Worklist: 2328

| AM 7 | Central | File available | upon | request |
|------|---------|----------------|------|---------|

reviewed 5/24/18

| reviewed 5/24/18                         | 1                 |  |
|--|-------------------|--|
| Buylee                                   |                   | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
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| <u>LAB CASE</u><br>M2018-1374 | <u>ITEM</u><br>1 | <u>TASK ID</u><br>110363 | DESCRIPTION  AM 25 Blood Multi-Drug Screen by LC-QQQ |
|-------------------------------|------------------|--------------------------|--|
| M2018-1374                    | 2                | 110994                   | AM 25 Blood Multi-Drug Screen by LC-QQQ              |
| M2018-1374                    | 3                | 110998                   | AM 25 Blood Multi-Drug Screen by LC-QQQ              |
| M2018-1395                    | 1                | 110387                   | AM 25 Blood Multi-Drug Screen by LC-QQQ              |
| M2018-1445                    | 1                | 110672                   | AM 25 Blood Multi-Drug Screen by LC-QQQ              |
| M2018-1507                    | 1                | 110923                   | AM 25 Blood Multi-Drug Screen by LC-QQQ              |
| M2018-1693                    | 2                | 112018                   | AM 25 Blood Multi-Drug Screen by LC-QQQ              |
| P2018-0772                    | 1                | 109965                   | AM 25 Blood Multi-Drug Screen by LC-QQQ              |
| P2018-0774                    | 1                | 109972                   | AM 25 Blood Multi-Drug Screen by LC-QQQ              |
| P2018-1001                    | 1                | 111873                   | AM 25 Blood Multi-Drug Screen by LC-QQQ              |
| P2018-1002                    | 1                | 111876                   | AM 25 Blood Multi-Drug Screen by LC-QQQ              |
| P2018-1025                    | 1                | 112266                   | AM 25 Blood Multi-Drug Screen by LC-QQQ              |
| P2018-1026                    | 1                | 112269                   | AM 25 Blood Multi-Drug Screen by LC-QQQ              |
| P2018-1027                    | 1                | 112272                   | AM 25 Blood Multi-Drug Screen by LC-QQQ              |
| P2018-1030                    | 1                | 112346                   | AM 25 Blood Multi-Drug Screen by LC-QQQ              |
| P2018-1031                    | 1                | 112349                   | AM 25 Blood Multi-Drug Screen by LC-QQQ              |
| P2018-1032                    | 1                | 112352                   | AM 25 Blood Multi-Drug Screen by LC-QQQ              |
| P2018-1033                    | 1                | 112355                   | AM 25 Blood Multi-Drug Screen by LC-QQQ              |
| P2018-1041                    | 1                | 112416                   | AM 25 Blood Multi-Drug Screen by LC-QQQ              |
| P2018-1056                    | 1                | 112456                   | AM 25 Blood Multi-Drug Screen by LC-QQQ              |
| P2018-1067                    | 1                | 112714                   | AM 25 Blood Multi-Drug Screen by LC-QQQ              |
| P2018-1092                    | 1                | 112818                   | AM 25 Blood Multi-Drug Screen by LC-QQQ              |
| P2018-1097                    | 1                | 112862                   | AM 25 Blood Multi-Drug Screen by LC-QQQ              |

Worklist: 2328

| LAB CASE   | <u>ITEM</u> | TASK ID | DESCRIPTION                             |
|------------|-------------|---------|---|
| P2018-1102 | 1           | 112939  | AM 25 Blood Multi-Drug Screen by LC-QQQ |
| P2018-1108 | ન           | 113004  | AM 25 Blood Multi-Drug Screen by LC-QQQ |



# Multi-Drug Screen in Blood by LC-MS/MS

Extraction Date: 04/27/18

Analyst: Sarah Pickle

Plate lot#: 0515207

Plate Expiration: 10/18/18

Mobile phase A: 10mM Ammonium Formate

Mobile phase B 0.1% Formic acid in MeOH

0.5M Ammonium Hydroxide

Ethyl Acetate

Blank Blood Lot: 361331-2

Column: Phenomenex Phenyl Hexyl (4.6x50mm: 2.6 um)

LCMS-QQQ ID:59740

# **Pre-Analytic:**

- □ 1. Check levels of mobile phases and needle wash refill as needed. Ensure waste is not full.
- □ Z. Ensure correct column is installed and begin mobile phase flow allow to equilibrate ~ 30 minutes.
- ⊠ 3. Create worklist:

# **Analytic:**

- ☑ 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
- Σ 2. Pipette 250μL blood (calibrated pipette) Pipette ID: #3 in wells of analytical (standards) plate.
- □ 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes. Shaker ID: 067105
- ☑ 4. Pipette 250μL 0.5M ammonium hydroxide buffer in wells of analytical plate.
- ☑ 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- Apply positive pressure for approx. 4 seconds (or until no liquid remains on top of sorbent). (Load at 85-100 PSI- Selector to the right) Manifold ID: 067104 Wait 5 minutes
- 8. Add 900μL ethyl acetate and allow to flow for 5 minutes under gravity.
- □ 10. Add 900μL ethyl acetate and allow to flow for 5 minutes under gravity.
- △ 11. Apply positive pressure for approx. 15 seconds. (10-15 PSI- Selector to the left)
- □ 12. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C. SPE Dry ID 067103
- □ 13. Reconstitute in 100μL 100% MeOH and heat seal plate with foil. Place in autosampler and run worklist.

## **POST- ANALYTIC**

 $\boxtimes$  1. Create batch and process data.

Worklist path: 042718 MDS TS SP Batch Name: MDS P1 wklst 2328 SP/MDS P2 wklst 2328 SP

- Evaluate samples, S/N of primary transition >5 and S/N of secondary transition >3 or evaluation of peak symmetry and resolution. Within +/- 2% or 0.1 min RT of administrative control. > 1/5 the response of administrative control.
- ☑ 3. Did all QCs pass for each analyte? Y / N
- ☑ 4. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

### **COMMENTS**:

Did not evaluate: Levamisole due to missing qualifier peaks
Protriptyline due to missing secondary peak





# **Idaho State Police Forensic Services**



# AM #25 Blood Multi-Drug Screen by LCMS-QQQ

Analyst: Sarah Pickle Extraction Date: 4/27/18 Worklist Number: 2328

| Reagent   | Lot Number               | Expiration<br>Date | Date in<br>Service | Date Out<br>of<br>Service | Initials |
|---|--------------------------|--------------------|--------------------|---------------------------|----------|
| ToxBox Benzo/Opiate<br>Screening Plate                | 0515207                  | 10/18/18           |                    |                           |          |
| Negative Blood  | 361331-2                 |                    | 12/27/17           |                           |          |
| Methanol External Control<br>Solution                 | 042618                   | 04/26/19           | 04/26/18           |                           |          |
| Blood External Control<br>Solution                    | WS042618                 | 04/26/19           | 04/26/18           |                           |          |
| 0.5M Ammonium Hydroxide                               | 032918                   | 9/29/18            | 3/29/18            |                           |          |
| Formic Acid (LCMS Grade)                              | 095180B                  |                    | 11/15/17           |                           |          |
| Water (LCMS Grade)                                    | <del>177529</del> 177528 | K                  | 03/05/18           |                           |          |
| Methanol (LCMS Grade)                                 | 177145                   |                    | 04/11/18           |                           |          |
| Ammonium Formate (LCMS Grade)                         | A0287238                 |                    | 1/30/17            |                           |          |
| Ammonium Hydroxide (ACS grade or better)              | 053200                   |                    | 8/3/07             |                           |          |
| Ethyl Acetate(ACS grade or better)                    | 100362                   |                    | 6/26/17            |                           |          |
| 10mM Ammonium Formate in LCMS Water (Mobile Phase A)  | 030818                   |                    | 3/8/18             |                           |          |
| 0.1% Formic Acid in LCMS<br>Methanol (Mobile Phase B) | 041018                   |                    | 04/10/18           |                           |          |
| Needle Rinse75% LCMS<br>MeOH in LCMS Water            | 042418                   |                    | 04/24/18           |                           |          |

# Methanol External Control Solution (Lot: 042618) 100 ul of Img/mL stock was added to each drug to 9600 ul of LC MeOH.

| Component       | Source         | Source Lot<br>Number | Expiration Date |
|-----------------|----------------|----------------------|-----------------|
| Methanol (LCMS) | Fisher         | 177145               |                 |
| Oxycodone       | Cerilliant     | FE01181701           | March 2022      |
| Diazepanı       | Cerilliant     | FE05201602           | June 2021       |
| Metoprolol      | Cerilliant     | FN06091510           | July 2020       |
| Meperidine      | Cerilliant     | FE01271602           | June 2021       |
| Prepared:       | 04/26/18       |                      |                 |
| Prepared By:    | Tamara Salazar |                      |                 |
| Expires:        | 04/26/19       |                      |                 |

## AM #25: Blood Multi-Drug Screen by LCMS-QQQ

## Blood External Control Solution (Lot: 042618)

100 ul of methanol external control solution was added to 9900 ul of blood.

| Component                          | Source         | Source Lot Number |
|------------------------------------|----------------|-------------------|
| Negative Blood                     | Hemostat       | 361331-2          |
| Methanol External Control Solution |                | 042618            |
| Prepared:                          | 04/26/18       |                   |
| Prepared by:                       | Tamara Salazar |                   |
| Expires:                           | 04/26/19       |                   |



0.5M Ammonium Hydroxide (Lot: 032918)

| Component                                | Source         | Source Lot<br>Number |  |
|--|----------------|----------------------|--|
| Ammonium Hydroxide (ACS grade or better) | Fisher         | 053200               |  |
| DI Water                                 |                | 7 <del>4</del> 7     |  |
| Prepared:                                | 03/29/18       |                      |  |
| Prepared By:                             | Tamara Salazar |                      |  |
| Expires:                                 | 09/29/18       |                      |  |

10mM Ammonium Formate in LCMS Water (Mobile Phase A) (Lot: 030818)

| Component           | Source         | Source Lot<br>Number |  |
|---------------------|----------------|----------------------|--|
| Ammonium<br>Formate | Arcos Organics | A0287238             |  |
| LCMS Water          | Fisher         | 102501 177528        |  |
| Prepared:           | 03/08/18       |                      |  |
| Prepared By:        | Tamara Salazar |                      |  |

# 0.1% Formic Acid in LCMS Methanol (Mobile Phase B) (Lot: 041018)

| Component            | Source         | Source Lot<br>Number |
|----------------------|----------------|----------------------|
| Formic Acid          | Fisher         | 095180B              |
| MeOH (LCMS<br>Grade) | Fisher         | 177145               |
| Prepared:            | 04/10/18       |                      |
| Prepared By:         | Tamara Salazar |                      |

