



Urine Drug Analysis Test No. 19-5671

Summary Report

A sample set contained one specimen bottle of human urine for each of the three case scenarios. Participants were requested to examine these items and report their findings. Data were returned from 109 participants and are compiled into the following tables:

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

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

Manufacturer's Information

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

SAMPLE PREPARATION: The urine used in this test was from the same lot, which tested negative for a variety of common drugs and controlled substances. A stock solution of each chosen drug was used to spike each item. Items were prepared at separate times with different glassware using the following procedure.

ITEMS 1, 2, and 3 (PREPARATION): Sample preparation consisted of adding a predetermined amount of drug stock solution to a beaker containing human urine, where the equivalent of 2% w/v sodium fluoride was added and then stirred. A 50mL aliquot of the mixture was then transferred into each of the pre-labeled specimen bottles. All bottles were stored in a refrigerator immediately after production and remained there until the sample sets were prepared.

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

VERIFICATION: The laboratories that conducted predistribution analysis of the samples indicated the presence of the expected drugs and/or a minimum of one expected metabolite per drug.

Item 1 Drug (Concentration)

Amphetamine (3,000 ng/mL)

Item 2 Drug (Concentration)

Fentanyl (270 ng/mL)
Norfentanyl (1,350 ng/mL)

Item 3 Drug (Concentration)

Oxycodone (860 ng/mL)
Noroxycodone (1,920 ng/mL)
Oxymorphone (470 ng/mL)

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

Summary Comments

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

There were 108 participants who reported screening results for Item 1. The presence of Amphetamine was reported by 90.7% of these participants while the remaining reported no drugs or metabolites detected. There were 98 participants who performed confirmatory analysis for Item 1. Amphetamine was confirmed by 96.9% of the participants with over a quarter of the participants reporting both d- and l- amphetamine. Three participants did not confirm the presence of any drugs or metabolites.

There were 106 participants who reported screening results for Item 2. The presence of Fentanyl and/or Norfentanyl was reported by 59.4% of these participants while the remaining reported no drugs/metabolites detected. All participants who moved forward with further testing confirmed the presence of Fentanyl and 48 of these also confirmed the presence of Norfentanyl. There were 3 participants who reported the presence of an additional drug/metabolite.

For Item 3, there were 105 participants who reported screening results. Of these, 71.4% reported the presence of at least one drug and/or the Opiate drug class while the remaining reported no drugs/metabolites detected. Participants reporting the opiate drug class and a specific drug were only counted once. All drug responses reported by participants consisted of one or a combination of the following: Oxycodone, Noroxycodone, and Oxymorphone. Confirmatory results for Item 3 showed that all participants reported the presence of at least one of the expected drugs or metabolites. Of the 92 participants who reported confirmatory results, 100% reported the presence of Oxycodone. Some of these participants also reported the metabolites of oxycodone: 47.8% reported Oxymorphone and 4.3% reported Noroxycodone. Only 21.7% of participants confirmed the presence of all three analytes.

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

For participants that did not include raw data but did report a final concentration in ng/ml based on a single determination, this concentration value was added to the Raw Data table. Due to the small number of participants who reported quantitative information, no grand mean statistics were calculated or determinations regarding "extreme" data made for any of the analytes in the three items.

Screening Results - Item 1

TABLE 1A Item 1

Item Scenario:

Case 1: A 21-year-old male college athlete receiving an annual physical complained of being tired. He reported some weight loss and his blood pressure and pulse were slightly elevated. A urine sample was collected for analysis.

Item Contents and Preparation Concentration: Amphetamine (3,000 ng/mL)

| WebCode | Screening Results |
|---------|--------------------------------------|
| 29RPK9 | Amphetamine |
| 2JFCYJ | Amphetamines |
| 2N7QJK | Amphetamine |
| 2Y6N6Y | Amphetamine |
| 3EC6QR | Amphetamine |
| 3HCFK7 | Amphetamine/MDA |
| 3TFLJE | No drugs/metabolites detected |
| 43FHVF | amphetamine |
| 43GABB | Amphetamine |
| 4RV8LN | Amphetamines |
| 4TRKDM | l-amphetamine d-amphetamine |
| 4UL9RC | Amphetamine Class |
| 4WQWAM | amphetamines were indicative by EIA |
| 4XLJNC | SMA - Amphetamine |
| 63CDWX | No drugs/metabolites detected |
| 6NVD8K | amphetamine(s) |
| 6Z7T7C | Amphetamine |
| 76VRZX | Amphetamines |
| 7DQU2A | Amphetamine |
| 82U4WV | class of amphetamines amphetamine |
| 8QRLME | Amphetamines (500 ng/mL cutoff) |
| 9A7D6A | Amphetamine |
| 9BVQNT | Amphetamines |
| 9NJNVH | d-amphetamine, l-amphetamine |
| 9RGEV3 | SMA |
| A9MX7Y | Amphetamine/MDA |

TABLE 1A Item 1

| WebCode | Screening Results |
|---------|---|
| AAXVKG | Amphetamines |
| ABTJY7 | Amphetamines (class), Possible SMA (Amphetamine) |
| ACM7BA | Amphetamine |
| ANFPRZ | Amphetamine |
| AWCH98 | No drugs/metabolites detected |
| BC4KK6 | Amphetamines (Class) Possible Amphetamine (Drug) |
| BE8BT6 | No drugs/metabolites detected |
| BEMRLC | amphetamines |
| C39YRB | Amphetamines (500ng/mL cutoff) |
| CVN4M2 | Amphetamines |
| D68WDN | Amphetamine (ELISA) |
| D9UAK7 | amphetamine |
| DJG9CC | amphetamines |
| DMFLWF | amphetamines |
| DWY69Z | Amphetamine |
| EHEZK4 | AMPHETAMINE |
| EN4M8W | sympathomimetic amines |
| EN6BU2 | Amphetamine |
| FAYJL3 | Amphetamines |
| FLR3Z8 | Amphetamine |
| FM2CQJ | Amphetamine |
| FWGKK | ELISA Amphetamine |
| G3DA9P | Amphetamines |
| GHRDW7 | Amphetamine |
| H3QYC3 | Amphetamine |
| H9H2K9 | amphetamines |
| HEHPTZ | Amphetamine class |
| HEKDF6 | d-amphetamine, l-amphetamine |
| HGQZP4 | Amphetamine |
| HJJNC6 | Amphetamines |
| HVU72M | Amphetamine |
| JL29WZ | amphetamine |

TABLE 1A Item 1

| WebCode | Screening Results |
|---------|--|
| JLYK9U | The specimen screened positive for Amphetamines. |
| JN67ZZ | amphetamines |
| KMN97F | Amphetamine/MDA |
| L2LKDY | Amphetamine class |
| LCQQB8 | Amphetamines (d-amphetamine and l-amphetamine) |
| LXKUR6 | Amphetamines |
| MFGNUU | Amphetamine class |
| MFZ7E4 | No drugs/metabolites detected |
| MLAJ3U | No drugs/metabolites detected |
| MVB432 | amphetamines |
| NVQMMY | amphetamines |
| P8ZR6E | amphetamines (immunoassay) amphetamine (LCMSMS) |
| P9TFPV | Amphetamines |
| PHJ2VT | Stimulant-Amphetamine |
| PKK88D | No drugs/metabolites detected |
| PW2P9X | Amphetamines |
| PWZ2LR | Amphetamine |
| Q3X7R2 | Amphetamine |
| QNJZJN | Amphetamines |
| R3DPBD | amphetamines |
| RTD2HG | Amphetamine |
| T3FU9M | amphetamine |
| T6YTKW | Amphetamine |
| TCMDQX | Amphetamines |
| TGTAAX | Amphetamine |
| TNUGVR | amphetamine class |
| TVWQ2K | Amphetamines |
| U8PAFQ | amphetamines |
| U9FK8J | Amphetamine |
| UMCWFM | No drugs/metabolites detected |
| V3PKCN | amphetamines |
| V4K7YM | No drugs/metabolites detected |

TABLE 1A Item 1

| WebCode | Screening Results |
|---------|-------------------------------|
| VBG3HJ | Amphetamine |
| VL369R | amphetamines |
| VRQPAL | Amphetamine |
| VVKNKB | Amphetamines |
| WJ9VCV | Indicative: amphetamines |
| WRH6ZN | Amphetamine |
| WTUYJV | amphetamines |
| WUA4DM | No drugs/metabolites detected |
| WUPMXK | Amphetamine class |
| XWAY9A | Amphetamine/ Methamphetamine |
| YDEPNJ | Amphetamines |
| YDFDBP | amphetamines |
| YE6RT8 | amphetamines |
| YNW37N | Amphetamine |
| YXJZWT | AMPHETAMINE |
| Z383EJ | Amphetamine |
| ZMEF87 | Amphetamine |
| ZWJKVF | Amphetamine |

| Response Summary for Item 1 | Participants: 108 |
|--|-------------------|
| Amphetamine or SMA: | 98 |
| No drugs/metabolites detected: | 10 |
| Totals may add up to more than the total number of participants because participants can report multiple classes/drug names. | |

Confirmatory Results - Item 1

What drugs/metabolites were detected in Item 1?

TABLE 1B Item 1

Item Scenario:

Case 1: A 21-year-old male college athlete receiving an annual physical complained of being tired. He reported some weight loss and his blood pressure and pulse were slightly elevated. A urine sample was collected for analysis.

Item Contents and Preparation Concentration: Amphetamine (3,000 ng/mL)

| WebCode | Analyte Reported | Qualitative Only | Reported Concentration | Uncertainty | Units |
|---------|------------------|------------------|------------------------|-------------|-------|
| 29RPK9 | Amphetamine | ✓ | | | |
| 2JFCYJ | d-amphetamine | ✓ | | | |
| | l-amphetamine | ✓ | | | |
| 2N7QJK | Amphetamine | ✓ | | | |
| 2Y6N6Y | Amphetamine | ✓ | | | |
| 3EC6QR | Amphetamine | ✓ | | | |
| 3HCFK7 | Amphetamine | ✓ | | | |
| 43FHVF | Amphetamine | ✓ | | | |
| 43GABB | Amphetamine | ✓ | | | |
| 4RV8LN | Amphetamine | ✓ | | | |
| 4TRKDM | d-amphetamine | ✓ | | | |
| | l-amphetamine | ✓ | | | |
| 4UL9RC | Amphetamine | ✓ | | | |
| 4WQWAM | d-amphetamine | ✓ | | | |
| | l-amphetamine | ✓ | | | |
| 4XLJNC | Amphetamine | ✓ | | | |
| 6NVD8K | d-amphetamine | ✓ | | | |
| | l-amphetamine | ✓ | | | |
| 6Z7T7C | Amphetamine | ✓ | | | |
| 76VRZX | Amphetamine | ✓ | | | |
| 7DQU2A | Amphetamine | ✓ | | | |
| 82U4WV | d-amphetamine | ✓ | | | |
| | l-amphetamine | ✓ | | | |
| 9A7D6A | Amphetamine | ✓ | | | |

TABLE 1B Item 1

| WebCode | Analyte Reported | Qualitative Only | Reported Concentration | Uncertainty | Units |
|---------|------------------|------------------|------------------------|-------------|-------|
| 9BVQNT | Amphetamine | ✓ | | | |
| 9NJNVH | d-amphetamine | ✓ | | | |
| | l-amphetamine | ✓ | | | |
| 9RGEV3 | Amphetamine | ✓ | | | |
| A9MX7Y | Amphetamine | ✓ | | | |
| AAXVKG | D-Amphetamine | ✓ | | | |
| | L-Amphetamine | ✓ | | | |
| ABTJY7 | Amphetamine | ✓ | | | |
| ACM7BA | Amphetamine | ✓ | | | |
| ANFPRZ | Amphetamine | ✓ | | | |
| BC4KK6 | Amphetamine | ✓ | | | |
| BEMRLC | d-amphetamine | ✓ | | | |
| | l-amphetamine | ✓ | | | |
| D68WDN | Amphetamine | ✓ | | | |
| D9UAK7 | d-amphetamine | ✓ | | | |
| | l-amphetamine | ✓ | | | |
| DJG9CC | Amphetamine | ✓ | | | |
| DMFLWF | d-amphetamine | ✓ | | | |
| | l-amphetamine | ✓ | | | |
| DWY69Z | Amphetamine | ✓ | | | |
| EHEZK4 | Amphetamine | ✓ | | | |
| EN4M8W | Amphetamine | ✓ | | | |
| EN6BU2 | Amphetamine | ✓ | | | |
| FAYJL3 | Amphetamine | ✓ | | | |
| FLR3Z8 | Amphetamine | ✓ | | | |
| FM2CQJ | Amphetamine | ✓ | | | |
| FVGKK | Amphetamine | ✓ | | | |
| G3DA9P | Amphetamine | ✓ | | | |
| GHRDW7 | Amphetamine | ✓ | | | |
| H3QYC3 | Amphetamine | ✓ | | | |

