYC	Immunoassay	✓		
	GC/MS		✓	
FL6GY9	Immunoassay	✓		
	LC/MS	✓		
	GC/MS	✓	✓	
FUZC2D	Immunoassay	✓		
	LC-QTOF		✓	
FVRDZA	Immunoassay	✓		
	GC/MS	✓	✓	
	LC/MS/MS	✓	✓	
GGUJ8F	Immunoassay	✓		
	GC/MS	✓	✓	
GKURDC	GC/MS	✓	✓	
HGNN2F	Immunoassay	✓		
	GC/MS		✓	
HV6NVK	LC/MS	✓	✓	
	GC/MS	✓		

TABLE 3E: Methods of Analysis - Item 3

WebCode	Method	Screening	Confirmatory	Quantitation
J9MV46	Immunoassay	✓		
	LC/MS/MS		✓	
	GC/MS		✓	
JCQTEX	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
JHXZEB	LC/MS/MS	✓	✓	
JZHL2L	Immunoassay	✓		
	GC/MS		✓	
JZWCMB	Immunoassay	✓		
	GC/MS	✓	✓	
K2MV7N	Immunoassay	✓		
	GC/MS	✓	✓	
	LC/MS/MS		✓	
K4B849	Immunoassay	✓		
	GC/MS		✓	
K9KNEH	Immunoassay	✓		
	GC/MS	✓	✓	
KH9E2B	GC/MS	✓	✓	
KQM3ZH	GC/MS	✓	✓	
	LC/MS/MS	✓	✓	
L8NAP6	Immunoassay	✓		
	GC/MS	✓	✓	
	LC/MS/MS	✓	✓	
L9YCDN	Immunoassay	✓		
LB8M98	Immunoassay	✓		
	GC/MS		✓	
	LC/QTOF		✓	
LEMY79	Immunoassay	✓		
	LC/MS/MS		✓	
LFYTNU	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
M4NJYJ	LC/MS/MS	✓	✓	
MAC2EF	LC/MS/MS	✓	✓	
MN9H4E	LC/MS/MS		✓	
MV88JW	LC/MS/MS	✓	✓	
MZNARN	Immunoassay	✓		
	LC/MS		✓	

TABLE 3E: Methods of Analysis - Item 3

WebCode	Method	Screening	Confirmatory	Quantitation
N8F8UG	GC/MS	✓	✓	
	Immunoassay	✓		
ND7KUJ	Immunoassay	✓		
NTKKQA	Immunoassay			
	GC/MS			
NWVX43	Immunoassay	✓		
	LC/MS/MS		✓	✓
P9ACNF	Immunoassay	✓		
	GC/MS	✓	✓	
PMQ94C	Immunoassay	✓		
	GC/MS	✓	✓	
PPEJ2W	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
QDF7HB	Immunoassay	✓		
	GC/MS	✓	✓	
QTDHQF	Immunoassay	✓		
R3CDMP	LC/MS/MS		✓	
	QTOF Screen	✓		
RB8BEY	Immunoassay	✓		
	LC/MS/MS		✓	
RGXRN4	Immunoassay	✓		
	GC/MS	✓	✓	
RKXX6V	Immunoassay	✓		
	GC/MS	✓	✓	
	LC/MS/MS	✓	✓	
RNVEHP	GC/MS	✓	✓	
RRYDTG	LC/MS/MS	✓		
	LC/MS/MS		✓	
RTMPP2	Immunoassay	✓		
	GC/MS	✓	✓	
RTQ7R8	LC/MS/MS	✓		
	GC/MS		✓	
RX3C48	GC/MS	✓		
	LC/MS/MS		✓	
TAU3LP	Immunoassay	✓		
	GC/MS		✓	
	LC/MS		✓	
TNQKBN	Immunoassay	✓		
	GC/MS		✓	

TABLE 3E: Methods of Analysis - Item 3

WebCode	Method	Screening	Confirmatory	Quantitation
UFU7PT	Immunoassay	✓		
	LC/MS/MS		✓	
	GC/MS		✓	
UHGJR6	LC/MS	✓		
	LC/MS/MS		✓	
UN8T34	Immunoassay	✓		
	GC/MS		✓	
UPZPPC	Immunoassay	✓		
	GC/MS		✓	
UXXE92	GC/MS	✓	✓	
VPXGX4	GC/MS		✓	
	LC/MS/MS		✓	
	LC-MS/MS (ion trap)	✓		
VZFXNP	GC/MS	✓	✓	
	LC/QTOF/MS	✓	✓	
WRVJXP	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
WRX8F4	Immunoassay	✓		
	LC/MS		✓	
X8P73W	LC/MS/MS	✓	✓	
XL9RNB	Immunoassay	✓		
	GC/MS		✓	
	LC/MS/MS		✓	
XUHF3A	GCMS and HPLC-DAD	✓		
XXJG6R	Immunoassay	✓		
	GC/MS		✓	
YADXR8	Immunoassay	✓		
	GC/MS	✓	✓	
YDD9M8	Immunoassay	✓		
	GC/MS		✓	
YVQM63	Immunoassay	✓		
	GC/MS	✓	✓	
YZP4HW	Immunoassay	✓		
Z2B6X4	Immunoassay	✓		
	LC/MS/MS		✓	
Z8YRQN	Immunoassay	✓		
	LC/MS/MS		✓	
	GC/MS		✓	
ZCEKJ3	LC/MS	✓	✓	