042418

|              |      |             |      |         |             | 072710  |
|--------------|------|-------------|------|---------|-------------|---------|
| Needle Rinse | (75% | <b>LCMS</b> | MeOH | in LCMS | Water)(Lot: | 030818) |

| Component             | Source         | Source Lot<br>Number |
|-----------------------|----------------|----------------------|
| MeOH (LCMS<br>Grade)  | Fisher         | 172516               |
| Water (LCMS<br>Grade) | Fisher         | 177528               |
| Prepared:             | 04/24/18       |                      |
| Prepared By:          | Tamara Salazar |                      |

| Name                 | Transition    | Acq. Date-Time     | RI    | Resp.  | N/S        | Transition      | Area  | N/S      | II Name                | Tra        | Transition    | RT    | Resp.   |
|----------------------|---------------|--------------------|-------|--------|------------|-----------------|-------|----------|------------------------|------------|---------------|-------|---------|
| 6-MAM                | 328.2 -> 165  | 4/27/2018 12:44 P  | 5.265 | 2773   | 492.17     | 328,2 -> 211    | 937   | Infinity | 6-MAM-D6               | 334.2      | -> 165        | 5.244 | 84835   |
| 7-aminoclonazepam    | 286.1 -> 121  | 4/27/2018 12:44 P  | 5.374 | 46791  | 108.95     | _ 286.1 -> 222  | 12714 | 34.16    | 7-Aminoclonazepam-D4   | 1          | 1             | 5.373 | 82813   |
| Acetyl Fentanyl      | 323.2 -> 105  | 4/27/2018 12:44 P  | 5.795 | 15402  | 48.34      | 323.2 -> 188    | 5408  | 28.83    | Acetyl Fentanyl-D5     | 328.2      | -> 105        | 5.773 | 1702692 |
| Acetyl Norfentanyl   | 219.1 -> 84.2 | 4/27/2018 12:44 P  | 4.893 | 9646   | 11.68      | 219.1 -> 56.3   | 3214  | 11.00    | Acetyl Norfentanyl-D5  | 5 224.2    | -> 84.2       | 4.913 | 559574  |
| a-hydroxyalprazolam  | 325.1 -> 297  | 4/27/2018 12:44 P  | 6.180 | 18775  | 24.37      | 325.1 -> 215    | 4538  | 16.64    | a-hydroxyalprazolam-D5 | 1-D5 330.1 | -> 302        | 6.159 | 90276   |
| alpha-PVP            | 232.2 -> 91.0 | 4/27/2018 12:44 P  | 5.504 | 97597  | Infinity   | 7 232.2 -> 77.1 | 62089 | 2001.54  | alpha-PVP-d8           |            | 240.2 -> 91.1 | 5.503 | 792786  |
| Alprazolam           | 309.1 -> 281  | 4/27/2018 12:44 P  | 6.265 | 120806 | 38173.24   | 309.1 -> 205    | 48067 | 131.89   | Alprazolam-D5          | 314.1      | -> 286        | 6.264 | 503861  |
| Amphetamine          | 136.1 -> 91.1 | 4/27/2018 12:44 P  | 4.896 | 117908 | Infinity   | 136.1 -> 119    | 28067 | 38.47    | Amphetamine-D11        | 147.2      | -> 130        | 4.834 | 9704    |
| Bupropion            | 240.1 -> 184  | 4/27/2018 12:44 P  | 5.686 | 86020  | 12760.21   | ^ I             | 1061  | 203,55   | Bupropion-D9           | 249.2      | -> 185        | 5.665 | 200230  |
| Carisoprodol         | 261.2 -> 176  | 4/27/2018 12:44 P  | 5.949 | 10149  | 1247.86    | _ 261.2 -> 55.3 | 28400 | 467.94   | Carisoprodol-D7        | 268.2      | -> 183        | 5.887 | 106827  |
| Citalopram           | 325.2 -> 109  | 4/27/2018 12:44    | 5.896 | 227604 | 85202.81   | ^               | 50691 | 6470.54  | Citalopram-D6          | 331,2      | -> 109        | 5.895 | 571743  |
| Clonazepam           | 316.1 -> 269  | 4/27/2018 12:44 P  | 6.101 | 58489  | 12231.30   | 316.1 -> 213    | 8914  | 42.27    | Clonazepam-D4          | 320,1      | -> 217        | 6.101 | 58283   |
| Codeine              | 300.2 -> 215  | 4/27/2018 12:44 P  | 5.270 | 16888  | 69.50      | 300.2 -> 165    | 13456 | 3023.26  | Codeine-D6             | 306.2      | -> 218        | 5.207 | 64668   |
| Cyclobenzaprine      | 276.2 -> 214  | 4/27/2018 12:44 P  | 6.170 | 91734  | 234.09     | 276.2 -> 231    | 38200 | Infinity | Cyclobenzaprine-D3     | 279.2      | -> 215        | 6.169 | 508424  |
| Dextromethorphan     | 272.2 -> 171  | 4/27/2018 12:44 P  | 5.947 | 112747 | 265.68     | _ 272.2 -> 147  | 1075  | 21875    | Dextromethorphan-D3    | )3 275.2   | -> 171        | 5.947 | 321362  |
| Dextrorphan          | 258.2 -> 157  | 4/27/2018 12:44 P  | 5.399 | 54663  | 124.50     | 258.2 -> 133    | 58156 | 145.42   | Dextrorphan-D3         | 261.2      | -> 157        | 5.399 | 311933  |
| Diazepam             | 285.1 -> 193  | 4/27/2018 12:44 P  | 6.512 | 54401  | 73.15      | 285.1 -> 153    | 76943 | 39.75    | Diazepam-D5            | 290.1      | 4             | 6.491 | 219366  |
| Dihydrocodeine       | 302.2 -> 198  | 4/27/2018 12:44 P  | 5.023 | 21436  | 54.01      | 302.2 -> 128    | 21902 | 35.15    | Dihydrocodeine-D6      | 308.2      | -> 202        | 5.002 | 108883  |
| Diphenhydramine      | 256.2 -> 167  | 4/27/2018 12:44 P  | 5.868 | 377462 | 66438.24 F | 256.2 -> 152    | 90158 | 1 8€.09€ | Diphenhydramine-D3     | 3 259.2    | -> 167        | 5.868 | 1822030 |
| Doxylamine           | 271.2 -> 182  | 4/27/2018 12:44 P  | 5.561 | 154084 | 132.06     | 271.2 -> 167_   | 2552  | Infinity | Doxylamine-D5          | 276.2      | -> 187        | 5,539 | 444880  |
| EDDP                 | 279.2 -> 235  | 4/27/2018 12:44 P  | 5.925 | 397706 | 149710     | 279.2 -> 250    | 2112  | 58826 F  | EDDP-D3                | 282.2 ->   | -> 235        | 5.925 | 184237  |
| Fentanyl             | 337.2 -> 105  | 4/27/2018 12:44 P  | 5.955 | 15058  | 47.62      | 337.2 -> 188    | 6019  | 38.94    | Fentanyl-D5            | 342,3 ->   | -> 105        | 5.955 | 1241839 |
| Fluoxetine           | 310.1 -> 44.3 | 4/27/2018 12:44 P  | 6.123 | 389191 | Infinity   | 310.1 -> 148    | 7123  | 13.14    | Fluoxetine-D6          | 316.2      | 316.2 -> 44.3 | 6.101 | 1769480 |
| Hydrocodone          | 300.2 -> 198  | 4/27/2018 12:44 P  | 5.434 | 32904  | Infinity   | 300.2 -> 128    | 18586 | Infinity | Hydrocodone-D6         | 306.2      | -> 202        | 5,393 | 263513  |
| Hydromorphone        | 286.2 -> 184  | 4/27/2018 12:44 P  | 4.884 | 31800  | Infinity   | 286.2 -> 157    | 23466 | Infinity | Hydromorphone-D6       | 292.2      | -> 185        | 4.842 | 87092   |
| Ketamine             | 238.1 -> 125  | 4/27/2018 12:44 P  | 5.585 | 195403 | Infinity   | 238.1 -> 220    | 38706 | 47.18    | Ketamine-D4            | 242.1      | -> 129        | 5.564 | 783761  |
| Meprobamate          | 219.1 -> 158  | 4/27/2018 12:44 P  | 5.443 | 20477  | 103.93     | 219.1 -> 97.1   | 9221  | Infinity | Meprobamate-D7         | 226.2      | -> 165        | 5.423 | 8868    |
| Methadone            | 310.2 -> 265  | 4/27/2018 12:44 P  | 6.204 | 311523 | Infinity   | 310.2 -> 105    | 1951  | Infinity | Methadone-D9           | 319.3      | -> 268        | 6.202 | 1254937 |
| Methamphetamine      | 150.1 -> 91.1 | 4/27/2018 12:44 P. | 5.037 | 102800 | Infinity   | 150.1 -> 119    | 17249 | 58.78 L  | Methamphetamine-D1     | _          | ^             | 5.016 | 150818  |
| Morphine             | 286.2 -> 201  | 4/27/2018 12:44 P  | 4.640 | 6557   | 2017.44    | ^               | 5806  | 35.70    | Morphine-D6            | 292.2      | 1             | 4.539 | 4940    |
| Naloxone             | 328.2 -> 309  |                    | 5.469 | 96092  | Infinity   | ^               | 11754 | 1313.40  | Naloxone-D5            | 333.2      | ^             | 5.468 | 150118  |
| Naltrexol            | 344.2 -> 326  |                    | 5 100 | 145049 | 471.84     | 4               | 31810 | 4874.96  | Naltrexol-D3           | 347.2      | 1             | 5.079 | 198040  |
| Naltrexone           | 342.2 -> 324  | 4/27/2018 12:44 P  | 5.345 | 29967  | 5041.00    | 4               | 45675 | 31.93    | Naltrexone-D3          |            | <b>^</b>      | 5.304 | 420637  |
| Norbuprenorphine     | 414.3 -> 101  | 4/27/2018 12:44 P  | 5 709 | 3538   | 23.98      | ^               | 6338  | 15.22    | Norbuprenorphine-D3    |            | 4             | 5.709 | 11280   |
| Nordiazepam          | 2/1.1 -> 140  | 4/2//2018 12:44 P  | 6.334 | 855//  | Infinity   | 2/1.1 -> 208    | 26690 | Infinity | Nordiazepam-D5         | 276.1      | -> 140        | 6.333 | 248149  |
| Norfentanyl          | 233.2 -> 84.2 | 4/27/2018 12:44 P  | 5.340 | 202635 | 37816.39   | ^               | 64621 | 233.63   | Norfentanyl-D5         | İ          | 238.2 -> 84.2 | 5.320 | 882930  |
| Norhydrocodone       | 286.2 -> 199  | 4/27/2018 12:44 P  | 5.047 | 5273   | 13.39      | <b>^</b>        | 857   | 3.63     | Norhydrocodone-D3      |            | 1             | 5.025 | 72139   |
| Noroxycodone         | 302.1 -> 284  | 4/27/2018 12:44 P  | 4.922 | 12826  | 1638.44    | 4               | 16124 | 53.05    | Noroxycodone-D3        |            | -> 287        | 4.942 | 147237  |
| O-desmethyl-tramadol | 250,2 -> 58.3 | 4/27/2018 12:44 P  | 4.951 | 360264 | Infinity   | 1               | 7531  | 1669.26  | O-desmethyl-tramadol   | ,:         | ^             | 4.951 | 1032813 |
| Oxazepam             | 287.1 -> 240  | 4/27/2018 12:44 P. | 6.167 | 64230  | Infinity   | 287.1 -> 268    | 56805 | Infinity | Oxazepam-D5            | 292.1      | -> 246        | 6.146 | 469818  |
| Oxycodone            | 316,2 -> 298  | 4/27/2018 12:44 P  | 5.206 | 150931 | Infinity   | ^               | 30410 | 34.11    | Oxycodone-D6           | 322.2 ->   | <b>^</b>      | 5.144 | 256295  |
| Oxymorphone          | 302.1 -> 284  | 4/27/2018 12:44 P  | 4.537 | 106454 | Infinity   | 302.1 -> 227    | 13011 | 5688.27  | Oxymorphone-D3         | 305.2      | -> 287        | 4.496 | 552853  |
| Phentermine          | 150.1 -> 65.2 | 4/27/2018 12:44 P  | 5.179 | 22577  | Infinity   | 150.1 -> 133    | 2367  | Infinity | Phentermine-D5         | 155.2      | -> 96.2       | 5.158 | 298696  |
| Promethazine         | 285,1 -> 86.2 | 4/27/2018 12:44 P  | 6.188 | 362849 | 1973.36    | 285.1 -> 71.3   | 71256 | 953.42   | Promethazine-D3        | 288.2      | -> 89.2       | 6.167 | 1385560 |
| Quetiapine           | 384.2 -> 253  | 4/27/2018 12:44 P  | 6.278 | 281374 | 61574.97   | 384.2 -> 221    | 1192. | 578.77   | Quetiapine-D8          | 392.2      | -> 226        | 6.236 | 313522  |
| Sertraline           | 306.1 -> 158  |                    | 6.388 | 141144 | 484.16     | 306.1 -> 275    | 72109 | 143.06   | Sertraline-D3          | 309.1      | -> 275        | 6.387 | 551010  |
| Sufentanil           | 387.2 -> 238  | 4/27/2018 12:44 P  | 8 208 | 116/17 | 00 00      | ,               | 01001 | 0100     | 1                      |            |               |       | 0. 1707 |
|                      |               |                    | -1.   |        | 20.00      | 387.2 -> 111    | 61221 | 23.18    | Sutentanil-U5          | 392.2      | -> 238        | 6.277 | 535142  |