TABLE 1B Item 1

| WebCode | Analyte Reported | Qualitative Only | Reported Concentration | Uncertainty | Units |
|---------|-------------------------------|------------------|------------------------|-------------|-------|
| H9H2K9 | d-amphetamine | ✓ | | | |
| | l-amphetamine | ✓ | | | |
| HEHPTZ | Amphetamine | | >1000 | | ng/mL |
| HEKDF6 | d-amphetamine | ✓ | | | |
| | l-amphetamine | ✓ | | | |
| HGQZP4 | Amphetamine | ✓ | | | |
| HJJNC6 | d-amphetamine | | | | |
| | l-amphetamine | | | | |
| HVU72M | Amphetamine | ✓ | | | |
| JL29WZ | Amphetamine | ✓ | | | |
| JN67ZZ | Amphetamine | ✓ | | | |
| KMN97F | Amphetamine | ✓ | | | |
| L2LKDY | Amphetamine | | >1000 | | ng/mL |
| LCQQB8 | d-amphetamine | ✓ | | | |
| | l-amphetamine | ✓ | | | |
| LXKUR6 | d-Amphetamine | ✓ | | | |
| | l-Amphetamine | ✓ | | | |
| MFGNUU | Amphetamine | | >1000 | | ng/mL |
| MFZ7E4 | No drugs/metabolites detected | | | | |
| MVB432 | d-amphetamine | ✓ | | | |
| | l-amphetamine | ✓ | | | |
| NVQMMY | d-amphetamine | ✓ | | | |
| | l-amphetamine | ✓ | | | |
| P8ZR6E | d-amphetamine | ✓ | | | |
| | l-amphetamine | ✓ | | | |
| P9TFPV | Amphetamine | ✓ | | | |
| PHJ2VT | Amphetamine | ✓ | | | |
| PW2P9X | d-amphetamine | ✓ | | | |
| | l-amphetamine | ✓ | | | |
| PWZ2LR | Amphetamine | ✓ | | | |
| Q3X7R2 | Amphetamine | ✓ | | | |

TABLE 1B Item 1

| WebCode | Analyte Reported | Qualitative Only | Reported Concentration | Uncertainty | Units |
|---------|-------------------------------|------------------|------------------------|-------------|-------|
| QNJZJN | Amphetamine | ✓ | | | |
| R3DPBD | Amphetamine | ✓ | | | |
| RTD2HG | Amphetamine | | 2863 | 573 | ng/mL |
| T3FU9M | Amphetamine | ✓ | | | |
| T6YTKW | Amphetamine | ✓ | | | |
| TCMDQX | Amphetamine | ✓ | | | |
| TGTAAX | Amphetamine | ✓ | | | |
| TNUGVR | d-amphetamine | ✓ | | | |
| | l-amphetamine | ✓ | | | |
| TVWQ2K | Amphetamine | ✓ | | | |
| U8PAFQ | d-amphetamine | ✓ | | | |
| | l-amphetamine | ✓ | | | |
| U9FK8J | Amphetamine | ✓ | | | |
| UMCWFM | No drugs/metabolites detected | | | | |
| V3PKCN | d-amphetamine | ✓ | | | |
| | l-amphetamine | ✓ | | | |
| V4K7YM | No drugs/metabolites detected | | | | |
| VBG3HJ | Amphetamine | ✓ | | | |
| VL369R | d-amphetamine | ✓ | | | |
| | l-amphetamine | ✓ | | | |
| VRQPAL | Amphetamine | ✓ | | | |
| VVKNKB | Amphetamine | ✓ | | | |
| WJ9VCV | d-amphetamine | ✓ | | | |
| | l-amphetamine | ✓ | | | |
| WRH6ZN | Amphetamine | ✓ | | | |
| WTUYJV | d-amphetamine | ✓ | | | |
| | l-amphetamine | ✓ | | | |
| WUA4DM | Amphetamine | ✓ | | | |
| WUPMXK | Amphetamine | ✓ | | | |
| XWAY9A | Amphetamine | ✓ | | | |

TABLE 1B Item 1

| WebCode | Analyte Reported | Qualitative Only | Reported Concentration | Uncertainty | Units |
|---------|------------------|------------------|------------------------|-------------|-------|
| YDEPNJ | Amphetamine | | 3018 | | ng/ml |
| YDFDBP | d-amphetamine | ✓ | | | |
| | l-amphetamine | ✓ | | | |
| YE6RT8 | Amphetamine | ✓ | | | |
| YNW37N | Amphetamine | ✓ | | | |
| YXJZWT | Amphetamine | | 3301.776 | | ng/ml |
| Z383EJ | Amphetamine | ✓ | | | |
| ZMEF87 | Amphetamine | ✓ | | | |
| ZWJKVF | Amphetamine | ✓ | | | |

| Response Summary for Item 1 | | Participants: 98 |
|---|-----|------------------|
| Amphetamine: | 121 | |
| No drugs/metabolites detected: | 3 | |
| Totals may add up to more than the total number of participants because participants can report multiple drugs/metabolites. | | |

Raw Data - Item 1

List of raw data determinations in ng/mL.

TABLE 1C Item 1

Item 1 Raw Data - Amphetamine Preparation concentration: (3,000 ng/mL)

| WebCode | Raw Data (ng/mL) | |
|----------------|-------------------------|---------|
| HEHPTZ | 4,139.8 | |
| L2LKDY | 3,003.4 | |
| MFGNUU | 2,246.4 | |
| RTD2HG | 2,863.0 | |
| YDEPNJ | 3,168.6 | 2,867.5 |
| YXJZWT | 3,301.8 | |

Statistical Analysis for Item 1 - Amphetamine

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

Reporting Procedures - Item 1

If quantitative analysis was performed, the reported concentrations are:

TABLE 1D Item 1

| WebCode | Quantitative Reporting Procedures |
|---------|---|
| HEHPTZ | A single determination. |
| L2LKDY | A single determination. |
| MFGNUU | A single determination. |
| RTD2HG | A single determination. |
| YDEPNJ | The mean of duplicate/several determinations. |
| YXJZWT | A single determination. |

| Response Summary for Item 1 | Participants: 6 |
|---|-----------------|
| A single determination: | 5 (83.3%) |
| The mean of duplicate/several determinations: | 1 (16.7%) |

Methods of Analysis - Item 1

TABLE 1E Item 1

| WebCode | Method | Screening | Confirmatory | Quantitation |
|---------|----------------------------------|-------------|--------------|--------------|
| 29RPK9 | Immunoassay GC/MS | ✓ | ✓ | |
| 2JFCYJ | Immunoassay GC/MS LC/MS/MS | ✓ | ✓ ✓ | |
| 2N7QJK | Immunoassay GC/MS | ✓ | ✓ | |
| 2Y6N6Y | Immunoassay GC/MS | ✓ | ✓ | |
| 3EC6QR | GC/MS | ✓ | ✓ | |
| 3HCFK7 | Immunoassay GC/MS | ✓ | ✓ | |
| 3TFLJE | Immunoassay | ✓ | | |
| 43FHVF | LC/MS/MS GC/MS | ✓ | ✓ | |
| 43GABB | Immunoassay GC/MS | ✓ | ✓ | |
| 4RV8LN | Immunoassay GC/MS | ✓ ✓ | ✓ | |
| 4TRKDM | Immunoassay LC/MS/MS GC/MS | ✓ ✓ | ✓ ✓ | |
| 4UL9RC | Immunoassay GC/MS | ✓ ✓ | ✓ | |
| 4WQWAM | Immunoassay LC/MS/MS GC/MS | ✓ | ✓ ✓ | |
| 4XLJNC | Immunoassay GC/MS | ✓ ✓ | ✓ | |
| 63CDWX | Immunoassay | ✓ | | |
| 6NVD8K | Immunoassay LC/MS/MS GC/MS | ✓ ✓ | ✓ | |
| 6Z7T7C | LC/MS/MS | ✓ | ✓ | |
| 76VRZX | Immunoassay GC/MS | ✓ | ✓ | |
| 7DQU2A | LC/MS/MS | ✓ | ✓ | |
| 82U4WV | Immunoassay LC/MS/MS GC/MS | ✓ ✓ ✓ | ✓ ✓ | |
| 8QRLME | Immunoassay | ✓ | | |

TABLE 1E Item 1

| WebCode | Method | Screening | Confirmatory | Quantitation |
|---------|-------------|-----------|--------------|--------------|
| 9A7D6A | GC/MS | ✓ | | |
| | LC/MS/MS | | ✓ | |
| | LC-TOF-MS | ✓ | | |
| 9BVQNT | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| 9NJNVH | GC/MS | | ✓ | |
| | LC/MS/MS | | ✓ | |
| | Immunoassay | ✓ | | |
| 9RGEV3 | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| A9MX7Y | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| AAXVKG | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| | LC/MS | | ✓ | |
| ABTJY7 | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| ACM7BA | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| ANFPRZ | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| BC4KK6 | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| BE8BT6 | Immunoassay | ✓ | | |
| BEMRLC | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| | LC/MS/MS | | ✓ | |
| C39YRB | Immunoassay | ✓ | | |
| D68WDN | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| D9UAK7 | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| | LC/MS/MS | | ✓ | |
| DJG9CC | Immunoassay | ✓ | | |
| | LC/MS | | ✓ | |
| | GC/MS | | ✓ | |
| DMFLWF | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| | LC/MS/MS | ✓ | ✓ | |
| DWY69Z | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| EHEZK4 | GC/MS | ✓ | ✓ | |
| | LC/MS-QTOF | ✓ | | |
| EN4M8W | GC/MS | | ✓ | |
| | Immunoassay | ✓ | | |

TABLE 1E Item 1

| WebCode | Method | Screening | Confirmatory | Quantitation |
|---------|----------------------------------|-------------|--------------|--------------|
| EN6BU2 | Immunoassay GC/MS | ✓ | ✓ | |
| FAYJL3 | Immunoassay GC/MS | ✓ | ✓ | |
| FLR3Z8 | Immunoassay GC/MS | ✓ | ✓ | |
| FM2CQJ | Immunoassay GC/MS LC/MS/MS | ✓ | ✓ ✓ | |
| FVVGKK | Immunoassay GC/MS | ✓ | ✓ | |
| G3DA9P | Immunoassay GC/MS LC-QTOF | ✓ | ✓ ✓ | |
| GHRDW7 | GC/MS Immunoassay LC/MS/MS | ✓ ✓ ✓ | ✓ | |
| H3QYC3 | Immunoassay GC/MS | ✓ | ✓ | |
| H9H2K9 | Immunoassay LC/MS/MS GC/MS | ✓ ✓ ✓ | ✓ ✓ | |
| HEHPTZ | Immunoassay LC/MS/MS | ✓ | ✓ | ✓ |
| HEKDF6 | Immunoassay GC/MS LC/MS/MS | ✓ | ✓ ✓ | |
| HGQZP4 | Immunoassay LC/MS/MS | ✓ ✓ | ✓ | |
| HJJNC6 | Immunoassay GC/MS LC/MS/MS | ✓ | ✓ ✓ | |
| HVU72M | Immunoassay LC-QTOF GC/MS | ✓ ✓ ✓ | ✓ ✓ | |
| JL29WZ | LC/MS/MS | ✓ | ✓ | |
| JLYK9U | Immunoassay | ✓ | | |
| JN67ZZ | Immunoassay GC/MS | ✓ | ✓ | |
| KMN97F | Immunoassay GC/MS | ✓ | ✓ | |
| L2LKDY | Immunoassay LC/MS/MS | ✓ | ✓ | ✓ |
| LCQQB8 | Immunoassay GC/MS LC/MS/MS | ✓ | ✓ ✓ | |

