

Blood Drug Analysis Test No. 17-5661 Summary Report

This test was sent to 130 participants. The sample sets contained blood samples from three cases, each with an individual case scenario. Each case sample consisted of two grey-topped vials containing human blood with various drugs/metabolites. Participants were requested to examine these items and report their findings. Data were returned from 114 participants (88% response rate) and are compiled into the following tables:

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

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

Manufacturer's Information

The sample sets contained blood samples from three cases, each with an individual case scenario. Each case sample consisted of two grey-topped vials containing human blood. Participants were asked to analyze the blood samples and report the presence of any drugs/metabolites and quantitative data obtained (including uncertainty).

SAMPLE PREPARATION-

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

A stock solution of each drug was used to spike the respective item. These solutions were obtained in sealed ampoules and were not opened until needed for production. Items were prepared at separate times using the following procedure, and different glassware was used for each item.

ITEMS 1, 2, and 3 (PREPARATION): Item preparation consisted of adding a predetermined amount of drug stock solution to human whole blood. It was stirred before pipetting the mixture into each of the pre-labeled vials, which contained Potassium Oxalate and Sodium Fluoride. The vials were sealed and inverted multiple times to mix the chemicals in the vials with the blood solution. All vials were placed in a refrigerator immediately after production until the sample sets were prepared.

SAMPLE SET ASSEMBLY: Each sample set contained two vials of each of the three Items and placed into a Department of Transportation regulated shipping container. The sample packs were then returned to the refrigerator until shipment.

VERIFICATION-

Laboratories that conducted predistribution analysis of the samples reported consistent results that were comparable to the preparation drug concentrations.

Item 1 Drug (Concentration)

Fentanyl (75 ng/mL)

Item 2 Drug (Concentration) MDMA (345 ng/mL) MDA (50 ng/mL) 11-nor-9-carboxy-delta-9-THC (85 ng/mL)

Item 3 Drug (Concentration) Oxycodone (150 ng/mL)

Noroxycodone (35 ng/mL)

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

Summary Comments

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

Of the 113 participants who reported screening results for Item 1, 57 (50.4%) reported the presence of opiates and/or fentanyl. Four of these participants also reported the presence of another drug class and/or analyte. Fifty-six (49.6%) participants reported "no drugs/metabolites detected". Of the 99 participants who reported confirmatory results for Item 1, 97 (98.0%) reported the presence of fentanyl and two participants reported "no drugs/metabolites detected."

Of the 113 participants who reported screening results for Item 2, 75 (66.4%) reported the presence of methamphetamine and/or MDMA. Sixty-seven (59.3%) reported the presence of amphetamine and/or MDA. Ninety-seven (85.8%) reported the presence of cannabinoids and/or THC-COOH. One participant reported "no drugs/metabolites detected" and four reported the presence of other drug classes and/or analytes. Of the 108 participants who reported confirmatory results for Item 2, 102 (94.4%) reported the presence of MDMA and 95 (88.0%) reported the presence of MDA. Eighty-six (80.0%) participants reported THC-COOH and four reported the presence of other analytes.

Of the 113 participants who reported screening results for Item 3, 97 (85.8%) reported the presence of opiates, oxycodone and/or noroxycodone. Sixteen (14.2%) reported "no drugs/metabolites detected" and four reported the presence of other drug classes and/or analytes. Of the 102 participants who reported confirmatory results for Item 3, 100 (98.0%) reported the presence of oxycodone and six participants also reported the presence of noroxycodone. One participant reported "no drugs/metabolites detected" and one reported the presence of MDMA.

If a participant indicated that the confirmatory quantitative result was a single determination and reported it in ng/mL, the conclusive quantitative result was included in the raw data table. The raw data was used to calculate the grand mean and standard deviation for each item and are supplied to assist the participants and accrediting bodies in determining the acceptability of results. For Item 1, one participant was determined to have "extreme" data (±3 STD from grand mean) for fentanyl. For Item 2, one participant was determined to have "extreme" data for MDA and three participants were determined to have "extreme" data for THC-COOH. For Item 3, two participants were determined to have "extreme" data for oxycodone.

Screening Results - Item 1

TABLE 1A Item 1

Item Scenario:

The body of a 52 year old female was found in her home. Her lips and extremities were blue, foam was present around her mouth, and a syringe was found nearby. A blood sample was collected at the autopsy.

Item Contents and Preparation Concentration: Fer

Fentanyl (75 ng/mL)

Webcode	Screening Results
2DPLGK	No drugs/metabolites detected
2RDN2X	Fentanyl
3RPK4H	fentanyl
43M3WW	No drugs/metabolites detected
46BFXM	Fentanyl
4C8ATZ	Fentanyl
4DHARF	Fentanyl
4ZHB6H	No drugs/metabolites detected
6DZMTX	fentanyl
6FM2LE	Fentanyl
79YZEZ	No drugs/metabolites detected
7AD6BC	No drugs/metabolites detected
7ATPXV	fentanyl
7AVDZ8	No drugs/metabolites detected
7FH2YJ	No drugs/metabolites detected
7FJ2UC	fentanyl
7QGWWE	No drugs/metabolites detected
7ZUQCG	The immunoassay drug screen resulted in no drugs detected. The first GC/MS resulted in the detection of Fentanyl which needed to be confirmed using GC/MS.
83RPZE	Fentanyl
8NAYYQ	Fentanyl
8T34RV	fentanyl
8WMTC9	Fentanyl
9833FR	No drugs/metabolites detected
9A48TC	No drugs/metabolites detected
9ANN9F	No drugs/metabolites detected
9F8CHB	Fentanyl and Zolpidem
9JVLUX	No drugs/metabolites detected
9KNGG7	No drugs/metabolites detected

Blood Drug Analysis

Webcode	Screening Results			
9LKREU	Fentanyl/ Acetyl Fentanyl			
ABG2BX	Fentanyl			
AHDRV9	Possible Fentanyl, Possible Benzodiazepine			
ALFUG4	No drugs/metabolites detected			
AN7YEG	Fentanyl (opioids)			
AQCJ2G	FENTANYL			
AWFMRF	Fentanyl			
AYHL39	Fentanyl			
B2MB2B	Fentanyl			
B2MB6G	Fentanyl			
BBDW79	Fentanyl			
BF499W	Fentanyl			
BGE937	No drugs/metabolites detected			
BHAUVW	Fentanyl			
BKW9K8	No drugs/metabolites detected			
BM3VXB	No drugs/metabolites detected			
BX2N9N	Fentanyl			
C2JBF2	No drugs/metabolites detected			
CKVX4U	No drugs/metabolites detected			
CMHCT6	No drugs/metabolites detected			
CQGQD9	Fentanyl			
DAVJLA	Fentanyl			
DHM6M2	No drugs/metabolites detected			
DPKU9C	No drugs/metabolites detected			
EJQEWA	No drugs/metabolites detected			
EQXLY8	No drugs/metabolites detected			
EV6CW8	No drugs/metabolites detected			
F77W47	No drugs/metabolites detected			
FHXQA8	fentanyl			
FMTHH6	Fentanyl			
FWT6A2	No drugs/metabolites detected			
FZU93A	No drugs/metabolites detected			
GGJE9H	Fentanyl			

Webcode	Screening Results
GX72E7	Fentanyl
H9ZU49	No drugs/metabolites detected
HEPCGY	No drugs/metabolites detected
HGDJ63	Fentanyl
HZ9EF6	No drugs/metabolites detected
J6E88E	No drugs/metabolites detected
J7TW97	fentanyl
J7UKXW	No drugs/metabolites detected
JD9D32	Fentanyl
JNRR2X	No drugs/metabolites detected
K6A8M6	No drugs/metabolites detected
KLG674	No drugs/metabolites detected
KXE9AX	Fentanyl
KXQ83L	Fentanyl
L67AMT	Fentanyl
LZEXPC	Fentanyl
M6MNQW	fentanyl
MVZKKH	No drugs/metabolites detected
MW9UE2	No drugs/metabolites detected
N628BU	No drugs/metabolites detected
N7E2QU	No drugs/metabolites detected
N87Z6T	No drugs/metabolites detected
NJ37XQ	Fentanyl
PATW9D	Fentanyl
PB4ZHV	Fentanyl
R2PQAR	No drugs/metabolites detected
R4GR9N	No drugs/metabolites detected
RA2RQM	No drugs/metabolites detected
RNNZNN	No drugs/metabolites detected
RUNGZE	No drugs/metabolites detected
T23MAQ	Fentanyl
T7FKJY	Fentanyl
TC3B7U	No drugs/metabolites detected

Webcode	Screening Results			
TD3DVX	Methadone & Fentanyl			
TTCYGA	Fentanyl			
U9HM6U	No drugs/metabolites detected			
UV969K	No drugs/metabolites detected			
UVVBV6	No drugs/metabolites detected			
UXY93R	No drugs/metabolites detected			
UYYA7X	No drugs/metabolites detected			
V4LDER	No drugs/metabolites detected			
VH3E8C	fentanyl			
VKUATK	Fentanyl			
VMDMCM	Fentanyl			
VNVBXN	Fentanyl			
W34NNK	No drugs/metabolites detected			
WFW7GR	No drugs/metabolites detected			
WYNJPP	Fentanyl			
XBDFRN	Fentanyl			
XMQWYK	Fentanyl			
YC9F9Y	No drugs/metabolites detected			
YXL4WP	Fentanyl			
Response Su	ummary for Item 1		Participants: 113	
	Opiates and/or fentanyl:	57		
	Other:	4		
	No drugs/metabolites detected:	56		

Totals may add up to more than the total number of participants because participants can report multiple classes/drug names.

Confirmatory Results - Item 1

What drugs/metabolites were detected in Item 1?

TABLE 1B Item 1

Item Scenario:

The body of a 52 year old female was found in her home. Her lips and extremities were blue, foam was present around her mouth, and a syringe was found nearby. A blood sample was collected at the autopsy.

Item Contents and Preparation Concentration: Fentanyl (75 ng/mL)

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
2DPLGK	Fentanyl	✓			
2RDN2X	Fentanyl	1			
3RPK4H	fentanyl		58	17	mcg/L
43M3WW	Fentanyl	✓			
46BFXM	Fentanyl		54 ug/l	36%	ug/l
4C8ATZ	Fentanyl		50	18	ng/mL
4DHARF	Fentanyl		54	17%	ng/mL
4ZHB6H	Fentanyl	1			
6DZMTX	fentanyl		50	16	ng/mL
6FM2LE	Fentanyl	1			
7AD6BC	Fentanyl	1			
7ATPXV	fentanyl		63	20	ng/mL
7FH2YJ	Fentanyl	1			
7FJ2UC	fentanyl		55	+/- 17	μ g/L
7QGWWE	Fentanyl	1			
7ZUQCG	Fentanyl	1			
83RPZE	Fentanyl		61	5	ng/mL
8NAYYQ	Fentanyl	1			
8T34RV	fentanyl		51	16	ng/mL
8WMTC9	Fentanyl	1			
9833FR	Fentanyl	1			
9A48TC	Fentanyl	1			
9ANN9F	Fentanyl	✓			
9F8CHB	Fentanyl		50	+/- 15	mcg/L

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
9KNGG7	fentanyl	✓			
ABG2BX	Fentanyl		51 ug/L	±15%	μ g/L
AHDRV9	Fentanyl	1			
AN7YEG	Fentanyl		67.9	±13.7%	ng/mL
AQCJ2G	FENTANYL		100		ng/mL
AWFMRF	Fentanyl	✓			
AYHL39	Fentanyl	1			
B2MB2B	Fentanyl	1			
B2MB6G	Fentanyl	1			
BBDW79	Fentanyl	1			
BGE937	Fentanyl	1			
BHAUVW	Fentanyl		82		ng/mL
BKW9K8	fentanyl	1			
BM3VXB	Fentanyl	1			
BX2N9N	Fentanyl		55	7.5	ng/mL
СМНСТ6	Fentanyl	1			
CQGQD9	Fentanyl		50	+/-15	μ g/L
DAVJLA	Fentanyl	1			
DHM6M2	Fentanyl	1			
DPKU9C	Fentanyl	1			
EJQEWA	Fentanyl	1	Positive		
EQXLY8	Fentanyl	1			
EV6CW8	Fentanyl	1			
F77W47	Fentanyl	1			
FHXQA8	fentanyl	1			
FMTHH6	Fentanyl		55	16.5	ng/mL
FWT6A2	Fentanyl	1			
FZU93A	fentanyl	1			
GGJE9H	Fentanyl	1			
GX72E7	Fentanyl	1			

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
HEPCGY	fentanyl	1			
HGDJ63	Fentanyl		62.0 ng/mL	2.9	ng/mL
HZ9EF6	Fentanyl	1			
J7TW97	fentanyl	1			
J7UKXW	Fentanyl	1			
JD9D32	Fentanyl		70 ng/mL	0.06	ng/mL
JNRR2X	Fentanyl	1			
K6A8M6	Fentanyl	1	Positive		
KXE9AX	Fentanyl	1			
KXQ83L	Fentanyl		63	5	ng/mL
L67AMT	Fentanyl		62	12	ng/mL
LZEXPC	Fentanyl		74	10	ng/mL
M6MNQW	fentanyl		53	16	μ g/L
MW9UE2	Fentanyl	1			
N628BU	Fentanyl	1			
N7E2QU	FENTANYL		58	17	mcg/L
N87Z6T	Fentanyl	1			
NJ37XQ	Fentanyl		70	7	ng/mL
PATW9D	Fentanyl	1			
PB4ZHV	Fentanyl		64	19	ng/mL
R2PQAR	fentanyl	1			
R4GR9N	Fentanyl	1			
RA2RQM	Fentanyl	1			
RNNZNN	Fentanyl	1			
T7FKJY	Fentanyl	1			
TC3B7U	Fentanyl	1			
TD3DVX	Fentanyl	1			
TTCYGA	Fentanyl		53.5	10.7	ng/mL
U9HM6U	Fentanyl	1			
UV969K	Fentanyl	1			

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
UVVBV6	Fentanyl				
UXY93R	Fentanyl	1			
UYYA7X	No drugs/metabolites detecte	əd			
V4LDER	Fentanyl	1			
VH3E8C	fentanyl		50		ng/mL
VKUATK	Fentanyl		56	12	ng/ml
VMDMCM	Fentanyl	1			
VNVBXN	Fentanyl	1			
W34NNK	Fentanyl	1			
WFW7GR	Fentanyl	1			
WYNJPP	Fentanyl	1			
XBDFRN	Fentanyl		43 mcg/L	13	mcg/L
XMQWYK	Fentanyl		53	+/-16	mcg/L
YC9F9Y	No drugs/metabolites detecte	əd			
YXL4WP	Fentanyl	✓			
Response S	Summary for Item 1			Partie	cipants: 99

Fentanyl: 97

No drugs/metabolites detected:

Totals may add up to more than the total number of participants because participants can report multiple drugs/metabolites.

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Raw Data - Item 1

List of raw data determinations in ng/mL.

TABLE 1C Item 1

ltem 1 Raw Data - Fentanyl

Preparation concentration: (75 ng/mL)

Webcode	Raw Date	a (ng/mL)		Participant Mean
3RPK4H	57.96			57.96
46BFXM	54.00	46.00		50.00
4C8ATZ	48.00	50.00		49.00
4DHARF	54.45			54.45
6DZMTX	50.94			50.94
7ATPXV	63.35			63.35
7FJ2UC	55.09			55.09
83RPZE	60.00	62.00		61.00
8T34RV	51.50			51.50
9F8CHB	49.73			49.73
ABG2BX	51.56	51.34		51.45
AN7YEG	67.90	67.80		67.85
AQCJ2G	100.0			100.0 X
BHAUVW	82.16			82.16
BX2N9N	55.00			55.00
CQGQD9	49.60			49.60
FMTHH6	57.89	53.44		55.66
HGDJ63	62.00			62.00
JD9D32	70.00			70.00
KXQ83L	62.79	63.35		63.07
L67AMT	62.00			62.00
LZEXPC	74.00			74.00
M6MNQW	52.67			52.67
N7E2QU	58.14			58.14
NJ37XQ	71.65	68.85		70.25
PB4ZHV	63.91			63.91
TTCYGA	53.30	52.40	54.80	53.50
VH3E8C	48.00	52.00		50.00

Item 1 Raw Data - Fentanyl

Preparation concentration: (75 ng/mL)

Webcode	Raw Data (ng	/mL)	Participant Mean
VKUATK	56.00		56.00
XBDFRN	43.39		43.39
XMQWYK	53.44		53.44
Statistical An	alysis for Item 1	- Fentanyl	
Grand	Mean 57.90	Number of Participants Included 30	Number of Participants without Raw Data or Data that was not 66
Standard Dev	viation 8.643	Number of Participants Excluded 1	reported in ng/mL

Reporting Procedures - Item 1

If quantitative analysis was performed, the reported concentrations are:

Webcode	Quantitative Reporting Procedures
3RPK4H	A single determination.
46BFXM	A single determination.
4C8ATZ	The mean of duplicate/several determinations.
4DHARF	A single determination.
6DZMTX	A single determination.
7ATPXV	A single determination.
7FJ2UC	A single determination.
8T34RV	A single determination.
9F8CHB	A single determination.
9KNGG7	A single determination.
ABG2BX	The mean of duplicate/several determinations.
AN7YEG	The mean of duplicate/several determinations.
AQCJ2G	A single determination.
BHAUVW	A single determination.
BX2N9N	A single determination.
CQGQD9	A single determination.
FMTHH6	The mean of duplicate/several determinations.
HEPCGY	A single determination.
HGDJ63	The mean of duplicate/several determinations.
JD9D32	A single determination.
L67AMT	A single determination.
LZEXPC	A single determination.
M6MNQW	A single determination.
N7E2QU	A single determination.
NJ37XQ	The mean of duplicate/several determinations.
PB4ZHV	A single determination.
TTCYGA	The mean of duplicate/several determinations.
VH3E8C	The mean of duplicate/several determinations.
VKUATK	A single determination.