| Name  | Transition    | Aca Date Time                            | F.    | Resn   | Z V          | Ξ    | Transition                   | Area  | N/C      | arciv.          | q              | Transition                  | FO    | Doon    |
|---|---------------|--|-------|--------|--------------|------|------------------------------|-------|----------|-----------------|----------------|-----------------------------|-------|---------|
| CALL PROPERTY OF THE PROPERTY |               |  |       | 1      | 1            |      |                              | 2     |          |                 | Contraction of |                             |       | - Jesh  |
| Tramadol  | 264.2 -> 58.3 | 264.2 -> 58.3  4/27/2018 12:44 P   5.419 |       | 456362 | Infinity   [ | 26   | Infinity       264.2 -> 43.3 | 5872  | 10.56    | Tramadol-13C-D3 | -D3            | 268.2 -> 58.3 5.419 1992375 | 5.419 | 1992375 |
| Trazodone   | 372.2 -> 176  | 372.2 -> 176 4/27/2018 12:44 P   6.441   | -     | 318757 | 1234.33      | 37   | 1234.33   372.2 -> 148       | 3629  | Infinity | _ Trazodone-D6  |                | 378.2 -> 182. 6.380         | 6.380 | 1010772 |
| Venlafaxine   | 278.2 -> 58.3 | 278.2 -> 58.3  4/27/2018 12:44 P   5.681 | 5.681 | 379730 | Infinity     | - 27 | Infinity       278.2 -> 260  | 24910 | 78.36    | Venlafaxine-D6  | Q              | 284.2 -> 64.3 5.660         | 5.660 | 964245  |
| Zolpidem  | 308.2 -> 235  | 308.2 -> 235   4/27/2018 12:44 P   6.084 |       | 363613 | 1874.12      | 30   | 1874.12    308.2 -> 263      | 1295  | 414.22   | Zolpidem-D6     |                | 314.2 -> 235 6.082 2236668  | 6.082 | 2236668 |

| Name                | Transition    | Acq. Date-Time                  | RT      | Resp.  | N/S      | Ξ         | Transition    | Area   | S/N    | Σ         | Name                   | Transition    | R     | Resp.  |
|---------------------|---------------|---------------------------------|---------|--------|----------|-----------|---------------|--------|--------|-----------|------------------------|---------------|-------|--------|
| 6-MAM               | 328.2 -> 165  | 4/27/2018 1:23 P                | 5 122   | 146    | 81.67    | 32        | 328.2 -> 211  | 624    | 174.60 | M-9 □     | 6-MAM-D6               | 334.2 -> 165  | 5.244 | 91345  |
| 7-aminoclonazepam   | 286.1 -> 121  | _                               |         |        |          | 7 28      | 286.1 -> 222  |        |        | ☐ 7-Arr   | 7-Aminoclonazepam-D4   | 290.1 -> 121. | -     | 106928 |
| Acetyl Fentanyl     | 323,2 -> 105  | 4/27/2018 1:23 P                | 5 957   | 178    | 0 43     | 32        | 323.2 -> 188  |        |        | T Acet    | Acetyl Fentanyl-D5     | 328.2 -> 105  | -     | 17717  |
| Acetyl Norfentanyl  | 219.1 -> 84.2 | 4/27/2018 1:23 P                | 4.934   | 1 207  | 0 64     | 21        | 219.1 -> 56.3 | 115    | 1.27   | T Acet    | Acetyl Norfentanyl-D5  | 224.2 -> 84.2 | 4.913 | 569707 |
| a-hydroxyalprazolam | 325.1 -> 297  | 4/27/2018 1:23 P.               | -       |        |          | 32        | 325.1 -> 215  | ¥      |        | T a-hyc   | a-hydroxyalprazolam-D5 | -             | 6.159 | 112889 |
| alpha-PVP           | 232.2 -> 91.0 | _                               | _       | 45     | 0 22     | 7 23      | 232.2 -> 77.1 | 213    | 89 0   | T alpha   | alpha-PVP-d8           |               | 5.503 | 871942 |
| Alprazolam          | 309.1 -> 281  | _                               | 6.083   | 15642  | 5.93     | 36        | 309.1 -> 205  | 374    | 1.03   | [   Alpra | Alprazolam-D5          | 314.1 -> 286  | 6.244 | 567847 |
| Amphetamine         | 136,1 -> 91.1 | 4/27/2018                       | _       |        |          | 1         | 136.1 -> 119  |        |        | ☐ Amp     | Amphetamine-D11        | 147.2 -> 130  | 4.855 | 10572  |
| Bupropion           | 240,1 -> 184  | $\neg$                          | 5 829   | 173    | 1.0.1    | 7 24      | 240.1 -> 131  | 3654   | 00.9   | Bupr      | Bupropion-D9           | 249.2 -> 185  | 5.685 | 189842 |
| Carisoprodol        | 261.2 -> 176  | 4/27/2018                       | _       |        |          | 7 26      | 261.2 -> 55.3 |        |        | Caris     | Carisoprodol-D7        | 268.2 -> 183  | 5.887 | 100041 |
| Citalopram          | 325.2 -> 109  | _                               | -       |        |          | 32        |               |        |        | Cital     | Citalopram-D6          | 331.2 -> 109  | 5.895 | 597594 |
| Clonazepam          | 316.1 -> 269  | -                               | 6.020   | 269    | 25.27    | 3         | 316.1 -> 213  |        |        | Clon      | Clonazepam-D4          | 320.1 -> 217  | 6.101 | 60383  |
| Codeine             | 300.2 -> 215  | -                               | 7.7     |        |          | <u>بر</u> | 300.2 -> 165  |        |        | Code      | Codeine-D6             | 306.2 -> 218  | 5.228 | 72722  |
| Cyclobenzaprine     | 276.2 -> 214  | -                               | 6.211   | 79     | 0 56     | 7.        | 276.2 -> 231  | 133    | 0.55   | Cycle     | Cyclobenzaprine-D3     | 279.2 -> 215  | 6.169 | 550732 |
| Dextromethorphan    | 272.2 -> 171  |                                 | _       |        |          | 27        | 272.2 -> 147  |        |        | Dexti     | Dextromethorphan-D3    | 275.2 -> 171  | 5.947 | 332391 |
| Dextrorphan         | 258.2 -> 157  |                                 | 5.481   | 826    | 3.35     | 72        | 258.2 -> 133  | 51     | 0 77   | Dexti     | Dextrorphan-D3         | 261.2 -> 157  | 5.419 | 326599 |
| Diazepam            | 285.1 -> 193  | _                               | _       | 622471 | Infinity | 78        | 285.1 -> 153  | 10001  | 12696  | Diaz      | Diazepam-D5            | 290.1 -> 198  | 6.471 | 259514 |
| Dihydrocodeine      | 302.2 -> 198  |                                 | 5.085   | 20     | 2.56     | 38        | 302.2 -> 128  | 217    | 1.32   | Dihy      | Dihydrocodeine-D6      | 308.2 -> 202  | 5.002 | 145902 |
| Diphenhydramine     | 256.2 -> 167  | 4/27/2018 1:23 P                | 1       |        |          | T 25      | 256.2 -> 152  |        |        | T Diph    | Diphenhydramine-D3     | 259.2 -> 167  | 5.868 | 17946  |
| Doxylamine          | 271.2 -> 182  | _                               |         |        | _        | 7         | 271.2 -> 167  |        |        | ☐ Doxy    | Doxylamine-D5          | 276.2 -> 187  | 5.560 | 456974 |
| EDDP                | 279.2 -> 235  | 4/27/2018 1:23 P                | 5.986   |        | 2 35     | 27        | 279.2 -> 250  | 45     | 0 68   | L EDD     | EDDP-D3                | 282.2 -> 235  | 5.925 | 193764 |
| Fentanyl            | 337.2 -> 105  | 4/27/2018 1:23 P                | 6 158   | 186    | 0.61     | 33        | 337.2 -> 188  |        |        | Fent      | Fentanyl-D5            | 342.3 -> 105  | 5.955 | 13717  |
| Fluoxetine          | 310.1 -> 44.3 | 4/27/2018 1:23 P                |         |        |          | 3.        | 310,1 -> 148  |        |        | Fluo      | Fluoxetine-D6          | 316.2 -> 44.3 | 6.101 | 19544. |
| Hydrocodone         | 300.2 -> 198  | _                               | 5.434   | . 50   | 50.76    | )<br>  ]  | 300,2 -> 128  |        |        | Hydr.     | Hydrocodone-D6         | 306.2 -> 202  | 5.414 | 293275 |
| Hydromorphone       | 286.2 -> 184  | -                               |         |        |          | 7 28      | 286.2 -> 157  |        |        | Hydr      | Hydromorphone-D6       | 292.2 -> 185  | 4.842 | 96794  |
| Ketamine            | 238.1 -> 125  | _                               | -       |        |          | 7 23      | 238.1 -> 220  |        |        | Keta      | Ketamine-D4            | 242.1 -> 129  | 5.564 | 824893 |
| Meprobamate         | 219.1 -> 158  | _                               | _       |        | 1 16     | 2.        | 219.1 -> 97.1 | 255    | 1 10   | Mepr      | Meprobamate-D7         | 226.2 -> 165  | 5.423 | 13050  |
| Methadone           | 310.2 -> 265  | 4/27/2018 1:23 P                | _       |        | 6.12     | 3,        | 310.2 -> 105  |        |        | Meth      | Methadone-D9           | 319.3 -> 268  | 6.202 | 13703  |
| Methamphetamine     | 150.1 -> 91.1 | -                               | 5.118   | 17525  | 4.57     | 1         | 150.1 -> 119  |        |        | Meth      | Methamphetamine-D11    | 161.2 -> 97.1 | 5.036 | 168126 |
| Morphine            | 286.2 -> 201  | _                               | -       |        |          | 1 28      | 286.2 -> 165  |        |        | Morp      | Morphine-D6            | 292.2 -> 152  | 4.539 | 2978   |
| Naloxone            | 328.2 -> 309  | 4/27/2018                       | 5.469   |        | 1.43     | 32        | 328.2 -> 211  | 287    | 1.37   | Nalo      | Naloxone-D5            | 333.2 -> 315  | 5.488 | 164226 |
| Naitrexol           | 344.2 -> 326  | _                               | 5 325   | 8731   | Infinity | 34        | 344.2 -> 308  |        |        | Naltr     | Naltrexol-D3           | 347.2 -> 329  | 5.079 | 203221 |
| Naitrexone          | 342.2 -> 324  | 4/27/2018 1:23 P                |         |        |          | 34        | 342.2 -> 55.3 |        |        | Naltr     | Naltrexone-D3          | 345.2 -> 327  | 5.324 | 473030 |
| Norbuprenorphine    | 414.3 -> 101  | 4/27/2018 1:23 P.               | 4       |        |          | 4         | 414.3 -> 57.3 |        |        | Norb      | Norbuprenorphine-D3    | 417.3 -> 101  | 5.709 | 13834  |
| Nordiazepam         | 271.1 -> 140  | 4/27/2018 1:23 P                | 4       |        |          | 27        | 271.1 -> 208  |        |        | Nord      | Nordiazepam-D5         | 276.1 -> 140  | 6.333 | 285925 |
| Norfentanyl         | 233.2 -> 84.2 |                                 | -       |        |          | 123       | 233.2 -> 55.3 |        |        | Norfe     | Norfentanyl-D5         | 238.2 -> 84.2 | 5.340 | 950687 |
| Norhydrocodone      | 286.2 -> 199  | 4/27/2018                       |         |        | 233.19   | 22        | 286.2 -> 171  |        |        | Norh      | Norhydrocodone-D3      | 289.2 -> 202  | 5.046 | 78001  |
| Noroxycodone        | 302.1 -> 284  | 4/27/2018 1:23 P                | -       |        | 1.48     | <u>بر</u> | 302.1 -> 186  | 392    | 4 89   | Noro      | Noroxycodone-D3        | 305.2 -> 287  | 4.942 | 160709 |
| O-desmethyl-tramad  | 250.2 -> 58.3 | 4/27/2018 1:23 P                | -       | 9      | 0.83     | 2E        | 250.2 -> 42.3 | 196    | 2.11   | O-de      | O-desmethyl-tramadol   | 256.2 -> 64.3 | 4.951 | 10279  |
| Oxazepam            | 287.1 -> 240  | 4/27/2018 1:23 P                | -       |        | 0.78     | 78        | 287.1 -> 268  |        |        | Oxaz      | Oxazepam-D5            | 292.1 -> 246  | 6.146 | 533844 |
| Oxycodone           | 316.2 -> 298  | 4/27/2018 1:23 P.               | 5.206   | 158    | Infinity | 3         | 316.2 -> 241  | 312044 | 90571  | Oxyc      | Oxycodone-D6           | 322.2 -> 304  | 5,165 | 265379 |
| Oxymorphone         | 302.1 -> 284  | 4/27/2018 1:23 P                | 4 598   | 932    | 1.24     | 36        | 302.1 -> 227  | 92     | 0 04   | Oxyn      | Oxymorphone-D3         | 305.2 -> 287  | 4.496 | 615753 |
| Phentermine         | 150.1 -> 65.2 | 4/27/2018 1:23 P.               | 31      |        |          | 12        | 150.1 -> 133  |        |        | ☐ Phen    | Phentermine-D5         | 155.2 -> 96.2 | 5.158 | 335953 |
| Promethazine        | 285.1 -> 86.2 | 4/27/2018 1:23 P                | . 6.188 | 286    | 124.79   | 28        | 285.1 -> 71.3 |        |        | Pron      | Promethazine-D3        | 288.2 -> 89.2 | 6.167 | 15626  |
| Quetiapine          | 384.2 -> 253  |                                 | -       |        | 0.35     | 38        | 384.2 -> 221  | 35     | 0.95   | Quet      | Quetiapine-D8          | 392.2 -> 226  | 6.236 | 316496 |
| Sertraline          |               | -                               | -       |        | 2.52     | )<br>)    | 306.1 -> 275  | 1659   | 5.86   | Sertr     | Sertraline-D3          | 309.1 -> 275  | 6.387 | 677588 |
| Sufentanil          | 387.2 -> 238  | 4/27/2018 1:23 P                | _       |        | 368.14   | 88        | 387.2 -> 111  | 722    | 1.30   | Sufe      | Sufentanil-D5          | 392.2 -> 238  | 6.277 | 577242 |
| Tomozonom           | 201 1 > 255   | D 201 1 - 25E 1/127/2019 1-22 D | 6 369   | 286    | 1.85     | 1         | 301 1 -> 283  |        |        | Tomor     | Tomozonam DE           | , , ,         | 1000  | 40700  |