TABLE 1E Item 1

| WebCode | Method | Screening | Confirmatory | Quantitation |
|---------|-----------------------------------|-----------|--------------|--------------|
| LXKUR6 | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| | LC/MS | | ✓ | |
| MFGNUU | Immunoassay | ✓ | | |
| | LC/MS/MS | | ✓ | ✓ |
| MLAJ3U | Immunoassay | ✓ | | |
| MVB432 | Immunoassay | ✓ | | |
| | LC/MS/MS | | ✓ | |
| | GC/MS | | ✓ | |
| NVQMMY | GC/MS | | ✓ | |
| | LC/MS/MS | ✓ | ✓ | |
| | Immunoassay | ✓ | | |
| P8ZR6E | Immunoassay | ✓ | | |
| | LC/MS/MS | ✓ | | |
| | GC/MS | | ✓ | |
| P9TFPV | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| | LC/MS/MS | | ✓ | |
| PHJ2VT | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| PKK88D | Immunoassay | ✓ | | |
| PW2P9X | Immunoassay | ✓ | | |
| | LC/MS/MS | | ✓ | |
| | GC/MS | | ✓ | |
| PWZ2LR | LC/MS/MS | ✓ | | |
| | GC/MS | | ✓ | |
| | Rapid Chromatographic Immunoassay | ✓ | | |
| Q3X7R2 | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| QNJZJN | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| R3DPBD | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| | HPLC/qTOF | ✓ | ✓ | |
| RTD2HG | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | ✓ |
| T3FU9M | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| T6YTKW | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| TCMDQX | GC/MS | | ✓ | |
| | Immunoassay | ✓ | | |
| TGTAAX | LC/MS/MS | | ✓ | |
| | Immunoassay | ✓ | | |

TABLE 1E Item 1

| WebCode | Method | Screening | Confirmatory | Quantitation |
|---------|-------------|-----------|--------------|--------------|
| TNUGVR | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| | LC/MS/MS | ✓ | ✓ | |
| TVWQ2K | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| U8PAFQ | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| | LC/MS/MS | | ✓ | |
| U9FK8J | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| UMCWFM | GC/MS | | ✓ | |
| V3PKCN | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| | LC/MS/MS | | ✓ | |
| V4K7YM | GC/MS | | ✓ | |
| VBG3HJ | GC/MS | ✓ | ✓ | |
| VL369R | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| | LC/MS/MS | | ✓ | |
| VRQPAL | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| VKKNKB | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| | LC-QTOF | | ✓ | |
| WJ9VCV | GC/MS | | ✓ | |
| | LC/MS/MS | | ✓ | |
| | Immunoassay | ✓ | | |
| WRH6ZN | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| | LC QTOF | | ✓ | |
| WTUYJV | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| | LC/MS/MS | | ✓ | |
| WUA4DM | GC/MS | | ✓ | |
| WUPMXK | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| XWAY9A | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| YDEPNJ | Immunoassay | ✓ | | |
| | LC/MS/MS | | ✓ | |
| YDFDBP | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| | LC/MS/MS | ✓ | ✓ | |
| YE6RT8 | Immunoassay | ✓ | | |
| | LC/QTOF | | ✓ | |
| | GC/MS | | ✓ | |

TABLE 1E Item 1

| WebCode | Method | Screening | Confirmatory | Quantitation |
|---------|------------------------|-----------|--------------|--------------|
| YNW37N | Immunoassay GC/MS | ✓ ✓ | ✓ | |
| YXJZWT | Immunoassay LC/MS | ✓ | ✓ | |
| Z383EJ | Immunoassay GC/MS | ✓ | ✓ | |
| ZMEF87 | Immunoassay LC-QTOF | ✓ | ✓ | |
| ZWJKVF | GC/MS LC/MS/MS | ✓ ✓ | ✓ ✓ | |

| Response Summary for Item 1 | | Participants: 105 | | |
|-----------------------------|--|-------------------|--------------|--------------|
| | | Screening | Confirmatory | Quantitation |
| Immunoassay: | | 92 | 0 | 0 |
| GC/MS: | | 24 | 85 | 1 |
| LC/MS: | | 0 | 4 | 0 |
| LC/MS/MS: | | 17 | 35 | 3 |
| Other: | | 5 | 7 | 0 |

Additional Comments for Item 1

TABLE 1F Item 1

| WebCode | Item 1 - Comments |
|---------|---|
| 29RPK9 | Caffeine was observed, but is not reported by [Laboratory]. |
| 2JFCYJ | Internal standard used: Mepivacaine. |
| 2Y6N6Y | Codeine ions observed |
| 3HCFK7 | Mepivacaine (IS) |
| 3TFLJE | Sample screened negative using ELISA for Methamphetamine, Benzodiazepines, Cocaine/BE, Opiates, PCP and Cannabinoids |
| 4TRKDM | Internal standards: mepivacaine and nalorphine. |
| 4WQWAM | internal standard: mepivacaine |
| 6Z7T7C | Internal Standard: Estazolam |
| 76VRZX | LOD 100 ng/mL |
| 82U4WV | Internal standard-mepivacaine |
| 9NJNVH | Internal Standard - Mepivacaine |
| A9MX7Y | Internal Standards: Amphetamine D-11, Methamphetamine D-11, Mepivacaine. Indications of Methamphetamine and Codeine |
| AAXVKG | Internal Standard: Mepivacaine |
| BE8BT6 | [Laboratory] screens for the following assays: Assay Type: Target Analyte at Cutoff Level - Amphetamines Assay: d-Methamphetamine at 300ng/mL; Cocaine/Metabolite Assay: Benzoylecgonine at 300ng/mL; Opiates Assay: Morphine at 300ng/mL; Benzodiazepines Assay: Oxazepam at 200ng/mL; Phencyclidine Assay: Phencyclidine at 25ng/mL; and Cannabis Assay: (-)-11-nor-Carboxy-[delta]9-THC at 50ng/mL |
| BEMRLC | mepivacaine ans nalorphine used as internal standards |
| D68WDN | Alphaprodine, n-Propylamphetamine, and Hexobarbital used as internal standards. GC/MS LOD: 250ng/mL |
| D9UAK7 | Mepivacaine was the internal standard used for both GC/MS and LC/MS/MS confirmation tests. |
| DJG9CC | internal standard: mepivacaine |
| DMFLWF | Mepivacaine used as internal standard |
| DWY69Z | D8-Amphetamine and other deuterated SMA's |
| EN6BU2 | Screening - Amphetamine, Methamphetamine, Carboxy-THC and Morphine: 20.0ng/mL; Benzoylecgonine and Oxazepam: 50ng/mL. Confirmation - Internal Standard: Phentermine; Cutoff: 2.0mcg/mL |
| FAYJL3 | Hexobarbital, Phenyltoloxamine used as internal reference materials |

TABLE 1F Item 1

| WebCode | Item 1 - Comments |
|---------|--|
| FLR3Z8 | IS-Phenyltoloxamine |
| FWGKK | N-Propylamphetamine, alphaprodine, and hexobarbital were used as internal standards. GC/MS LOD for Amphetamine: 250 ng/mL |
| GHRDW7 | internal standard - phenyltoloxamine |
| H9H2K9 | Internal standard used fro all tests - mepivacaine |
| HEHPTZ | Results are above our upper limit of quantitation (1000ng/mL) |
| HEKDF6 | Mepivacaine, |
| HGQZP4 | Amphetamine (LC/MS/MS). Cut-off: 100 ng/mL. Internal standard: trimipramine-D3 |
| HJJNC6 | Mepivacaine used as internal standard. |
| HVU72M | Internal Standards used for LC-QTOF: Fentanyl-D5, Imipramine-D3, MDMA-D5, Methaqualone-D7, Triazolam-D4. |
| L2LKDY | Results are above our upper limit of quantitation (1000ng/mL) |
| LCQQB8 | internal standard used was mepivacaine |
| LXKUR6 | Mepivacaine used as internal standard for LC/MS analysis. Mepivacaine and nalorphine used as internal standards for GC/MS analysis. |
| MFGNUU | Results are above our upper limit of quantitation (1000ng/mL) |
| MVB432 | internal standard - mepivacaine |
| NVQMMY | Internal standard- Mepivacaine |
| P8ZR6E | internal standards: mepivacaine, nalorphine |
| P9TFPV | Internal Standard (Methamphetamine D9) |
| PHJ2VT | Internal Standard-Phenyltoloxamine |
| PKK88D | Preliminary testing did not indicated the presence of a drug compound(s). Additional confirmatory testing not pursued. |
| PW2P9X | D and L isomers of amphetamine were determined using GC/MS by (S)-(-)-N-(trifluoroacetyl)-prolyl chloride (with a purity of at least 95% S-isomer). Mepivacaine is the internal standard used to determine the relative retention time for the compounds reported. |
| PWZ2LR | Alere iCassette (THC) test device was used to screen for THC, referred to in 1-4 as rapid chromatographic immunoassay. The cutoff concentration for the assay is 50 ng/mL. |
| RTD2HG | Amphetamine: Internal Standard: Amphetamine-d11, LOD/LOQ: 50 ng/mL |
| T6YTKW | Internal Standard Diphenylamine. Detection limits 50 ng/mL |
| U9FK8J | D8-Amphetamine - Internal Standard |

TABLE 1F Item 1

| WebCode | Item 1 - Comments |
|----------------|---|
| V3PKCN | mepivacaine as internal standard |
| WJ9VCV | internal standard: mepivacaine |
| WUA4DM | Flurazepam as Internal Standard |
| YDFDBP | Internal Standards: Mepivacaine |
| YNW37N | Internal Standard: Phenyltoloxamine |
| YXJZWT | Internal standard used was PAMP at a concentration of 5000ng/ml |
| Z383EJ | Phenyltoloxamine Internal Standard used for the base fraction and Heptabarbital use for the acid fraction. |
| ZMEF87 | A GC/MS test was also performed per procedures but was not needed for confirmation. The results of the GC/MS test corroborated the LC-QTOF test. Internal standards used for the LC-QTOF method: Fentanyl-D5, Imipramine-D3, MDMA-D5, Methaqualone-D7, Triazolam-D4 |
| ZWJKVF | Internal Standard: Flurazepam, LOD: 10 ng/mL |

Screening Results - Item 2

TABLE 2A Item 2

Item Scenario:

Case 2: A 53-year-old male was pulled over for swerving in and out of lanes, driving significantly under the speed limit. The officer noted that the driver seemed relaxed but confused. His pupils were constricted and there was evidence of possible vomit on his shirt. A urine sample was collected for analysis 60 minutes later.

Item Contents and Preparation Concentration: Fentanyl (270 ng/mL)
Norfentanyl (1,350 ng/mL)

| Webcode | Screening Results |
|---------|-------------------------------|
| 29RPK9 | Fentanyl |
| 2JFCYJ | No drugs/metabolites detected |
| 2N7QJK | Fentanyl |
| 2Y6N6Y | Norfentanyl Fentanyl |
| 3EC6QR | Fentanyl |
| 3TFLJE | No drugs/metabolites detected |
| 43FHVF | fentanyl norfentanyl |
| 43GABB | Fentanyl |
| 4RV8LN | No drugs/metabolites detected |
| 4TRKDM | fentanyl |
| 4UL9RC | Fentanyl, Norfentanyl |
| 4WQWAM | No drugs/metabolites detected |
| 4XLJNC | Fentanyl, Norfentanyl |
| 63CDWX | No drugs/metabolites detected |
| 6NVD8K | fentanyl |
| 6Z7T7C | Fentanyl Norfentanyl |
| 76VRZX | Fentanyl |
| 7DQU2A | Fentanyl Norfentanyl |
| 82U4WV | fentanyl |
| 8QRLME | No drugs/metabolites detected |
| 9A7D6A | Fentanyl Norfentanyl |

TABLE 2A Item 2

| Webcode | Screening Results |
|----------------|-------------------------------|
| 9BVQNT | No drugs/metabolites detected |
| 9NJNVH | Fentanyl |
| 9RGEV3 | Fentanyl Norfentanyl |
| A9MX7Y | No drugs/metabolites detected |
| AAXVKG | No drugs/metabolites detected |
| ABTJY7 | Fentanyl, Norfentanyl |
| ANFPRZ | Fentanyl |
| AWCH98 | No drugs/metabolites detected |
| BC4KK6 | Fentanyl Norfentanyl |
| BE8BT6 | No drugs/metabolites detected |
| BEMRLC | No drugs/metabolites detected |
| C39YRB | No drugs/metabolites detected |
| CVN4M2 | No drugs/metabolites detected |
| D68WDN | Fentanyl (ELISA) |
| D9UAK7 | No drugs/metabolites detected |
| DJG9CC | No drugs/metabolites detected |
| DMFLWF | fentanyl |
| DWY69Z | Fentanyl |
| EHEZK4 | FENTANYL NORFENTANYL |
| EN4M8W | fentanyl, norfentanyl |
| EN6BU2 | No drugs/metabolites detected |
| FAYJL3 | No drugs/metabolites detected |
| FLR3Z8 | Fentanyl Norfentanyl |
| FM2CQJ | Fentanyl |
| FVVGKK | ELISA Fentanyl |
| G3DA9P | No drugs/metabolites detected |

