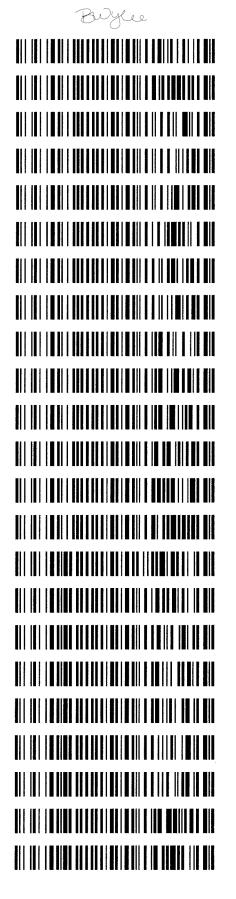
#### Worklist: 1743

| LAB CASE   | ITEM | TASK ID | DESCRIPTION                  |
|------------|------|---------|------------------------------|
| C2017-0822 | 1    | 85925   | AM 28 Blood Multi-Drug Quant |
| C2017-0845 | 1    | 85926   | AM 28 Blood Multi-Drug Quant |
| C2017-0855 | 1    | 85927   | AM 28 Blood Multi-Drug Quant |
| C2017-0856 | 1    | 85928   | AM 28 Blood Multi-Drug Quant |
| C2017-0857 | 1    | 85929   | AM 28 Blood Multi-Drug Quant |
| C2017-0891 | 1    | 85930   | AM 28 Blood Multi-Drug Quant |
| C2017-0895 | 1    | 85931   | AM 28 Blood Multi-Drug Quant |
| C2017-0905 | 1    | 85932   | AM 28 Blood Multi-Drug Quant |
| C2017-0917 | 1    | 85933   | AM 28 Blood Multi-Drug Quant |
| C2017-0919 | 1    | 85934   | AM 28 Blood Multi-Drug Quant |
| C2017-0920 | 1    | 85935   | AM 28 Blood Multi-Drug Quant |
| C2017-0945 | 1    | 85936   | AM 28 Blood Multi-Drug Quant |
| C2017-0957 | 1    | 85937   | AM 28 Blood Multi-Drug Quant |
| C2017-0994 | 1    | 85947   | AM 28 Blood Multi-Drug Quant |
| M2017 1799 | 1    | 85938   | AM 28 Blood Multi Drug Quant |
| M2017-1841 | 1    | 85939   | AM 28 Blood Multi-Drug Quant |
| M2017-1888 | 1    | 85940   | AM 28 Blood Multi-Drug Quant |
| M2017-1917 | 1    | 85941   | AM 28 Blood Multi-Drug Quant |
| M2017-1918 | 1    | 85942   | AM 28 Blood Multi-Drug Quant |
| M2017-2047 | 1    | 85946   | AM 28 Blood Multi-Drug Quant |
| M2017-2049 | 5    | 85943   | AM 28 Blood Multi-Drug Quant |
| M2017-2121 | 2    | 85944   | AM 28 Blood Multi-Drug Quant |
| M2017-2187 | 2    | 85945   | AM 28 Blood Multi-Drug Quant |

reviewed 6/6/16



#### Worklist: 1734

| LAB CASE   | ITEM | TASK ID | DESCRIPTION                  |
|------------|------|---------|------------------------------|
| M2017-1918 | 1    | 85292   | AM 25/AM 26 Blood MultiDrug/ |
| M2017-2006 | 1    | 84881   | AM 25/AM 26 Blood MultiDrug/ |
| M2017-2047 | 1    | 85412   | AM 25/AM 26 Blood MultiDrug/ |
| M2017-2049 | 5    | 84883   | AM 25/AM 26 Blood MultiDrug/ |
| M2017-2121 | 2    | 84621   | AM 25/AM 26 Blood MultiDrug/ |
| M2017-2187 | 2    | 84894   | AM 25/AM 26 Blood MultiDrug/ |
| M2017-2344 | 5    | 85414   | AM 25/AM 26 Blood MultiDrug/ |