| Compound Method | wetnod        | p i external control                    | p l e | xternal cor | p i external control Results | _  | Cualifier I M          | Qualifier I Results | I Kesuit |   | Domern U.S.I.            | D.                         | 2     | IS IN Kesuits |
|-----------------|---------------|---|-------|-------------|------------------------------|----|------------------------|---------------------|----------|---|--------------------------|----------------------------|-------|---------------|
| Name            | Transition    | Acq. Date-Time                          | RI    | Resp.       | N/S                          | Ξ  | MI Transition          | Area                | S/N MI   | Ξ | mannin Mamerine seesesse | - Transition - RT          | H     | Resp.         |
| Tramadol        | 264.2 -> 58.3 | 264.2 -> 58.3  4/27/2018 1:23 P   5.439 | 5.439 | 10937       | 81.29                        | 7  | _ 264.2 -> 43.3        | 511                 | 72.34    | L | 72.34   Tramadol-13C-D3  | 268.2 -> 58.3 5.439 21124  | 5.439 | 21124         |
| Trazodone       | 372.2 -> 176  | 372.2 -> 176   4/27/2018 1:23 P   6.420 | 6.420 | 1252        | 5.24                         | ]3 | 372.2 -> 148           | 1859                | 4.28     | L | 4.28 Ti Trazodone-D6     | 378.2 -> 182. 6.380        | 6.380 | 11693         |
| Venlafaxine     | 278.2 -> 58.3 | 278.2 -> 58.3  4/27/2018 1:23 P         |       |             |                              | 12 | 278.2 -> 260           |                     |          | L | Venlafaxine-D6           | 284.2 -> 64.3 5.680        | 5.680 | 10337_        |
| Zolpidem        | 308.2 -> 235  | 308.2 -> 235   4/27/2018 1:23 P   6.165 | 6.165 | 294         | 0.238                        | E  | 0.28 [7   308.2 -> 263 | 174                 | 0.47     | L | 0 47 T Zolpidem-D6       | 314.2 -> 235   6.061 24402 | 6.061 | 24402         |