TABLE 2A Item 2

| Webcode | Screening Results |
|----------------|---|
| GHRDW7 | fentanyl norfentanyl |
| H3QYC3 | No drugs/metabolites detected |
| H9H2K9 | fentanyl |
| HEHPTZ | Fentanyl class |
| HEKDF6 | Fentanyl |
| HGQZP4 | Fentanyl and norfentanyl |
| HJJNC6 | Fentanyl |
| HVU72M | Fentanyl |
| JL29WZ | fentanyl |
| JLYK9U | No drugs/metabolites detected |
| JN67ZZ | No drugs/metabolites detected |
| L2LKDY | Fentanyl class |
| LCQQB8 | Fentanyl |
| LXKUR6 | No drugs/metabolites detected |
| MFGNUU | Fentanyl class |
| MFZ7E4 | Fentanyl |
| MLAJ3U | No drugs/metabolites detected |
| MVB432 | fentanyl |
| NVQMMY | No drugs/metabolites detected |
| P8ZR6E | fentanyl (LCMSMS) |
| P9TFPV | No drugs/metabolites detected |
| PHJ2VT | Narcotic-Fentanyl Narcotic-Norfentanyl |
| PKK88D | No drugs/metabolites detected |
| PW2P9X | No drugs/metabolites detected |
| PWZ2LR | Fentanyl, Norfentanyl |
| Q3X7R2 | Fentanyl |
| QNJZJN | Fentanyl, Norfentanyl |

TABLE 2A Item 2

| Webcode | Screening Results |
|----------------|-------------------------------|
| R3DPBD | fentanyl, norfentanyl |
| RTD2HG | Fentanyl |
| T3FU9M | No drugs/metabolites detected |
| T6YTKW | FENTANYL |
| TCMDQX | No drugs/metabolites detected |
| TGTAAX | Fentanyl |
| TNUGVR | No drugs/metabolites detected |
| TVWQ2K | Fentanyl |
| U8PAFQ | No drugs/metabolites detected |
| U9FK8J | Fentanyl |
| UMCWFM | No drugs/metabolites detected |
| V3PKCN | No drugs/metabolites detected |
| V4K7YM | Fentanyl |
| VBG3HJ | Fentanyl Norfentanyl |
| VL369R | No drugs/metabolites detected |
| VRQPAL | Fentanyl |
| VKNKB | No drugs/metabolites detected |
| W94T6D | No drugs/metabolites detected |
| WJ9VCV | No drugs/metabolites detected |
| WRH6ZN | LSD Fentanyl |
| WTUYJV | fentanyl |
| WUA4DM | No drugs/metabolites detected |
| WUPMXK | Fentanyl, Norfentanyl |
| XWAY9A | No drugs/metabolites detected |
| YDEPNJ | Fentanyl |
| YDFDBP | No drugs/metabolites detected |
| YE6RT8 | No drugs/metabolites detected |

TABLE 2A Item 2

| Webcode | Screening Results |
|---------|-------------------------------|
| YNW37N | Fentanyl Norfentanyl |
| YXJZWT | No drugs/metabolites detected |
| Z383EJ | Fentanyl Norfentanyl |
| ZMEF87 | Fentanyl Norfentanyl |
| ZWJKVF | Fentanyl Norfentanyl |

| Response Summary for Item 2 | Participants: 106 |
|--|-------------------|
| Fentanyl and/or Norfentanyl: | 63 |
| No drugs/metabolites detected: | 43 |
| Totals may add up to more than the total number of participants because participants can report multiple drugs/analytes. | |

Confirmatory Results - Item 2

What drugs/metabolites were detected in Item 2?

TABLE 2B Item 2

Item Scenario:

Case 2: A 53-year-old male was pulled over for swerving in and out of lanes, driving significantly under the speed limit. The officer noted that the driver seemed relaxed but confused. His pupils were constricted and there was evidence of possible vomit on his shirt. A urine sample was collected for analysis 60 minutes later.

Item Contents and Preparation Concentration: Fentanyl (270 ng/mL)
Norfentanyl (1,350 ng/mL)

| WebCode | Analyte Reported | Qualitative Only | Reported Concentration | Uncertainty | Units |
|---------|------------------|------------------|------------------------|-------------|-------|
| 29RPK9 | Fentanyl | ✓ | | | |
| 2JFCYJ | Fentanyl | ✓ | | | |
| 2N7QJK | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| 2Y6N6Y | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| 3EC6QR | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| 43FHVF | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| 43GABB | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| 4RV8LN | Fentanyl | ✓ | | | |
| 4TRKDM | Fentanyl | ✓ | | | |
| 4UL9RC | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| 4WQWAM | Fentanyl | ✓ | | | |
| 4XLJNC | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| 6NVD8K | Fentanyl | ✓ | | | |
| 6Z7T7C | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| 76VRZX | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| | 4-ANPP | ✓ | | | |
| 7DQU2A | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| 82U4WV | Fentanyl | ✓ | | | |

TABLE 2B Item 2

| WebCode | Analyte Reported | Qualitative Only | Reported Concentration | Uncertainty | Units |
|---------|------------------|------------------|------------------------|-------------|-------|
| 9A7D6A | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| 9BVQNT | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| 9NJNVH | Fentanyl | | | | |
| 9RGEV3 | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| A9MX7Y | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| AAXVKG | Fentanyl | ✓ | | | |
| ABTJY7 | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| ANFPRZ | Fentanyl | ✓ | | | |
| BC4KK6 | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| BEMRLC | Fentanyl | ✓ | | | |
| D68WDN | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| D9UAK7 | Fentanyl | ✓ | | | |
| DJG9CC | Fentanyl | ✓ | | | |
| DMFLWF | Fentanyl | ✓ | | | |
| DWY69Z | Fentanyl | ✓ | | | |
| EHEZK4 | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| EN4M8W | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| FAYJL3 | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| FLR3Z8 | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| FM2CQJ | Fentanyl | ✓ | | | |
| FWGKK | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| G3DA9P | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| GHRDW7 | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |

TABLE 2B Item 2

| WebCode | Analyte Reported | Qualitative Only | Reported Concentration | Uncertainty | Units |
|---------|------------------|------------------|------------------------|-------------|-------|
| H3QYC3 | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| | methylphenidate | ✓ | | | |
| H9H2K9 | Fentanyl | ✓ | | | |
| HEHPTZ | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| HEKDF6 | Fentanyl | ✓ | | | |
| HGQZP4 | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| HJJNC6 | Fentanyl | | | | |
| HVU72M | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| JL29WZ | Fentanyl | ✓ | | | |
| JN67ZZ | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| | methylphenidate | ✓ | | | |
| L2LKDY | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| LCQQB8 | Fentanyl | ✓ | | | |
| LXKUR6 | Fentanyl | ✓ | | | |
| MFGNUU | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| MFZ7E4 | Fentanyl | ✓ | | | |
| MVB432 | Fentanyl | ✓ | | | |
| NVQMMY | Fentanyl | ✓ | | | |
| P8ZR6E | Fentanyl | ✓ | | | |
| P9TFPV | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| PHJ2VT | Fentanyl | ✓ | | | |
| PW2P9X | Fentanyl | ✓ | | | |
| PWZ2LR | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| Q3X7R2 | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| QNJZJN | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |

TABLE 2B Item 2

| WebCode | Analyte Reported | Qualitative Only | Reported Concentration | Uncertainty | Units |
|---------|------------------|------------------|------------------------|-------------|-------|
| R3DPBD | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| RTD2HG | Fentanyl | | 263 | 53 | ng/mL |
| T6YTKW | Fentanyl | ✓ | | | |
| TCMDQX | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| TNUGVR | Fentanyl | ✓ | | | |
| TVWQ2K | Fentanyl | ✓ | | | |
| U8PAFQ | Fentanyl | ✓ | | | |
| U9FK8J | Fentanyl | ✓ | | | |
| UMCWFM | Fentanyl | ✓ | | | |
| V3PKCN | Fentanyl | ✓ | | | |
| V4K7YM | Fentanyl | ✓ | | | |
| VBG3HJ | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| VL369R | Fentanyl | ✓ | | | |
| VRQPAL | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| VKNKB | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| W94T6D | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| WJ9VCV | Fentanyl | ✓ | | | |
| WRH6ZN | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| WTUYJV | Fentanyl | ✓ | | | |
| WUA4DM | Fentanyl | ✓ | | | |
| WUPMXK | Fentanyl | ✓ | | | |
| XWAY9A | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| YDEPNJ | Fentanyl | ✓ | | | |
| YDFDBP | Fentanyl | ✓ | | | |
| YE6RT8 | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| YNW37N | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |

TABLE 2B Item 2

| WebCode | Analyte Reported | Qualitative Only | Reported Concentration | Uncertainty | Units |
|---------|------------------|------------------|------------------------|-------------|-------|
| Z383EJ | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| ZMEF87 | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |
| ZWJKVF | Fentanyl | ✓ | | | |
| | Norfentanyl | ✓ | | | |

| Response Summary for Item 2 | Participants: 92 |
|---|------------------|
| Fentanyl: 92 | |
| Norfentanyl: 48 | |
| Other: 3 | |
| Totals may add up to more than the total number of participants because participants can report multiple drugs/metabolites. | |

Raw Data - Item 2

List of raw data determinations in ng/mL.

TABLE 2C Item 2

Item 2 Raw Data - Fentanyl **Preparation concentration: (270 ng/mL)**

| WebCode | Raw Data (ng/mL) |
|----------------|-------------------------|
| RTD2HG | 263.0 |

Statistical Analysis for Item 2 - Fentanyl

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

Reporting Procedures - Item 2

If quantitative analysis was performed, the reported concentrations are:

TABLE 2D Item 2

| WebCode | Quantitative Reporting Procedures |
|---------|-----------------------------------|
|---------|-----------------------------------|

| | |
|--------|-------------------------|
| RTD2HG | A single determination. |
|--------|-------------------------|

| Response Summary for Item 2 | Participants: 1 |
|-----------------------------|-----------------|
|-----------------------------|-----------------|

| | |
|---|------------|
| A single determination: | 1 (100.0%) |
| The mean of duplicate/several determinations: | 0 (0.0%) |

Methods of Analysis - Item 2

TABLE 2E Item 2

| WebCode | Method | Screening | Confirmatory | Quantitation |
|---------|----------------------------------|-----------|--------------|--------------|
| 29RPK9 | Immunoassay GC/MS | ✓ | ✓ | |
| 2JFCYJ | Immunoassay GC/MS LC/MS/MS | ✓ | ✓ ✓ | |
| 2N7QJK | Immunoassay GC/MS | ✓ | ✓ | |
| 2Y6N6Y | Immunoassay GC/MS | ✓ ✓ | ✓ | |
| 3EC6QR | GC/MS | ✓ | ✓ | |
| 3TFLJE | Immunoassay | ✓ | | |
| 43FHVF | LC/MS/MS GC/MS | ✓ | ✓ | |
| 43GABB | Immunoassay GC/MS | ✓ | ✓ | |
| 4RV8LN | Immunoassay GC/MS | ✓ ✓ | ✓ | |
| 4TRKDM | Immunoassay GC/MS LC/MS/MS | ✓ ✓ | ✓ ✓ | |
| 4UL9RC | Immunoassay GC/MS | ✓ ✓ | ✓ | |
| 4WQWAM | Immunoassay GC/MS LC/MS/MS | ✓ | ✓ ✓ | |
| 4XLJNC | Immunoassay GC/MS | ✓ ✓ | ✓ | |
| 63CDWX | Immunoassay | ✓ | | |
| 6NVD8K | Immunoassay LC/MS/MS GC/MS | ✓ ✓ | ✓ ✓ | |
| 6Z7T7C | LC/MS/MS | ✓ | ✓ | |
| 76VRZX | Immunoassay LC/MS/MS | ✓ | ✓ | |
| 7DQU2A | LC/MS/MS | ✓ | ✓ | |
| 82U4WV | Immunoassay LC/MS/MS GC/MS | ✓ ✓ | ✓ ✓ | |
| 8QRLME | Immunoassay | ✓ | | |

TABLE 2E Item 2

| WebCode | Method | Screening | Confirmatory | Quantitation |
|---------|-------------|-----------|--------------|--------------|
| 9A7D6A | GC/MS | ✓ | | |
| | LC/MS/MS | | ✓ | |
| | LC-TOF-MS | ✓ | | |
| 9BVQNT | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| 9NJNVH | LC/MS/MS | ✓ | | |
| | GC/MS | | ✓ | |
| 9RGEV3 | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| A9MX7Y | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| AAXVKG | LC/MS | ✓ | | |
| | GC/MS | | ✓ | |
| ABTJY7 | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| ANFPRZ | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| BC4KK6 | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| BE8BT6 | Immunoassay | ✓ | | |
| BEMRLC | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| | LC/MS/MS | | ✓ | |
| C39YRB | Immunoassay | ✓ | | |
| D68WDN | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| D9UAK7 | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| | LC/MS/MS | | ✓ | |
| DJG9CC | Immunoassay | ✓ | | |
| | LC/MS | | ✓ | |
| | GC/MS | | ✓ | |
| DMFLWF | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| | LC/MS/MS | ✓ | ✓ | |
| DWY69Z | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| EHEZK4 | GC/MS | ✓ | ✓ | |
| | LC/MS-QTOF | ✓ | | |
| EN4M8W | GC/MS | ✓ | ✓ | |
| EN6BU2 | Immunoassay | ✓ | | |