Webcode	Quantitative Report	ing Procedures	
XBDFRN	A single determination.		
XMQWYK	A single determination.		
YC9F9Y	A single determination.		
Response	Response Summary for Item 1 Participants: 32		
	A single determination:	24 (75.0%)	
, T	he mean of duplicate/several determinations:	8 (25.0%)	

Method of Analysis - Item 1

Webcode	Method	Screening	Confirmatory	Quantitation
2DPLGK	lmmunoassay GC/MS	√ √	✓	
2RDN2X	lmmunoassay GC/MS LC/MS/MS	J J	1	
3RPK4H	lmmunoassay GC/MS LC/MS/MS	s s	√ √	1
43M3WW	Immunoassay GC/MS	1	1	
46BFXM	lmmunoassay GC/MS LC/MS	1	1	1
4C8ATZ	Immunoassay LC/MS/MS UPLC-QTOF MS	J J	1	1
4DHARF	lmmunoassay GC/MS	1	1	✓
4ZHB6H	lmmunoassay GC/MS	√ √	✓	
6DZMTX	GC/MS LC/MS/MS	\checkmark	✓	✓
6FM2LE	lmmunoassay GC/MS GC/NPD	5 5 5	1	
7AD6BC	lmmunoassay GC/MS GC/FID	1	<i>J</i> <i>J</i>	
7ATPXV	GC/MS LC/MS/MS	V	✓	✓
7AVDZ8	Immunoassay	1		
7FH2YJ	lmmunoassay GC/MS	\checkmark	1	
7FJ2UC	lmmunoassay LC/MS/MS	√ √	1	✓
7QGWWE	Immunoassay GC/MS	V	1	
7ZUQCG	lmmunoassay GC/MS	\$ \$	1	
83RPZE	GC/MS LC/MS/MS LC-TOF	<i>I</i> <i>J</i>	1	1

Webcode	Method	Screening	Confirmatory	Quantitation
8NAYYQ	Immunoassay GC/MS	\checkmark	1	
8T34RV	GC/MS LC/MS/MS	\checkmark	1	1
8WMTC9	GC/MS	\checkmark	1	
9833FR	Immunoassay GC/MS	\checkmark	1	
9A48TC	Immunoassay GC/MS	\checkmark	1	
9ANN9F	Immunoassay GC/MS	1	1	
9F8CHB	Immunoassay LC/MS/MS	√ ✓	1	1
9JVLUX	Immunoassay	✓		
9KNGG7	Immunoassay GC/MS GC/FID	1	✓	J
9LKREU	Immunoassay	✓		
ABG2BX	Immunoassay LC/MS/MS HPLC QTOF	1 1 1	1	1
AHDRV9	Immunoassay GC/MS GC/NPD		✓	
ALFUG4	Immunoassay	✓		
AN7YEG	LC/MS/MS	\checkmark	1	1
AQCJ2G	GC/MS	\checkmark	1	
AWFMRF	Immunoassay GC/MS	\checkmark	1	
AYHL39	Immunoassay GC/MS	√ ✓	1	
B2MB2B	Immunoassay GC/MS	√ ✓	1	
B2MB6G	Immunoassay GC/MS	✓	1	
BBDW79	Immunoassay GC/MS	\checkmark	1	
BF499W	Immunoassay	1		
BGE937	Immunoassay GC/MS GC/FID	1	۲ ۲	

Webcode	Method	Screening	Confirmatory	Quantitation
BHAUVW	Immunoassay	1	,	
	LC/MS		v	1
BKW9K8	Immunoassay	✓		
	GC/MS		1	
	GC/FID		v	
ВМЗАХВ	Immunoassay GC/MS	v	1	
BX2N9N	Immunoassay	1	,	,
	LC/MS/MS		v	v
C2JBF2	Immunoassay	✓		
CKVX4U	Immunoassay	\checkmark		
CMHCT6	Immunoassay	\checkmark	,	
	GC/MS			
	GC\FID	1	✓	
CQGQD9		\checkmark	/	
		1	v	1
	CC/MS	· · · · · · · · · · · · · · · · · · ·	· · ·	•
	IC/MS/MS	✓ ✓	1	
	Immunoassay			
DIMMENTE	GC/MS		1	
	GC/FID		1	
DPKU9C	Immunoassay	✓		
	GC/MS		1	
	GC/FID		✓	
EJQEWA	Immunoassay	\checkmark		
	GC/MS		1	
	GC/FID		v	
EQXLY8	Immunoassay	\checkmark	,	
	LC/MS/MS	,	V	
EV6CW8	Immunoassay	\checkmark	/	
	GC/MS	1	v	
F//W4/	Immunoassay	\checkmark	./	
			•	
TTAQAO	GC/MS	✓ ✓	1	
ЕМТННА				
	GC/MS		1	
	LC/MS/MS		1	1
FWT6A2	GC/MS	✓		
	GC/FID		1	
FZU93A	Immunoassay	1		
	GC/MS		1	
GGJE9H	Immunoassay	1		
	GC/MS		1	

Webcode	Method	Screening	Confirmatory	Quantitation
GX72E7	LC/MS/MS	1	1	
H9ZU49	LC/MS/MS	1		
HEPCGY	Immunoassay	✓		
	GC/MS		1	
	GC/FID		✓	
HGDJ63	LC/MS	\checkmark		\checkmark
	LC/MS/MS		1	
HZ9EF6	Immunoassay	\checkmark		
	GC/MS		1	
J6E88E	Immunoassay	1		
J7TW97	Immunoassay	\checkmark		
	GC/MS		1	
J7UKXW	Immunoassay	\checkmark		
	GC/MS		1	
	LC/MS/MS		1	
	GC-HS	v		
JD9D32	GC/MS			<i>,</i>
	LC/MS/MS	v	v	
JNRR2X	Immunoassay	<i>✓</i>	,	
	GC/MS			
	GC/FID		V	
K6A8M6	Immunoassay	v	,	
	GC/MS		V	
KLG674	Immunoassay	v		
KXE9AX	LC/MS/MS	\checkmark	1	
KXQ83L	Immunoassay			
	GC/MS	<i>,</i>	,	,
	LC/MS/MS	/	v	v
. <u></u>	QIOF			
L67AMT	Immunoassay	\checkmark	,	1
	LC/MS/MS		V	V
LZEXPC	Immunoassay	J	/	1
	LC/MS/MS		V	V
M6MNQW	Immunoassay		/	
	LC/MS/MS		V	
MVZKKH	Immunoassay	v		
MW9UE2	Immunoassay	<i>,</i>	,	
	GC/MS		v	
N628BU	Immunoassay	<i>✓</i>	,	
	GC/MS		v	
	GC-FID		v	
N/E2QU	Immunoassay	\checkmark	/	
			V	./
	LC/1VI3/1VI3	•	•	v

Webcode	Method	Screening	Confirmatory	Quantitation
N87Z6T	Immunoassay GC/MS GC/FID	\checkmark	\$ \$	
NJ37XQ	lmmunoassay GC/MS LC/MS/MS	√ ✓	✓	1
PATW9D	GC/MS LC/MS/MS	\checkmark	1	
PB4ZHV	Immunoassay GC/MS LC/MS/MS	\ \ \	v	1
R2PQAR	Immunoassay GC/MS	\checkmark	1	
R4GR9N	Immunoassay GC/MS GC/FID	✓	✓ ✓	
RA2RQM	Immunoassay GC/MS GC/FID	1	√ √	
RNNZNN	Immunoassay GC/MS	√ √	1	
RUNGZE	lmmunoassay	✓		
T23MAQ	lmmunoassay	1		
T7FKJY	Immunoassay GC/MS	\checkmark	1	
TC3B7U	Immunoassay GC/MS	\checkmark	1	
TD3DVX	Immunoassay GC/MS	\checkmark	1	
TTCYGA	LC/MS/MS	✓		1
U9HM6U	Immunoassay GC/MS	\checkmark	1	
UV969K	Immunoassay GC/MS	√ √	1	
UVVBV6	Immunoassay GC/MS	\ \	1	
UXY93R	Immunoassay GC/MS	\checkmark	1	
UYYA7X	Immunoassay GC/MS	√ √		
V4LDER	Immunoassay GC/MS	\checkmark	1	
VH3E8C	LC/MS/MS	1		1

Test 17-5661

Webcode	Method	Screening	Confirmatory	Quantitation
VKUATK	Immunoassay	1		
	GC/MS	\checkmark		
	LC/MS/MS		1	
VMDMCM	Immunoassay	\checkmark		
	GC/MS	\checkmark	\checkmark	
	GC/NPD	✓		
VNVBXN	LC/MS/MS	✓	✓	
W34NNK	Immunoassay	✓ ✓		
	GC/MS		\checkmark	
	GC-FID		\checkmark	
WFW7GR	Immunoassay	1		
	GC/MS		\checkmark	
	GC/FID		✓	
WYNJPP	Immunoassay	✓		
	GC/MS		\checkmark	
XBDFRN	LC/MS/MS	✓	✓	✓
XMQWYK	Immunoassay	✓		
	LC/MS/MS	✓	✓	✓
YC9F9Y	LC/MS/MS	/		
YXL4WP	Immunoassay	✓		
	GC/MS	<u> </u>	<u> </u>	
Response Sum	mary for Item 1			Participants: 112
		Screening	Confirmatory	Quantitation
	Immunoassay:	92	0	0
	GC/MS:	29	68	2
	LC/MS:	1	0	2
	LC/MS/MS:	21	34	25
	Other:	10	16	1

Additional Comments for Item 1

Webcode	Item 1 - Comments
2DPLGK	Zolpidem indications, weak mass spectrum, assay negative - not reported
2RDN2X	Fentanyl is usually reported quantitatively in our laboratory but the concentration for this proficiency sample was approximately three times the upper limit of quantitation for our analysis. Therefore, the value could not be reported out quantitatively. It could only be reported qualitatively.
43M3WW	A second GC-MS extraction was conducted on 8/24/17 to confirm the fentanyl from the initial extraction on 7/27/17.
4C8ATZ	Screening: Instrument: UPLC-QTOF MS (Waters) Salting-out assisted extraction. Internal Standards: Cyclobarbitone, Prazepam & D3-Methadone. Fentanyl Quantitative Analysis: Instrument: UPLC-TQD (Waters). Internal Standard: D3-Codeine. LOD: 2 ng/mL
4DHARF	Internal standard used was D5-Fentanyl. Limit of detection is 1.0 ng/mL (limit of quantitation is 1.67 ng/mL).
6DZMTX	fentanyl internal standard = fentanyl-d5; LOQ = 0.5 ng/mL
79YZEZ	Immunoassay analyte: cutoff - Amphetamine: 20 ng/mL, Methamphetamine: 20 ng/mL, Morphine: 20 ng/mL, Benzoylecgonine: 50 ng/mL, Oxazepam: 50 ng/mL, Carboxytetrahydrocannabinol: 20ng/mL.
7AD6BC	IS = Mepivicaine. Even though death involved, Fentanyl is not quantitated in lab.
7ATPXV	fentanyl internal standard = fentanyl-d5; LOQ = 0.5 ng/mL
7AVDZ8	ELISA screening panel includes: amphetamine, benzodiazepines, cannabinoids, carisoprodol, cocaine and metabolites, methadone, opiates, oxycodone, phencyclidine, and zolpidem. Laboratory does not routinely analyze postmortem samples (outside scope of testing).
7FJ2UC	mepivacaine
7QGWWE	Internal standard: Mepivacaine
7ZUQCG	Internal standards used: Mepivacine, Nalorphine. Zolpidem indicated: not reported, immunoassay not indicative
83RPZE	Internal standard: Fentanyl-D5. LOD: 0.63 ng/mL. LOQ: 1.25 ng/mL. Diluted 5-fold for quantitation
8T34RV	fentanyl internal standard = fentanyl-d5; LOQ = 0.5 ng/mL
8WMTC9	Mepivacaine used as an internal standard. Fentanyl limit of detection: 50 ng/mL.
9A48TC	Zolpidem indicated, may be an artifact from production, not reported.
9F8CHB	Internal standard used was mepivacaine. The limit of detection is 0.5 mcg/L for fentanyl.
9KNGG7	Fentanyl is only called positive and not quantitated via GC/FID
ABG2BX	D5 - Fentanyl used as internal standard for confirmation/quantitation by LCMSMS. LOQ is 1 ng on column.
AHDRV9	Butyl Acetate Screen - Promazine (IStd). Opiate Confirmation - Nalorphine (IStd)
ALFUG4	ELISA screening panel includes: amphetamine, benzodiazepines, cannabinoids, carisoprodol, cocaine and metabolites, methadone, opiates, oxycodone. Our laboratory does not routinely test post-mortem blood.
BHAUVW	ULOQ for method is 30 ng/mL. Dilution was required.

Webcode	Item 1 - Comments
BKW9K8	Internal Standard= Mepivicaine. It is our policy to call fentanyl positive only. We do not quantitate this drug.
BM3VXB	Internal standard used: Mepivacaine
BX2N9N	Internal standard is Fentanyl-D5. Detection limit is 1ng/mL for Fentanyl
C2JBF2	ELISA screening panel includes: amphetamine, benzodiazepines, cannabinoids, carisoprodol, cocaine and metabolites, methadone, opiates, oxycodone, phencyclidine, and zolpidem. Laboratory does not routinely analyze postmortem samples (outside scope of testing).
CKVX4U	The sample was screened for the following type/class of drugs: Amphetamines, Benzodiazepines, Cannabinoids, Cocaine, Opiates, PCP
CMHCT6	The lab does not quantitate Fentanyl.
CQGQD9	Internal standard-mepivacaine. Had to sample reduced volume to get quantitation on calibration curve. 50 μ L sampled for a 200 μ L extraction, result multiplied by 4.
DHM6M2	Fentanyl is not quantitated using our basic extraction. It is only identified as positive.
EJQEWA	For fentanyl, the GC-FID was qualitative only.
EQXLY8	We used Fentanyl -D5 as internal standard.
EV6CW8	Internal Standard: Mepivacaine
F77W47	Internal Standards used: Mepivacaine. Fentanyl Limit of Detection: 50 ng/mL
FHXQA8	Caffeine and ibuprofen were also confirmed in the blood sample. The drugs were not reported independently in sections 1-1 [Table 1A - Screening Results-Item 1] and 1-2 [Table 1B - Confirmatory Results-Item 1] because they were confirmed in more than one of the PT samples.
HGDJ63	Internal Standard = Estazolam (1000 ng/mL)
HZ9EF6	Internal standard for confirmatory testing: Mepivacaine
JD9D32	LOD = 10 ng/mL. Internal Standard (GC/MS) = Nalorphine. Internal Standard (LC/MS/MS) = Flurazepam
JNRR2X	Internal standard used is mepivicaine. We have external testing done fentanyl, we call it positive.
KXE9AX	Internal Standard = Estazolam
KXQ83L	Initial quantitation of fentanyl was above the standard curve (high standard 40 ng/mL); the sample was analyzed again but with a dilution factor of 2.
L67AMT	Internal Standard: d5-Fentanyl. LOD: 0.4 ng/mL. LOQ: 0.4 ng/mL
LZEXPC	Internal standard is Fentanyl-D5. Detection limit is 1ng/mL for Fentanyl
M6MNQW	IS: mepivacaine. LOD: 0.5 μ g/L.
MVZKKH	Our immunoassay screening (ELISA) panel includes Amphetamines, Benzodiazepines, Cannabinoids, Cocaine, Opiates and Phencyclidine.
N7E2QU	mepivacaine used as internal standard.
N87Z6T	The lab does not quantitate Fentanyl.
NJ37XQ	LOQ 1 ng/mL. Internal standard Fentanyl-D5

Webcode	Item 1 - Comments
PATW9D	Used Internal standards: For the screening: Phenobarbital D-5; For the Confirmatory: Codeine D-3
PB4ZHV	Internal standard: mepivacaine
R4GR9N	I.S. = Mepivicaine
RNNZNN	Internal Standard - Mepivacaine. Fentanyl LOD - 50 ng/ml. Oxycodone and Zolpidem were indicated but not reported.
RUNGZE	Screen for following w/ cut-off values: Amp 20ng/ml, Oxa 50ng/ml, BE 50ng/ml, Meth 20ng/ml, Morphine 20ng/ml, C-THC 20ng/ml.
T23MAQ	[From Table 1B - Confirmatory Results-Item 1: "No validated method available at this time."]
TC3B7U	Internal Standard: Mepivacaine. Compounds indicated but not reported: Codeine and Zolpidem
TTCYGA	Fentanyl-D5 as ISTD. LOQ - 2 ng/mL
U9HM6U	Internal standards - SKF-525A @ 500 ng/mL
UV969K	Internal Standard: Mepivacaine. Fentanyl LOD 50ng/mL
VH3E8C	nordiazepam-d5 as internal standard, LOD 0.2ng/mL
VKUATK	fentanyl - d5
VMDMCM	Butyl Acetate screen utilized Promazine internal standard.
WFW7GR	The Lab does not quantitate Fentanyl.
XBDFRN	internal standards: mepivacaine
XMQWYK	Internal standard used: mepivacaine. Full volume for CQ LCMSMS quantitation was higher than the

highest calibrator. Analysis was calculated from 1:10 dilution single determination.