| Name                | Transition    | Acq. Date-Time    | R     | Hesp. | Z/N      | MI Iransition | j       | Area   | N/S      | ž.       | Name                   | Transition    | iz.   | Resp.  | Σ        |
|---------------------|---------------|-------------------|-------|-------|----------|---------------|---------|--------|----------|----------|------------------------|---------------|-------|--------|----------|
| 6-MAM               | 328.2 -> 165  | 4/27/2018 1:04 PM | 5.326 | 26    | 9.77     | 328.2 ->      | 211     | _      |          | 6        | 6-MAM-D6               | 334.2 -> 165  | 5 244 | 89930  | -        |
| 7-aminoclonazepam   | 286.1 -> 121  | 4/27/2018 1:04 PM | 5.354 | 512   | 2.23     | 7   286.1 ->  | 222_    | 261    | 1 0 1    | - 7      | 7-Aminoclonazebam-D4   | 1 ^           | 5.373 | 117103 | L        |
| Acetyl Fentanyl     | 323.2 -> 105  | 4/27/2018 1:04 PM |       |       |          | 323.2 ->      | 188     |        |          | A        | Acetyl Fentanyl-D5     | 1             | 5.773 | 17999  | L        |
| Acetyl Norfentanyl  | 219.1 -> 84.2 | 4/27/2018 1:04 PM |       |       |          | _ 219.1 ->    | 56.3    |        |          | Ā        | Acetyl Norfentanyl-D5  | 224.2 -> 84.2 | 4.913 | 561708 | L        |
| a-hydroxyalprazolam | 325.1 -> 297  | 4/27/2018 1:04 PM |       |       |          | 325.1 ->      | 215     |        | =        | ι<br>σ   | a-hydroxyalprazolam-D5 | 330.1 -> 302  | 6.138 | 109000 | L        |
| alpha-PVP           | 232.2 -> 91.0 | 4/27/2018 1:04 PM | 5.484 | 166   | 26.56    | _   232.2 ->  | -> 77.1 | 121    | 0.40     | a        | alpha-PVP-d8           | 240.2 -> 91.1 | 5.482 | 831184 | L        |
| Alprazolam          | 309.1 -> 281  | 4/27/2018 1:04 PM | 6 063 | 15277 | 106.6    | 309.1 ->      | 205     | 134    | 0.68     | A        | Alprazolam-D5          | 314.1 -> 286  | 6.244 | 561309 | L        |
| Amphetamine         | 136,1 -> 91.1 | 4/27/2018 1:04 PM | 4.814 | 8659  | Infinity | _   136.1 ->  | 119     |        | _        | Ā        | Amphetamine-D11        | 147.2 -> 130  | 4.834 | 11560  | L        |
| Bupropion           | 240,1 -> 184  | _                 | 5.706 | 337   | 2 48     | 240.1 ->      | 131     |        |          | m        | Bupropion-D9           | 249.2 -> 185  | 5.665 | 188583 | L        |
| Carisoprodol        | 261.2 -> 176  |                   |       |       |          | _   261.2 ->  | 55.3    |        | _        | Ŭ        | Carisoprodol-D7        | 268.2 -> 183  | 2.867 | 98064  | _        |
| Citalopram          | <b>^</b>      | _                 | 5.875 | 236   | 1 09     | 7 325.2 ->    | 262     | _      | _        | Ö        | Citalopram-D6          | 331.2 -> 109  | 5.895 | 543925 | L        |
| Clonazepam          | 316,1 -> 269  | $\overline{}$     | 6 243 | 688   | 8.36     | _   316.1 ->  | 213     |        | _        | O        | Clonazepam-D4          | 320.1 -> 217  | 080.9 | 72202  | A        |
| Codeine             | 300.2 -> 215  | 4/27/2018 1:04 PM | 5,331 | 255   | 0 70     | 300.2 ->      | 165     | 232    | 9.64     | ŭ        | Codeine-D6             | 306.2 -> 218  | 5.207 | 68303  | _        |
| Cyclobenzaprine     | 276,2 -> 214  | 4/27/2018 1:04 PM | 6.191 | 276   | 4 49     | _   276.2 ->  | 231     | 437    | 75.02    | 0        | Cyclobenzaprine-D3     | 279.2 -> 215  | 6.169 | 524995 | _        |
| Dextromethorphan    | 272.2 -> 171  | 4/27/2018 1:04 PM | 5.947 | 325   | 0.26     | _ 272.2 ->    | 147     | 283    | 6.02   F | ĭ        | Dextromethorphan-D3    | 275.2 -> 171  | 5.927 | 329406 | L        |
| Dextrorphan         | 258.2 -> 157  | 4/27/2018 1:04 PM | 5.481 | 292   | 2.43     | _   258.2 ->  | 133     | 193    | 4.55     | Ŏ        | Dextrorphan-D3         | 261.2 -> 157  | 5.399 | 331570 |          |
| Diazepam            | 285.1 -> 193  | 4/27/2018 1:04 PM |       |       | _        | 285.1 ->      | 153     | _      | _        |          | Diazepam-D5            | 290.1 -> 198  | 6.491 | 278975 | L        |
| Dihydrocodeine      | 302.2 -> 198  | 4/27/2018 1:04 PM | 5.003 | 43    | 141      | _ 302.2 ->    | 128     |        | _        |          | Dihydrocodeine-D6      | 308.2 -> 202  | 5.002 | 137192 | _        |
| Diphenhydramine     | 256.2 -> 167  | 4/27/2018 1:04 PM | 6 072 | 242   | 1 97     | _   256.2 ->  | 152     | 103    | 0.50     |          | Diphenhydramine-D3     | 259.2 -> 167  | 5.868 | 18013  | L        |
| Doxylamine          | 271.2 -> 182  | 4/27/2018 1:04 PM | 5.561 | 192   | 1.28     | _ 271.2 ->    | 167     |        | _        | ĭ        | Doxylamine-D5          | 276.2 -> 187  | 5.539 | 493807 | L        |
| EDDP                | 279.2 -> 235  | 4/27/2018 1:04 PM | 5.946 | 721   | 134.07   | _ 279.2 ->    | 250     | 684    | 48.90    | EL       | EDDP-D3                | 282.2 -> 235  | 5.905 | 197572 | L        |
| Fentanyl            | 337.2 -> 105  | 4/27/2018 1:04 PM | 6.016 | 38    | 0 43     | 337.2 ->      | 188     |        | _        | FE       | Fentanyl-D5            | 342.3 -> 105  | 5.955 | 13728  | L        |
| Fluoxetine          | 310.1 -> 44.3 | 4/27/2018 1:04 PM | 5 920 | 1228  | 3.15     | 310.1 ->      | 148     | 225    | 0.50     | 正        | Fluoxetine-D6          | 316.2 -> 44.3 | 6,101 | 19301  | L        |
| Hydrocodone         | 300.2 -> 198  | 4/27/2018 1:04 PM | 5.434 | 526   | 1 67     | 300.2 ->      | 128     | _      |          | Í        | Hydrocodone-D6         | 306.2 -> 202  | 5.393 | 295479 | L        |
| Hydromorphone       | 286.2 -> 184  | 4/27/2018 1:04 PM | 4 742 | 425   | 0 04     | _ 286.2 ->    | 157     | 47 1(  | 101.11   | Í        | Hydromorphone-D6       | 292.2 -> 185  | 4.842 | 90952  | L        |
| Ketamine            | 238.1 -> 125  | 4/27/2018 1:04 PM |       |       |          | 238.1 ->      | 220     | _      |          | 조        | Ketamine-D4            | 242.1 -> 129  | 5.564 | 823961 | _        |
| Meprobamate         | 219.1 -> 158  | 4/27/2018 1:04 PM | 5.485 | 165   | 1 92     | 4             | 97.1    | 382    | 141      | Σ        | Meprobamate-D7         | 226.2 -> 165  | 5.402 | 11261  |          |
| Methadone           | 310.2 -> 265  | 4/27/2018 1:04 PM | 6.224 | 281   | 0 75     | <b>^</b>      | 105     |        | _        | Σ        | Methadone-D9           | 319.3 -> 268  | 6.202 | 12928  | 니        |
| Methamphetamine     | 150.1 -> 91.1 | 4/27/2018 1:04 PM | 5.077 | 21614 | Infinity | <b>^</b>      | 119     |        | _        | Σ        | Methamphetamine-D11    | 161.2 -> 97.1 | 5.016 | 154064 | L        |
| Morphine            | 286.2 -> 201  | 4/27/2018 1:04 PM |       |       |          | _ 286.2 ->    | 165     |        | _        | Σ        | Morphine-D6            | 292.2 -> 152. | 4.539 | 1856   | <u>_</u> |
| Naloxone            | 328.2 -> 309  | 4/27/2018 1:04 PM | 5.509 | 72    | 0 40     | 328.2 ->      | 211     |        | _        | ž        | Naloxone-D5            | 333.2 -> 315  | 5.468 | 149136 | L        |
| Naltrexol           | ^ l           | _                 | 5 325 | 13848 | 14.47    |               | 308     |        |          | ž        | Naltrexol-D3           | 347.2 -> 329  | 5.079 | 220430 | Ц        |
| Naltrexone          | 342.2 -> 324  | 4/27/2018 1:04 PM | 5.305 | 258   | 103.95   | 342.2 ->      | 55.3    |        | _        | ž        | Naltrexone-D3          | 345.2 -> 327  | 5.304 | 447587 | Ц        |
| Norbuprenorphine    | 414,3 -> 101  | _                 |       |       |          | 4             | 57.3    | _      |          | ž        | Norbuprenorphine-D3    | 417.3 -> 101  | 5.688 | 12150  |          |
| Nordiazepam         | 271.1 -> 140  | _                 | 6 192 | 178   | 1 04     | _   271.1 ->  | 208 1   | 134    | 1 80     | ž        | Nordiazepam-D5         | 276.1 -> 140  | 6.333 | 285373 | _        |
| Norfentanyl         | 233.2 -> 84.2 | 4/27/2018 1:04 PM | 5.340 | 187   | 0.64     | 4             | 55.3    | 254 Ir | Infinity | ž        | Norfentanyl-D5         | 238.2 -> 84.2 | 5.320 | 921452 | L        |
| Norhydrocodone      | 286.2 -> 199  | 4/27/2018 1:04 PM | 5.047 | 173   | 1 53     | _ 286.2 ->    | 171     | _      | =        | ž        | Norhydrocodone-D3      | 289.2 -> 202  | 5.025 | 75821  | 니        |
| Noroxycodone        | 302.1 -> 284  | 4/27/2018 1:04 PM | 4.841 | 80    | 41.51    | 7 302.1 ->    | 186     | _      | _        | ž        | Noroxycodone-D3        | 305.2 -> 287  | 4.942 | 151606 | L        |
| O-desmethyl-tramad  | -             | 4/27/2018 1:04 PM | 4.971 | 5263  | 1 02     | _   250.2 ->  | 42.3    | 107    | 0 40     | Ó        | O-desmethyl-tramadol   | 256.2 -> 64.3 | 4.951 | 10562  | L        |
| Oxazepam            | 287.1 -> 240  | 4/27/2018 1:04 PM |       |       | _        | _   287.1 ->  | 268     | _      | _        | Ô        | Oxazepam-D5            | 292.1 -> 246  | 6.146 | 530688 | _        |
| Oxycodone           | 316.2 -> 298  | 4/27/2018 1:04 PM | 5 063 | 947   | 9.75     | _ 316.2 ->    | 241     | 108    | 0.43     | 0        | Oxycodone-D6           | 322.2 -> 304  | 5.165 | 278248 | L        |
| Oxymorphone         | 302.1 -> 284  | 4/27/2018 1:04 PM | 4.537 | 298   | 0.77     | 302.1 ->      | 227     | _      | _        | 0        | Oxymorphone-D3         | 305.2 -> 287  | 4.496 | 620875 | L        |
| Phentermine         | 150.1 -> 65.2 | 4/27/2018 1:04 PM |       |       |          | 150.1 ->      | 133     |        | _        | à        | Phentermine-D5         | 155.2 -> 96.2 | 5.158 | 313728 | 4        |
| Promethazine        | 285.1 -> 86.2 | 4/27/2018 1:04 PM |       |       |          | _   285.1 ->  | 71.3    | _      | _        | ď        | Promethazine-D3        | 288.2 -> 89.2 | 6.167 | 14582  |          |
| Quetiapine          | 384.2 -> 253  | 4/27/2018 1:04 PM | 6.258 | 70    | 0.58     | 384.2 ->      | 221     | 128    | 0 66     | ď        | Quetiapine-D8          | 392.2 -> 226  | 6.236 | 330273 | L        |
| Sertraline          | 306.1 -> 158  | 4/27/2018 1:04 PM | 6.449 | 368   | 1.22     | _   306.1 ->  | 275  1  | 110    | 3.22     | Š        | Sertraline-D3          | 309.1 -> 275  | 6.387 | 671942 | L        |
| Sufentanil          | 387.2 -> 238  | 4/27/2018 1:04 PM | 6.277 | 1235  | 13.50    | _   387.2 ->  | 111     | 911    | 3.04     | <u>σ</u> | Sufentanil-D5          | 392 2 -> 238  | 17769 | 557892 | L        |
|                     |               |                   |       |       |          |               |         |        |          |          | division of the second |               | 7.57  |        |          |

| Compound Memod | pome          | p i negative  | <b>a</b> | o i negative mesuits | Kesuits  | Quaimer I M Quaimer I Resul     | чиаше | I Hesni  | Bomernod  | DO                           | 2     | IS ID Mesuits |   |
|----------------|---------------|---|----------|----------------------|----------|---------------------------------|-------|----------|---|------------------------------|-------|---------------|---|
| Name           | Transition    | Acq. Date-Time                                      | RT       | Resp.                | N/S      | MtTransition Area S/N MI        | Area  | SN       | // Name   | Transition                   | R     | Resp.         | 1 |
| Tramadol       | 264.2 -> 58.3 | 264.2 -> 58.3   4/27/2018 1:04 PM   5.419   - 11588 | 5.419    | 11588                | 835.86   | _ 264.2 -> 43.3                 | 665   | 110.23 F | 835.86  7 264.2 -> 43.3 665 110.23  7 Tramadol-13C-D3 | 268.2 -> 58.3 5.419 21139    | 5.419 | 21139         | 1 |
| Trazodone      | 372.2 -> 176  | 372.2 -> 176   4/27/2018 1:04 PM   6.441            | 6.441    | 3241                 | Infinity | Infinity     372.2 -> 148   224 | 224   | 0.48     | 0.48   Trazodone-D6                                   | 378.2 -> 182 6.380 11518     | 6.380 | 11518         | 1 |
| Venlafaxine    | 278.2 -> 58.3 | 278.2 -> 58.3   4/27/2018 1:04 PM                   |          |                      | _        | _ 278.2 -> 260                  |       | -        | - Venlafaxine-D6                                      | 284.2 -> 64.3 5.660 951840   | 5.660 | 951840        | 1 |
| Zolpidem       | 308.2 -> 235  | 308.2 -> 235   4/27/2018 1:04 PM   5.982            | 5.982    | 173                  | 1.57     | 57 7 308.2 -> 263   129         | 129   |          | 187 [ Zolpidem-D6                                     | 314 2 1> 235   6 061   23479 | 6.061 | 23479         | 1 |