TABLE 2E Item 2

| WebCode | Method | Screening | Confirmatory | Quantitation |
|---------|----------------------------------|-------------|--------------|--------------|
| FAYJL3 | Immunoassay GC/MS | ✓ ✓ | ✓ | |
| FLR3Z8 | Immunoassay GC/MS | ✓ ✓ | ✓ | |
| FM2CQJ | Immunoassay GC/MS LC/MS/MS | ✓ | ✓ ✓ | |
| FVGKK | Immunoassay GC/MS | ✓ ✓ | ✓ | |
| G3DA9P | Immunoassay GC/MS LC-QTOF | ✓ | ✓ ✓ | |
| GHRDW7 | Immunoassay GC/MS LC/MS/MS | ✓ ✓ ✓ | ✓ | |
| H3QYC3 | Immunoassay LC/MS/MS GC/MS | ✓ | ✓ ✓ | |
| H9H2K9 | Immunoassay GC/MS LC/MS/MS | ✓ ✓ ✓ | ✓ ✓ | |
| HEHPTZ | Immunoassay LC/MS/MS | ✓ | ✓ | |
| HEKDF6 | Immunoassay GC/MS LC/MS/MS | ✓ | ✓ ✓ | |
| HGQZP4 | Immunoassay LC/MS/MS | ✓ ✓ | ✓ | |
| HJJNC6 | Immunoassay GC/MS LC/MS/MS | ✓ ✓ ✓ | ✓ ✓ | |
| HVU72M | Immunoassay GC/MS LC-QTOF | ✓ ✓ ✓ | ✓ ✓ | |
| JL29WZ | LC/MS/MS | ✓ | ✓ | |
| JLYK9U | Immunoassay | ✓ | | |
| JN67ZZ | GC/MS LC/MS | ✓ | ✓ | |
| L2LKDY | Immunoassay LC/MS/MS | ✓ | ✓ | |
| LCQQB8 | Immunoassay GC/MS LC/MS/MS | ✓ ✓ ✓ | ✓ ✓ | |

TABLE 2E Item 2

| WebCode | Method | Screening | Confirmatory | Quantitation |
|---------|--|-------------|--------------|--------------|
| LXKUR6 | Immunoassay GC/MS LC/MS/MS | ✓ | ✓ ✓ | |
| MFGNUU | Immunoassay LC/MS/MS | ✓ | ✓ | |
| MFZ7E4 | LC/MS/MS | ✓ | ✓ | |
| MLAJ3U | Immunoassay | ✓ | | |
| MVB432 | LC/MS/MS GC/MS | ✓ | ✓ | |
| NVQMMY | LC/MS/MS GC/MS | ✓ | ✓ ✓ | |
| P8ZR6E | Immunoassay LC/MS/MS GC/MS | ✓ ✓ | ✓ | |
| P9TFPV | Immunoassay GC/MS LC/MS/MS | ✓ | ✓ ✓ | |
| PHJ2VT | GC/MS. We do not currently have a screening test for Fentanyl. Our screening immunoassay does not include the fentanyl assay. GC/MS | ✓ | ✓ | |
| PKK88D | Immunoassay | ✓ | | |
| PW2P9X | Immunoassay GC/MS LC/MS/MS | ✓ | ✓ ✓ | |
| PWZ2LR | LC/MS/MS GC/MS Rapid Chromatographic Immunoassay | ✓ ✓ | ✓ | |
| Q3X7R2 | Immunoassay GC/MS | ✓ | ✓ | |
| QNJZJN | Immunoassay GC/MS | ✓ ✓ | ✓ | |
| R3DPBD | Immunoassay GC/MS HPLC/qTOF | ✓ ✓ ✓ | ✓ ✓ | |
| RTD2HG | Immunoassay LC/MS/MS | ✓ | ✓ | ✓ |
| T3FU9M | Immunoassay | ✓ | | |
| T6YTKW | GC/MS | ✓ | ✓ | |
| TCMDQX | GC/MS Immunoassay | ✓ | ✓ | |
| TGTAAX | Immunoassay | ✓ | | |

TABLE 2E Item 2

| WebCode | Method | Screening | Confirmatory | Quantitation |
|---------|----------------|-----------|--------------|--------------|
| TNUGVR | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| | LC/MS/MS | ✓ | ✓ | |
| TVWQ2K | GC/MS | ✓ | ✓ | |
| U8PAFQ | GC/MS | | ✓ | |
| | LC/MS | | ✓ | |
| U9FK8J | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| UMCWFM | GC/MS | | ✓ | |
| V3PKCN | Immunoassay | ✓ | | |
| | LC/MS/MS | | ✓ | |
| | GC/MS | | ✓ | |
| V4K7YM | GC/MS | | ✓ | |
| VBG3HJ | GC/MS | ✓ | ✓ | |
| VL369R | Immunoassay | ✓ | | |
| | LC/MS/MS | | ✓ | |
| | GC/MS | | ✓ | |
| VRQPAL | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| VVKNKB | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| | LC/QTOF | | ✓ | |
| W94T6D | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| WJ9VCV | GC/MS | | ✓ | |
| | LC/MS/MS | | ✓ | |
| | Immunoassay | ✓ | | |
| WRH6ZN | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| | LC QTOF | | ✓ | |
| WTUYJV | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| | LC/MS/MS | ✓ | ✓ | |
| WUA4DM | GC/MS | | ✓ | |
| WUPMXK | GC/MS | ✓ | ✓ | |
| XWAY9A | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| YDEPNJ | LC-Orbitrap MS | ✓ | | |
| | LC/MS/MS | | ✓ | |
| YDFDBP | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| | LC/MS/MS | ✓ | ✓ | |

TABLE 2E Item 2

| WebCode | Method | Screening | Confirmatory | Quantitation |
|---------|-------------|-----------|--------------|--------------|
| YE6RT8 | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| | LC/QTOF | | ✓ | |
| YNW37N | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| YXJZWT | Immunoassay | ✓ | | |
| Z383EJ | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| ZMEF87 | LC-QTOF | ✓ | | |
| | GC/MS | | ✓ | |
| ZWJKVF | GC/MS | ✓ | ✓ | |
| | LC/MS/MS | ✓ | ✓ | |

| Response Summary for Item 2 | | Participants: 104 | | |
|-----------------------------|-----------|-------------------|--------------|--|
| | Screening | Confirmatory | Quantitation | |
| Immunoassay: | 77 | 0 | 0 | |
| GC/MS: | 37 | 79 | 0 | |
| LC/MS: | 1 | 3 | 0 | |
| LC/MS/MS: | 23 | 37 | 1 | |
| Other: | 8 | 6 | 0 | |

Additional Comments for Item 2

TABLE 2F Item 2

| Webcode | Item 2 - Comments |
|---------|---|
| 29RPK9 | Caffeine was observed, but is not reported by [Laboratory]. |
| 2JFCYJ | Internal standard used: Mepivacaine. |
| 3TFLJE | Sample screened negative using ELISA for Methamphetamine, Benzodiazepines, Cocaine/BE, Opiates, PCP and Cannabinoids |
| 4TRKDM | Internal standard: mepivacaine |
| 4WQWAM | internal standard: mepivacaine |
| 4XLJNC | Nalorphine ISTD for Opiate extraction |
| 6Z7T7C | Internal Standard: Estazolam |
| 76VRZX | LOD 500 pg/mL |
| 82U4WV | Internal standard-mepivacaine |
| 9BVQNT | We do not have a screening method for Fentanyl. Two separate extracts run on GCMS are used to screen and confirm. |
| 9NJNVH | Internal Standard - Mepivacaine |
| A9MX7Y | Mepivacaine was used as the internal standard. Additional fentanyl related peaks indicated. Trace peak of Codeine indicated. |
| AAXVKG | Internal Standards: Mepivacaine |
| BE8BT6 | [Laboratory] screens for the following assays: Assay Type: Target Analyte at Cutoff Level - Amphetamines Assay: d-Methamphetamine at 300ng/mL; Cocaine/Metabolite Assay: Benzoylcegonine at 300ng/mL; Opiates Assay: Morphine at 300ng/mL; Benzodiazepines Assay: Oxazepam at 200ng/mL; Phencyclidine Assay: Phencyclidine at 25ng/mL; and Cannabis Assay: (-)-11-nor-Carboxy-[delta]9-THC at 50ng/mL |
| BEMRLC | mepivacaine and nalorphine used as internal standards |
| D68WDN | Alphaprodine, n-Propylamphetamine, and Hexobarbital used as internal standards. GC/MS LOD: Fentanyl: 25 ng/mL, Norfentanyl: 250 ng/mL. Norfentanyl screening/confirmation performed via GC/MS on 4/24/19 and 4/25/19. |
| D9UAK7 | Mepivacaine was the the internal standard used for both GC/MS and LC/MS/MS tests. |
| DJG9CC | internal standard: mepivacaine |
| DMFLWF | Mepivacaine used as internal standard. |
| DWY69Z | Hexobarbital and SKF-525A internal standards |
| EN6BU2 | Screening - Amphetamine, Methamphetamine, Carboxy-THC and Morphine: 20.0ng/mL; Benzoylcegonine and Oxazepam: 50ng/mL |
| FAYJL3 | Hexobarbital, Phenyltoloxamine used as internal reference materials |
| FLR3Z8 | IS-Phenyltoloxamine |

TABLE 2F Item 2

| Webcode | Item 2 - Comments |
|---------|---|
| FWGKK | N-Propylamphetamine, alphaprodine, and hexobarbital were used as internal standards. Fentanyl LOD: 25 ng/mL, Norfentanyl LOD: 250 ng/mL. GC/MS was used as a screening tool for Norfentanyl on 04/02/2019, and as confirmation on 04/15/2019. |
| GHRDW7 | internal standard - phenyltoloxamine |
| H9H2K9 | Internal standard used for all tests - mepivacaine |
| HEHPTZ | cutoff 5 ng/mL |
| HEKDF6 | Mepivacaine |
| HGQZP4 | Fentanyl (LC/MS/MS). Cut-off: 20 ng/mL. Internal Standard: trimipramine-D3. Norfentanyl (LC/MS/MS). Cut-off: 20 ng/mL. Internal Standard: diazepam-D5 |
| HJJNC6 | Mepivacaine used as internal standard. |
| HVVU72M | Internal Standards used for LC-QTOF: Fentanyl-D5, Imipramine-D3, MDMA-D5, Methaqualone-D7, Triazolam-D4. Immunoassay does not include fentanyl screen. Fentanyl confirmed by LC-QTOF and GCMS. |
| L2LKDY | cutoff 5 ng/mL |
| LCQQB8 | internal standard used was mepivacaine |
| LXKUR6 | Mepivacaine used as internal standard for LC/MS analysis. Mepivacaine and nalorphine used as internal standards for GC/MS analysis. |
| MFGNUU | cutoff 5 ng/mL |
| MVB432 | internal standard - mepivacaine |
| NVQMMY | Internal standards- mepivacaine and nalorphine |
| P8ZR6E | internal standards: mepivacaine, nalorphine |
| P9TFPV | Internal Standard (Codiene-D3) |
| PHJ2VT | Internal Standard-Phenyltoloxamine. Possible Norfentanyl detected but not confirmed |
| PKK88D | Preliminary testing did not indicated the presence of a drug compound(s). Additional confirmatory testing not pursued. |
| PW2P9X | Mepivacaine is the internal standard used to determine the relative retention time for the compound reported. |
| PWZ2LR | Alere iCassette (THC) test device was used to screen for THC, referred to in 1-4 as rapid chromatographic immunoassay. The cutoff concentration for the assay is 50 ng/mL. |
| RTD2HG | Fentanyl: Internal Standard: Fentanyl-d5, LOD/LOQ: 0.4ng/mL |
| T6YTKW | Detection limits 5 ng/mL |
| TGTAAX | Fentanyl routinely confirmed by reference lab. Screen reported only. |
| U9FK8J | SKF-525A used as internal standard; norfentanyl indicated but not currently reported by laboratory |
| V3PKCN | mepivacaine as internal standard |
| W94T6D | Mepivacaine - internal standard used |

TABLE 2F Item 2

| Webcode | Item 2 - Comments |
|---------|--|
| WJ9VCV | internal standard: mepivacaine |
| WUA4DM | Flurazepam as Internal Standard |
| YDFDBP | Internal standard: mepivacaine |
| YNW37N | Internal Standard: Phenyltoloxamine |
| Z383EJ | Phenyltoloxamine Internal Standard used for the base fraction and Heptabarbital use for the acid fraction. |
| ZMEF87 | A series of immunoassay tests were also performed per procedures but a fentanyl assay is not part of the panel of tests available to me and so could not be used as a screening test for these drugs. Internal standards used for the LC-QTOF method: Fentanyl-D5, Imipramine-D3, MDMA-D5, Methaqualone-D7, Triazolam-D4 |
| ZWJKVF | Internal Standard: Flurazepam, LOD: 10 ng/mL |

Screening Results - Item 3

TABLE 3A Item 3

Item Scenario:

Case 3: A 45-year-old female was subject to a routine pain management compliance drug test. A urine sample was collected for analysis.