Screening Results - Item 2

TABLE 2A Item 2

Item Scenario:

A 26 year old female was arrested at a party. The arresting officer noted that she exhibited sweating, chills, dilated pupils, and confusion. A blood sample was collected 80 minutes after the arrest.

Item Contents and Preparation Concentration:

MDMA (345 ng/mL) MDA (50 ng/mL) 11-Nor-9-carboxy-delta-9-THC (85 ng/mL)

Webcode	Screening Results
2DPLGK	Amphetamine/MDA, Cannabinoids, Methamphetamine/MDMA
2RDN2X	3,4-MDMA, 3,4-MDA, Delta 9 Carboxy-THC
3RPK4H	cannabinoids, 3,4-methylenedioxyamphetamine (MDA), 3,4-methylenedioxymethamphetamine (MDMA)
43M3WW	Amphetamine/MDA, Cannabinoids, Methamphetamine/MDMA
46BFXM	sympathomimetic amines
4C8ATZ	3,4-Methylenedioxyamphetamine (3,4-MDA), 3,4-Methylenedioxymethylamphetamine (3,4-MDMA), Delta-9-THC Acid
4DHARF	11-nor-Delta-9-Carboxy-THC, Methamphetamine & MDMA
4ZHB6H	Methamphetamine, Cannabinoids
6DZMTX	amphetamines; MDA, MDMA, cannabinoids; 11-nor-9-carboxy-delta9-THC
6FM2LE	Sympathomimetic amines
79YZEZ	Amphetamine, Methamphetamine, Tetrahydrocannabinol
7AD6BC	Cannabinoids
7ATPXV	amphetamines; MDA, MDMA, cannabinoids; 11-nor-9-carboxy-delta9-THC
7AVDZ8	Cannabinoids, amphetamine
7FH2YJ	Cannabinoids
7FJ2UC	THC class, MDA (3,4-methylenedioxyamphetamine), MDMA (3,4-methylenedioxymethamphetamine)
7QGWWE	Amphetamine/MDA, Cannabinoids, Methamphetamine/MDMA
7ZUQCG	Amphetamine/MDA, Cannabinoids, Methamphetamine/MDMA
83RPZE	Methylenedioxymethamphetamine (MDMA), Methylenedioxyamphetamine (MDA)
8NAYYQ	Cannabinoids, Methamphetamine/MDMA
8T34RV	amphetamines; MDA, MDMA, cannabinoids; 11-nor-9-carboxy-delta9-THC
8WMTC9	Amphetamine/MDA; Cannabinoids; Methamphetamine/MDMA.
9833FR	Amphetamine/MDA, Cannabinoids, Methamphetamine/MDMA
9A48TC	Amphetamine/MDA, Cannabinoids, Methamphetamine/MDMA

Webcode	Screening Results
9ANN9F	THC, Methamphetamine
9F8CHB	delta-9 THC and metabolite(s), MDA, and MDMA
9JVLUX	Amphetamines, Cannabinoids
9KNGG7	cannabinoids
9LKREU	Cannabinoids, Amphetamines, Methamphetamine/MDMA
ABG2BX	Illicit stimulants: (MDA: 3,4-dimethylenedioxymethylamphetamine), (MDA: methylenedioxyamphetamine)
AHDRV9	Possible SMA , Possible Benzodiazepine
ALFUG4	amphetamine, cannabinoids
AN7YEG	MDA (illicit hallucinogens/stimulants), MDMA (illicit hallucinogens/stimulants), THC-COOH (cannabinoids)
AQCJ2G	AMPHETAMINE/EXTASIS, CANNABIS
AWFMRF	MDMA
AYHL39	Methamphetamine, Cannabinoids
B2MB2B	Amphetamine/MDA, Methamphetamine/MDMA, Cannabinoids
B2MB6G	MDMA
BBDW79	Methamphetamine (MDMA), Cannabinoids
BF499W	Amphetamine, Cannabinoids, MDMA, Methamphetamine
BGE937	Marijuana metabolites
BHAUVW	Methamphetamine, Amphetamine, Cannabinoid
BKW9K8	Cannabinoids
BM3VXB	Amphetamine/MDA, Cannabinoids, Methamphetamine/MDMA
BX2N9N	11-nor-9-Carboxy-delta9-THC, 3,4-methylenedioxymethamphetamine (MDMA), 3,4-methylenedioxyamphetamine (MDA)
C2JBF2	Cannabinoids and amphetamine.
CKVX4U	Cannabinoids, Amphetamines
СМНСТ6	THC
CQGQD9	Cannabinoids, MDA, MDMA
DAVJLA	MDMA, MDA, THC-COOH
DHM6M2	THC and metabolites
DPKU9C	THC and metabolites
EJQEWA	Cannabinoids presumptively positive.

Webcode	Screening Results
EQXLY8	We detected cannabinoids
EV6CW8	Amphetamine/MDA, Methamphetamine/MDMA, Cannabinoids
F77W47	Amphetamine/MDA, Cannabinoids, Methamphetamine/MDMA
FHXQA8	amphetamine, cannabinoids, methamphetamine
FMTHH6	Delta 9 Carboxy THC, MDMA, MDA
FWT6A2	THC (ELISA)
FZU93A	THC
GGJE9H	Amphetamines, THC
GX72E7	MDA, MDMA, Carboxy-THC
H9ZU49	MDMA, MDA, THC-COOH
HEPCGY	THC ELISA screen
HGDJ63	MDMA
HZ9EF6	Amphetamine/MDA, Cannabinoids, Methamphetamine/MDMA
J6E88E	Methamphetamine, Amphetamine, MDMA (3,4 Methylenedioxy-Methamphetamine), THC (Tetrahydrocannabinol)
J7TW97	Cannabinoids, amphetamine, methamphetamine
J7UKXW	No drugs/metabolites detected
JD9D32	3,4-Methylenedioxymethamphetamine (MDMA)
JNRR2X	Cannabinoids
K6A8M6	THC
KLG674	Cannabinoids, methamphetamine
KXE9AX	MDMA
KXQ83L	Methylenedioxymethamphetamine, methylenedioxyamphetamine, carboxytetrahydrocannabinol
L67AMT	THC-Metabolite, Amphetamine, and Methamphetamine
LZEXPC	11-nor-9-Carboxy-delta 9-THC, 3,4-methylenedioxyamphetamine (MDA), 3,4-methylenedioxymethamphetamine (MDMA)
M6MNQW	cannabinoids, 3,4-methylenedioxymethamphetamine, 3,4-methyldioxyamphetamine
MVZKKH	Positive for Amphetamines and Cannabinoids.
MW9UE2	The specimen screened positive for THC using EMIT technology screening.
N628BU	Cannabinoids
N7E2QU	class - Cannabinoids

Webcode	Screening Results
N87Z6T	THC
NJ37XQ	Amphetamine, Methamphetamine, Cannabinoids
PATW9D	MDMA, MDA, 11-nor-9-carboxy- delta-9-THC
PB4ZHV	3,4-methylenedioxyamphetamine (MDA), 3,4-methylenedioxymethamphetamine (MDMA), 11-nor-9-tetrahydrocannabinol-9-carboxylic acid (THC-COOH)
R2PQAR	Drug(s) detected [No class and/or drug names reported]
R4GR9N	Cannabinoids
RA2RQM	Cannabinoids
RNNZNN	Amphetamine/MDA, Cannabinoids, Methamphetamine/MDMA
RUNGZE	Amp, Meth, THC
T23MAQ	Methamphetamines, amphetamines, marijuana metabolite
T7FKJY	MDMA and Cannabinoids
TC3B7U	Amphetamine/MDA, Cannabinoids, Methamphetamine/MDMA
TD3DVX	Cannabinoids & MDMA
TTCYGA	Methylenedioxymethamphetamine (MDMA), Methylenedioxyamphetamine (MDA)
U9HM6U	Amphetamine, Methamphetamine, Cannabinoids
UV969K	Amphetamine/MDA, Cannabinoids, Methamphetamine/MDMA
UVVBV6	Amphetamine/MDA, Cannabinoids, Methamphetamine/MDMA
UXY93R	amphetamine, methamphetamine, cannabinoids
UYYA7X	Amphetamines, Methamphetamine, Marijuana Metabolite
V4LDER	Cannabinoids
VH3E8C	MDMA, MDA
VKUATK	THC, MDMA
VMDMCM	Sympahtomimetic Amines (SMA)
VNVBXN	3.4-methylenedioxyamphetamine, 3,4-methylenedioxymethamphetamine
W34NNK	Cannabinoids
WFW7GR	THC
WYNJPP	Methamphetamine/Amphetamine/Cannabinoid ELISA Screens, MDMA, MDA
XBDFRN	Cannabinoids, MDA, MDMA
XMQWYK	THC, MDMA, MDA
YC9F9Y	3,4-MDMA, THCCOOH

Webcode	Screening Results				
YXL4WP	Amphetamine, Cannabinoids (THC), Methamphetamine				
Response Summary for Item 2 Partic					
	Methamphetamine and/or MDMA:	75			
	Amphetamine and/or MDA:	67			
	Cannabinoids and/or THC-COOH:	97			
	Other:	4			
	No drugs/metabolites detected:	1			
	Totals may add up to more than the total nu because participants can report multiple	umber of participant drugs/analytes.	s		

Confirmatory Results - Item 2

What drugs/metabolites were detected in Item 2?

TABLE 2B Item 2

Item Scenario:

A 26 year old female was arrested at a party. The arresting officer noted that she exhibited sweating, chills, dilated pupils, and confusion. A blood sample was collected 80 minutes after the arrest.

Item Contents and Preparation Concentration:

MDMA (345 ng/mL) MDA (50 ng/mL) 11-Nor-9-carboxy-delta-9-THC (85 ng/mL)

Webcode	Q Analyte Reported	ualitative Only	Reported Concentration	Uncertainty	Units
2DPLGK	3,4-Methylenedioxymethamphetamine (MDMA)	1			
	3,4-Methylenedioxyamphetamine (MDA	N) 🗸			
	11-nor-delta-9-tetrahydrocannabinol-9 carboxylic acid (THCA)	-	89	27%	ng/mL
2RDN2X	3,4 - MDMA		304.4	48.7	ng/ml
	3,4 - MDA	1			
	Delta-9 Carboxy THC	1			
3RPK4H	3,4-methylenedioxymethamphetamine		400	90	mcg/L
	3,4-methylenedioxyamphetamine		61	14	mcg/L
	11-nor-delta-9-tetrahydrocannabinol-9 carboxylic acid	-	69	12	ng/mL
43M3WW	MDMA	1			
	MDA	1			
	THCA		78	27	ng/ml
46BFXM	MDMA	1			
	MDA	\checkmark			
4C8ATZ	3,4-Methylenedioxymethylamphetamine	e	380	85	ng/mL
	3,4-Methylenedioxyamphetamine		50	30	ng/mL
	Delta-9-THC Acid		96	18	ng/mL
4DHARF	Methylenedioxymethamphetamine (MDMA)		310	18%	ng/mL
	Methylenedioxyamphetamine (MDA)		40	18%	ng/mL
	11-nor-Delta-9-Carboxy-THC, Free	✓			

Qualitative Reported Webcode **Analyte Reported** Only Uncertainty Units Concentration 4ZHB6H 1 3,4-Methylenedioxymethamphetamine 1 3.4-Methylenedioxyamphetamine 1 Delta-9 Carboxy THC 6DZMTX 310 42 MDMA ng/mL MDA 43 6.1 ng/mL 11-nor-9-carboxy-delta9-THC 72 11 ng/mL 6FM2LE MDMA 1 MDA 79YZEZ 0.308 ±0.046 MDMA $\mu g/mL$ MDA 0.047 ±0.007 $\mu g/mL$ Carboxytetrahydrocannabinol 68 ±11 ng/mL 1 7AD6BC MDMA MDA 1 THC-COOH 84 +/-11 ng/mL 7ATPXV MDMA 340 45 ng/mL MDA 47 6.6 ng/mL 11-nor-9-carboxy-delta9-THC 88 13 ng/mL 7AVDZ8 11-nor-9-carboxy-delta-9-81 ± 12 ng/mL tetrahydrocannabinol 7FH2YJ MDMA 0.35 +/-0.02 ug/ml MDA 0.06 +/-0.004 ug/ml 11-nor-9-carboxy-delta9-THC 85 +/-11ng/ml 7FJ2UC MDMA 0.43 +/- 0.10 mg/L (3,4-methylenedioxymethamphetamine) MDA (3,4-methylenedioxyamphetamine) 68 +/- 16 μ g/L THCCOOH 74 +/- 13 ng/mL (11-nor-delta-9-tetrahydrocannabinol-9carboxylic acid)

Webcode	Qu Analyte Reported	valitative Only	Reported Concentration	Uncertainty	Units
7QGWWE	3,4-methylenedioxymethamphetamine (MDMA)	1			
	3,4-methylenedioxyamphetamine (MDA)	1			
	11-nor-delta-9-tetrahydrocannabinol-9- carboxylic acid (THCA)		83	27	ng/mL
7ZUQCG	3,4-Methylenedioxymethamphetamine (MDMA)	1			
	3,4-Methylenedioxyamphetamine (MDA)	1			
	11-nor-delta-9-tetrahydrocannabinol-9- carboxylic acid (THCA)		78	+/- 27%	ng/mL
83RPZE	MDMA		0.28	0.04	mg/L
	MDA		0.046	0.009	mg/L
8NAYYQ	MDMA		310		ng/mL
	MDA	1			
	THC-COOH	1			
8T34RV	MDMA		340	45	ng/mL
	MDA		48	6.8	ng/mL
	11-nor-9-carboxy-delta9-THC		79	11	ng/mL
8WMTC9	3,4-Methylenedioxymethamphetamine (MDMA)	√			
	3,4-Methylenedioxyamphetamine (MDA)	1			
	11-nor-delta-9-tetrahydrocannabinol-9- carboxylic acid (THCA)		86	27%	ng/mL
9833FR	3,4-Methylenedioxymethamphetamine (MDMA)	1			
	3,4-Methylenedioxyamphetamine (MDA)	1			
	11-nor-delta-9-tetrahydrocannabinol-9- carboxylic acid (THCA)		70	27%	ng/ml
9A48TC	3,4-Methylenedioxymethamphetamine (MDMA)	✓			
	3,4-Methylenedioxyamphetamine (MDA)	1			
	11-nor-delta-9-tetrahydrocannabinol-9- carboxylic acid (THCA)		89	+/- 27%	ng/mL
9ANN9F	MDMA	1			
	MDA	1			

Webcode	Q Analyte Reported	Only	Reported Concentration	Uncertainty	Units
9F8CHB	3,4-methylenedioxymethamphetamine		0.41	+/- 0.09	mg/L
	3,4-methylenedioxyamphetamine		65	+/- 15	mcg/L
	11-nor-delta-9-tetrahydrocannabinol-9- carboxylic acid		83	+/- 14	ng/mL
9KNGG7	MDMA	1			
	MDA	1			
	THC-COOH		93	+/- 12	ng/mL
ABG2BX	MDMA (3,4-methylenedioxymethamphetamine)		0.32	±10%	mg/L
	MDA (methylenedioxyamphetamine		0.04	±10%	mg/L
AHDRV9	MDMA	1			
	MDA	1			
ALFUG4	11-nor-9-carboxy-delta-9-cannabinnol		77	11	ng/mL
AN7YEG	MDMA		398.5	±14.1%	ng/mL
	MDA		52.5	±13.6%	ng/mL
	THC-COOH		84.8	±14.4%	ng/mL
AQCJ2G	MDMA		404		ng/mL
	MDA		50		ng/mL
	11-nor-d9-THC-COOH		32		ng/mL
AWFMRF	MDMA	1			
	MDA	1			
AYHL39	3,4-Methylenedioxymethamphetamine	1			
	3,4-Methylenedioxyamphetamine	1			
	Delta-9 Carboxy THC	1			
B2MB2B	3,4-Methylenedioxymethamphetamine (MDMA)	1			
	3,4-Methylenedioxyamphetamine (MDA)	1			
	11-nor-delta-9-tetrahydrocannabinol-9- carboxylic acid		86	27%	ng/ml
B2MB6G	MDMA	1			
	MDA	1			

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
BBDW79	MDMA	1			
BF499W	MDMA	1			
	MDA	1			
	THC-COOH	1			
BGE937	MDMA	1			
	MDA	1			
	11-nor-9-carboxy-delta-9-THC		91	+/- 12	ng/mL
BHAUVW	3,4-Methylenedioxymethamphetamin (MDMA)	e 🗸			
	3,4-Methylenedioxyamphetamine (MD	A) 🗸			
	9-carboxy-11-nor-delta-9-THC		69		ng/mL
BKW9K8	MDMA	1			
	MDA	1			
	THC-COOH		91	(80-104)	ng/mL
BM3VXB	3,4-Methylenedioxymethamphetamin (MDMA)	e 🗸			
	3,4-Methylenedioxyamphetamine (MD	A) 🗸			
	11-nor-delta-9-tetrahydrocannabinol- carboxylic acid (THCA	9-	86	27%	ng/mL
BX2N9N	MDMA		293	54	ng/mL
	MDA		68	6.7	ng/mL
	11-nor-9-Carboxy-delta9-THC		102	14	ng/mL
C2JBF2	11-nor-9-carboxy-delta-9-THC		80	±12	ng/ml
CMHCT6	MDMA	1			
	MDA	1			
	11-nor-9-carboxy-delta-9-THC		90	+\- 12	ng/mL
CQGQD9	3,4-methylenedioxymethamphetamin	e	0.41	0.09	mg/L
	3,4-methylenedioxyamphetamine		55	+/-13	μ g/L
	11-nor-delta-9-tetrahydrocannabinol- carboxylic acid	9-	67	+/-11	ng/mL