| +                                     |               | i                  | -     | 1      |            | -                 | _          | _           |             |                         |               |       | 4       |
|---------------------------------------|---------------|--------------------|-------|--------|------------|-------------------|------------|-------------|-------------|-------------------------|---------------|-------|---------|
| <u> </u>                              |               | Acq. Date-Time     | ī     | Kesp.  |            | MI Transition     | 4          | N/S         | Ī           | Name                    | Transition    | 몺     | Resp.   |
| 284.1 ->                              | 135           | 4/27/2018 12:54 P  | 5.550 | 62766  | 69.57      | 7 284.1 -> 93     | 93.2 9525  | 25 342.73   | L           | 7-aminoflunitrazepam-D7 | 291.2 -> 138  | 5.549 | 508033  |
| alpha-hydroxymidazolam   342.1 -> 324 | _             | 4/27/2018 12:54 P  | 6.254 | 126326 | Infinity   | 342.1 -> 2        | L)         | 220         | L           | alpha-hydroxymidazolam  | 1             | 6.233 | 588939  |
| 278.2 -> 91.2                         | $\overline{}$ | 4/27/2018 12:54 P  | 6.264 | 267629 | Infinity   | 7 278.2 -> 1      | 105 97811  | 11 43.05    | L           | Amitriptyline-D3        | 281.2 -> 91.2 | 6.263 | 656508  |
| 314.1 -> 271                          | _             | 4/27/2018 12:54 P  | 6.238 | 80390  | 234.33     | 314.1 -> 1        | 193 53660  | 50 174.82   | T<br>An     | Amitriptyline-D3        | 1.4           | 6.263 | 656508  |
| 290.1 -> 168                          | $\overline{}$ | 4/27/2018 12:54 P  | 5.202 | 28149  | 501.45     | 290,1 -> 1        | 105 8993   | 93 2541.46  | L           | Benzoylecgonine-D8      | 298.2 -> 171  | 5.181 | 8295    |
| 237.1 -> 193                          | $\overline{}$ | 4/27/2018 12:54 P  | 5.924 | 48091  | 9.95       | 7 <- 1.237.1 -> 1 | 194 2866.  | 5 63.02     | L           | Carbamazepine-13C6      | 243.1 -> 200  | 5.924 | 1662049 |
| 300.1 -> 227                          | -             | 4/27/2018 12:54 P  | 6.382 | 62280  | 19277.19   | 300.1 -> 2        | 282 64583  | 33 43140    | Ò           | Chlordiazepoxide-D5     | 305.1 -> 286  | 6.381 | 1126636 |
| 315.2 -> 86.2                         | -             | 4/27/2018 12:54 P  | 6.521 | 352145 | 151.68     | 315,2 -> 58       | 58.3 2031. | 1.017       | T<br>T      | Clomipramine-D3         | 318.2 -> 89.2 | 6,500 | 1122472 |
| 304.2 -> 182                          | _             | 4/27/2018 12:54 P  | 5.526 | 169815 | 46.38      | 304.2 -> 1        | 105 31678  | 36.38       |             | Cocaine-D3              | 307.2 -> 185  | 5.525 | 713165  |
| 267.2 -> 72.3                         | -             | 4/27/2018 12:54 P  | 6.205 | 375331 | 157.01     | 267.2 -> 44       | 44.3 1489. | 9 116.85    | L           | Desipramine-D3          | 270.2 -> 75.3 | 6.205 | 902372  |
| 280.2 -> 107                          | -             | 4/27/2018 12:54 P  | 000.9 | 75274  | 191.62     | 7 <- 280.2 -> 77  | 77.2 40071 | 71 20.03    | 匚           | Doxepin-D3              | 283.2 -> 107  | 5.999 | 197257  |
| 295.1 -> 267                          | $\overline{}$ | 4/27/2018 12:54 P  | 6.181 | 108707 | 319.50     | 295.1 -> 2        | 205 67911  | 11 326.64   |             | Estazolam-D5            | 300.1 -> 272  | 6.179 | 831114  |
| 314.1 -> 268                          | -             | 4/27/2018 12:54 P  | 6.217 | 137154 | 90.29      | 7 314.1 -> 2      | 239 35935  | 35 51.00    | L           | Flunitrazepam-D7        | 321.1 -> 245  | 6.196 | 52215   |
| 388.2 -> 315                          | -             | 4/27/2018 12:54 P  | 6.049 | 225070 | 225.93     | 7   388.2 -> 3    | 317. 29281 | 31 83.75    | L           | Zopiclone-D4            | 1             | 6.028 | 176563  |
| 281.2 -> 86.2                         |               | 4/27/2018 12:54 P  | 6.223 | 394087 | 123.96     | 281.2 -> 58       | 58.3 2265. | 5 116.42    | L           | Imipramine-D3           | 284.2 -> 61.3 | 6.222 | 1608225 |
| 205.1 ->                              | 91.2          | 4/27/2018 12:54 P. | 4.687 | 210    | 0.34       | 205.1 -> 1        | 78.        |             | L           | ocaine-D3               | 307.2 -> 185  | 5.525 | 713165  |
| 278.2 -> 91.2                         |               | 4/27/2018 12:54 P  | 5.918 | 225575 | 16.54      | 7   278.2 -> 1    | 117 1180   | 30 Infinity | 1>          | Meperidine-D4           | 252.2 -> 224  | 5.556 | 126656  |
| 180.1 ->                              | 163           | 4/27/2018 12:54 P  | 5.032 | 53038  | 12.76      | 180.1 -> 1        | 105 26272  |             | L           | MDA-D5                  | 185.1 -> 168  | 5.012 | 112081  |
| 208.1 -> 163                          |               | 4/27/2018 12:54 P  | 5.295 | 190826 | 45.21      | 208.1 -> 1        | 105 72315  | 15 26.54    | L           | MDEA-D6                 | 214.2 -> 166  | 5.274 | 645806  |
| 194.1 -> 163                          | -             | 4/27/2018 12:54 P  | 5.153 | 93207  | 54.58      | 194.1 -> 1        | 105 55129  | 29 54.96    | 匚           | MDMA-D6                 | 200.2 -> 166  | 5,153 | 23523   |
| 248.2 -> 220                          | _             | 4/27/2018 12:54 P  | 5.557 | 69540  | 51.86      | 248.2 -> 1        | 174. 56883 | 33 41.54    | L           | Meperidine-D4           | 252.2 -> 224  | 5.556 | 126656  |
| 234.2 -> 84.2                         |               | 4/27/2018 12:54 P  | 5.476 | 419294 | 114.73     | 7   234.2 -> 56   | 56.3 69391 | 91 40.51    | L           | Meperidine-D4           | 2             | 5.556 | 126656  |
| 268.2 -> 116                          | _             | 4/27/2018 12:54 P  | 5.430 | 30427  | 114.60     | 7   268.2 -> 56   | 56.3 32811 | 11 57.07    | L           | Meperidine-D4           | 252.2 -> 224  | 5.556 | 126656  |
| 326.1 -> 223                          | _             | 4/27/2018 12:54 P  | 6.418 | 33150  | 351.48     | 326.1 -> 2        | 249 31137  | 37 94.26    | 口           | Midazolam-D4            | 330.1 -> 295  | 6.417 | 561900  |
| 266.2 -> 195                          | _             | 4/27/2018 12:54 P  | 5.900 | 211441 | 123.61     | 7   266.2 -> 72   | 72.3 1602  | 2 92.35     | 匸           | Midazolam-D4            | 330.1 -> 295  | 6.417 | 561900  |
| 399.2 -> 174                          | _             | 4/27/2018 12:54 P  | 6.048 | 94363  | 241.87     | 7   399.2 -> 2    | 238 17583  | 33 40.43    |             | Carbamazepine-13C6      | 243.1 -> 200  | 5.924 | 1662049 |
| 234.1 -> 42.3                         |               | 4/27/2018 12:54 P  | 5.518 | 67914  | 54.83      | 234.1 -> 1        | 160 29258  | 58 380.93   | L           | Normeperidine-D4        | 238.2 -> 164  | 5.517 | 514469  |
| 326.2 -> 44.3                         |               | 4/27/2018 12:54 P  | 6.073 | 30512  | 82.58      | 326.2 -> 2        | 252. 9250  | 50 39.17    | L           | Norpropoxyphene-D5      | 331.2 -> 44.3 | 6.072 | 144820  |
| 264.2 -> 91.2                         |               | 4/27/2018 12:54 P  | 6.226 | 101179 | 35.82      | Ŷ                 | 233 63049  | 49 Infinity | <u>&gt;</u> | Nortriptyline-D3        | 1             | 6.245 | 493260  |
| 294.2 -> 184                          | -             | 4/27/2018 12:54 P  | 5.732 | 131442 | 532.61     | 294.2 -> 2        | 212 19171  |             | L           | Pentazocine-13C3        |               | 5.570 | 930624  |
| 286.2 -> 218                          | _             | 4/27/2018 12:54 P  | 5.571 | 137857 | 314.84     | 286.2 -> 41       | 41.3 67460 | 30 74.33    | L           | Pentazocine-13C3        | 289.2 -> 72.3 | 5.570 | 930624  |
| 349.0 -> 206                          | _             | 4/27/2018 12:54 P  | 6.293 | 53225  | 394.43     | 349.0 -> 1        | 183 76275  | 75 292.82   | 匚           | Phenazepam-D4           | 353.0 -> 183  | 6.293 | 35810   |
| 244.2 -> 86.2                         | $\overline{}$ | 4/27/2018 12:54 P  | 5.801 | 90722  | 57.04      | 7   244.2 -> 91.1 | .1 1169.   | 163.98      | 匸           | Phencydlidine-D5        | 249.2 -> 86.2 | 5.780 | 779509  |
| 253.1 -> 104                          | _             | 4/27/2018 12:54 P  | 5.840 | 6792   | 18.02      | 7   253.1 -> 1    | 182 7316   | 16 49.05    | L           | Phenytoin-D10           | 263.2 -> 192  | 5.820 | 39251   |
| 325.1 -> 271                          | _             | 4/27/2018 12:54 P  | 6.803 | 412345 | 181.48     | 7 325.1 -> 1      | 140 1400.  | 80.98       | 匸           | Prazepam-D5             | 330.1 -> 276  | 6.781 | 2259616 |
| 219.1 -> 91.2                         | _             | 4/27/2018 12:54 P  | 5.253 | 42230  | 7066.79    | 7   219.1 -> 1    | 162 36357  | 57 73.45    | 乚           | Prazepam-D5             | 330.1 -> 276  | 6.781 | 2259616 |
| 340.2 -> 58.3                         | _             | 4/27/2018 12:54 P  | 6.112 | 297880 | 144.93     | 340.2 -> 2        | 266 42635  | 35 126.72   | r<br>q      | Propoxyphene-D11        | 351.3 -> 277  | 060.9 | 131357  |
| 264.2 ->                              | 155.          | 4/27/2018 12:54 P. | 8.T45 | 12077  | (Infinity) | 264.2 -> 10       |            |             |             | ortriptyline-D3         | 267.2 -> 233_ | 6.245 | 493260  |
| 166.1 -> 148                          | -             | 4/27/2018 12:54 P  | 4.690 | 11135  | 53.03      | 7   166.1 -> 1    | 133 2632.  | 2 35.48     | 匸           | Pseudoephedrine-D3      | 169.1 -> 151  | 4.669 | 311858  |
| 222.2 ->                              | 107           | 4/27/2018 12:54 P  | 5.416 | 156679 | 42.47      | 7   222.2 -> 1    | 121 82918  | 18 27.27    | Ta Ta       | Tapentadol-D3           | 225.2 -> 107  | 5.416 | 645638  |
| 295.2 ->                              | 100           | 4/27/2018 12:54 P  | 6.322 | 395998 | 133.21     | 7   295.2 -> 58   | 58.3 2442. | 2 93.58     | L           | Trimipramine-D3         | 298.2 -> 103  | 6.322 | 2257473 |
| 455.3 -> 165                          | -             | 4/27/2018 12:54 P  | 6.088 | 364381 | 810.70     | 7 455.3 -> 1      | 150 1092.  | 2 1266.29   | 匚           | Trimipramine-D3         | 298.2 -> 103  | 6.322 | 2257473 |
| 306.1 -> 236                          |               | 4/27/2018 12:54 P  | 6.015 | 96323  | 16134.83   | 7   306.1 -> 2    | 264 1184   | 1_ 279.26   | 7           | Zalenlon-D4             | 2102 - 240    | 6 014 | 279190  |
| 7 000                                 |               |                    |       |        |            |                   |            |             | 7           | -1-indon                | 1             | 1     | 201017  |