# 

ISP Forensic Services: Loxicology Discipline

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

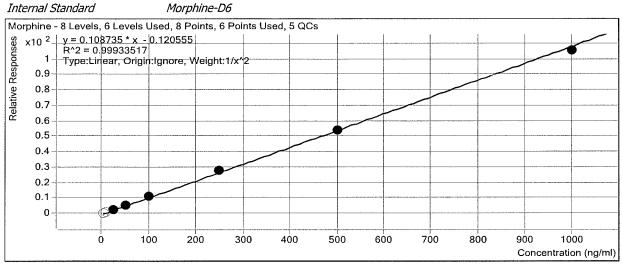
| Date:  | 5-30-17 Analyst: Anne Nord   |
|--|--|
| PRE-AN   | ALYTIC   |
| Pl   | ate Lot# 0498367 Plate Exp. 1/26/2018  |
| <ul><li>✓ 1.</li></ul>   | Ensure all solutions are within expiration date.   |
|  | Mobile Phase A: <b>0.5M Ammonium Hydroxide</b>   |
|  | 5mM Amm Form +0.01% FA   |
|  | Mobile Phase B: Ethyl Acetate  |
|  | 0.01% FA in MeOH<br>20% Methanol Column: Agilent 120 EC-C18 (2.1x 100-4um)   |
| √ 2.   | Check levels of mobile phases and needle wash and refill as necessary. Ensure waste is not full.   |
| $\frac{1}{3}$  | Begin mobile phase flow and allow system to equilibrate for approx. 30 minutes.  |
| $\frac{J}{J}$ 4.   | Create worklist. Data path name: $53/17 M dq \rho_1$   |
| ANALY  | $\frac{1}{2} = \frac{1}{2} = \frac{1}$ |
| $\sqrt{1}$   | Remove standards plate, blood, and samples from cold storage. Allow to reach room temperature.   |
| $\sim$ 2.  | Pipette 250 $\mu$ L blood in wells of analytical (standards) plate. Mix via aspirate and dispense.   |
|  | <ul> <li>Blank blood for locations containing standards/QCs and internal standards</li> </ul>  |
|  | <ul> <li>Sample blood for locations containing only internal standards</li> </ul>  |
| <b>√</b> 3.  | Place on shaking incubator at ambient temp., 900rpm for 15 minutes. Shaker ID 66759  |
|  | Pipette 250 $\mu$ L 0.5M ammonium hydroxide buffer in wells of analytical (standards) plate.   |
| $\sim$ 5.  | Place on shaking incubator at ambient temp., 900rpm for 15 minutes.  |
| $\overline{\sqrt{6}}$  | Transfer <b>300 <math>\mu</math>L of blood+base</b> mixture to corresponding wells of SLE+ plate.  |
| $ \begin{array}{c c} \hline \checkmark \\ \hline \checkmark \\ \hline \checkmark \\ \hline \checkmark \\ \hline \hline \\ \hline \\$ | Apply positive pressure for approx. 4 seconds (or until no liquid remains on top of sorbent).<br>(Load at 85-100PSI- Selector to Right) Wait 5 min.  |
| <u> </u>   | Add <b>900 <math>\mu</math>L ethyl acetate</b> and allow to flow for 5 minutes under gravity.  |
| <u> </u>   | Apply positive pressure for approx. 15 seconds. (~10-15 PSI – Selector to the left)  |
| $\sqrt{10}$  | Add 900 $\mu$ L ethyl acetate and allow to flow for 5 minutes under gravity.   |
| $\sqrt{11}$  | Apply positive pressure for approx. 15 seconds. ( $\sim 10-15 PSI - Selector to the left$ )  |
| 12.  | Remove plate containing eluate. Place on <b>SPE Dry</b> and evaporate to dryness at approx. 35°C.  |
| 12.  | SPE Dry ID 66819   |
| $\int$ 13.   | Reconstitute in 100 µL 20% MeOH and seal plate with foil. Place in autosampler and run worklist.   |
| POST   | ANALYTIC   |
| . / 1.   | Open quantitation software and create a new quantitation batch.  |
| ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~   | Batch name: <u>53117 mdg Pla</u> , <u>53117 mdg Plb</u>  |
| ∼_ 2.  | Make any necessary changes. Limit curves based on validated linear ranges.   |
| $\frac{\sqrt{2}}{\sqrt{3}}$ $\frac{2}{\sqrt{4}}$   | Were all appropriate standards used in the curve for each analyte? Y / N<br>Are $r^2$ values $\geq 0.98$ for each analyte? Y / N   |
| ✓ <sup>4.</sup>  | For unknown samples, are the response ratios for each analyte within $\pm$ 20% of the average ratios of the standards and QC's? Y / N  |
| 5.   | Did all QCs pass for each analyte? Y/N   |
| $\sqrt{6.}$  | Central File Packet to include: $\checkmark$ LIMS Worklist: $\checkmark$ Method Checklist $\checkmark$ Calibration and Control Reports   |
| COMME  |  |
|  | hydromorphone was not evaluated - retention time shifts too gra  |
|  | nor suprenorphine was not evaluated poor signal to noise.  |
|  | Lincar range adjustments   |
|  | Lorazepen minimum 25   |
|  | Methamphetamine minimum 10   |
|  | Murphine minimum 25  |
|  | Morphine minimum 25<br>Norhydro codone minimum 10  |