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
DAVJLA	MDMA	1			
	MDA	1			
	THC-COOH	1			
DHM6M2	MDMA	1			
	MDA	1			
	THC-COOH (Carboxy THC)		95	+/- 13	ng/mL
DPKU9C	MDMA	1			
	MDA	1			
	11-nor-9-carboxy-delta-9-THC		86	+/-11	ng/ml
EJQEWA	MDMA	1	Positive		
	MDA	1	Positive		
	11-nor-9-carboxy-delta-9-THC		87	+/- 11	ng/mL
EQXLY8	MDMA	1			
	delta-9-tetrahydrocannabinol-9 -carboxylic acid	1			
EV6CW8	3,4-Methylenedioxymethamphetamin (MDMA)	e 🗸			
	3,4-Methylenedioxyamphetamine (MD	A) 🗸			
	11-nor-delta-9-tetrahydro cannabinol-9-carboxylic acid (THCA)	88	+/-27%	ng/ml
F77W47	3,4-Methylenedioxymethamphetamin (MDMA)	e 🗸			
	3,4-Methylenedioxyamphetamine (MD	A) 🗸			
	11-nor-delta-9-tetrahydrocannabinol- carboxylic acid (THCA)	9-	83	27%	ng/mL
FHXQA8	methylenedioxymethamphetamine	1			
	methylenedioxyamphetamine	1			
	carboxy-THC	1			
FMTHH6	MDMA		289	86.7	ng/mL
	MDA		55	16.5	ng/mL
	Delta 9 carboxy THC		72	21.6	ng/mL

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
FWT6A2	MDMA	1			
	MDA	1			
	THC-COOH		83.0	+/-11.0	ng/ml
FZU93A	MDMA		0.37	0.02	ug/ml
	MDA		0.07	0.005	ug/ml
	11-nor-9-carboxy-delta-9-THC		86	11	ng/ml
GGJE9H	MDMA	1			
	MDA	1			
	11-nor-9-carboxy-THC	1			
GX72E7	3,4-methylenedioxymethamphetamin (MDMA)	e 🗸			
	3,4-methylenedioxyamphetamine (MD	0A) 🗸			
	Carboxy-THC	\checkmark			
HEPCGY	MDMA	1	positive		
	MDA	1	positive		
	9-carboxy-11-nor-delta-9-THC		92	81-105	ng/mL
HGDJ63	MDMA		335.7 ng/mL	7.0	ng/mL
HZ9EF6	3,4-Methylenedioxymethamphetamin (MDMA)	e 🗸			
	3,4-Methylenedioxyamphetamine (MD	DA) 🗸			
	11-nor-delta-9-tetrahydrocannabinol- carboxylic acid (THCA)	9-	81	27%	ng/ml
J7TW97	MDMA	1			
	MDA	1			
	THC-COOH		72		ng/mL
J7UKXW	MDMA	1			
JD9D32	MDMA	1	>300 ng/mL	0.06	ng/mL
JNRR2X	MDMA	1			
	MDA	1			
	thc-cooh		95	83-108	ng/ml
Qualitative Reported Webcode Only **Analyte Reported** Concentration Uncertainty Units K6A8M6 MDMA 0.34 +/-0.02 ug/ml MDA 0.07 +/-0.005 ug/ml 11-nor--9-carboxy-delta-9-THC 81 +/-10ng/ml KLG674 1 Cannabinoids Methamphetamine 1 KXE9AX MDMA 1 MDA 1 KXQ83L Methylenedioxymethamphetamine 0.33 0.04 mg/L 0.055 0.007 Methylenedioxyamphetamine mg/L Carboxytetrahydrocannabinol 1 L67AMT 302 60 3,4-Methylenedioxymethamphetamine ng/mL (MDMA) 9 3,4-Methylenedioxyamphetamine (MDA) 44 ng/mL 11-nor-9-carboxy-delta-9-THC 84 17 ng/mL LZEXPC 3,4-methylenedioxymethamphetamine 334 62 ng/mL (MDMA) 3,4-methylenedioxyamphetamine (MDA) 63 6.2 ng/mL 11-nor-9-Carboxy-delta 9-THC 87 12 ng/ml M6MNQW 3,4-methylenedioxymethamphetamine 0.41 0.09 mg/L 3,4-methyldioxyamphetamine 64 15 μ g/L 11-nor-delta-9-tetrahydrocannabinol-9-71 12 ng/mL carboxylic acid 92 **MVZKKH** THCA 14.7 ng/mL MW9UE2 Oxycodone 1 N628BU MDMA 1 1 MDA THC-COOH 86 75-97 ng/ml N7E2QU MDMA 0.41 0.09 mg/L MDA 67 15 mcg/L THC-COOH 84 14 ng/mL

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
N87Z6T	MDMA	1			
	MDA	1			
	[No analyte name reported]		51	+/- 5	ng/mL
NJ37XQ	MDMA		0.39	0.05	mg/L
	MDA		0.050	0.006	mg/L
	Cannabinoids	✓			
PATW9D	MDMA	1			
	MDA	1			
	11-nor-9-carboxy- delta-9-THC	\checkmark			
PB4ZHV	MDMA		400	90	ng/mL
	MDA		62	14	ng/mL
	THC-COOH		80	14	ng/mL
R2PQAR	methylenedioxymethamphetamine	1			
	methylenedioxyamphetamine	1			
	carboxy-THC	1			
R4GR9N	MDMA	1			
	MDA	1			
	THC-COOH		96 ng/mL	+/- 13	ng/mL
RA2RQM	MDMA	1			
	MDA	1			
	THC-COOH		101	+/- 13	ng/mL
RNNZNN	3,4-Methylenedioxymethamphetamin (MDMA)	ne 🗸			
	3,4-Methylenedioxyamphetamine (MD	DA) 🗸			
	11-nor-delta-9-tetrahydrocannabinol- carboxylic acid (THCA)	9-	84	+/- 27%	ng/ml
RUNGZE	MDMA		0.334	±0.050	mcg/ml
	MDA		0.049mcg/ml	±0.008	mcg/ml
	C-THC		75	±12	ng/ml

Qualitative Reported Webcode Only **Analyte Reported** Concentration Uncertainty Units T23MAQ 284 3,4-Methylenedioxymethamphetamine ng/mL MDMA 3,4-Methylenedioxyamphetamine MDA 50 ng/mL 11-nor-9-carboxy-delta-9-THC 78 ng/mL T7FKJY MDMA 1 1 MDA 62.2 THCA 21.6 ng/mL TC3B7U 3,4-Methylenedioxymethamphetamine 1 (MDMA) 3,4-Methylenedioxyamphetamine (MDA) 1 11-nor-delta-9-tetrahydrocannabinol-9-81 +/- 27% ng/ml carboxylic acid (THCA) 1 **TD3DVX** MDMA 1 MDA **TTCYGA** MDMA 1 1 MDA 1 U9HM6U Methylenedioxymethamphetamine 1 carboxy-THC UV969K 1 MDMA 1 MDA THCA 87 27% ng/mL UVVBV6 3,4-methylenedioxymethamphetamine 1 1 3,4-methylenedioxyamphetamine 11-nor-delta-9-tetrahydrocannabinol-9-86 21% ng/ml carboxylic acid (THCA) UXY93R methylenedioxymethamphetamine 1 methylenedioxyamphetamine 1 1 carboxy-THC UYYA7X 1 MDMA 1 MDA Carboxy-THC (THCCOOH) 75 15 ng/mL

Qualitative Reported Webcode Only **Analyte Reported** Concentration Uncertainty Units V4LDER MDMA 0.38 +/- 0.03 ug/ml MDA 0.07 +/- 0.005 ug/ml 11-nor-9-carboxy-delta-9-THC 88 +/- 11.00 ng/ml VH3E8C 330 MDMA ng/mL MDA 94 ng/L VKUATK MDMA 307 62 ng/ml MDA 46 10 ng/ml 11-carboxy-THC 80 20 ng/ml 1 VMDMCM Methylenedioxymethamphetamine (MDMA) 1 Methlenedioxyamphetamine (MDA) 1 VNVBXN 3,4-methylenedioxymethamphetamine 1 3,4-methylenedioxyamphetamine 1 W34NNK MDMA 1 MDA THC-COOH 90 +/-12ng/ml WFW7GR 1 MDMA 1 MDA 11-nor-9-carboxy-9-THC 57 +/- 7 ng/mL WYNJPP 1 MDMA 1 MDA Delta-9-Carboxy THC 89 36% ng/mL XBDFRN 3,4-methylenedioxymethamphetamine 0.43 mg/L 0.10 mg//L 3,4-methylenedioxyamphetamine 64 mcg/L 15 mcg/L 11-nor-delta-9-tetrahydrocannabinol-9-68 ng/mL 12 ng/mL carboxylic acid **XMQWYK** 3,4-methylenedioxymethamphetamine 0.41 +/-0.09 mg/L 3,4-methylenedioxyamphetamine 64 +/-15mcg/L 11-nor-delta-9-tetrahydrocannabinol-9-76 +/-13 ng/mL carboxylic acid

Webcode	Que Analyte Reported	alitative Only	Reported Concentration	Uncertainty	Units
YC9F9Y	3,4-MDMA		332.90	166.45	ng/ml
	ТНССООН		241.00	120.50	ng/ml
YXL4WP	3,4-Methylenedioxymethamphetamine (MDMA)		366.0		ng/mL
	3,4-Methylenedioxyamphetamine (MDA)	1			
	Carboxy-THC		44.0		ng/mL
Response	Summary for Item 2			Participants	: 108
	MDMA	.: 102			
	MDA	: 95			
	11-nor-9-carboxy-delta-9-THC	.: 86			
	Other	: 4			
	Totals may add up to more th because participants can re	nan the tc eport mu	stal number of partic Itiple drugs/metabol	cipants lites.	

Raw Data - Item 2

List of raw data determinations in ng/mL.

TABLE 2C Item 2

Item 2 Raw Data - MDMA

Preparation concentration: (345 ng/mL)

Webcode	Raw Data	(ng/mL)			Participant Mean
2RDN2X	304.0				304.0
3RPK4H	402.7				402.7
4C8ATZ	370.0	384.0			377.0
4DHARF	310.0				310.0
6DZMTX	315.8				315.8
79YZEZ	308.0				308.0
7ATPXV	341.0				341.0
7FH2YJ	350.0				350.0
7FJ2UC	427.8				427.8
83RPZE	275.0	287.0			281.0
8NAYYQ	311.2				311.2
8T34RV	343.5				343.5
9F8CHB	414.0				414.0
ABG2BX	315.0	318.0			316.5
AN7YEG	386.0	410.9			398.5
AQCJ2G	404.0				404.0
BX2N9N	293.0				293.0
CQGQD9	413.0				413.0
FMTHH6	289.6	305.5			297.5
FZU93A	373.0				373.0
HGDJ63	335.7				335.7
K6A8M6	347.0				347.0
KXQ83L	329.5	333.2			331.4
L67AMT	302.0				302.0
LZEXPC	334.0				334.0
M6MNQW	407.8				407.8
N7E2QU	409.1				409.1
NJ37XQ	388.5	383.5	453.5	376.0	400.4

Item 2 Raw Data - MDMA Preparation concentration: (345 ng/mL)

Webcode	Raw Data (ne	g/mL)			Participant Mean
PB4ZHV	400.6				400.6
RUNGZE	334.0				334.0
T23MAQ	284.3				284.3
V4LDER	380.0				380.0
VH3E8C	330.0	350.0	320.0		333.3
VKUATK	307.0				307.0
XBDFRN	425.5				425.5
XMQWYK	408.4				408.4
YC9F9Y	332.9				332.9
YXL4WP	365.7				365.7
Statistical /	Analysis for Item (2 - MDMA			
Grar	nd Mean 353.2	Numbe	er of Participants Inclu	uded 38	Number of Participants without Raw Data or Data that was not 64
Standard D	eviation 45.17	Numbe	er of Participants Exclu	ided 0	reported in ng/mL

Item 2 Raw Data - MDA Preparation concentration: (50 ng/mL)

Webcode	Raw Data	(ng/mL)			Participant Mean
3RPK4H	60.61				60.61
4C8ATZ	43.00	50.00			46.50
4DHARF	40.00				40.00
6DZMTX	43.36				43.36
79YZEZ	47.00				47.00
7ATPXV	47.39				47.39
7FH2YJ	60.00				60.00
7FJ2UC	68.03				68.03
83RPZE	49.00	43.00			46.00
8T34RV	48.78				48.78
9F8CHB	64.77				64.77
ABG2BX	42.00	42.00			42.00
AN7YEG	51.60	53.40			52.50
AQCJ2G	50.00				50.00
BX2N9N	68.00				68.00
CQGQD9	55.12				55.12
FMTHH6	55.87	50.16			53.01
FZU93A	73.00				73.00
K6A8M6	71.00				71.00
KXQ83L	52.35	57.84			55.09
L67AMT	44.00				44.00
LZEXPC	63.00				63.00
M6MNQW	63.73				63.73
N7E2QU	67.21				67.21
NJ37XQ	51.35	49.10	62.50	49.20	53.04
PB4ZHV	61.98				61.98
RUNGZE	49.00				49.00
T23MAQ	50.70				50.70
V4LDER	70.00				70.00
VH3E8C	93.00	86.00	104.0		94.33 X
VKUATK	46.00				46.00

Item 2 Raw Data - MDA Preparation concentration: (50 ng/mL)

Webcode	Raw Data (ng,	/mL)	Participant Mean
XBDFRN	64.10		64.10
XMQWYK	64.35		64.35
Statistical An	alysis for Item 2	- MDA	
Grand	Mean 55.91	Number of Participants Included 32	Number of Participants without Raw Data or Data that was not 62
Standard Dev	viation 9.699	Number of Participants Excluded 1	reported in ng/mL

Item 2 Raw Data - 11-nor-9-carboxy-delta-9-THC Preparation concentration: (85 ng/mL)

Webcode	Raw Data	ng/mL)	Participant Mean
2DPLGK	88.74		88.74
3RPK4H	68.57		68.57
43M3WW	77.81		77.81
4C8ATZ	100.0	92.00	96.00
6DZMTX	72.74		72.74
79YZEZ	68.27		68.27
7AD6BC	84.26		84.26
7ATPXV	88.52		88.52
7AVDZ8	81.24		81.24
7FH2YJ	85.00		85.00
7FJ2UC	73.66		73.66
7QGWWE	83.02		83.02
7ZUQCG	78.36		78.36
8T34RV	79.42		79.42
8WMTC9	85.72		85.72
9833FR	70.40		70.40
9A48TC	89.22		89.22
9F8CHB	82.74		82.74
9KNGG7	93.51		93.51
ALFUG4	77.95		77.95
AN7YEG	87.40	82.20	84.80
AQCJ2G	32.00		32.00 X
B2MB2B	85.82		85.82
BGE937	91.34		91.34
BHAUVW	68.60		68.60
BKW9K8	91.71		91.71
BM3VXB	86.17		86.17
BX2N9N	102.0		102.0
C2JBF2	80.38		80.38
СМНСТ6	90.61		90.61
CQGQD9	66.76		66.76

Item 2 Raw Data - 11-nor-9-carboxy-delta-9-THC Preparation concentration: (85 ng/mL)

Webcode	Raw Data (ng/r	mL)	Participant Mean
DHM6M2	95.76		95.76
DPKU9C	86.15		86.15
EJQEWA	87.44		87.44
EV6CW8	88.12		88.12
F77W47	83.44		83.44
FMTHH6	72.03		72.03
FWT6A2	83.64		83.64
FZU93A	86.87		86.87
HEPCGY	92.98		92.98
HZ9EF6	81.12		81.12
J7TW97	72.00		72.00
JNRR2X	95.56		95.56
K6A8M6	81.34		81.34
L67AMT	84.00		84.00
LZEXPC	87.00		87.00
M6MNQW	71.46		71.46
MVZKKH	91.90		91.90
N628BU	86.06		86.06
N7E2QU	83.72		83.72
PB4ZHV	79.95		79.95
R4GR9N	96.25		96.25
RA2RQM	101.2		101.2
RNNZNN	83.91		83.91
RUNGZE	75.18		75.18
T23MAQ	78.70		78.70
T7FKJY	63.48	60.90	62.19
TC3B7U	80.93		80.93
UV969K	87.04		87.04
UVVBV6	85.72		85.72
UYYA7X	75.50		75.50

Item 2 Raw Data - 11-nor-9-carboxy-delta-9-THC Preparation concentration: (85 ng/mL)

Webcode	Raw Data (ng/	mL)	Participant Mean
V4LDER	88.00		88.00
VKUATK	80.00		80.00
W34NNK	90.56		90.56
WFW7GR	57.38		57.38
WYNJPP	89.00		89.00
XBDFRN	67.73		67.73
XMQWYK	76.14		76.14
YC9F9Y	241.0		241.0 X
YXL4WP	43.81		43.81 X
Statistical Ar	nalysis for Item 2	- 11-nor-9-carboxy-delta-9-THC	
Grand	Mean 82.68	Number of Participants Included 67	Number of Participants without Raw Data or Data that was not 16
Standard De	viation 9.107	Number of Participants Excluded 3	reported in ng/mL

Item 2 Raw Data - Other

Webcode	Raw Data (ng/mL)	Participant Mean	
N87Z6T	[No analyte name reported] 51.744		
Statistical An	Statistical Analysis for Item 2 - Other		
	Please note statistical analysis is not provided for other drug responses	š.	