TABLE 3E: Methods of Analysis - Item 3

WebCode	Method	Screening	Confirmatory	Quantitation
ZE3WGM	LC-HR-MS/MS	✓		
	GC/MS		✓	
ZMW2CA	Immunoassay	✓		
ZNPVCY	Immunoassay	✓		
	GC/MS	✓	✓	

Response Summary for Item 3 **Participants: 119**

	Screening	Confirmatory	Quantitation
Immunoassay:	86	0	0
GC/MS:	39	76	0
LC/MS:	4	7	1
LC/MS/MS:	22	45	1
Other:	8	8	0

Additional Comments for Item 3

TABLE 3F

WebCode	Item Comments
32QB9E	istds for GCMS=ethinamate and cyproheptadine. istd for LCMSMS= diazepam-D5.
3U6DH7	Codiene-D3 used as internal standard
4RVPFL	The internal standard used was mepivacaine.
69XLFV	No confirmatory testing performed.
6CXXCV	Zolpidem cutoff 5 ng/mL.
6VCCUQ	This urine screened negative using a 12 panel dip card.
7UWAKW	Creatinine normal
86PFPE	Internal Standard: Mepivacaine
8VK9AE	Mepivacaine was used as internal standard
99JR2Q	Alere iCassette (THC) test device was used to screen for THC, referred to in 3-4 [Table 3E: Methods of Analysis] as rapid chromatographic immunoassay. The cutoff concentration for the assay is 50 ng/mL.
9TE3AY	Tests performed by [Examiner]
A7WEYE	internal standards: mepivacaine, THCA d9
AFL3UG	internal standard: mepivacaine
B3PED8	internal standard mepivacaine
BAERGG	The Immunoassay hit presumptive positive on zolpidem and amphetamines. Our lab is currently only able to quantitate and confirm amphetamines. After it was run on the LCMSMS, no amphetamine was detected in the sample.
C9CNZB	Internal standard(s) used: Mepivacaine
D2BN3U	Testing performed by [Examiner]
DG4L34	Internal standard used is mepivacaine
DNLUPF	Prazepam as IS Method capability for Zolpidem is 10ng/mL
EAZW3B	Amphetamine not detected in LCMSMS confirmation run
EZR39H	Hexobarbital and phenyltoloxamine added as internal reference material.
F2HMB9	Internal Standard for LC/MS/MS screen - mepivacaine. Internal Standard for GC/MS - mepivacaine.
FL6GY9	Mepivacaine: Internal Standard
FVRDZA	Internal Standard = mepivacaine
GGUJ8F	The internal reference materials used were Phenyltoloxamine for the base fraction and the Hexobarbital for the acid fraction. Possible Naproxen detected in the acid fraction. Possible Caffeine noted in both the acid and base fractions.
HGNN2F	Internal standards used: Phenyltoloxamine and Heptabarbital

TABLE 3F: Additional Comments for Item 3

WebCode	Item Comments
JCQTEX	Internal standard used for GCMS and LCMSMS analysis was mepivacaine.
JZWCMB	n-Propylamphetamine, Mepivacaine, and Hexobarbital internal standards utilized for GC/MS screening/confirmation.
L8NAP6	internal standard = mepivacaine, nalorphine
L9YCDN	Drugs screened for in every ELISA run include cannabinoids, benzodiazepines, methamphetamines, barbiturates, opiates, methadone and cocaine.
N8F8UG	Only drugs on the [State] Police Drug Panel reported.
NTKKQA	* Internal standard: flurazepam / estazolam. * Sample preparation: L/L extraction. * The final extraction is derivatized with BSTFA and injected in GC-MS.
NWVX43	Zolpidem Internal Standard: Zolpidem-d6. LOD/LOQ: 10ng/mL.
PPEJ2W	Internal Standard for GC/MS Testing: mepivacaine. Internal Standard For LC/MS/MS Testing: mepivacaine.
QDF7HB	IS: phenyltoloxamine
RRYDTG	Zolpidem cut off value in urine confirmatory assay is 5 ng/mL .
RTMPP2	N-Propylamphetamine, Mepivacaine, and Hexobarbital were used as internal standards for GC/MS testing.
RTQ7R8	Sample also screened for GHB by LCMSMS and was negative.
RX3C48	Internal standard: Flurazepam and aprobarbital. LoD: 10 ng/mL.
TAU3LP	Internal standard: mepivacaine
TNQKBN	Prazepam is the internal standard for the zolpidem analysis.
UHGJR6	ESTAZOLAM WAS USED AS AN INTERNAL STANDARD.
UN8T34	Basic Internal Reference Material is Phenyltoloxamine. Acidic Internal Reference Material is Heptabarbital.
WRVJXP	LCMSMS and GCMS Internal Standard - mepivacaine
WRX8F4	Zolpidem cutoff 5 ng/mL
XL9RNB	Codeine D3 used as internal Standard
XUHF3A	Sample was extracted using Dichloromethane, partitioned into Acidic and Basic extracts and analysed on GCMS and HPLC-DAD.
XXJG6R	Confirmatory ISTD: NPA and SKF
YVQM63	Internal Standard GCMS: Phenyltoloxamine
Z8YRQN	Mepivacaine is the internal standard used to determine relative retention times for the drugs found.
ZE3WGM	Mepivacaine
ZMW2CA	Creatinine normal