# Did not evaluate levamisole or protriptyline.

| Name                   | Transition    | Acq. Date-Time                   | R         | Resp.  | N/S     | MI Tr         | Transition    | Area  | S/N MI |                  | Name                    | Transition    | RT    | Resp.  |
|------------------------|---------------|----------------------------------|-----------|--------|---------|---------------|---------------|-------|--------|------------------|-------------------------|---------------|-------|--------|
| 7-aminoflunitrazepam   | 284.1 -> 135  | 4/27/2018 1:33 PM                | 5.673     | 3766   | 5.60    | _ 284.        | 284.1 -> 93.2 | 414   | 1111   | 7-aminoflu       | 7-aminoflunitrazepam-D7 | 291.2 -> 138  | 5.549 | 507201 |
| alpha-hydroxymidazolam | 342.1 -> 324  | 4/27/2018 1:33 PM                | 6.254     | 56     | 0.26    | 342.          | 342.1 -> 203  | 48    | 86 0   | alpha-hyd        | alpha-hydroxymidazolam  | 346.1 -> 328  | 6.233 | 613414 |
| Amitriptyline          | 278.2 -> 91.2 | 4/27/2018 1:33 PM                | 6.386     | 3139   | 0.74    | 278.2         | .2 -> 105     | 2094  | 1 14   | Amitriptyline-D3 | ne-D3                   | 281.2 -> 91.2 | 6.263 | 765184 |
| Amoxapine              | 314.1 -> 271  | 4/27/2018 1:33 PM                | 6.238     | 619    | 1.20    | 314.          | 314.1 -> 193  | 8516  | 87.23  | Amitriptyline-D3 | ne-D3                   | 281,2 -> 91.2 | 6.263 | 765184 |
| Benzoylecgonine        | 290.1 -> 168  | 4/27/2018 1:33 PM                | 5.202     | 598    | 2.92    | _ 290.        | 290.1 -> 105  | 40    | 0 33   | Benzoyled        | Benzovlecqonine-D8      | 298.2 -> 171  | 5.201 | 9209   |
| Carbamazepine          | 237.1 -> 193  | 4/27/2018 1:33 PM                | 5 435     | 4018   | 2.70    | _ 237.        | 237.1 -> 194  |       |        | Carbamaz         | Carbamazepine-13C6      | 243.1 -> 200  | 5.924 | 17257  |
| Chlordiazepoxide       | 300.1 -> 227  | 4/27/2018 1:33 PM                | 6.362     | 4419   | 16.77   | 300           | 300.1 -> 282  |       | -      | Chlordiaze       | Chlordiazepoxide-D5     | 305.1 -> 286  | 6.361 | 924252 |
| Clomipramine           | 315.2 -> 86.2 | 4/27/2018 1:33 PM                | 6 3 3 9 9 | 1121   | 1.51    | 315           | 315.2 -> 58.3 |       |        | Clomipramine-D3  | nine-D3                 | 318.2 -> 89.2 | 6.480 | 13233  |
| Cocaine                | 304.2 -> 182  | 4/27/2018 1:33 PM                |           |        |         | 304           | 304.2 -> 105  |       |        | Cocaine-D3       | 33                      | 307.2 -> 185  | 5.525 | 752021 |
| Desipramine            | 267.2 -> 72.3 | 4/27/2018 1:33 PM                | 6.245     | 2824   | 1 96    | _ 267.        | 267.2 -> 44.3 | 7169  | 5.93   | _ Desipramine-D3 | ne-D3                   | 270.2 -> 75.3 | 6 185 | 922375 |
| Doxepin                | 280.2 -> 107  | 4/27/2018 1:33 PM                | 6.163     | 984    | 1 65    | _ 280         | 280.2 -> 77.2 | 11229 | 281    | - Doxebin-D3     | 33                      | 283.2 -> 107  | 5 999 | 210399 |
| Estazolam              | 295.1 -> 267  | -                                | 6.140     | 91     | 0 18    | 295.          | 295.1 -> 205  | 36    | 0.54   | Estazolam-D5     | -D5                     | 300.1 -> 272  | 6.159 | 10359  |
| Flunitrazepam          | 314.1 -> 268  |                                  | 6.238     | 2475   | 173     | 314           | 314.1 -> 239  |       |        | Flunitrazepam-D7 | pam-D7                  | 321.1 -> 245  | 6.196 | 57295  |
| Flurazepam             | 388.2 -> 315  | -                                | 6.171     | 180    | 5.81    | 388.          | 388.2 -> 317  |       |        | Zopiclone-D4     | -D4                     | 393.1 -> 244  | 6.028 | 154849 |
| Imipramine             | 281.2 -> 86.2 | 4/27/2018 1:33 PM                | 6.283     | 4463   | 2.05    | _ 281.        | 281.2 -> 58.3 | 2928  | 0.65   | Imipramine-D3    | e-D3                    | 284.2 -> 61.3 | 6.222 | 17033  |
| Levamisole             | 205.1 -> 91.2 | 4/27/2018 1:33 PM                | 4.646     | 156    | 0 95    | 7 205.        | 205.1 -> 178  | 159   | 0.34   | Cocaine-D3       | 33                      | 307.2 -> 185  | 5.525 | 752021 |
| Maprotiline            | 278.2 -> 91.2 | 4/27/2018 1:33 PM                |           |        |         | 278.          | 278.2 -> 117  |       |        | Meperidine-D4    | e-D4                    | 252.2 -> 224  | 5.536 | 143433 |
| MDA                    | 180.1 -> 163  | 4/27/2018 1:33 PM                | 4.992     | 633    | 0 48    | 180           | 180.1 -> 105  | 322   | 0 44   | MDA-D5           |                         | 185.1 -> 168  | 5.032 | 104255 |
| MDEA                   | 208.1 -> 163  | 4/27/2018 1:33 PM                |           |        |         | _ 208.        | 208.1 -> 105  |       | _      | MDEA-D6          |                         | 214.2 -> 166  | 5.295 | 633794 |
| MDMA                   | 194.1 -> 163  | 4/27/2018 1:33 PM                | 5.173     | 1299   | 0 63    | 194           | 194.1 -> 105  | 1388  | 1 00   | MDMA-D6          |                         | 200.2 -> 166  | 5,153 | 25429  |
| Meperidine             | 248.2 -> 220  | 4/27/2018 1:33 PM                | 5.557     | 912364 | 106.36  | 248.          | 248.2 -> 174  | 7488  | 130.85 | Meperidine-D4    | e-D4                    | 252.2 -> 224  | 5.536 | 143433 |
| Methylphenidate        | 234.2 -> 84.2 | 4/27/2018 1:33 PM                |           |        |         | 234           | 234,2 -> 56.3 |       | -      | Meperidine-D4    | e-D4                    | 252.2 -> 224  | 5.536 | 143433 |
| Metoprolol             | 268.2 -> 116  | _                                | 5.430     | 353234 | 1779.79 | 268.          | 268.2 -> 56.3 | 3752  | 130.40 | Meperidine-D4    | e-D4                    | 252.2 -> 224  | 5.536 | 143433 |
| Midazolam              | 326.1 -> 223  | _                                | 6.418     | 307    | 1.16    | 326.          | 326.1 -> 249  |       | _      | Midazolam-D4     | n-D4                    | 330.1 -> 295  | 6.397 | 640752 |
| Mirtazapine            | 266.2 -> 195  | _                                | 5 677     | 510    | 0 67    | 7 266.        | 266.2 -> 72.3 | 1886  | 1 76   | Midazolam-D4     | n-D4                    | 330.1 -> 295  | 6.397 | 640752 |
| Mitragynine            | 399.2 -> 174  | 4/27/2018 1:33 PM                | 6 493     | 262    | 2.27    | 399.          | 399,2 -> 238  |       |        | - Carbamaz       | Carbamazepine-13C6      | 243.1 -> 200  | 5.924 | 17257  |
| Normeperidine          | 234.1 -> 42.3 | 4/27/2018 1:33 PM                | 5.497     | 893    | 0 65    | 7 234         | 234.1 -> 160  | 35    | 0 18   | Normeperidine-D4 | idine-D4                | 238.2 -> 164  | 5.517 | 526863 |
| Norpropoxyphene        | 326.2 -> 44.3 | 4/27/2018 1:33 PM                | 6.011     | 118    | 45.49   | 326.          | 326.2 -> 252  |       |        | Norpropo         | Norpropoxyphene-D5      | 331.2 -> 44.3 | 6.072 | 151959 |
| Nortriptyline          | 264.2 -> 91.2 | 4/27/2018 1:33 PM                | 6.307     | 1223   | 080     | 7 264.        | 264.2 -> 233  | 250   | 1.15   | Nortriptyline-D3 | ле-D3                   | 267.2 -> 233  | 6.225 | 496120 |
| Ondansetron            | 294.2 -> 184  | _                                | 5.732     | 490    | 1.63    | _ 294.        | 294,2 -> 212  |       | _      | Pentazocine-13C3 | ne-13C3                 | 289.2 -> 72.3 | 5.570 | 992576 |
| Pentazocine            | 286.2 -> 218  | 4/27/2018 1:33 PM                | 5.672     | 49     | 0.25    | _ 286.        | 286.2 -> 41.3 | 347   | 0.85   | Pentazocine-13C3 | ne-13C3                 | 289.2 -> 72.3 | 5.570 | 992576 |
| Phenazepam             | 349.0 -> 206  | 4/27/2018 1:33 PM                | 6.233     | 1347   | 7.52    | 349.          | 349.0 -> 183  | 335   | 3 17   | Phenazepam-D4    | am-D4                   | 353.0 -> 183  | 6.273 | 33144  |
| Phencyclidine          | 244.2 -> 86.2 | 4/27/2018 1:33 PM                | 5.882     | 704    | 2 02    | _ 244.        | 244.2 -> 91.1 | 5047  | 2.41   | Phencydlidine-D5 | dine-D5                 | 249.2 -> 86.2 | 5.801 | 805620 |
| Phenytoin              | 253.1 -> 104  | 4/27/2018 1:33 PM                | 6 086     | 217    | 091     | _ 253.        | 253.1 -> 182  | 709   | 3.22   | Phenytoin-D10    | -D10                    | 263.2 -> 192  | 5.820 | 51427  |
| Prazepam               | 325.1 -> 271  | 4/27/2018 1:33 PM                |           |        |         | 325.          | 325.1 -> 140  |       |        | Prazepam-D5      | -D5                     | 330.1 -> 276  | 6.740 | 23939  |
| Primidone              | 219.1 -> 91.2 | 4/27/2018 1:33 PM                |           |        |         | _ 219.        | 219.1 -> 162  |       |        | Prazepam-D5      | -D5                     | 330.1 -> 276  | 6.740 | 23939  |
| Propoxyphene           | 340.2 -> 58.3 | 4/27/2018 1:33 PM                | 6.051     | 225    | 0.57    | 340           | 340,2 -> 266  | 20    |        | Propoxyphene-D11 | nene-D11                | 351.3 -> 277  | 060'9 | 142015 |
| Protriptyline          | 264.2 -> 155  | 4/27/2018 1:33 PM                | 6.186     | 486    | 23.67   | <b>7</b> 264. | 264.2 -> 161  |       |        | Nortriptyline-D3 | ле-D3                   | 267.2 -> 233  | 6.225 | 496120 |
| Pseudoephedrine        | 166.1 -> 148  | 4/27/2018 1:33 PM                | 5 155     | 1360   | 0.32    | _   166.      | 166.1 -> 133  | 495   | 0 77   | - Pseudoep       | Pseudoephedrine-D3      | 169.1 -> 151  | 4.689 | 311910 |
| Tapentadol             | 222.2 -> 107  | _                                | 5.416     | 1002   | 0.75    | _ 222.        | 222.2 -> 121  |       | -      | Tapentadol-D3    | ol-D3                   | 225,2 -> 107  | 5.416 | 730892 |
| Trimipramine           | 295.2 -> 100  | _                                | 6.464     | 1481   | 0 68    | 295.          | 295.2 -> 58.3 | 468   | 3.81   | Trimipramine-D3  | ine-D3                  | 298.2 -> 103  | 6.302 | 25914. |
| Verapamil              | 455.3 -> 165  | 4/27/2018 1:33 PM                | 6.169     | 61     | 0.41    | 455.          | 455.3 -> 150  |       |        | Trimipramine-D3  | ine-D3                  | 298.2 -> 103  | 6.302 | 25914  |
| Zaleplon               | 306.1 -> 236  | 4/27/2018 1:33 PM                | 6 300     | 1256   | 2.40    | 306.          | 306.1 -> 264  | 631   | 1 15   | Zaleplon-D4      | 74                      | 310.2 -> 240  | 6.014 | 282485 |
| Zopiclone              | 389.1 -> 244  | 389.1 -> 244   4/27/2018 1:33 PM | 6.028     | 757    | 0 53    | 389           | 389.1 -> 216  | 328   | 5.71   | Zopiclone-D4     | -D4                     | 393.1 -> 244  | 6.028 | 154849 |