Reporting Procedures - Item 2

If quantitative analysis was performed, the reported concentrations are:

Webcode	Quantitative Reporting Procedures
2DPLGK	A single determination.
2RDN2X	A single determination.
3RPK4H	A single determination.
43M3WW	A single determination.
4C8ATZ	The mean of duplicate/several determinations.
4DHARF	A single determination.
6DZMTX	A single determination.
79YZEZ	A single determination.
7AD6BC	A single determination.
7ATPXV	A single determination.
7AVDZ8	A single determination.
7FH2YJ	A single determination.
7FJ2UC	A single determination.
7QGWWE	A single determination.
7ZUQCG	A single determination.
8NAYYQ	A single determination.
8T34RV	A single determination.
8WMTC9	A single determination.
9833FR	A single determination.
9A48TC	A single determination.
9F8CHB	A single determination.
9KNGG7	A single determination.
ABG2BX	The mean of duplicate/several determinations.
ALFUG4	A single determination.
AN7YEG	The mean of duplicate/several determinations.
AQCJ2G	A single determination.
B2MB2B	A single determination.
BGE937	A single determination.
BHAUVW	A single determination.

Webcode	Quantitative Reporting Procedures
BKW9K8	A single determination.
BM3VXB	A single determination.
BX2N9N	A single determination.
C2JBF2	A single determination.
CMHCT6	A single determination.
CQGQD9	A single determination.
DHM6M2	A single determination.
DPKU9C	A single determination.
EJQEWA	A single determination.
EV6CW8	A single determination.
F77W47	A single determination.
FMTHH6	A single determination.
FWT6A2	A single determination.
FZU93A	A single determination.
HEPCGY	A single determination.
HGDJ63	The mean of duplicate/several determinations.
HZ9EF6	A single determination.
J7TW97	A single determination.
JD9D32	A single determination.
JNRR2X	A single determination.
K6A8M6	A single determination.
L67AMT	A single determination.
LZEXPC	A single determination.
M6MNQW	A single determination.
MVZKKH	A single determination.
N628BU	A single determination.
N7E2QU	A single determination.
N87Z6T	A single determination.
NJ37XQ	The mean of duplicate/several determinations.
PB4ZHV	A single determination.
R4GR9N	A single determination.
RA2RQM	A single determination.

Webcode	Quantitative Reporting Procedures	
RNNZNN	A single determination.	
RUNGZE	A single determination.	
T23MAQ	A single determination.	
T7FKJY	The mean of duplicate/several determinations.	
TC3B7U	A single determination.	
UV969K	A single determination.	
UVVBV6	A single determination.	
UYYA7X	A single determination.	
V4LDER	A single determination.	
VH3E8C	The mean of duplicate/several determinations.	
VKUATK	A single determination.	
W34NNK	A single determination.	
WFW7GR	A single determination.	
WYNJPP	A single determination.	
XBDFRN	A single determination.	
XMQWYK	A single determination.	
YC9F9Y	A single determination.	
YXL4WP	A single determination.	
Response Sun	nmary for Item 2 Participants: 79	

72 (91.1%)

7 (8.9%)

A single determination:

The mean of duplicate/several determinations:

Method of Analysis - Item 2

Webcode	Method	Screening	Confirmatory	Quantitation
2DPLGK	lmmunoassay GC/MS LC/MS/MS	\checkmark	J J	<i>J</i>
2RDN2X	lmmunoassay GC/MS LC/MS/MS	√ √	1	✓
3RPK4H	Immunoassay GC/MS LC/MS/MS	J J	1 1	√ √
43M3WW	Immunoassay GC/MS LC/MS/MS	1	5 5	1
46BFXM	Immunoassay GC/MS	\checkmark	1	
4C8ATZ	Immunoassay GC/MS LC/MS/MS UPLC QTOF MS	1	J J	√ √
4DHARF	lmmunoassay GC/MS LC/MS/MS	1	\ \	1
4ZHB6H	lmmunoassay GC/MS LC/MS/MS	\checkmark	J J	
6DZMTX	lmmunoassay GC/MS LC/MS/MS	√ √	1	✓
6FM2LE	lmmunoassay GC/MS GC/NPD	\ \ \	1	
79YZEZ	Immunoassay GC/MS	\checkmark	1	1
7AD6BC	Immunoassay GC/MS GC/FID	\checkmark	\$ \$	1
7ATPXV	Immunoassay GC/MS LC/MS/MS	√ √	1	1
7AVDZ8	Immunoassay LC/MS/MS	\checkmark	1	✓

Webcode	Method	Screening	Confirmatory	Quantitation
7FH2YJ	lmmunoassay GC/MS GC/FID	1	1	۲ ۲
7FJ2UC	Immunoassay GC/MS LC/MS/MS	✓ ✓	5 5	√ √
7QGWWE	Immunoassay LC/MS GC/MS	\checkmark	\$ \$	
7ZUQCG	Immunoassay GC/MS LC/MS/MS	\checkmark	J J	
83RPZE	GC/MS LC-TOF LC/MS/MS	√ √	1	1
8NAYYQ	Immunoassay LC/MS/MS	1	1	✓
8T34RV	lmmunoassay GC/MS LC/MS/MS	√ √	1	✓
8WMTC9	lmmunoassay GC/MS LC/MS/MS	1	\ \	1
9833FR	Immunoassay GC/MS LC/MS/MS	1	J J	
9A48TC	Immunoassay GC/MS LC/MS/MS	1	J J	1
9ANN9F	Immunoassay GC/MS	1	1	
9F8CHB	lmmunoassay GC/MS LC/MS/MS	J J	J J	√ ✓
9JVLUX	Immunoassay	✓		
9KNGG7	Immunoassay GC/MS GC/FID	\checkmark	1	√ √
9LKREU	Immunoassay	1		
ABG2BX	Immunoassay LC/MS/MS LC/QTOF HPIC-DAD	J J J		✓

Webcode	Method	Screening	Confirmatory	Quantitation
AHDRV9	Immunoassay	\checkmark		
	GC/MS	\checkmark	\checkmark	
	GC/NPD	1		
ALFUG4	Immunoassay	\checkmark		
	LC/MS/MS		1	1
AN7YEG	LC/MS/MS	✓	✓	✓
AQCJ2G	Immunoassay	1		
	GC/MS		✓	✓
AWFMRF	GC/MS	1	1	
AYHL39	Immunoassay	1		
	GC/MS		1	
B2MB2B	Immunoassay	1		
	GC/MS		1	
	LC/MS/MS		1	1
B2MB6G	Immunoassay	1		
	GC/MS	\checkmark	1	
BBDW79	Immunoassay	1		
	GC/MS		1	
BF499W	Immunoassay	1		
	LC/MS/MS		1	
	GC/MS/MS/MS		1	
BGE937	Immunoassay	1		
	GC/MS		1	1
	GC/FID		1	
BHAUVW	Immunoassay	1		
	GC/MS		1	
	LC/MS/MS			\checkmark
BKW9K8	Immunoassay	1		
	GC/MS		1	1
	GC/FID		1	
BM3VXB	Immunoassay	1		
	GC/MS		1	
	LC/MS/MS		1	1
BX2N9N	Immunoassay	1		
	LC/MS/MS	\checkmark	1	\checkmark
C2JBF2	Immunoassay	1		
	LC/MS/MS		1	\checkmark
CKVX4U	Immunoassay	1		
СМНСТ6	Immunoassav	1		
	GC/MS		1	1
	GC\FID		1	
CQGQD9	Immunoassay	1		
	GC/MS		1	1
	LC/MS/MS	1	1	1

Webcode	Method	Screening	Confirmatory	Quantitation
DAVJLA	GC/MS LC/MS/MS	<i>J</i> <i>J</i>	<i>J</i> <i>J</i>	
DHM6M2	Immunoassay GC/MS GC/FID	\checkmark	J J	
DPKU9C	Immunoassay GC/MS GC/FID	1	J J	1
EJQEWA	Immunoassay GC/MS GC/FID	1	J J	1
EQXLY8	Immunoassay LC/MS/MS GC/MS	J J	\ \	
EV6CW8	Immunoassay GC/MS LC/MS/MS	✓	\ \	1
F77W47	Immunoassay GC/MS LC/MS/MS	1	1	1
FHXQA8	Immunoassay GC/MS	J J	1	
FMTHH6	Immunoassay GC/MS LC/MS/MS	1	J J	V
FWT6A2	Immunoassay GC/MS GC/FID	√ √	1	1
FZU93A	Immunoassay GC/MS GC-FID	1	1	\ \
GGJE9H	Immunoassay GC/MS	1	1	
GX72E7	LC/MS/MS	1	✓	
H9ZU49	LC/MS/MS	✓		
HEPCGY	Immunoassay GC/MS GC/FID	1	J J	
HGDJ63	LC/MS LC/MS/MS	1	1	1
HZ9EF6	lmmunoassay GC/MS LC/MS/MS	J	/ /	1
J6E88E	Immunoassay	1		

Webcode	Method	Screening	Confirmatory	Quantitation
J7TW97	Immunoassay GC/MS	1	1	✓
J7UKXW	Immunoassay GC/MS LC/MS	\checkmark	J J	
JD9D32	LC/MS/MS	1	1	1
JNRR2X	lmmunoassay GC/MS GC/FID	1	\ \	✓
К6А8М6	Immunoassay GC/MS GC-FID	\checkmark	1	√ √
KLG674	Immunoassay	1		
KXE9AX	LC/MS/MS	1		
KXQ83L	Immunoassay GC/MS LC/MS/MS QTOF	\$ \$ \$	J	1
L67AMT	Immunoassay GC/MS	1	1	1
LZEXPC	Immunoassay LC/MS/MS	\ \	1	✓
M6MNQW	Immunoassay GC/MS LC/MS/MS	✓ ✓	J J	
MVZKKH	lmmunoassay GC/MS GC/MS/MS	\checkmark	J J	✓ ✓
MW9UE2	Immunoassay GC/MS	1	1	
N628BU	Immunoassay GC/MS GC-FID	✓	\ \	✓
N7E2QU	Immunoassay GC/MS LC/MS/MS	√ √	J J	✓ ✓
N87Z6T	lmmunoassay GC/MS GC/FID	✓	<i>J</i> <i>J</i>	1
NJ37XQ	Immunoassay GC/MS LC/MS/MS	√ √	1	✓
PATW9D	GC/MS LC/MS/MS	\checkmark	v	

Webcode	Method	Screening	Confirmatory	Quantitation
PB4ZHV	Immunoassay GC/MS	J	J	J
	LC/MS/MS	1	, ,	1
R2PQAR	Immunoassay GC/MS	1	1	
R4GR9N	Immunoassay GC/MS GC/FID	\checkmark	5 5	✓
RA2RQM	Immunoassay GC/MS GC/FID	1	√ √	1
RNNZNN	Immunoassay GC/MS LC/MS/MS	\checkmark	5 5	✓
RUNGZE	Immunoassay GC/MS	1	1	✓
T23MAQ	Immunoassay LC/MS/MS	1	1	1
T7FKJY	Immunoassay GC/MS LC/MS/MS	\checkmark	1	✓
TC3B7U	Immunoassay GC/MS LC/MS/MS	1	J J	
TD3DVX	Immunoassay GC/MS	1	1	
TTCYGA	LC/MS/MS	1	1	
U9HM6U	Immunoassay GC/MS	1	1	
UV969K	Immunoassay GC/MS LC/MS/MS	✓	5 5	✓
UVVBV6	Immunoassay GC/MS LC/MS/MS	\checkmark	5 5	<i>√</i>
UXY93R	Immunoassay GC/MS	1	1	
UYYA7X	Immunoassay GC/MS	\ \	1	1
V4LDER	lmmunoassay GC/MS GC/FID	1	1	J J
VH3E8C	LC/MS/MS	1		✓

Webcode	Method	Screening	Confirmatory	Quantitation
VKUATK	Immunoassay	/		
	GC/MS	\checkmark	\checkmark	
	LC/MS/MS	1	1	
VMDMCM	Immunoassay	\checkmark		
	GC/MS	1	\checkmark	
	GC/NPD	1		
VNVBXN	LC/MS/MS	1	1	
W34NNK	Immunoassay	\checkmark		
	GC/MS		/	\checkmark
	GC-FID		1	
WFW7GR	Immunoassay	\checkmark		
	GC/MS		\checkmark	\checkmark
	GC/FID		1	
WYNJPP	Immunoassay	\checkmark		
	GC/MS	\checkmark		
	LC/MS/MS		1	
XBDFRN	Immunoassay	\checkmark		
	GC/MS		1	\checkmark
	LC/MS/MS	1	1	1
XMQWYK	Immunoassay	\checkmark		
	GC/MS		1	\checkmark
	LC/MS/MS	1	\checkmark	\checkmark
YC9F9Y	LC/MS/MS	✓	✓	✓
YXL4WP	Immunoassay	✓		
	GC/MS		1	✓
Response Sum	mary for Item 2			Participants: 113
		Screening	Confirmatory	Quantitation
I	Immunoassay:	99	0	0
I	GC/MS:	20	79	37
l	LC/MS:	1	2	1
I	LC/MS/MS:	23	54	43
I	Athor	20 Q	10	то 4
1	Unier:	0	10	0

Additional Comments for Item 2

Webcode	Item 2 - Comments
4C8ATZ	3,4-Methylenedioxymethylamphetamine and 3,4-Methylenedioxymethylamphetamine Qualitative Analysis: Instrument: GC/MS with Electron Impact (El) ionisation (AGILENT). Method: Derivatised with Heptafluorobutyric anhydride (HFBA) and then analysed by Quadrupole GC-MS in SIM mode. Internal Standards: D5-3,4-Methylenedioxyamphetamine and D5-3,4-Methylenedioxymethylamphetamine. LOD: 3,4-MDA and 3,4-MDMA = 10 ng/mL. Delta-9-THC Acid Qualitative Analysis: Instrument: Liquid Chromatography-Tandem Mass Spectrometry (LC-MS-MS) in Multiple Reaction Monitoring (MRM) mode. Method: Sample is buffered and extracted with a hexane / ethyl acetate solvent mixture. Internal Standards: D3-THC and D3-THC Acid. LOD: 0.5 ng/mL
4DHARF	11-nor-Delta-9-Carboxy-THC: Internal standards used were D3-THC and D3-THC-COOH. Limit of detection is 1.0 ng/mL. MDA/MDMA: Internal standards used were D5-Amphetamine, D5-Methamphetamine, D5-MDA, and D5-MDMA. Limit of detection is 30 ng/mL.
6DZMTX	amphetamines: MDA internal standard = MDA-d5, MDMA internal standard = MDMA-d5; LOQ = 10 ng/mL. 11-nor-9-carboxy-delta9-THC internal standard = 11-nor-9-carboxy-delta9-THC-d3; LOQ = 5 ng/mL
79YZEZ	Immunoassay analyte: cutoff - Amphetamine: 20 ng/mL, Methamphetamine: 20 ng/mL, Morphine: 20 ng/mL, Benzoylecgonine: 50 ng/mL, Oxazepam 50 ng/mL, Carboxytetrahydrocannabinol 20 ng/mL
7AD6BC	IS = THC-COOH D3. LOQ = 15 ng/mL. IS=Mepivicaine
7ATPXV	amphetamines: MDA internal standard = MDA-d5, MDMA internal standard = MDMA-d5; LOQ = 10 ng/mL. 11-nor-9-carboxy-delta9-THC internal standard = 11-nor-9-carboxy-delta9-THC-d3; LOQ = 5 ng/mL
7AVDZ8	ELISA screening panel includes: amphetamine, benzodiazepines, cannabinoids, carisoprodol, cocaine and metabolites, methadone, opiates, oxycodone, phencyclidine, and zolpidem. Confirmation/ quantitation for delta-9-tetrahydrocannabinol (d-9-THC) and 11-nor-9-carboxy-delta-9- tetrahydrocannabinol (carboxy-THC) following positive cannabinoid screen. d-9-THC-D3 and carboxy-THC-D3 used as internal standards. LOQ/LOD is 1 ng/mL for d-9-THC and 5 ng/mL for carboxy-THC. d-9-THC was not detected. Confirmation/quantitation for amphetamine following positive screen. Amphetamine-D5 used as internal standard. LOQ/LOD is 4 ng/mL for amphetamine. Amphetamine was not detected.
7FJ2UC	mepivacaine, THC-COOH-d9
7QGWWE	Internal Standard: Mepivacaine (BSPE), Amphetamine D-11 Acetyl (PHEALLE), Methamphetamine D-11 Acetyl (PHEALLE), THC-D3 (BCLLE), 11-OH-THC-D3 (BCLLE), THCA-D3 (BCLLE)
7ZUQCG	Internal standards used: Mepivacaine, Nalorphine, THC-D3, 11-OH-THC-D3, THCA-D3, Amphetamine-D11, Methamphetamine-D11. Hydroxyzine related peak indicated: Not reported, no standard available for comparison. THCA Limits of detection: LLOD-5ng/mL, ULOD-500ng/mL
83RPZE	Internal standard: MDMA-D5, LOD: 6.25 ng/mL, LOQ: 12.5 ng/mL. Internal standard: MDA-D5, LOD: 6.25 ng/mL, LOQ: 12.5 ng/mL
8NAYYQ	MDA LOD=25ng/mL, LOQ=50ng/mL
8T34RV	amphetamines: MDA internal standard = MDA-d5, MDMA internal standard = MDMA-d5; LOQ = 10 ng/mL. 11-nor-9-carboxy-delta9-THC internal standard = 11-nor-9-carboxy-delta9-THC-d3; LOQ = 5 ng/mL
8WMTC9	Methamphetamine-D11 internal standard used in the detection of MDA and MDMA. THCA-D3 internal standard used in the detection of THCA.