Additional Test Comments

TABLE 4

WebCode	Additional Comments
6VCCUQ	Unfortunately, some of our confirmation supplies are on backorder, so I was unable to finish the testing on Item 2.
9TE3AY	The following metabolites were tested for at the following cutoffs: 6 Acetyl Morphine: 10 ng/mL, Amphetamines: 1000 ng/mL, Benzodiazepine: 200 ng/mL, Cocaine: 300 ng/mL, Opiates: 300 ng/mL, THC: 50 ng/mL, Oxycodone: 100 ng/mL, ETG: 500 ng/mL. All specimens are tested on the analyzer (Viva-ProE) using photometric measurement.
D2BN3U	The following metabolites were tested for at the following cutoffs: 6 Acetyl Morphine: 10 ng/mL, Amphetamines: 1000 ng/mL, Benzodiazepine: 200 ng/mL, Cocaine: 300 ng/mL, Opiates: 300 ng/mL, THC: 50 ng/mL, Oxycodone: 100 ng/mL, ETG: 500 ng/mL. All specimens are tested on the analyzer (Viva-ProE) using photometric measurement.
DPTAX7	The LC-TOFMS test is a combined screen and confirmation method
JHXZEB	Arrived in the lab on 04/13/2021. I took custody of the sample on 05/05/2021.
N8F8UG	Only drugs on the [State] Police Drug Panel reported. Screening methods for all items included EMIT and a GC/MS drug screen.
ND7KUJ	The following metabolites were tested for at the following cut offs: 6 Acetyl Morphine: 10 ng/mL, Amphetamines: 1000 ng/mL, Benzodiazepine: 200 ng/mL, Cocaine: 300 ng/mL, Opiates: 300 ng/mL, THC: 50 ng/mL, Oxycodone: 100 ng/mL, ETG: 500 ng/mL. All specimens are tested on the analyzer (Viva-ProE) using photometric measurement.
RX3C48	The metabolite norhydrocodone was identified by GC-MS and LC-MS-MS library match. As to the lab does not have reference material available.
XUHF3A	Sample was extracted using Dichloromethane (Acidic and Basic extracts), evaporated to dryness under nitrogen flow and reconstituted in Methanol. All extracts were analysed using GCMS and HPLC-DAD.

-End of Report-
(Appendix may follow)

Collaborative Testing Services ~ Forensic Testing Program

Test No. 21-5671: Urine Drug Analysis

DATA MUST BE SUBMITTED BY **June 7, 2021, 11:59 p.m.** TO BE INCLUDED IN THE REPORT

Participant Code: U1234E WebCode: XAUUHL

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 28-year-old male was involved in a single vehicle accident. The victim was driving alone and said that he felt dizzy and lost control of his vehicle. The police officer noted that the man appeared calm at the scene. A urine sample was collected for analysis an hour after the incident had occurred.

Case 2: A 45 year-old female was subject to a routine drug test as part of a drug and alcohol rehabilitation program. A urine sample was collected for analysis.

Case 3: A 25-year-old female with a history of mental illness was found unresponsive in her bed by her roommates. She was taken to the hospital and a urine sample was collected approximately 2 hours after her admittance.

-Samples many contain methanol and acetonitrile as artifacts from production.

***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). 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(s) Analysis Performed on Analyte:

Raw Data (ng/mL):

1-3). If quantitative analysis was performed, are the reported concentrations above

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

1-4). 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.

Method Used	Screening	Confirmatory	Quantitation
	☐	☐	☐

1-5). 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:

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

☐ No drugs/metabolites detected utilizing confirmatory methods.

Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units
	☐			( )

Date(s) Analysis Performed on Analyte:

Raw Data (ng/mL):

2-3). If quantitative analysis was performed, are the reported concentrations above

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

2-4). 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.

Method Used	Screening	Confirmatory	Quantitation
	☐	☐	☐

2-5). 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). 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(s) Analysis Performed on Analyte:

Raw Data (ng/mL):

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

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

3-4). 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.

Method Used	Screening	Confirmatory	Quantitation
	☐	☐	☐

3-5). 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
only if your laboratory is accredited in this testing/calibration discipline
by one or more of the following Accreditation Bodies.

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

ANAB Certificate No.
(Include ASCLD/LAB 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)