|                        |               | į                                | 1       | 1     |         |                   |         | Т     |       |                         |               | COLORES |         |
|------------------------|---------------|----------------------------------|---------|-------|---------|-------------------|---------|-------|-------|-------------------------|---------------|---------|---------|
| Name                   | Iransition    | Acq. Date-Time                   | RT      | Resp. | S/N MI  | I Transition      | Area    | S/N   | Ξ     | Name                    | Transition    | R       | Resp.   |
| 7-aminoflunitrazepam   | 284.1 -> 135  | 4/27/2018 1:14 PM                | 5.530   | 188   | 1.86    | 284.1 -> 93.2     |         |       | L     | 7-aminoflunitrazepam-D7 | 291.2 -> 138  | 5.549   | 640211  |
| alpha-hydroxymidazolam | 342,1 -> 324  | .   4/27/2018 1:14 PM            | 6.274   | 419   | 0.87    | 342.1 -> 203      | . 133   | 0.91  | L     | alpha-hydroxymidazolam- | 346.1 -> 328  | 6.253   | 606133  |
| Amitriptyline          | 278.2 -> 91.2 | 4/27/2018 1:14 PM                | 6.426   | 8244  | 0 97    | 278.2 -> 105.     | 1593    | 1 00  | L     | Amitriptyline-D3        | ^             | 6.283   | 719341  |
| Amoxapine              | 314.1 -> 271  | . [4/27/2018 1:14 PM             | 6.278   | 808   | 0.66    | 314.1 -> 193.     | 10119   | 49.35 | 匸     | Amitriptyline-D3        | 281.2 -> 91.2 | 6.283   | 719341  |
| Benzoylecgonine        | 290.1 -> 168  | 4/27/2018 1:14 PM                | 5.222   | 153   | 0.54    | 290.1 -> 105      | . 145   | 0.49  | L     | Benzoylecgonine-D8      | 298.2 -> 171_ | 5.201   | 9512    |
| Carbamazepine          | 237.1 -> 193  | .   4/27/2018 1:14 PM            | 6 2 2 9 | 2049  | 0.21    | 237.1 -> 194      | 4821    | 0 45  | 匚     | Carbamazepine-13C6      | 243.1 -> 200  | 5.924   | 17808   |
| Chlordiazepoxide       | 300.1 -> 227  | 4/27/2018 1:14 PM                | 6.402   | 4562  | 4903.35 | 300.1 -> 282.     |         |       | L     | Chlordiazepoxide-D5     | 305.1 -> 286  | 6.381   | 12218.  |
| Clomipramine           | 315.2 -> 86.2 | 4/27/2018 1:14 PM                | 6.602   | 231   | 0.41    | 315.2 -> 58.3     |         |       | L     | Clomipramine-D3         | 318.2 -> 89.2 | 6.500   | 12491   |
| Cocaine                | 304.2 -> 182  | 4/27/2018 1:14 PM                |         |       | -       | 304.2 -> 105.     |         |       | 匸     | Cocaine-D3              | 307.2 -> 185  | 5.525   | 756587  |
| Desipramine            | 267.2 -> 72.3 | 4/27/2018 1:14 PM                | 6.245   | 4230  | 3.81    | 7 267.2 -> 44.3   | 6564    | 4 94  | 匸     | Desipramine-D3          | 270.2 -> 75.3 | 6.205   | 977345  |
| Doxepin                | 280.2 -> 107  | . 4/27/2018 1:14 PM              | 5 856   | 171   | 0.25    | 7 280.2 -> 77.2   | 1393    | 1.29  | L     | Doxepin-D3              | 283.2 -> 107_ | 5.999   | 219209  |
| Estazolam              | 295.1 -> 267  | . 4/27/2018 1:14 PM              | 6.201   | 209   | 1.39    | 295.1 -> 205      | . 160   | 1.08  | AXC   | Estazolam-D5            | 300.1 -> 272  | 6.179   | 927326  |
| Flunitrazepam          | 314.1 -> 268  |                                  | 6.238   | 3372  | 1 62    | 314.1 -> 239.     | .   521 | 0 44  |       | Flunitrazepam-D7        | 321.1 -> 245  | 6.216   | 53414   |
| Flurazepam             | 388,2 -> 315  | 4/27/2018 1:14 PM                | 6,151   | 225   | 1 64    | [ 388.2 -> 317.   |         |       | 匸     | Zopiclone-D4            | 393.1 -> 244  | 6.028   | 140547  |
| Imipramine             | 281.2 -> 86.2 | 4/27/2018 1:14 PM                | 6.283   | 3914  | 1 69    | Ą                 | 2268    | 1 66  | L     | Imipramine-D3           | 284.2 -> 61.3 | 6.242   | 17260.  |
| Levamisole             | 205.1 -> 91.2 | 4/27/2018 1:14 PM                | 4 849   | 912   | 06'0    | 205.1 -> 178.     |         |       |       | Cocaine-D3              | 307.2 -> 185  | 5.525   | 756587  |
| Maprotiline            | 278.2 -> 91.2 | 4/27/2018 1:14 PM                | 6,103   | 9445  | 1 02    | [ 278.2 -> 117.   | . 243   | 0.78  |       | Meperidine-D4           | 252.2 -> 224  | 5.556   | 140685  |
| MDA                    | 180.1 -> 163  | 4/27/2018 1:14 PM                | 5.194   | 1142  | 1.27    | 180.1 -> 105.     | . 530   | 0.78  |       | MDA-D5                  | 185.1 -> 168  | 5.032   | 106672  |
| MDEA                   | 208.1 -> 163  | 4/27/2018 1:14 PM                | 5.275   | 388   | 0.43    | [ 208.1 -> 105.   | . 57    | 0.25  | L     | MDEA-D6                 | 214.2 -> 166  | 5.295   | 630829  |
| MDMA                   | 194.1 -> 163  | 4/27/2018 1:14 PM                | 4 809   | 364   | 0.57    | 194.1 -> 105      | . 327   | 99 0  | L     | MDMA-D6                 | 200.2 -> 166  | 5.153   | 25249   |
| Meperidine             | 248.2 -> 220  | -                                | 5.536   | 066   | 1.41    | 248.2 -> 174      |         | 0.43  | L     | Meperidine-D4           | 252.2 -> 224  | 5.556   | 140685  |
| Methylphenidate        | 234.2 -> 84.2 |                                  | 5.599   | 910   | 0.54    | [ 234.2 -> 56.3   | 452     | 0.46  |       | Meperidine-D4           | 252.2 -> 224  | 5.556   | 140685  |
| Metoprolol             | 268.2 -> 116  | $\overline{}$                    | 5.266   | > 266 | 27.98   | 268.2 -> 56.3     | 2060    | 3.92  |       | Meperidine-D4           | 252.2 -> 224  | 5.556   | 140685  |
| Midazolam              | 326.1 -> 223  | -                                | 6 762   | 40    | 0.55    | 326.1 -> 249.     | . 50    | 0 77  | L     | Midazolam-D4            | 330.1 -> 295  | 6.417   | 585689  |
| Mirtazapine            | 266.2 -> 195  | -                                |         |       | _       | 266.2 -> 72.3     |         |       | 匚     | Midazolam-D4            | 330.1 -> 295  | 6.417   | 585689  |
| Mitragynine            | 399.2 -> 174  | 4/27/2018 1:14 PM                | 6 655   | 361   | 2.79    | 399.2 -> 238.     |         |       |       | Carbamazepine-13C6      | 243.1 -> 200  | 5.924   | 17808   |
| Normeperidine          | 234.1 -> 42.3 | 4/27/2018 1:14 PM                | 5.559   | 145   | 0.50    | [ 234.1 -> 160    | . 126   | 0.45  |       | Normeperidine-D4        | 238.2 -> 164  | 5.517   | 531927  |
| Norpropoxyphene        | 326.2 -> 44.3 | 4/27/2018 1:14 PM                | 6.194   | 96    | 0.52    | 326.2 -> 252.     |         |       |       | Norpropoxyphene-D5      | 331.2 -> 44.3 | 6.072   | 150258  |
| Nortriptyline          | 264.2 -> 91.2 | 4/27/2018 1:14 PM                | 6.327   | 2811  | 2.25    | [ 264.2 -> 233.   | 623     | 1 79  | 匚     | Nortriptyline-D3        | 267.2 -> 233  | 6.245   | 518272  |
| Ondansetron            | 294.2 -> 184  | =                                | 5.732   | 263   | 0.94    | 294.2 -> 212.     |         |       |       | Pentazocine-13C3        | 289.2 -> 72.3 | 5.591   | 963949  |
| Pentazocine            | 286.2 -> 218  | 4/27/2018 1:14 PM                | 5.631   | 416   | 1 48    | [ 286.2 -> 41.3   | 361     | 1 52  | area. | Pentazocine-13C3        | 289.2 -> 72.3 | 5.591   | 963949  |
| Phenazepam             | 349.0 -> 206  | 4/27/2018 1:14 PM                | 6,253   | 1254  | 9.18    | 349.0 -> 183.     | 300     | 1 80  | 匚     | Phenazepam-D4           | 353.0 -> 183  | 6.293   | 43240   |
| Phencyclidine          | 244.2 -> 86.2 | -                                | 5.903   | 362   | 0.92    | 244.2 -> 91.1     | 1903    | 1 90  |       | Phencydlidine-D5        | 249.2 -> 86.2 | 5.801   | 790309  |
| Phenytoin              | 253.1 -> 104  | -                                | 6 390   | 128   | 15.55   | 253.1 -> 182.     | 366     | 2.51  | L     | Phenytoin-D10           | 263.2 -> 192  | 5.820   | 31566   |
| Prazepam               | 325.1 -> 271  | 4/27/2018 1:14 PM                | 6.134   | 462   | 0.50    | [ 325.1 -> 140.   | . 180   | 0.71  |       | Prazepam-D5             | 330.1 -> 276  | 6.822   | 23542   |
| Primidone              | 219.1 -> 91.2 | 4/27/2018 1:14 PM                | 5.232   | 389   | 2.13    | [ 219.1 -> 162.   | . 224   | 1.15  | 匚     | Prazepam-D5             | 330.1 -> 276  | 6.822   | 23542.  |
| Propoxyphene           | 340.2 -> 58.3 | 4/27/2018 1:14 PM                | 6.173   | 1889  | 06 0    | 340.2 -> 266.     | . 234   | 69 0  | 匸     | Propoxyphene-D11        | 351.3 -> 277  | 060'9   | 143344  |
| Protriptyline          | 264.2 -> 155  | . 4/27/2018 1:14 PM              |         |       | _       | 264.2 -> 161.     |         |       | 匚     | Nortriptyline-D3        | 267.2 -> 233  | 6.245   | 518272  |
| Pseudoephedrine        | 166.1 -> 148  | . 4/27/2018 1:14 PM              |         |       | _       | 166.1 -> 133.     |         |       |       | Pseudoephedrine-D3      | 169.1 -> 151  | 4.689   | 309231  |
| Tapentadol             | 222.2 -> 107  | . 4/27/2018 1:14 PM              |         |       | _       | [   222.2 -> 121. |         |       |       | Tapentadol-D3           | 225.2 -> 107  | 5.416   | 691812  |
| Trimipramine           | 295.2 -> 100  | .   4/27/2018 1:14 PM            | 6.322   | 1469  | 1 35    | 295.2 -> 58.3     | 1570    | 0.97  | 匸     | Trimipramine-D3         | 298.2 -> 103  | 6.322   | 23684   |
| Verapamil              | 455.3 -> 165  | 4/27/2018 1:14 PM                | 6.108   | 1232  | 5.14    | 455.3 -> 150.     | . 385   | 2.65  |       | Trimipramine-D3         | 298.2 -> 103  | 6.322   | 23684   |
| Zaleplon               | 306.1 -> 236  | 4/27/2018 1:14 PM                | 6 320   | 887   | 308.65  | 306.1 -> 264.     | 1786    | 6.04  | 匸     | Zaleplon-D4             | 310.2 -> 240  | 6.035   | 246860  |
| Zopiclone              | 389.1 -> 244  | 389 1 -> 244   4/27/2018 1·14 PM | 6 109   | 546   | 152     | 2001 - 216        |         |       | l     | 7                       |               |         | Tr Tor. |