Webcode	Item 2 - Comments
9ANN9F	Preliminary testing indicated the possible presence of a cannabinoid class compound, confirmatory testing not pursued because analyst is not trained in the cannabinoid analytical method.
9F8CHB	3,4-methylenedioxyamphetamine (MDA) and 3,4-methylenedioxymethamphetamine (MDMA) used the internal standard mepivacaine in order to quantitate. The limit of detection for MDA and MDMA is 12.5 mcg/L. 11-nor-delta-9-tetrahydrocannabinol-9-carboxylic acid used the internal standard THC-COOH d9 to quantitate. The limit of detection is 5 ng/mL.
9KNGG7	MDA & MDMA are only called positive and not quantitated on GC/FID. THC-COOH is confirmed/ quantitated on GC/MS
ABG2BX	D5-MDMA & D5-MDA used as ISTDs. LOR = 0.01 mg/L. LOD = 0.005 mg/L.
AHDRV9	Butyl Acetate Screen - Promazine (IStd)
ALFUG4	ELISA screening panel includes: amphetamine, benzodiazepines, cannabinoids, carisoprodol, cocaine and metabolites, methadone, opiates, oxycodone. 11-nor-9-carboxy-delta-9-tetrahydrocannabinol (carboxy-THC) Carboxy-THC-D3 used as internal standards. LOQ/LOD is 5 ng/mL for Carboxy-THC
BBDW79	Cannabinoids were not confirmed because [Laboratory] does not confirm cannabinoids in-house. In casework, samples would be sent out for confirmation.
BF499W	LC/MS/MS/MS instead of LC/MS/MS used for confirmatory method. Option not available on drop down to select LC/MS/MS/MS.
BKW9K8	Internal Standard= Mepivicaine. Internal Standard= THC-COOH-D3, LOQ= 15 ng/mL. Note: It is our policy to call MDA and MDMA positive only. We do not quantitate those drugs. U of M for THC-COOH= 13.06% at 95.45% (see above calculated range [Table 2B - Confirmatory Results-Item 2])
BM3VXB	GCMS analysis: Internal standard: Mepivacaine, Amphetamine D-11 acetyl, Methamphetamine D-11 acetyl. LCMSMS: Internal standard: THC D-3; 11-OH-THC-D3; THCA-D3.
BX2N9N	Internal standard is MDMA-D5 and Carboxy THC-D9. Limit of detection is 10ng/mL and 2ng/mL respectively
C2JBF2	ELISA screening panel includes: amphetamine, benzodiazepines, cannabinoids, carisoprodol, cocaine and metabolites, methadone, opiates, oxycodone, phencyclidine, and zolpidem. Carboxy-THC-D3 used as internal standard. LOQ/LOD for carboxy-THC is 5ng/ml.
CKVX4U	The sample was screened for the following type/class of drugs: Amphetamines, Benzodiazepines, Cannabinoids, Cocaine, Opiates, PCP. No confirmatory method was used on this sample since that is beyond my current qualifications.
СМНСТ6	The lab does not quantitate MDMA or MDA.
CQGQD9	THC-COOH internal standard-THC-COOH-d9. MDA and MDMA internal standard-mepivacaine
DHM6M2	MDA + MDMA are not quantitated using our basic extraction. They are only identified as positive.
DPKU9C	We do not currently test for parent THC.
EJQEWA	GC-MS was used to quantitate 11-nor-9-carboxy-delta-9-THC (SIM mode). GC-FID was used for MDMA and MDA (for these analytes, it was qualitative only).
EQXLY8	MDMA CONFIRMATORY: limit of detection is 50 ng/mL.(LC/MS/MS). Tetrahydrocannabinol-9 -carboxylic acid CONFIRMATORY: limit of detection is 10ng/mL (GC/MS)
EV6CW8	Internal Standard (GCMS): Mepivacaine. Internal Standard (LC/MS/MS) THC-D3, 11-OH-THC-D3, THCA-D3

Webcode	Item 2 - Comments
F77W47	Internal Standards used: Mepivacaine, Amphetamine D-11 Acetyl, Methamphetamine D-11 Acetyl, Tetrahydrocannabinol D-3, 11-hydroxy-delta-9-tetrahydrocannabinol D-3, and 11-nor-delta-9-tetrahydrocannabinol-9-carboxylic acid D-3. MDA Limit of Detection: 12.5 ng/mL. MDMA Limit of Detection: 12.5 ng/mL. THCA Lower Limit of Quantitation: 5 ng/mL
FHXQA8	Caffeine was also confirmed in the blood sample. The drug was not reported independently in sections 2-1 [Table 2A - Screening Results-Item 2] and 2-2 [Table 2B - Confirmatory Results-Item 2] because it was confirmed in all three PT samples.
FWT6A2	Expanded uncertainty - 95.42%, K=2 (THC-COOH 13.06 %)
HEPCGY	expanded uncertainty - 95.42%, k=2 (13.06)
HGDJ63	Internal Standard = Estazolam (1000 ng/mL)
HZ9EF6	GC/MS Internal standard (base extraction): Mepivacaine. GC/MS Internal standard (phenethylamine extraction): Amphetamine-D11 and Methamphetamine-D11. LC/MS/MS Internal standard: THC-D3, 11-OH-THC-D3, THCA-D3
JD9D32	LOD = 10 ng/mL. Linearity = 25 - 300 ng/mL. Internal Standard = Flurazepam
JNRR2X	Internal standard used is mepivicaine. Internal standard used is thc-cooh-d3. LOQ is 15ng/ml. We only call MDA and MDMA positive. Measurement of certainty for thc-cooh is calculated at 13.06% certainty at a 95.45% confidence level. Please see above for the calculated range [Table 2B - Confirmatory Results-Item 2].
KLG674	Cutoff concentration for cannabinoids assay: 5 ng/mL. Cutoff concentration for methamphetamine assay: 20 ng/mL
KXE9AX	MDA was identified by a very low signal (concentration). The laboratory does not have enough tools to quantify it so It could be possible that MDA was a degradation product from de MDMA. Internal Standard = Estazolam
L67AMT	11-nor-9-carboxy-delta-9-THC: Internal Standard: d9-11-nor-9-carboxy-delta-9-THC: LOD: 2 ng/mL, LOQ: 2 ng/mL. 3,4-Methylenedioxyamphetamine (MDA): Internal Standard: d5-3,4-Methylenedioxyamphetamine, LOD: 25 ng/mL, LOQ: 25 ng/mL. 3,4-Methylenedioxymethamphetamine (MDMA): Internal Standard: d5-3,4-Methylenedioxymethamphetamine, LOD: 25 ng/mL, LOQ: 25 ng/mL
LZEXPC	Internal standard is MDMA-D5 and Carboxy THC-D9. Limit of detection is 10 ng/mL and 2 ng/mL respectively
M6MNQW	IS: THC-COOH d9, mepivacaine. LOD: THC-COOH (5 ng/mL), MDMA/MDA (12.5 μ g/L)
MVZKKH	The compounds that were analyzed using the GC/MS method were Methamphetamine and Amphetamine. Both of these compounds were none detected. Internal standards used were Methamphetamine-D14 and Amphetamine-D11 with a cut off of 25 ng/mL. The compounds that were analyzed using the GC/MS/MS method were THC, OH-THC, and THCA. Both THC and OH-THC were none detected and THCA was positive. Internal standards used were THC-D3, OH-THC-D3 and THCA-D9 with a cut off of 0.5 ng/mL for THC and OH-THC and 5 ng/mL THCA.
MW9UE2	[Laboratory] does not routinely perform confirmatory testing for THC in blood.
N7E2QU	THC-COOH d9 used as internal standard. Mepivacaine used as internal standard for MDMA and MDA.
N87Z6T	The lab does not quantitate MDMA and MDA.
NJ37XQ	Positive cannabinoids from positive ELISA screen only. LOQ for both MDMA, MDA is 10 ng/mL. Internal standards MDMA-D5, MDA-D5. Used quantitation data from 8/23/17 only.

Webcode	Item 2 - Comments
PATW9D	Used Internal standards: For the screening: Phenobarbital D-5. For MDA and MDMA Confirmatory: Codeine D-3 was used. For 11-nor-9-carboxy- delta-9-THC- Confirmatory: 11-nor-9-carboxy- delta- 9-THC-D3 was used
PB4ZHV	Internal standards used: mepivacaine and deuterated THC-COOH
R4GR9N	I.S. = mepivicaine, d3-THC-COOH. Measurement certainty calculated at 13.06% with a 95.45% confidence interval
RNNZNN	Internal standards: Mepivacaine, Amphetamine-D11, Methamphetamine-D11, THC-D3, 11-OH-THC-D3, THCA-D3 LOD: MDA - 12.5 ng/ml MDMA - 12.5 ng/ml LLOQ: THCA - 5 ng/ml
RUNGZE	Screen for following w/ cut-off values: Amp 20ng/ml, Oxa 50ng/ml, BE 50ng/ml, Meth 20ng/ml, Morphine 20ng/ml, C-THC 20ng/ml. Confirm negative for Meth, Amp, delta9 THC, OH-THC.
T23MAQ	Internal standards - THC-COO-D9, MDMA-D5, MDA-D5. THC-COO LOD 5ng/mL, MDMA LOD 10ng/mL, MDA LOD 10ng/mL.
TC3B7U	Internal Standards: Mepivacaine, Amphetamine D-11 acetyl, Methamphetamine D-11 acetyl, delta-9-tetrahydrocannabinol (delta-9-THC)-D3, 11-nor-delta-9-tetrahydrocannabinol-9-carboxylic acid (THCA)-D3, 11-hydroxy-delta-9-tetrahydrocannabinol (11-OH-THC)-D3. LLOQ/ULOQ for THC: 1.00/100.00 ng/ml. LLOQ/ULOQ for 11-OH-THC: 1.00/100.00 ng/ml. LLOQ/ULOQ for THCA: 5.00/500.00 ng/ml
U9HM6U	Internal Standard - n-propylamphetamine @ 500 ng/mL (Full Scan). Internal Standard - D3-THC & D3-THC-COOH @ 20 ng/mL (SIM)
UV969K	Internal Standards used: Mepivacaine. Amphetamine D-11, Methamphetamine D-11. THC-D3, 11-OH-THC-D3, THCA-D3. LODs: MDA 12.5ng/mL, MDMA 12.5ng/mL, THCA 5ng/mL
VH3E8C	MDMA-d5 as internal standard. MDMA LOD: 3 ng/mL. MDA LOD: <1 ng/mL
VKUATK	deuterated internal standards
VMDMCM	Butyl Acetate screen utilized Promazine internal standard.
WFW7GR	The Lab does not quantitate MDMA or MDA.
XBDFRN	internal standards: mepivacaine, THC-COOH-d9
XMQWYK	Internal standards: mepivacaine, amphetamine-d11, methamphetamine-d11, delta 9-THC-d3, THCOH-d3, THCA-d9

Screening Results - Item 3

TABLE 3A Item 3

Item Scenario:

A 35 year old male was pulled over by police after running a red light. He displayed drowsiness, slurred speech, and confusion. A breath alcohol test resulted in 0.00 percent. A blood sample was collected 1 hour later.

Item Contents and Preparation Concentration:

Oxycodone (150 ng/mL) Noroxycodone (35 ng/mL)

Webcode	Screening Results
2DPLGK	Oxycodone/Oxymorphone
2RDN2X	Oxycodone
3RPK4H	oxycodone
43M3WW	Oxycodone/Oxymorphone
46BFXM	Oxycodone
4C8ATZ	Oxycodone
4DHARF	Opiates (Codeine, Morphine, Hydrocodone, & Hydromorphone)
4ZHB6H	No drugs/metabolites detected
6DZMTX	opiates; oxycodone
6FM2LE	Opiates: Oxycodone
79YZEZ	No drugs/metabolites detected
7AD6BC	Opiates
7ATPXV	opiates; oxycodone
7AVDZ8	Oxycodone, amphetamine
7FH2YJ	Opiates
7FJ2UC	oxycodone
7QGWWE	Methadone, Oxycodone
7ZUQCG	Oxycodone/Oxymorphone
83RPZE	Oxycodone
8NAYYQ	Oxycodone
8T34RV	opiates; oxycodone
8WMTC9	Oxycodone/Oxymorphone
9833FR	Oxycodone/Oxymorphone
9A48TC	Oxycodone/Oxymorphone
9ANN9F	Opiates
9F8CHB	Oxycodone and Zolpidem

Webcode	Screening Results
9JVLUX	No drugs/metabolites detected
9KNGG7	opiates
9LKREU	Oxycodone/ Oxymorphone
ABG2BX	Oxycodone
AHDRV9	Oxycodone
ALFUG4	oxycodone
AN7YEG	Oxycodone (opioids)
AQCJ2G	No drugs/metabolites detected
AYHL39	Oxycodone
B2MB2B	Oxycodone/Oxymorphone
B2MB6G	Oxycodone
BBDW79	Opiates
BF499W	Oxycodones
BGE937	Opiates
BHAUVW	Oxycodone 1, Oxycodone 2, Opioids
BKW9K8	opiates
BM3VXB	Oxycodone/Oxymorphone
BX2N9N	Oxycodone, Noroxycodone
C2JBF2	Oxycodone
CKVX4U	No drugs/metabolites detected
СМНСТ6	Opiates
CQGQD9	Oxycodone
DAVJLA	Oxycodone
DHM6M2	Opiates
DPKU9C	Opiates
EJQEWA	Opiates presumptively positive.
EQXLY8	No drugs/metabolites detected
EV6CW8	Oxycodone/Oxymorphone
F77W47	Oxycodone/Oxymorphone
FHXQA8	oxycodone
FMTHH6	Oxycodone

Webcode	Screening Results
FWT6A2	Opiate (ELISA)
FZU93A	opiates
GGJE9H	Opiates
GX72E7	oxycodone, noroxycodone
H9ZU49	Oxycodone
HEPCGY	opiate ELISA screen
HGDJ63	Oxycodone
HZ9EF6	Oxycodone/Oxymorphone
J6E88E	No drugs/metabolites detected
J7TW97	Oxycodone
J7UKXW	No drugs/metabolites detected
JD9D32	Oxycodone
JNRR2X	Opiates
K6A8M6	Opiates
KLG674	Oxycodone
KXE9AX	Oxycodone
KXQ83L	Oxycodone
L67AMT	Oxycodone
L68ZVW	Opium Derivatives
LZEXPC	Oxycodone, Noroxycodone
M6MNQW	oxycodone
MVZKKH	No drugs/metabolites detected
MW9UE2	No drugs/metabolites detected
N628BU	Opiates
N7E2QU	No drugs/metabolites detected
N87Z6T	Opiates
NJ37XQ	Opiate, Oxycodone
PATW9D	Oxycodone
PB4ZHV	Oxycodone
R2PQAR	No drugs/metabolites detected
R4GR9N	Opiates

Webcode	Screening Results
RA2RQM	Opiates
RNNZNN	Oxycodone/Oxymorphone
RUNGZE	No drugs/metabolites detected
T23MAQ	Oxycodone and Opiates
T7FKJY	Opiates and Oxycodone
TC3B7U	Oxycodone/Oxymorphone
TD3DVX	Oxycodone
TTCYGA	Oxycodone
U9HM6U	No drugs/metabolites detected
UV969K	Oxycodone/Oxymorphone
UVVBV6	Oxycodone/Oxymorphone
UXY93R	No drugs/metabolites detected
UYYA7X	Opiate was detected below the screening cut-off
V4LDER	Opiate
VH3E8C	oxycodone
VKUATK	Oxycodone
VMDMCM	Opiates
VNVBXN	Oxycodone
W34NNK	Opiates
WFW7GR	Opiates
WYNJPP	Oxycodone
XBDFRN	oxycodone
XMQWYK	Oxycodone
YC9F9Y	No drugs/metabolites detected
YXL4WP	Oxycodone

Response Summary for Item 3

Opiates, oxycodone and/or noroxycodone: 97

Other: 4

No drugs/metabolites detected: 16

Totals may add up to more than the total number of participants because participants can report multiple drugs/analytes.

Participants: 113

Confirmatory Results - Item 3

What drugs/metabolites were detected in Item 3?

TABLE 3B Item 3

Item Scenario:

A 35 year old male was pulled over by police after running a red light. He displayed drowsiness, slurred speech, and confusion. A breath alcohol test resulted in 0.00 percent. A blood sample was collected 1 hour later.