Item Contents and Preparation Concentration: Oxycodone (860 ng/mL)
 Noroxycodone (1,920 ng/mL)
 Oxymorphone (470 ng/mL)

| WebCode | Screening Results |
|---------|--|
| 29RPK9 | Opiates Oxycodone/Oxymorphone |
| 2JFCYJ | No drugs/metabolites detected |
| 2N7QJK | Oxycodone and Opioids |
| 2Y6N6Y | Oxycodone/Oxymorphone |
| 3EC6QR | Oxycodone |
| 3TFLJE | No drugs/metabolites detected |
| 43FHVF | oxycodone |
| 43GABB | Opiates |
| 4RV8LN | Oxycodone |
| 4TRKDM | oxycodone |
| 4UL9RC | Oxycodone, Noroxycodone, Possible Opiate Class |
| 4WQWAM | No drugs/metabolites detected |
| 4XLJNC | Opiate - Oxycodone, Noroxycodone, Oxymorphone |
| 63CDWX | Opiate(s)/opiate metabolite(s) |
| 6NVD8K | oxycodone |
| 6Z7T7C | Oxycodone Noroxycodone Oxymorphone |
| 76VRZX | Oxycodone |
| 7DQU2A | Oxycodone Noroxycodone |
| 82U4WV | oxycodone |
| 8QRLME | No drugs/metabolites detected |
| 9A7D6A | Oxycodone Oxymorphone |

TABLE 3A Item 3

| WebCode | Screening Results |
|---------|--|
| 9BVQNT | Oxycodone/oxymorphone |
| 9NJNVH | Oxycodone |
| 9RGEV3 | Opiates |
| A9MX7Y | Oxycodone/Oxymorphone |
| AAXVKG | No drugs/metabolites detected |
| ABTJY7 | Opiates (class) |
| ANFPRZ | Opiates |
| AWCH98 | No drugs/metabolites detected |
| BC4KK6 | Opiates (Class) Oxycodone Noroxycodone |
| BE8BT6 | No drugs/metabolites detected |
| BEMRLC | No drugs/metabolites detected |
| C39YRB | No drugs/metabolites detected |
| CVN4M2 | Oxycodone |
| D68WDN | Oxycodone (ELISA) |
| D9UAK7 | No drugs/metabolites detected |
| DJG9CC | No drugs/metabolites detected |
| DMFLWF | oxycodone |
| DWY69Z | Oxycodone |
| EHEZK4 | OXYCODONE OXYCODONE METABOLITE |
| EN4M8W | oxycodone oxymorphone |
| EN6BU2 | No drugs/metabolites detected |
| FAYJL3 | Oxycodone |
| FLR3Z8 | Oxycodone |
| FM2CQJ | Opiates |
| FWGKK | ELISA Oxycodone |
| G3DA9P | oxycodone |
| GHRDW7 | Oxycodone |

TABLE 3A Item 3

| WebCode | Screening Results |
|---------|--|
| H3QYC3 | opiates |
| H9H2K9 | oxycodone |
| HEHPTZ | Oxycodone class |
| HEKDF6 | Oxycodone, Oxymorphone |
| HGQZP4 | Oxycodone |
| HJJNC6 | Oxycodone |
| HVU72M | Oxycodone |
| JL29WZ | oxycodone |
| JLYK9U | No drugs/metabolites detected |
| JN67ZZ | opiates group |
| L2LKDY | Oxycodone class |
| LCQQB8 | Oxycodone and oxymorphone |
| LXKUR6 | No drugs/metabolites detected |
| MFGNUU | Oxycodone class |
| MFZ7E4 | Oxycodone & oxymorphone |
| MLAJ3U | No drugs/metabolites detected |
| MVB432 | oxycodone |
| NVQMMY | No drugs/metabolites detected |
| P8ZR6E | oxycodone (LCMSMS) oxymorphone (LCMSMS) |
| P9TFPV | No drugs/metabolites detected |
| PHJ2VT | Narcotic-Oxycodone Narcotic-Oxymorphone |
| PKK88D | Opiate class compound. |
| PW2P9X | No drugs/metabolites detected |
| PWZ2LR | Oxycodone, Oxymorphone |
| Q3X7R2 | Oxycodone 1 Oxycodone 2 Opioids |
| QNJZJN | Opiates |
| R3DPBD | oxycodone, noroxycodone, oxymorphone |

TABLE 3A Item 3

| WebCode | Screening Results |
|---------|-------------------------------|
| RTD2HG | Oxycodone |
| T3FU9M | No drugs/metabolites detected |
| T6YTKW | OXYCODONE |
| TCMDQX | No drugs/metabolites detected |
| TGTAAX | Oxycodone |
| TNUGVR | No drugs/metabolites detected |
| TVWQ2K | Oxycodone |
| U8PAFQ | No drugs/metabolites detected |
| U9FK8J | Oxycodone |
| UMCWFM | No drugs/metabolites detected |
| V3PKCN | No drugs/metabolites detected |
| V4K7YM | Oxycodone Oxymorphone |
| VBG3HJ | Oxycodone Oxymorphone |
| VL369R | No drugs/metabolites detected |
| VRQPAL | Oxycodone |
| WKNKB | Oxycodone |
| WJ9VCV | No drugs/metabolites detected |
| WRH6ZN | No drugs/metabolites detected |
| WTUYJV | oxycodone, oxymorphone |
| WUA4DM | No drugs/metabolites detected |
| WUPMXK | Opiate class |
| XWAY9A | Opiates |
| YDEPNJ | Oxycodone and Oxymorphone |
| YDFDBP | No drugs/metabolites detected |
| YE6RT8 | Oxycodone assay |
| YNW37N | Oxycodone |
| YXJZWT | No drugs/metabolites detected |
| Z383EJ | Oxycodone |

TABLE 3A Item 3

| WebCode | Screening Results |
|----------------|--|
| ZMEF87 | Oxycodone Noroxycodone Oxymorphone |
| ZWJKVF | Oxycodone Oxymorphone |

| Response Summary for Item 3 | Participants: 105 |
|---|--------------------------|
| Opiates: | 18 |
| Oxycodone, Noroxycodone, or Oxymorphone: | 63 |
| No drugs/metabolites detected: | 30 |
| Totals may add up to more than the total number of participants because participants can report multiple drugs/analytes. | |

Confirmatory Results - Item 3

What drugs/metabolites were detected in Item 3?

TABLE 3B Item 3

Item Scenario:

Case 3: A 45-year-old female was subject to a routine pain management compliance drug test. A urine sample was collected for analysis.

Item Contents and Preparation Concentration: Oxycodone (860 ng/mL)
 Noroxycodone (1,920 ng/mL)
 Oxymorphone (470 ng/mL)

| WebCode | Analyte Reported | Qualitative Only | Reported Concentration | Uncertainty | Units |
|---------|------------------|------------------|------------------------|-------------|-------|
| 29RPK9 | Oxycodone | ✓ | | | |
| 2JFCYJ | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| 2N7QJK | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| 2Y6N6Y | Oxycodone | ✓ | | | |
| | Noroxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| 3EC6QR | Oxycodone | ✓ | | | |
| 43FHVF | Oxycodone | ✓ | | | |
| 43GABB | Oxycodone | ✓ | | | |
| | Noroxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| 4RV8LN | Oxycodone | ✓ | | | |
| 4TRKDM | Oxycodone | ✓ | | | |
| 4UL9RC | Oxycodone | ✓ | | | |
| | Noroxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| 4WQWAM | Oxycodone | ✓ | | | |
| 4XLJNC | Oxycodone | ✓ | | | |
| | Noroxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| 6NVD8K | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| 6Z7T7C | Oxycodone | ✓ | | | |
| | Noroxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| 76VRZX | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |

TABLE 3B Item 3

| WebCode | Analyte Reported | Qualitative Only | Reported Concentration | Uncertainty | Units |
|---------|------------------|------------------|------------------------|-------------|-------|
| 7DQU2A | Oxycodone | ✓ | | | |
| | Noroxycodone | ✓ | | | |
| 82U4WV | Oxycodone | ✓ | | | |
| | Noroxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| 9A7D6A | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| 9BVQNT | Oxycodone | ✓ | | | |
| 9NJNVH | Oxycodone | ✓ | | | |
| 9RGEV3 | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| A9MX7Y | Oxycodone | ✓ | | | |
| | Noroxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| AAXVKG | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| ABTJY7 | Oxycodone | ✓ | | | |
| | Noroxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| ANFPRZ | Oxycodone | ✓ | | | |
| BC4KK6 | Oxycodone | ✓ | | | |
| | Noroxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| BEMRLC | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| D68WDN | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| D9UAK7 | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| DJG9CC | Oxycodone | ✓ | | | |
| | Noroxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| DMFLWF | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| DWY69Z | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |

TABLE 3B Item 3

| WebCode | Analyte Reported | Qualitative Only | Reported Concentration | Uncertainty | Units |
|---------|----------------------|------------------|------------------------|-------------|-------|
| EHEZK4 | Oxycodone | ✓ | | | |
| | OXYCODONE METABOLITE | ✓ | | | |
| EN4M8W | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| FAYJL3 | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| FLR3Z8 | Oxycodone | ✓ | | | |
| FM2CQJ | Oxycodone | ✓ | | | |
| | Noroxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| FVGKK | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| G3DA9P | Oxycodone | ✓ | | | |
| | Noroxycodone | | | | |
| | Oxymorphone | | | | |
| GHRDW7 | Oxycodone | ✓ | | | |
| H3QYC3 | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| H9H2K9 | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| HEHPTZ | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| HEKDF6 | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| HGQZP4 | Oxycodone | ✓ | | | |
| HJJNC6 | Oxycodone | | | | |
| | Oxymorphone | | | | |
| HVU72M | Oxycodone | ✓ | | | |
| | Noroxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| JL29WZ | Oxycodone | ✓ | | | |
| JN67ZZ | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| L2LKDY | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| LCQQB8 | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |

TABLE 3B Item 3

| WebCode | Analyte Reported | Qualitative Only | Reported Concentration | Uncertainty | Units |
|---------|-------------------------|------------------|------------------------|-------------|-------|
| LXKUR6 | Oxycodone | ✓ | | | |
| MFGNUU | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| MFZ7E4 | Oxycodone & oxymorphone | ✓ | | | |
| MVB432 | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| NVQMMY | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| P8ZR6E | Oxycodone | ✓ | | | |
| | Noroxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| P9TFPV | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| PHJ2VT | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| PW2P9X | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| PWZ2LR | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| Q3X7R2 | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| QNJZJN | Oxycodone | ✓ | | | |
| | Noroxycodone | ✓ | | | |
| R3DPBD | Oxycodone | ✓ | | | |
| | Noroxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| RTD2HG | Oxycodone | | 860 | 172 | ng/mL |
| | Oxymorphone | | 505 | 101 | ng/mL |
| T6YTKW | Oxycodone | ✓ | | | |
| TCMDQX | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| TGTAAX | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| TNUGVR | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| TVWQ2K | Oxycodone | ✓ | | | |

TABLE 3B Item 3

| WebCode | Analyte Reported | Qualitative Only | Reported Concentration | Uncertainty | Units |
|---------|------------------|------------------|------------------------|-------------|-------|
| U8PAFQ | Oxycodone | ✓ | | | |
| | Noroxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| U9FK8J | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| UMCWFM | Oxycodone | ✓ | | | |
| V3PKCN | Oxycodone | ✓ | | | |
| V4K7YM | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| VBG3HJ | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| VL369R | Oxycodone | ✓ | | | |
| VRQPAL | Oxycodone | ✓ | | | |
| VKNKB | Oxycodone | ✓ | | | |
| | Noroxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| WJ9VCV | Oxycodone | ✓ | | | |
| WRH6ZN | Oxycodone | ✓ | | | |
| | Noroxycodone | ✓ | | | |
| WTUYJV | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| WUA4DM | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| WUPMXK | Oxycodone | ✓ | | | |
| | Noroxycodone | ✓ | | | |
| | Oxymorphone | | | | |
| XWAY9A | Oxycodone | ✓ | | | |
| YDEPNJ | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| YDFDBP | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| YE6RT8 | Oxycodone | ✓ | | | |
| | Noroxycodone | ✓ | | | |
| | Oxymorphone | | | | |
| YNW37N | Oxycodone | ✓ | | | |

TABLE 3B Item 3

| WebCode | Analyte Reported | Qualitative Only | Reported Concentration | Uncertainty | Units |
|---------|------------------|------------------|------------------------|-------------|-------|
| Z383EJ | Oxycodone | ✓ | | | |
| | Noroxycodone | ✓ | | | |
| ZMEF87 | Oxycodone | ✓ | | | |
| | Noroxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |
| ZWJKVF | Oxycodone | ✓ | | | |
| | Oxymorphone | ✓ | | | |

| Response Summary for Item 3 | | Participants: 92 |
|--|----|------------------|
| Oxycodone: | 92 | |
| Noroxycodone: | 24 | |
| Oxymorphone: | 64 | |
| <p>Totals may add up to more than the total number of participants because participants can report multiple drugs/metabolites.</p> | | |

Raw Data - Item 3

List of raw data determinations in ng/mL.