#### Batch Data Path D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin Analyst Name 6/1/2017 3:51 PM ISP TOX Last Calib Update

#### Target Compound

Internal Standard

#### Morphine



| Sample            | Level | Enabled                 | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-------------------------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     |                         | 5        | 5.6        | 112.4    |
| a cal 2-10ng/mL   | 2     |                         | 10       | 10.4       | 103.6    |
| a QC 10           | 2     | $\mathbf{\nabla}$       | 10       | 7.8        | 78.2     |
| a cal 3-25ng/mL   | 3     | $\mathbf{N}$            | 25       | 24.7       | 98.9     |
| a cal 4-50ng/mL   | 4     | $\mathbf{\nabla}$       | 50       | 50.8       | 101.6    |
| a cal 5-100ng/mL  | 5     | $\mathbf{\nabla}$       | 100      | 100.5      | 100.5    |
| a qc 100          | 5     | $\mathbf{M}$            | 100      | 101.2      | 101.2    |
| a qc 100 2nd      | 5     | $\mathbf{\nabla}$       | 100      | 97.2       | 97.2     |
| a cal 6-250ng/mL  | 6     | $\square$               | 250      | 256.7      | 102.7    |
| a QC 250          | 6     | $\mathbf{\overline{M}}$ | 250      | 244.0      | 97.6     |
| a cal 7-500ng/mL  | 7     | Z                       | 500      | 497.4      | 99.5     |
| a cal 8-1000ng/mL | 8     | V                       | 1000     | 968.4      | 96.8     |
| a qc 1000         | 8     | $\square$               | 1000     | 1053.8     | 105.4    |

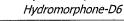


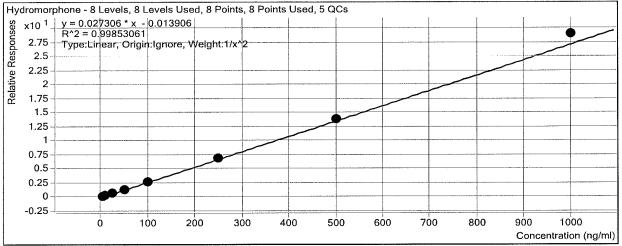
| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |              |         |  |  |
|-------------------|--|--------------|---------|--|--|
| Last Calib Update | 6/1/2017 3:51 PM   | Analyst Name | ISP TOX |  |  |

#### Target Compound

Hydromorphone







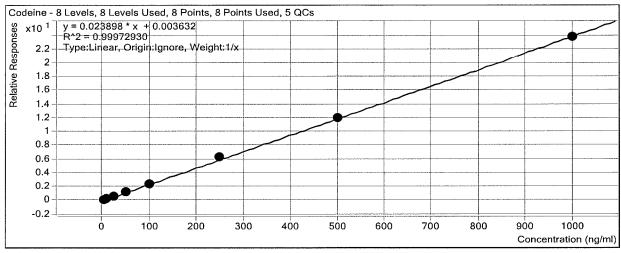
| Sample            | Level | Enabled           | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-------------------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     | $\square$         | 5        | 5.1        | 102.3    |
| a cal 2-10ng/mL   | 2     | ☑                 | 10       | 9.8        | 97.6     |
| a QC 10           | 2     | $\square$         | 10       | 11.5       | 115.5    |
| a cal 3-25ng/mL   | 3     | Ø                 | 25       | 23.8       | 95.4     |
| a cal 4-50ng/mL   | 4     | $\square$         | 50       | 49.3       | 98.5     |
| a cal 5-100ng/mL  | 5     | $\square$         | 100      | 99.0       | 99.0     |
| a qc 100          | 5     | $\square$         | 100      | 107.4      | 107.4    |
| a qc 100 2nd      | 5     | $\square$         | 100      | 107.7      | 107.7    |
| a cal 6-250ng/mL  | 6     | $\mathbf{\nabla}$ | 250      | 247.9      | 99.1     |
| a QC 250          | 6     | $\square$         | 250      | 266.0      | 106.4    |
| a cal 7-500ng/mL  | 7     | $\mathbf{\nabla}$ | 500      | 510.3      | 102.1    |
| a cal 8-1000ng/mL | 8     | $\square$         | 1000     | 1060.4     | 106.0    |
| a qc 1000         | 8     | $\square$         | 1000     | 1111.0     | 111.1    |