Item Contents and Preparation Concentration:

Oxycodone (150 ng/mL) Noroxycodone (35 ng/mL)

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
2DPLGK	Oxycodone	1			
2RDN2X	Oxycodone	1			
3RPK4H	oxycodone`		180	50	mcg/L
43M3WW	Oxycodone	1			
46BFXM	Oxycodone		150 ug/l	33%	ug/l
4C8ATZ	Oxycodone		150	30	ng/mL
4DHARF	Oxycodone, Total		130	20%	ng/mL
4ZHB6H	Oxycodone	1			
6DZMTX	oxycodone		140	25	ng/mL
6FM2LE	Oxycodone				
7AD6BC	Oxycodone		0.11	+/- 0.02	ug/mL
7ATPXV	oxycodone		120	21	ng/mL
7AVDZ8	Oxycodone		0.13	± 0.03	μ g/mL
7FH2YJ	Oxycodone		0.15	+/-0.03	ug/ml
7FJ2UC	oxycodone		0.14	+/- 0.04	mg/L
7QGWWE	Oxycodone	1			
7ZUQCG	Oxycodone	1			
83RPZE	Oxycodone		0.13	0.02	mg/L
8NAYYQ	Oxycodone		140		ng/mL
8T34RV	oxycodone		130	21	ng/mL
8WMTC9	Oxycodone	1			

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
9833FR	Oxycodone	1			
9A48TC	Oxycodone	1			
	Noroxycodone	1			
9ANN9F	Oxycodone	1			
9F8CHB	Oxycodone		0.15	+/- 0.04	mg/L
9KNGG7	oxycodone		0.10	+/02	ug/mL
ABG2BX	Oxycodone		0.12	±0.012	mg/L
AHDRV9	Oxycodone	1			
ALFUG4	oxycodone		0.14	0.03	ug/mL
AN7YEG	Oxycodone		176.3	±16.4%	ng/mL
AYHL39	Oxycodone	1			
B2MB2B	Oxycodone	1			
B2MB6G	Oxycodone		170	53	ug/mL
BBDW79	Oxycodone	1			
BGE937	Oxycodone		0.13	+/- 0.02	ug/mL
BHAUVW	Oxycodone		140		ng/mL
BKW9K8	oxycodone		0.14	(0.12-0.17)	ug/mL
BM3VXB	Oxycodone	1			
BX2N9N	Oxycodone		165	14	ng/mL
	Noroxycodone	1			
C2JBF2	oxycodone		0.14	±0.03	μ g/ml
СМНСТ6	Oxycodone		0.11	+/- 0.02	ug/mL
CQGQD9	Oxycodone		0.13	+/-0.03	mg/L
DAVJLA	Oxycodone	1			
DHM6M2	Oxycodone		0.12	+/- 0.02	ug/mL
DPKU9C	Oxycodone		0.13	+/-0.02	ug/ml
EJQEWA	Oxycodone		0.14	+/- 0.03	ug/mL
EQXLY8	OXYCODONE	1			

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
EV6CW8	Oxycodone	1			
F77W47	Oxycodone	1			
FHXQA8	oxycodone	1			
FMTHH6	Oxycodone		108	32.4	ng/mL
FWT6A2	Oxycodone		0.10		ug/ml
FZU93A	oxycodone		0.13	0.02	ug/ml
GGJE9H	Oxycodone	1			
GX72E7	Oxycodone	1			
	Noroxycodone	1			
HEPCGY	oxycodone		0.11	0.09-0.13	ug/mL
HGDJ63	Oxycodone		138.5 ng/mL	4.0	ng/mL
HZ9EF6	Oxycodone	1			
J7TW97	Oxycodone		137		ng/mL
J7UKXW	Oxycodone	1			
JD9D32	Oxycodone		170 ng/mL	0.06	ng/mL
JNRR2X	oxycodone		0.14	.1217	ug/ml
K6A8M6	Oxycodone		0.15	+/-0.03	ug/ml
KLG674	Oxycodone	1			
KXE9AX	Oxycodone	1			
KXQ83L	oxycodone		0.13	0.01	mg/L
L67AMT	Oxycodone		148	30	ng/mL
L68ZVW	Oxycodone	1			
LZEXPC	Oxycodone		159	14	ng/mL
	Noroxycodone	1			
M6MNQW	oxycodone		0.13	0.03	mg/L
MW9UE2	3,4-MDMA	 ✓ 			
N628BU	Oxycodone		0.10	0.09 - 0.12	ug/ml
N7E2QU	oxycodone		99	25	mcg/L

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units
N87Z6T	Oxycodone		0.10	+/- 0.02	ug/mL
NJ37XQ	Oxycodone		0.16	0.03	mg/L
	Noroxycodone		0.042	0.006	mg/L
PATW9D	oxycodone	1			
PB4ZHV	Oxycodone		140	40	ng/mL
R2PQAR	oxycodone	1			
R4GR9N	Oxycodone		0.11 ug/mL	+/-0.02	ug/mL
RA2RQM	Oxycodone		0.12	+/- 0.02	ug/mL
RNNZNN	Oxycodone	1			
T7FKJY	Oxycodone		146		ng/mL
TC3B7U	Oxycodone	1			
TD3DVX	Oxycodone		124		ng/ml
TTCYGA	Oxycodone	1			
U9HM6U	Oxycodone	1			
UV969K	Oxycodone	1			
UVVBV6	Oxycodone	1			
UXY93R	oxycodone	1			
UYYA7X	Oxycodone	1			
V4LDER	Oxycodone		0.16	+/- 0.03	ug/ml
VH3E8C	oxycodone		200		ng/mL
VKUATK	Oxycodone		149	29	ng/ml
VMDMCM	Oxycodone	1			
VNVBXN	Oxycodone	1			
W34NNK	Oxycodone		0.12	+/- 0.02	ug/ml
WFW7GR	Oxycodone		0.10	+/- 0.02	ug/mL
WYNJPP	Oxycodone		116	26%	ng/mL
	Noroxycodone		28	29%	ng/mL
XBDFRN	oxycodone		0.13 mg/L	0.03	mg/L

Webcode	Analyte Reported	Qualitative Only	Reported Concentration	Uncertainty	Units		
XMQWYK	oxycodone		0.14	+/-0.04	mg/L		
YC9F9Y	**No drugs/metabolites detec	ted					
YXL4WP	Oxycodone		>250.0		ng/mL		
Response	Response Summary for Item 3 Participants: 102						
		Oxycodone:	100				
	Ν	oroxycodone:	6				
	No drugs/metabo	ites detected:	1				
		Other:	1				
Totals may add up to more than the total number of participants because participants can report multiple drugs/metabolites.							
Raw Data - Item 3

List of raw data determinations in ng/mL.

TABLE 3C Item 3

Item 3 Raw Data - Oxycodone Preparation concentration: (150 ng/mL)

Webcode	Raw Data	(ng/mL)		Participant Mean
3RPK4H	181.3			181.3
46BFXM	152.0			152.0
4C8ATZ	142.0	150.0		146.0
4DHARF	128.0			128.0
6DZMTX	149.8			149.8
7AD6BC	118.0			118.0
7ATPXV	126.1			126.1
7AVDZ8	139.7			139.7
7FH2YJ	150.0			150.0
7FJ2UC	144.9			144.9
83RPZE	131.0	118.0		124.5
8NAYYQ	141.7			141.7
8T34RV	130.9			130.9
9F8CHB	146.0			146.0
9KNGG7	106.0			106.0
ABG2BX	118.0	121.0		119.5
ALFUG4	141.2			141.2
an7yeg	176.8	175.8		176.3
B2MB6G	171.5	171.7	153.7	165.6
BGE937	135.0			135.0
BHAUVW	153.8	140.5		147.2
BKW9K8	141.0			141.0
BX2N9N	165.0			165.0
C2JBF2	147.0			147.0
СМНСТ6	111.0			111.0
CQGQD9	134.9			134.9
DHM6M2	125.0			125.0
DPKU9C	131.0			131.0

Item 3 Raw Data - Oxycodone Preparation concentration: (150 ng/mL)

Webcode	Raw Data	(ng/mL)			Participant Mean
EJQEWA	145.0				145.0
FMTHH6	108.3				108.3
FWT6A2	109.0				109.0
FZU93A	134.0				134.0
HEPCGY	113.0				113.0
HGDJ63	138.5				138.5
J7TW97	137.0				137.0
JD9D32	170.0				170.0
JNRR2X	143.0				143.0
K6A8M6	154.0				154.0
KXQ83L	127.9	127.5	134.7	134.0	131.0
L67AMT	148.0				148.0
LZEXPC	159.0				159.0
M6MNQW	133.3				133.3
N628BU	104.0				104.0
N7E2QU	87.10	111.3			99.21
N87Z6T	104.0				104.0
NJ37XQ	153.0	158.5			155.8
PB4ZHV	136.2				136.2
R4GR9N	118.0				118.0
RA2RQM	120.0				120.0
T7FKJY	147.8	144.5			146.1
TD3DVX	130.6	118.6			124.6
V4LDER	160.0				160.0
VH3E8C	200.0				200.0 X
VKUATK	149.0				149.0
W34NNK	122.0				122.0
WFW7GR	104.0				104.0
WYNJPP	116.0				116.0
XBDFRN	134.8				134.8
XMQWYK	143.2				143.2

Item 3 Raw Data - Oxycodone Preparation concentration: (150 ng/mL)

Webcode	Raw Data (ng	/mL)	Participant Mean			
YXL4WP	273.8		273.8 X			
Statistical An	Statistical Analysis for Item 3 - Oxycodone					
Grand	Mean 135.9	Number of Participants Included 58	Number of Participants without Raw Data or Data that was not 40			
Standard Dev	viation 19.02	Number of Participants Excluded 2	reported in ng/mL			

Item 3 Raw Data - Noroxycodone Preparation concentration: (35 ng/mL)

Webcode	Raw Data	(ng/mL)	Participant Mean	
NJ37XQ	42.55	40.85	41.70	
WYNJPP	28.00		28.00	
Statistical Analysis for Item 3 - Noroxycodone				

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

Reporting Procedures - Item 3

If quantitative analysis was performed, the reported concentrations are:

WebCode	Quantitative Reporting Procedures
2RDN2X	A single determination.
3RPK4H	A single determination.
46BFXM	A single determination.
4C8ATZ	The mean of duplicate/several determinations.
4DHARF	A single determination.
6DZMTX	A single determination.
7AD6BC	A single determination.
7ATPXV	A single determination.
7AVDZ8	A single determination.
7FH2YJ	A single determination.
7FJ2UC	A single determination.
8NAYYQ	A single determination.
8T34RV	A single determination.
9F8CHB	A single determination.
9KNGG7	A single determination.
ABG2BX	The mean of duplicate/several determinations.
ALFUG4	A single determination.
AN7YEG	The mean of duplicate/several determinations.
BGE937	A single determination.
BKW9K8	A single determination.
BX2N9N	A single determination.
C2JBF2	A single determination.
СМНСТ6	A single determination.
CQGQD9	A single determination.
DHM6M2	A single determination.
DPKU9C	A single determination.
EJQEWA	A single determination.

WebCode	Quantitative Reporting Procedures
FMTHH6	A single determination.
FWT6A2	A single determination.
FZU93A	A single determination.
HEPCGY	A single determination.
HGDJ63	The mean of duplicate/several determinations.
J7TW97	A single determination.
JD9D32	A single determination.
JNRR2X	A single determination.
K6A8M6	A single determination.
KXQ83L	The mean of duplicate/several determinations.
L67AMT	A single determination.
LZEXPC	A single determination.
M6MNQW	A single determination.
N628BU	A single determination.
N7E2QU	The mean of duplicate/several determinations.
N87Z6T	A single determination.
NJ37XQ	The mean of duplicate/several determinations.
PB4ZHV	A single determination.
R4GR9N	A single determination.
RA2RQM	A single determination.
T7FKJY	The mean of duplicate/several determinations.
TD3DVX	The mean of duplicate/several determinations.
V4LDER	A single determination.
VH3E8C	A single determination.
VKUATK	A single determination.
W34NNK	A single determination.
WFW7GR	A single determination.
WYNJPP	A single determination.
XBDFRN	A single determination.
XMQWYK	A single determination.

WebCod	Quantitative Reporting Procedures				
YC9F9Y	A single determination.				
YXL4WP	A single determination.				
Respons	se Summary for Item 3		Participants: 59		
	A single determination:	50 (84.7%)			
	The mean of duplicate/several determinations:	9 (15.3%)			

Method of Analysis - Item 3

WebCode	Method	Screening	Confirmatory	Quantitation
2DPLGK	Immunoassay GC/MS	1	\checkmark	
2RDN2X	Immunoassay GC/MS LC/MS/MS	J J	✓	
3RPK4H	Immunoassay GC/MS LC/MS/MS	J J	√ √	~
43M3WW	Immunoassay GC/MS	1	1	
46BFXM	Immunoassay GC/MS LC/MS	✓ ✓	✓	1
4C8ATZ	Immunoassay LC/MS/MS UPLC QTOF MS	J J	1	✓
4DHARF	Immunoassay GC/MS	1	1	1
4ZHB6H	Immunoassay GC/MS	\ \	1	
6DZMTX	Immunoassay GC/MS LC/MS/MS	\ \	✓	✓
6FM2LE	Immunoassay GC/MS GC/NPD	\ \ \	1	
7AD6BC	Immunoassay GC/MS GC/FID	1	۲ ۲	1
7ATPXV	Immunoassay GC/MS LC/MS/MS	\ \	1	<i>,</i>
7AVDZ8	Immunoassay LC/MS/MS	1	1	1
7FH2YJ	Immunoassay GC/MS GC/FID	1	1	✓
7FJ2UC	Immunoassay GC/MS LC/MS/MS	<i>J</i>	1	✓
7QGWWE	Immunoassay GC/MS	1	1	
7ZUQCG	Immunoassay GC/MS	1	1	

WebCode	Method	Screening	Confirmatory	Quantitation
83RPZE	Immunoassay	\checkmark		
	GC/MS	\checkmark		
	LC/MS/MS	1	\checkmark	\checkmark
	LC-TOF			
8NAYYQ	Immunoassay GC/MS	7	1	1
8T34RV	Immunoassay			
	GC/MS	1		
	LC/MS/MS		\checkmark	\checkmark
8WMTC9	Immunoassay	1		
	GC/MS		1	
9833FR	Immunoassay	\checkmark		
	GC/MS		✓	
9A48TC	Immunoassay	\checkmark		
	GC/MS		v	
9ANN9F	Immunoassay	v	1	
	GC/MS		✓	
AL8CHR	Immunoassay	V	1	1
		ſ	v	v
9 \/ X				
	Immunoassay			
	GC/MS	•	1	
	GC/FID			\checkmark
9LKREU	Immunoassay	✓		
ABG2BX	Immunoassay	1		
	LC/MS/MS		\checkmark	\checkmark
	LC-QTOF		\checkmark	
	HPLC-DAD	<i>✓</i>		
AHDRV9	Immunoassay			
	GC/MS	,	v	
	GC/NPD			
ALFUG4	Immunoassay	V		./
		./	· · ·	· · ·
<u>AN71LO</u>		· · · · · · · · · · · · · · · · · · ·	•	▼
ATHL39	GC/MS	↓	1	
B2MB2B				
DZIVIDZD	GC/MS	·	1	
B2MB6G	Immunoassay	✓	-	
	GC/MS	-	1	
	LC/MS			\checkmark
BBDW79	Immunoassay	✓		
	GC/MS		\checkmark	
BF499W	Immunoassay	\checkmark		

WebCode	Method	Screening	Confirmatory	Quantitation
BGE937	Immunoassay GC/MS GC/FID	V	1	1
BHAUVW	Immunoassay GC/MS	1	✓	✓
ВКW9К8	lmmunoassay GC/MS CG/FID	V	√ √	<i>,</i>
ВМЗУХВ	Immunoassay GC/MS	1	✓	
BX2N9N	lmmunoassay LC/MS/MS	J J	1	1
C2JBF2	lmmunoassay LC/MS/MS	1	1	1
CKVX4U CMHCT6	Immunoassay Immunoassay GC/MS GC/FID	✓ ✓	√ √	✓
CQGQD9	Immunoassay GC/MS LC/MS/MS	J J	1	✓
DAVJLA	GC/MS LC/MS/MS	\ \	√ √	
DHM6M2	lmmunoassay GC/MS GC-FID	1	√ √	
DPKU9C	lmmunoassay GC/MS GC/FID	1	1	✓
EJQEWA	lmmunoassay GC/MS GC/FID	\checkmark	1	1
EQXLY8	lmmunoassay GC/MS LC/MS/MS	J J	√ √	
EV6CW8	Immunoassay GC/MS	1	✓	
F77W47	lmmunoassay GC/MS	1	1	
FHXQA8	lmmunoassay GC/MS	√ √	✓	
FMTHH6	Immunoassay LC/MS/MS	1	✓	✓
FWT6A2	lmmunoassay GC/MS GC/FID	\checkmark	\checkmark	✓

WebCode	Method	Screening	Confirmatory	Quantitation
FZU93A	Immunoassay GC/MS GC-FID	/	✓	✓
GGJE9H	Immunoassay GC/MS	1	✓	
GX72E7	LC/MS/MS	1	1	
H9ZU49	LC/MS/MS	✓		
HEPCGY	Immunoassay GC/MS GC/FID	1	√ √	
HGDJ63	LC/MS LC/MS/MS	1	✓	1
HZ9EF6	Immunoassay GC/MS	1	✓	
J6E88E	Immunoassay	1		
J7TW97	Immunoassay GC/MS	\checkmark	✓	1
J7UKXW	Immunoassay GC/MS LC/MS	J	√ √	
JD9D32	GC/MS LC/MS/MS	√ √	√ ✓	✓
JNRR2X	Immunoassay GC/MS GC/FID	1	√ ✓	✓
К6А8М6	Immunoassay GC/MS GC-FID	1	✓	1
KLG674	lmmunoassay	✓		
KXE9AX	LC/MS/MS	✓		
KXQ83L	Immunoassay GC/MS LC/MS/MS QTOF	5 5 5	✓	√ ✓
L67AMT	Immunoassay LC/MS/MS	1	✓	1
L68ZVW	Immunoassay GC/MS	\checkmark	\checkmark	
LZEXPC	Immunoassay LC/MS/MS	✓ ✓	\checkmark	1
M6MNQW	Immunoass ay GC/MS LC/MS/MS	J J	\checkmark	
MVZKKH	Immunoassay	1		
MW9UE2	Immunoassay GC/MS	\checkmark	✓	