TABLE 3C Item 3

Item 3 Raw Data - Oxycodone
Preparation concentration: (860 ng/mL)

| WebCode | Raw Data (ng/mL) |
|----------------|-------------------------|
| RTD2HG | 860.0 |

Statistical Analysis for Item 3 - Oxycodone

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

TABLE 3C Item 3
Item 3 Raw Data - Oxymorphone
Preparation concentration: (470 ng/mL)

| WebCode | Raw Data (ng/mL) |
|---------|------------------|
| RTD2HG | 505.0 |

Statistical Analysis for Item 3 - Oxymorphone

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

Reporting Procedures - Item 3

If quantitative analysis was performed, the reported concentrations are:

TABLE 3D Item 3

| WebCode | Quantitative Reporting Procedures |
|---------|-----------------------------------|
|---------|-----------------------------------|

| | |
|--------|-------------------------|
| RTD2HG | A single determination. |
|--------|-------------------------|

| Response Summary for Item 3 | Participants: 1 |
|-----------------------------|-----------------|
|-----------------------------|-----------------|

| | |
|---|------------|
| A single determination: | 1 (100.0%) |
| The mean of duplicate/several determinations: | 0 (0.0%) |

Methods of Analysis - Item 3

TABLE 3E Item 3

| WebCode | Method | Screening | Confirmatory | Quantitation |
|---------|----------------------------------|-----------|--------------|--------------|
| 29RPK9 | Immunoassay GC/MS | ✓ | ✓ | |
| 2JFCYJ | Immunoassay GC/MS LC/MS/MS | ✓ | ✓ ✓ | |
| 2N7QJK | Immunoassay GC/MS | ✓ | ✓ | |
| 2Y6N6Y | Immunoassay GC/MS | ✓ | ✓ | |
| 3EC6QR | GC/MS | ✓ | ✓ | |
| 3TFLJE | Immunoassay | ✓ | | |
| 43FHVF | LC/MS/MS GC/MS | ✓ | ✓ | |
| 43GABB | Immunoassay GC/MS | ✓ | ✓ | |
| 4RV8LN | Immunoassay GC/MS | ✓ ✓ | ✓ | |
| 4TRKDM | GC/MS LC/MS/MS | ✓ ✓ | ✓ ✓ | |
| 4UL9RC | Immunoassay GC/MS | ✓ ✓ | ✓ | |
| 4WQWAM | Immunoassay GC/MS LC/MS/MS | ✓ | ✓ ✓ | |
| 4XLJNC | Immunoassay GC/MS | ✓ ✓ | ✓ | |
| 6NVD8K | Immunoassay LC/MS/MS GC/MS | ✓ ✓ | ✓ ✓ | |
| 6Z7T7C | LC/MS/MS | ✓ | ✓ | |
| 76VRZX | Immunoassay LC/MS/MS | ✓ | ✓ | |
| 7DQU2A | LC/MS/MS | ✓ | ✓ | |
| 82U4WW | Immunoassay LC/MS/MS GC/MS | ✓ ✓ | ✓ ✓ | |
| 8QRLME | Immunoassay | ✓ | | |
| 9A7D6A | GC/MS LC/MS/MS LC-TOF-MS | ✓ ✓ | ✓ | |
| 9BVQNT | Immunoassay GC/MS | ✓ | ✓ | |
| 9NJNVH | GC/MS LC/MS/MS | ✓ | ✓ | |

TABLE 3E Item 3

| WebCode | Method | Screening | Confirmatory | Quantitation |
|---------|----------------------------------|-------------|--------------|--------------|
| 9RGEV3 | Immunoassay GC/MS | ✓ | ✓ | |
| A9MX7Y | Immunoassay GC/MS | ✓ | ✓ | |
| AAXVKG | LC/MS/MS GC/MS | ✓ ✓ | ✓ | |
| ABTJY7 | Immunoassay GC/MS | ✓ ✓ | ✓ | |
| ANFPRZ | Immunoassay GC/MS | ✓ ✓ | ✓ | |
| BC4KK6 | Immunoassay GC/MS | ✓ ✓ | ✓ | |
| BE8BT6 | Immunoassay | ✓ | | |
| BEMRLC | Immunoassay GC/MS LC/MS/MS | ✓ | ✓ ✓ | |
| C39YRB | Immunoassay | ✓ | | |
| D68WDN | Immunoassay GC/MS | ✓ ✓ | ✓ | |
| D9UAK7 | Immunoassay GC/MS LC/MS/MS | ✓ | ✓ ✓ | |
| DJG9CC | Immunoassay LC/MS GC/MS | ✓ | ✓ ✓ | |
| DMFLWF | Immunoassay GC/MS LC/MS/MS | ✓ ✓ ✓ | ✓ ✓ | |
| DWY69Z | Immunoassay GC/MS | ✓ ✓ | ✓ | |
| EHEZK4 | GC/MS LC/MS-QTOF | ✓ ✓ | ✓ | |
| EN4M8W | GC/MS | ✓ | ✓ | |
| EN6BU2 | Immunoassay | ✓ | | |
| FAYJL3 | Immunoassay GC/MS | ✓ | ✓ | |
| FLR3Z8 | Immunoassay GC/MS | ✓ | ✓ | |
| FM2CQJ | Immunoassay GC/MS LC/MS/MS | ✓ | ✓ ✓ | |
| FVVGKK | Immunoassay GC/MS | ✓ ✓ | ✓ | |
| G3DA9P | Immunoassay GC/MS LC-QTOF | ✓ | ✓ ✓ | |

TABLE 3E Item 3

| WebCode | Method | Screening | Confirmatory | Quantitation |
|---------|-------------|-----------|--------------|--------------|
| GHRDW7 | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| | LC/MS/MS | ✓ | | |
| H3QYC3 | Immunoassay | ✓ | | |
| | LC/MS/MS | | ✓ | |
| H9H2K9 | Immunoassay | ✓ | | |
| | LC/MS/MS | ✓ | ✓ | |
| | GC/MS | ✓ | ✓ | |
| HEHPTZ | Immunoassay | ✓ | | |
| | LC/MS/MS | | ✓ | |
| HEKDF6 | Immunoassay | ✓ | | |
| | GC/MS | ✓ | | |
| | LC/MS/MS | | ✓ | |
| HGQZP4 | Immunoassay | ✓ | | |
| | LC/MS/MS | ✓ | ✓ | |
| HJJNC6 | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| | LC/MS/MS | ✓ | ✓ | |
| HVU72M | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| | LC-QTOF | ✓ | ✓ | |
| JL29WZ | LC/MS/MS | ✓ | ✓ | |
| JLYK9U | Immunoassay | ✓ | | |
| JN67ZZ | Immunoassay | ✓ | | |
| | LC/MS | | ✓ | |
| L2LKDY | Immunoassay | ✓ | | |
| | LC/MS/MS | | ✓ | |
| LCQQB8 | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| | LC/MS/MS | ✓ | ✓ | |
| LXKUR6 | Immunoassay | ✓ | | |
| | LC/MS | | ✓ | |
| | GC/MS | | ✓ | |
| MFGNUU | Immunoassay | ✓ | | |
| | LC/MS/MS | | ✓ | |
| MFZ7E4 | LC/MS/MS | ✓ | ✓ | |
| MLAJ3U | Immunoassay | ✓ | | |
| MVB432 | LC/MS/MS | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| NVQMMY | LC/MS/MS | ✓ | ✓ | |
| | GC/MS | | ✓ | |
| P8ZR6E | Immunoassay | ✓ | | |
| | LC/MS/MS | ✓ | | |
| | GC/MS | | ✓ | |
| P9TFPV | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| | LC/MS/MS | | ✓ | |

TABLE 3E Item 3

| WebCode | Method | Screening | Confirmatory | Quantitation |
|---------|--|-------------|--------------|--------------|
| PHJ2VT | Immunoassay GC/MS | ✓ | ✓ | |
| PKK88D | Immunoassay | ✓ | | |
| PW2P9X | Immunoassay GC/MS LC/MS/MS | ✓ | ✓ ✓ | |
| PWZ2LR | LC/MS/MS GC/MS Rapid Chromatographic Immunoassay | ✓ ✓ ✓ | ✓ ✓ | |
| Q3X7R2 | Immunoassay GC/MS | ✓ | ✓ | |
| QNJZJN | Immunoassay GC/MS | ✓ ✓ | ✓ | |
| R3DPBD | Immunoassay GC/MS HPLC/qTOF | ✓ ✓ ✓ | ✓ ✓ | |
| RTD2HG | Immunoassay LC/MS/MS | ✓ | ✓ | ✓ |
| T3FU9M | Immunoassay | ✓ | | |
| T6YTKW | GC/MS | ✓ | ✓ | |
| TCMDQX | GC/MS lc-qtof | ✓ | ✓ | |
| TGTAAX | GC/MS Immunoassay | ✓ | ✓ | |
| TNUGVR | Immunoassay GC/MS LC/MS/MS | ✓ ✓ ✓ | ✓ ✓ | |
| TVWQ2K | Immunoassay GC/MS | ✓ | ✓ | |
| U8PAFQ | GC/MS LC/MS/MS | | ✓ ✓ | |
| U9FK8J | Immunoassay GC/MS | ✓ ✓ | ✓ | |
| UMCWFM | GC/MS | | ✓ | |
| V3PKCN | Immunoassay GC/MS LC/MS/MS | ✓ | ✓ ✓ | |
| V4K7YM | GC/MS | | ✓ | |
| VBG3HJ | GC/MS | ✓ | ✓ | |
| VL369R | Immunoassay GC/MS LC/MS/MS | ✓ | ✓ ✓ | |
| VRQPAL | Immunoassay GC/MS | ✓ | ✓ | |
| VVKNKB | Immunoassay GC/MS LC/QTOF | ✓ | ✓ ✓ | |

TABLE 3E Item 3

| WebCode | Method | Screening | Confirmatory | Quantitation |
|---------|----------------|-----------|--------------|--------------|
| WJ9VCV | GC/MS | ✓ | ✓ | |
| | LC/MS/MS | ✓ | ✓ | |
| WRH6ZN | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| | LC QTOF | | ✓ | |
| WTUYJV | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| | LC/MS/MS | | ✓ | |
| WUA4DM | GC/MS | | ✓ | |
| WUPMXK | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| XWAY9A | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| YDEPNJ | GC/MS | ✓ | | |
| | LC-Ion-trap MS | | ✓ | |
| YDFDBP | Immunoassay | ✓ | | |
| | GC/MS | ✓ | ✓ | |
| | LC/MS/MS | ✓ | ✓ | |
| YE6RT8 | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| | LC/QTOF | | ✓ | |
| YNW37N | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| YXJZWT | Immunoassay | ✓ | | |
| Z383EJ | Immunoassay | ✓ | | |
| | GC/MS | | ✓ | |
| ZMEF87 | Immunoassay | ✓ | | |
| | LC-QTOF | | ✓ | |
| ZWJKVF | GC/MS | ✓ | ✓ | |
| | LC/MS/MS | ✓ | ✓ | |

| Response Summary for Item 3 | | Participants: 102 | | |
|-----------------------------|-----------|-------------------|--------------|--|
| | Screening | Confirmatory | Quantitation | |
| Immunoassay: | 77 | 0 | 0 | |
| GC/MS: | 35 | 75 | 0 | |
| LC/MS: | 0 | 3 | 0 | |
| LC/MS/MS: | 24 | 37 | 1 | |
| Other: | 5 | 9 | 0 | |