WebCode	Method	Screening	Confirmatory	Quantitation
N628BU	Immunoassay GC/MS GC-FID	J	1	<i>,</i>
N7E2QU	lmmunoassay GC/MS LC/MS/MS	J J	√ √	1
N87Z6T	Immunoassay GC/MS GC/FID	J	√ √	1
NJ37XQ	Immunoassay GC/MS LC/MS/MS	1 1	1	
PATW9D	GC/MS LC/MS/MS	\checkmark	1	
PB4ZHV	Immunoassay GC/MS LC/MS/MS	ן ר ר	1	1
R2PQAR	Immunoassay GC/MS	\checkmark	1	
R4GR9N	Immunoassay GC/MS GC/FID	V	1	<i>,</i>
RA2RQM	Immunoassay GC/MS GC/FID	V	√ √	✓
RNNZNN	Immunoassay GC/MS	1	1	
RUNGZE	Immunoassay	✓		
T23MAQ	Immunoassay	✓		
T7FKJY	Immunoassay GC/MS LC/MS/MS	J	✓	1
TC3B7U	Immunoassay GC/MS	1	✓	
TD3DVX	Immunoassay GC/MS LC/MS/MS	V	\checkmark	✓
TTCYGA	LC/MS/MS	\checkmark	1	
U9HM6U	Immunoassay GC/MS	 Image: A start of the start of	✓	
UV969K	Immunoassay GC/MS	1	\checkmark	
UVVBV6	Immunoassay GC/MS	1	1	
UXY93R	Immunoassay GC/MS	\checkmark	1	

WebCode	Method	Screening	Confirmatory	Quantitation
UYYA7X	Immunoassay GC/MS	<i>\</i> <i>\</i>	1	
V4LDER	Immunoassay GC/MS GC/FID	✓	/	
VH3E8C	LC/MS/MS	✓		✓
VKUATK	Immunoassay GC/MS LC/MS/MS	✓ ✓ ✓	/	
VMDMCM	Immunoassay GC/MS	<i>\</i> <i>\</i>	1	
VNVBXN	LC/MS/MS	√	1	
W34NNK	Immunoassay GC/MS GC-FID	٠ 	1	<i>✓</i>
WFW7GR	Immunoassay GC/MS GC/FID	✓	٠ ٠	✓
WYNJPP	GC/MS LC/MS/MS	✓ 		✓
XBDFRN	GC/MS LC/MS/MS	1	✓	✓
XMQWYK	Immunoassay GC/MS LC/MS/MS	✓ ✓		✓
YC9F9Y	LC/MS/MS	 ✓ 	1	✓
YXL4WP	Immunoassay GC/MS	<i>✓</i>		✓
Response Sum	mary for Item 3			Participants: 112
		Screening	Confirmatory	Quantitation
1	Immunoassay:	96	0	0
1	GC/MS:	22	75	15
1	LC/MS:	1	1	3
1	LC/MS/MS:	23	29	21
	Other:	8	10	19

Additional Comments for Item 3

WebCode	Item 3 - Comments
2DPLGK	Noroxycodone indications, weak mass spectrum, not reported
2RDN2X	The quantitative value for Oxycodone in this proficiency sample was above our upper limit of quantitation. Therefore, the result was reported out qualitatively.
4C8ATZ	Screening: Instrument: UPLC-QTOF MS (Waters). Salting-out assisted extraction. Internal Standards: Cyclobarbitone, Prazepam & D3-Methadone. Oxycodone Quantitative Analysis: Instrument: UPLC-TQD (Waters). Internal Standard: D3-Oxycodone. LOD: 2 ng/mL
4DHARF	Internal standards used were D6-Codeine, D6-Morphine, D3-Hydrocodone, D3-Hydromorphone, D6-Oxycodone, and D3-Oxymorphone. Limit of detection is 25 ng/mL.
6DZMTX	oxycodone internal standard = oxycodone-d6; LOQ = 10 ng/mL
79YZEZ	Immunoassay analyte: cutoff - Amphetamine: 20 ng/mL, Methamphetamine: 20 ng/mL, Morphine 20 ng/mL, Benzoylecgonine: 50 ng/mL, Oxazepam 50 ng/mL, Carboxytetrahydrocannabinol: 20 ng/mL
7AD6BC	IS = Mepivicaine. LOQ = 0.05 ug/mL
7ATPXV	oxycodone internal standard = oxycodone-d6; LOQ = 10 ng/mL
7AVDZ8	ELISA screening panel includes: amphetamine, benzodiazepines, cannabinoids, carisoprodol, cocaine and metabolites, methadone, opiates, oxycodone, phencyclidine, and zolpidem. Confirmation/quantitation for oxycodone and oxymorphone following positive oxycodone screen. Oxycodone-D3 and oxymorphone-D3 used as internal standards. LOQ/LOD is 5 ng/mL for both oxycodone and oxymorphone. Oxymorphone was not detected. Confirmation/quantitation for amphetamine following positive screen. Amphetamine-D5 used as internal standard. LOQ/LOD is 4 ng/mL for amphetamine. Amphetamine was not detected.
7FJ2UC	nalorphine
7QGWWE	Internal Standard: Mepivacaine
7ZUQCG	Internal standards used: Mepivacine, Nalorphine; Zolpidem indicated: not reported, immunoassay not indicative
83RPZE	Internal standard: Oxycodone-D6. LOD: 12.5 ng/mL. LOQ: 25 ng/mL
8T34RV	oxycodone internal standard = oxycodone-d6; LOQ = 10 ng/mL
8WMTC9	Mepivacaine used as an internal standard in the detection of Oxycodone.
9A48TC	Cocaine related peaks indicated, immunoassay not indicative, no RRT to compare to, not reported. Zolpidem indicated, may be an artifact from production, not reported.
9F8CHB	The internal standard used to quantitate oxycodone is butylated nalorphine. The limit of detection is 6.2 mcg/L for oxycodone.
AHDRV9	Butyl Acetate Screen - Promazine (IStd), Opiate Confirmation - Nalorphine (IStd)
ALFUG4	ELISA screening panel includes: amphetamine, benzodiazepines, cannabinoids, carisoprodol, cocaine and metabolites, methadone, opiates, oxycodone. Oxycodone-D3 used as the internal standard. LOQ/LOD is 5 ng/mL for oxycodone.

WebCode	Item 3 - Comments
BGE937	Presumptive testing indicates the possibility of additional opiates.
BKW9K8	IS= Mepivicaine. LOQ= 0.05 ug/mL. U of M= 17.74% at 95.45% (see calculated range above [Table 3B - Confirmatory Results-Item 3])
BM3VXB	Internal standard: Mepivacaine
BX2N9N	Internal standard is Oxycodone-D6, Limit of detection is 10ng/mL
C2JBF2	ELISA screening panel includes: amphetamine, benzodiazepines, cannabinoids, carisoprodol, cocaine and metabolites, methadone, opiates, oxycodone, phencyclidine, and zolpidem. Oxycodone-D3 used as internal standard. LOD/LOQ for oxycodone is 5ng/ml.
CKVX4U	The sample was screened for the following type/class of drugs: Amphetamines, Benzodiazepines, Cannabinoids, Cocaine, Opiates, PCP
CQGQD9	Internal standard- nalorphine
EJQEWA	Presumptive screen indicates the possibility of additional opiates.
EQXLY8	OXYCODONE CONFIRMATORY limit of detection 50ng/mL(GC/MS , LC/MS/MS)
EV6CW8	Internal Standard: Mepivacaine
F77W47	Internal Standard used: Mepivacaine. Oxycodone Limit of Detection: 50 ng/mL. Zolpidem indicated but not confirmed due to Immunoassay screening negative for Zolpidem
FHXQA8	Caffeine and ibuprofen were also confirmed in the blood sample. The drugs were not reported independently in sections 3-1 [Table 3A - Screening Results-Item 3] and 3-2 [Table 3B - Confirmatory Results-Item 3] because they were confirmed in more than one of the PT samples.
FWT6A2	Expanded uncertainty 95.42%, K=2 (Oxycodone 17.74%)
HEPCGY	expanded uncertainty - 95.42%, k=2 (17.74)
HGDJ63	Internal Standard = Estazolam (1000 ng/mL)
HZ9EF6	GC/MS Internal Standard: Mepivacaine
JD9D32	LOD (GC/MS) = 62.5 ng/mL, LOD (LC/MS/MS) = 25 ng/mL, Internal Standard (GC/MS) = Nalorphine, Internal Standard (LC/MS/MS) = Flurazepam
JNRR2X	Internal standard used is mepivicaine. LOQ is 0.05ug/ml. Measurement of certainty for oxycodone is calculated at 17.74% certainty at a 95.45% confidence level. Please see above for the calculated range [Table 3B - Confirmatory Results-Item 3].
KLG674	Cutoff concentration for oxycodone assay: 10 ng/mL
KXE9AX	Internal Standard = Estazolam
L67AMT	Internal Standard: d6-Oxycodone. LOD: 10 ng/mL. LOQ: 10 ng/mL
L68ZVW	The major ions of oxymophone were observed; however, the concentration of oxymorphone in the sample was not sufficient to confirm by GCMS.
LZEXPC	Internal standard is Oxycodone-D6, Limit of detection is 10 ng/mL
M6MNQW	IS: mepivacaine. LOD: 6.2 μ g/L

WebCode	Item 3 - Comments
MVZKKH	Our immunoassay screening (ELISA) panel includes Amphetamines, Benzodiazepines, Cannabinoids, Cocaine, Opiates and Phencyclidine.
N7E2QU	nalorphine used as internal standard.
NJ37XQ	LOQ for both analytes 10 ng/mL. Internal standard Oxycodone-D3
PATW9D	Used Internal standards: For the screening: Phenobarbital D-5; For the Confirmatory: Codeine D-3
PB4ZHV	Internal standard used: nalorphine
R4GR9N	I.S. = mepivicaine. Measurement uncertainty based on 17.74% at a 95.45% confidence interval
RNNZNN	Internal standard: Mepivacaine. Oxycodone LOD: 50 ng/ml. Noroxycodone and Zolpidem were indicated but not reported.
RUNGZE	Screen for following w/ cutt-off values: Amp 20ng/ml, Oxa 50ng/mL, BE 50ng/ml, Meth 20ng/ml, Morphine 20ng/ml, C-THC 20ng/ml.
T23MAQ	[From Table 3B - Confirmatory Results-Item 3: "No validated method available at this time."]
TC3B7U	Internal Standard: Mepivacaine; Zolpidem had a baseline indication but was not reported.
U9HM6U	Internal Standard - D6-Oxycodone @ 100 ng/mL (SIM)
UV969K	Internal Standard: Mepivacaine. Oxycodone LOD: 50ng/mL
VH3E8C	oxycodone-d6 as internal standard. LOD <0.1 ng/mL
VKUATK	oxycodone - d3
VMDMCM	Opiate confirmation utilized Nalorphine internal standard. Butyl Acetate utilized Promazine internal standard.
W34NNK	Additional opiates are possible.
XBDFRN	internal standards: mepivacaine, nalorphine
XMQWYK	Internal standard: mepivacaine, BZE-d8, nalorphine, zolpidem quanted <lor< td=""></lor<>

Additional Test Comments

TABLE 4

WebCode	Additional Comments
4C8ATZ	All samples appeared to contain traces of Metformin and Ibuprofen.
79YZEZ	Limits of quantitation for analytes - MDA: 20 ng/mL, MDMA: 20 ng/mL, Tetrahydrocannabinol: 2 ng/mL. Hydroxytetrahydrocannabinol: 5 ng/mL, Carboxytetrahydrocannabinol: 10 ng/mL
9LKREU	Only screening testing is performed at this location.
FHXQA8	Caffeine was confirmed in all three PT samples. Ibuprofen was confirmed in two of the three PT samples.
J6E88E	All the items were screened using immunoassay method (Biochip Array Technology). No confirmatory method was performed for the screened positive sample.
KLG674	Screening performed using ELISA.
LZEXPC	Low levels of Gabapentin and Zolpidem were detected but below the labs cutoff for quantitation.

Appendix: Data Sheet

Collaborative Testing Services ~ Forensic Testing Program

Test No. 17-5661: Blood Drug Analysis

DATA MUST BE RECEIVED BY September 11, 2017 TO BE INCLUDED IN THE REPORT

Participant Code:

WebCode:

 	Accreditation Release Statement
	CTS submits external proficiency test data directly to ASCLD/LAB, ANAB, and A2LA. Please select one of the following statements to ensure your data is handled appropriately.
	This participant's data is intended for submission to ASCLD/LAB, ANAB, and/or A2LA. (Accreditation Release section on the last page must be completed and submitted.)
	This participant's data is NOT intended for submission to ASCLD/LAB, ANAB or A2LA.

Scenario:

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

Case 1: The body of a 52 year old female was found in her home. Her lips and extremities were blue, foam was present around her mouth, and a syringe was found nearby. A blood sample was collected at the autopsy.

Case 2: A 26 year old female was arrested at a party. The arresting officer noted that she exhibited sweating, chills, dilated pupils, and confusion. A blood sample was collected 80 minutes after the arrest.

Case 3: A 35 year old male was pulled over by police after running a red light. He displayed drowsiness, slurred speech, and confusion. A breath alcohol test resulted in 0.00 percent. A blood sample was collected 1 hour later.

Instructions:

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

-Please do not report the presence/concentration of drugs in concentrations less than 10ng/mL. -Samples may contain methanol, acetonitrile, Zolpidem, and Gabapentin as artifacts from production.

Items Submitted (Sample Pack BDRG):

Item 1: Two vials of blood from Case 1

- Item 2: Two vials of blood from Case 2
- Item 3: Two vials of blood from Case 3

Please return all pages of this data sheet.

Screening Results for Item 1:

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



Drug(s) detected (list each class and/or drug name below).

Confirmatory Results for Item 1:

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

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

No drugs/metabolites detected utilizing confirmatory methods.

Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units ()
Date(s) Analysis Performed on Analyt	e:			
Raw Data (ng/mL):				
<u> </u>				

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

Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units ()
Date(s) Analysis Performed on Analyte	e:			
Raw Data (ng/mL):				
<u></u>		<u> </u>		

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Results for Item 1 (continued):

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

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

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

	<u>Method Used</u>	<u>Screening</u>	Confirmatory	<u>Quantitation</u>
	Immunoassay			
	GC/MS			
	LC/MS			
	LC/MS/MS			
Other:				
Other:				

1-5.) Additional Comments for Item 1

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

Screening Results for Item 2:

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

No drugs detected utilizing screening methods.

Drug(s) detected (list each class and/or drug name below).

Confirmatory Results for Item 2:

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

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

No drugs/metabolites detected utilizing confirmatory methods.

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

Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units ()
Date(s) Analysis Performed on Analyte	ə:			
Raw Data (ng/mL):				
		<u> </u>		

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

Please return all pages of this data sheet.

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Results for Item 2 (continued):

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

A single deter	mination? T	he mean of duplicate / several	determinations?
Other? (Speci	fy):		

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

	<u>Method Used</u>	<u>Screening</u>	Confirmatory	<u>Quantitation</u>
	Immunoassay			
	GC/MS			
	LC/MS			
	LC/MS/MS			
Other:				
Other:				

2-5.) Additional Comments for Item 2

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

Screening Results for Item 3:

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

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

Confirmatory Results for Item 3:

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

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

No drugs/metabolites detected utilizing confirmatory methods.

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

Analyte	Qualitative Only?	Reported Concentration	Uncertainty	Units ()
Date(s) Analysis Performed on Analyte	e:			
Raw Data (ng/mL):				
		<u> </u>		

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

Please return all pages of this data sheet.

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Results for Item 3 (continued):

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

A sir	ngle determination?	The mean of duplicate / several determinations?
Oth	er? (Specify):	

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

	<u>Method Used</u>	<u>Screening</u>	Confirmatory	<u>Quantitation</u>
	Immunoassay			
	GC/MS			
	LC/MS			
	LC/MS/MS			
Other:				
Other:				

3-5.) Additional Comments for Item 3

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

Date Samples Received:

Additional Comments on Test

Return Instructions: Data must be received via		Participant Code:
online data entry, fax (please include a cover sheet),		ONLINE DATA ENTRY: www.cts-portal.com
or mail by September 11, 2017 to be included in the	<u>;</u>	
report. Emailed data sheets are not accepted.	FAX:	+1-571-434-1937
QUESTIONS? TEL: +1-571-434-1925 (8 am - 4:30 pm EST) EMAIL: forensics@cts-interlab.com www.ctsforensics.com	MAIL:	Collaborative Testing Services, Inc. P.O. Box 650820 Sterling, VA 20165-0820 USA

Please return all pages of this data sheet.

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Collaborative Testing Services ~ Forensic Testing Program

RELEASE OF DATA TO ACCREDITATION BODIES

The following Accreditation Releases will apply only to:

Participant Code:

WebCode:

for Test No. 17-5661: Blood Drug Analysis

This release page must be completed and received by <u>September 11, 2017</u> to have this participant's submitted data included in the reports forwarded to the respective Accreditation Bodies.

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

Step 1: Provide th	<u>e applicable Accre</u>	editation Certificate Number(s) for your laboratory
ASCLE)/LAB Certificate No.	
	ANAB Certificate No.	
	A2LA Certificate No.	
Step 2: Complete	the Laboratory Ide	entifying Information in its entirety
Signature and Title		
Signature and Title Laboratory Name		
Signature and Title Laboratory Name Location (City/State)		

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

Please return all pages of this data sheet.