Additional Comments for Item 3

TABLE 3F Item 3

| WebCode | Item 3 - Comments |
|---------|--|
| 2JFCYJ | Internal standard used: Mepivacaine. |
| 3TFLJE | Sample screened negative using ELISA for Methamphetamine, Benzodiazepines, Cocaine/BE, Opiates, PCP and Cannabinoids |
| 4TRKDM | Internal Standard: Mepivacaine |
| 4UL9RC | Nalorphine - Internal Standard for Opiate Confirmation |
| 4WQWAM | internal standard: mepivacaine |
| 4XLJNC | Nalorphine ISTD used for Opiate Extraction |
| 63CDWX | Preliminary testing indicated the possible presence of opiate(s)/opiate metabolite(s). Unable to pursue as analyst is not authorized to perform this type of confirmation testing. |
| 6Z7T7C | Internal Standard: Estazolam |
| 76VRZX | LOD 10 ng/mL |
| 82U4WV | Internal standard-mepivacaine |
| 9NJNVH | Internal Standard - Mepivacaine |
| A9MX7Y | Internal standards used: Mepivacaine, Nalorphine. Oxycodone related peak indicated - Not reported, no standard available for comparison |
| AAXVKG | Internal Standards: Mepivacaine, and Nalorphine, butyl |
| ABTJY7 | Opiate Confirmation - Nalorphine ISTD |
| BC4KK6 | Nalorphine was used as an internal standard for the opiate confirmation via GC/MS |
| BE8BT6 | KRCL screens for the following assays: Assay Type: Target Analyte at Cutoff Level - Amphetamines Assay: d-Methamphetamine at 300ng/mL; Cocaine/Metabolite Assay: Benzoyllecgonine at 300ng/mL; Opiates Assay: Morphine at 300ng/mL; Benzodiazepines Assay: Oxazepam at 200ng/mL; Phencyclidine Assay: Phencyclidine at 25ng/mL; and Cannabis Assay: (-)-11-nor-Carboxy-[delta]9-THC at 50ng/mL |
| BEMRLC | mepivacaine and nalorphine used as internal standards |
| D68WDN | Alphaprodine, n-Propylamphetamine, and Hexobarbital used as internal standards GC/MS LOD: Oxycodone: 25 ng/mL, Oxymorphone: 20 ng/mL. Oxymorphone screening/confirmation performed via GC/MS on 4/24/19 and 4/25/19. |
| D9UAK7 | Mepivacaine was the the internal standard used for both GC/MS and LC/MS/MS tests. |
| DJG9CC | internal standard: mepivacaine |
| DMFLWF | Mepivacaine used as internal standard. |
| DWY69Z | D3-Oxycodone and D3-Oxymorphone used - samples derivatized using BSTFA |
| EN6BU2 | Screening - Amphetamine, Methamphetamine, Carboxy-THC and Morphine: 20.0ng/mL; Benzoyllecgonine and Oxazepam: 50ng/mL |

TABLE 3F Item 3

| WebCode | Item 3 - Comments |
|---------|--|
| FAYJL3 | Hexobarbital, Phenyltoloxamine used for internal reference material. There was possible noroxycodone present in the sample but our laboratory did not have the appropriate reference material available to confirm it |
| FLR3Z8 | IS-Phenyltoloxamine |
| FVGKK | N-Propylamphetamine, alphaprodine, and hexobarbital were used as internal standards. Oxycodone LOD: 25 ng/mL, Oxymorphone LOD: 20 ng/mL. GC/MS was used as a screening tool for Oxymorphone on 04/02/2019, and as confirmation on 04/25/2019 |
| GHRDW7 | internal standard - phenyltoloxamine |
| H9H2K9 | Internal standards used - mepivacaine & nalorphine |
| HEHPTZ | cutoff 50 ng/mL |
| HEKDF6 | Mepivacaine |
| HGQZP4 | Oxycodone (LC/MS/MS). Cut-off: 50 ng/mL. Internal Standard: codeine-D3 |
| HJJNC6 | Mepivacaine and nalorphine used as internal standards. |
| HVU72M | Internal Standards used for LC-QTOF: Fentanyl-D5, Imipramine-D3, MDMA-D5, Methaqualone-D7, Triazolam-D4. |
| L2LKDY | cutoff 50 ng/mL |
| LCQQB8 | internal standard used was mepivacaine |
| LXKUR6 | Mepivacaine used as internal standard for LC/MS analysis. Mepivacaine and nalorphine used as internal standards for GC/MS analysis. |
| MFGNUU | cutoff 50 ng/mL |
| MVB432 | internal standard - mepivacaine & nalorphine |
| NVQMMY | Internal standards - mepivacaine and nalorphine |
| P8ZR6E | internal standards: mepivacaine, nalorphine |
| P9TFPV | Internal standard (Codiene D3) |
| PHJ2VT | Internal Standard-Phenyltoloxamine. A positive Oxycodone Immunoassay result includes a positive result for other drugs not listed, including Oxymorphone. |
| PKK88D | Preliminary testing indicated the possible presence of an opiate class compound. Unable to pursue as analyst is not authorized to perform this type of confirmation testing. |
| PW2P9X | Oxymorphone was confirmed by using derivatization with 1-iodobutane and reporting by GC/MS. Mepivacaine is the internal standard used to determine the relative retention time for the compounds reported. |
| PWZ2LR | Alere iCassette (THC) test device was used to screen for THC, referred to in 1-4 as rapid chromatographic immunoassay. The cutoff concentration for the assay is 50 ng/mL. |
| QNJZJN | Nalorphine ISTD for opiate extraction |

TABLE 3F Item 3

| WebCode | Item 3 - Comments |
|---------|---|
| RTD2HG | Oxycodone: Internal Standard: Oxycodone-d6, LOD/LOQ: 10 ng/mL. Oxymorphone: Internal Standard: Oxycodone-d6, LOD/LOQ: 10 ng/mL |
| T6YTKW | Detection limits 10 ng/mL |
| V3PKCN | mepivacaine as internal standard |
| WJ9VCV | internal standard: mepivacaine |
| WUA4DM | Flurazepam as Internal Standard |
| YDFDBP | Internal Standard: Mepivacaine and nalorphine |
| YNW37N | Internal Standard: Phenyltoloxamine |
| Z383EJ | Phenyltoloxamine Internal Standard used for the base fraction and Heptabarbital use for the acid fraction. |
| ZMEF87 | A GC/MS test was also performed per procedures but was not needed for confirmation. The results of the GC/MS test corroborated the LC-QTOF test. Internal standards used for the LC-QTOF method: Fentanyl-D5 Imipramine-D3 MDMA-D5 Methaqualone-D7 Triazolam-D4 |
| ZWJKVF | Internal Standard: Flurazepam LOD: 10 ng/mL |

Additional Test Comments

TABLE 4

| WebCode | Additional Comments |
|----------------|--|
| 63CDWX | Currently analyst is only signed off on AM 7 ELISA screening for drugs of abuse and AM 13 for confirmation of benzodiazepines and z drugs using the LCMS-QQQ in urine. |
| AAXVKG | ["Qualitative Only" reported in Quantitative Reporting Procedures on Tables 1D, 2D, and 3D] |
| KMN97F | Only analyzed item 1. Did not analyze items 2 and 3. |
| ZWJKVF | Norfentanyl (Fentanyl metabolite) was identified by GC-MS and LC-MS-MS library searches since the laboratory does not have reference material. |

-End of Report-
(Appendix may follow)

Collaborative Testing Services ~ Forensic Testing Program

Test No. 19-5671: Urine Drug Analysis

DATA MUST BE SUBMITTED BY **May 13, 2019, 11:59 p.m.** TO BE INCLUDED IN THE REPORT

Participant Code: U1234A

WebCode: P2Z4WM

Scenario:

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

Case 1: A 21-year-old male college athlete receiving an annual physical complained of being tired. He reported some weight loss and his blood pressure and pulse were slightly elevated. A urine sample was collected for analysis.

Case 2: A 53-year-old male was pulled over for swerving in and out of lanes, driving significantly under the speed limit. The officer noted that the driver seemed relaxed but confused. His pupils were constricted and there was evidence of possible vomit on his shirt. A urine sample was collected for analysis 60 minutes later.

Case 3: A 45-year-old female was subject to a routine pain management compliance drug test. A urine sample was collected for analysis.

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

Items Submitted (Sample Pack UDRG):

Item 1: Urine sample from Case 1

Item 2: Urine sample from Case 2

Item 3: Urine sample from Case 3

Screening Results for Item 1:

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

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

Confirmatory Results for Item 1:

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

- No drugs/metabolites detected utilizing confirmatory methods.

| Analyte | Qualitative Only? | Reported Concentration | Uncertainty | Units |
|---|--|--|--|--|
| <input style="width: 90%;" type="text"/> | <input type="checkbox"/> | <input style="width: 80%;" type="text"/> | <input style="width: 80%;" type="text"/> | (<input style="width: 50%;" type="text"/>) |
| Date(s) Analysis Performed on Analyte: <input style="width: 80%;" type="text"/> | | | | |
| Raw Data (ng/mL): | | | | |
| <input style="width: 15%;" type="text"/> | <input style="width: 15%;" type="text"/> | <input style="width: 15%;" type="text"/> | <input style="width: 15%;" type="text"/> | <input style="width: 15%;" type="text"/> |

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

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

1-4). Please select the analysis method(s) performed and check whether it was used for screening, confirmatory testing, and/or quantitation.

Please list each method only once

| Method Used | Screening | Confirmatory | Quantitation |
|--|--------------------------|--------------------------|--------------------------|
| <input style="width: 90%;" type="text"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

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

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

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

Screening Results for Item 2:

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

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

Confirmatory Results for Item 2:

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

- No drugs/metabolites detected utilizing confirmatory methods.

| Analyte | Qualitative Only? | Reported Concentration | Uncertainty | Units |
|---|--|--|--|--|
| <input style="width: 90%;" type="text"/> | <input type="checkbox"/> | <input style="width: 80%;" type="text"/> | <input style="width: 80%;" type="text"/> | (<input style="width: 50%;" type="text"/>) |
| Date(s) Analysis Performed on Analyte: <input style="width: 80%;" type="text"/> | | | | |
| Raw Data (ng/mL): | | | | |
| <input style="width: 15%;" type="text"/> | <input style="width: 15%;" type="text"/> | <input style="width: 15%;" type="text"/> | <input style="width: 15%;" type="text"/> | <input style="width: 15%;" type="text"/> |

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

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

2-4). Please select the analysis method(s) performed and check whether it was used for screening, confirmatory testing, and/or quantitation.

Please list each method only once

| Method Used | Screening | Confirmatory | Quantitation |
|--|--------------------------|--------------------------|--------------------------|
| <input style="width: 90%;" type="text"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2-5). Additional Comments for Item 2

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

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

Screening Results for Item 3:

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

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

Confirmatory Results for Item 3:

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

- No drugs/metabolites detected utilizing confirmatory methods.

| Analyte | Qualitative Only? | Reported Concentration | Uncertainty | Units |
|---|--|--|--|--|
| <input style="width: 90%;" type="text"/> | <input type="checkbox"/> | <input style="width: 80%;" type="text"/> | <input style="width: 80%;" type="text"/> | (<input style="width: 50%;" type="text"/>) |
| Date(s) Analysis Performed on Analyte: <input style="width: 60%;" type="text"/> | | | | |
| Raw Data (ng/mL): | | | | |
| <input style="width: 15%;" type="text"/> | <input style="width: 15%;" type="text"/> | <input style="width: 15%;" type="text"/> | <input style="width: 15%;" type="text"/> | <input style="width: 15%;" type="text"/> |

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

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

3-4). Please select the analysis method(s) performed and check whether it was used for screening, confirmatory testing, and/or quantitation.

Please list each method only once

| Method Used | Screening | Confirmatory | Quantitation |
|--|--------------------------|--------------------------|--------------------------|
| <input style="width: 90%;" type="text"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

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

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

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

Test No. 19-5671 Data Sheet, continued

Participant Code: U1234A
WebCode: P2Z4WM

Date Samples Received:

Additional Comments on Test

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

RELEASE OF DATA TO ACCREDITATION BODIES

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

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

- This participant's data is intended for submission to ASCLD/LAB, ANAB, and/or A2LA. (Accreditation Release section below must be completed.)
- This participant's data is **not** intended for submission to ASCLD/LAB, ANAB, and/or A2LA.

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

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

ANAB Certificate No.
(Include ASCLD/LAB Certificate here)

A2LA Certificate No.

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

Authorized Contact Person and Title

Laboratory Name

Location (City/State)