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |              |         |  |  |
|-------------------|--|--------------|---------|--|--|
| Last Calib Update | 6/1/2017 3:51 PM   | Analyst Name | ISP TOX |  |  |

#### ound Codeine

Target Compound Internal Standard

Codeine-D6



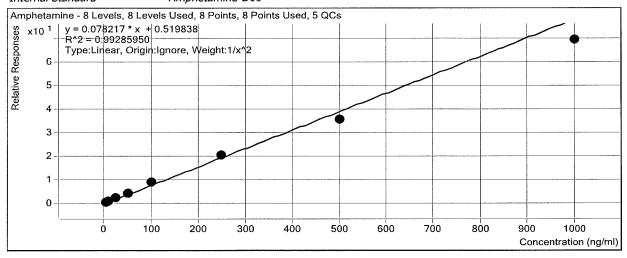
| Sample            | Level | Enabled   | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-----------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     | $\square$ | 5        | 5.1        | 101.2    |
| a cal 2-10ng/mL   | 2     | $\square$ | 10       | 10.0       | 100.0    |
| a QC 10           | 2     |           | 10       | 8.9        | 89.0     |
| a cal 3-25ng/mL   | 3     | ¥         | 25       | 24.7       | 98.9     |
| a cal 4-50ng/mL   | 4     | Ø         | 50       | 48.5       | 97.1     |
| a cal 5-100ng/mL  | 5     |           | 100      | 99.7       | 99.7     |
| a qc 100          | 5     | $\square$ | 100      | 91.0       | 91.0     |
| a qc 100 2nd      | 5     |           | 100      | 99.1       | 99.1     |
| a cal 6-250ng/mL  | 6     | M         | 250      | 259.3      | 103.7    |
| a QC 250          | 6     |           | 250      | 255.3      | 102.1    |
| a cal 7-500ng/mL  | 7     | Ø         | 500      | 501.7      | 100.3    |
| a cal 8-1000ng/mL | 8     | Ø         | 1000     | 991.0      | 99.1     |
| a qc 1000         | 8     | Ø         | 1000     | 1014.7     | 101.5    |



| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.b |              |         |  |
|-------------------|--|--------------|---------|--|
| Last Calib Update | 6/1/2017 3:51 PM                                       | Analyst Name | ISP TOX |  |

#### Target Compound Internal Standard

Amphetamine Amphetamine-D11



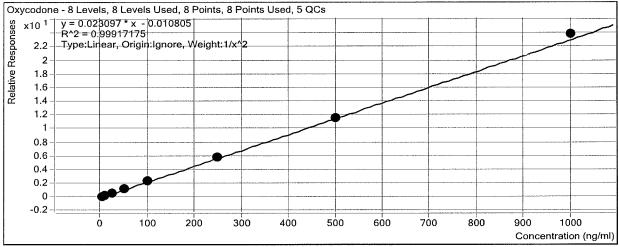
| Sample            | Level | Enabled           | Exp Conc | Final Conc | Accuracy          |
|-------------------|-------|-------------------|----------|------------|-------------------|
| a cal 1-5ng/mL    | 1     | $\square$         | 5        | 4.8        | 96.6              |
| a cal 2-10ng/mL   | 2     | $\square$         | 10       | 10.4       | 104.3             |
| a QC 10           | 2     | $\Box$            | 10       | 12.0       | 120.0             |
| a cal 3-25ng/mL   | 3     | $\square$         | 25       | 25.3       | 101.1             |
| a cal 4-50ng/mL   | 4     | $\square$         | 50       | 53.1       | 106.3             |
| a cal 5-100ng/mL  | 5     | $\square$         | 100      | 109.0      | 109.0             |
| a qc 100          | 5     | $\mathbf{\nabla}$ | 100      | 109.9      | 109.9             |
| a qc 100 2nd      | 5     | $\square$         | 100      | 118.7      | 118.7             |
| a cal 6-250ng/mL  | 6     | $\square$         | 250      | 258.3      | 103.3             |
| a QC 250          | 6     | $\square$         | 250      | 264.7      | 105. <del>9</del> |
| a cal 7-500ng/mL  | 7     | Ø                 | 500      | 455.7      | 91.1              |
| a cal 8-1000ng/mL | 8     | $\square$         | 1000     | 882.4      | 88.2              |
| a qc 1000         | 8     |                   | 1000     | 933.5      | 93.4              |

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |              |         |  |
|-------------------|--|--------------|---------|--|
| Last Calib Update | 6/1/2017 3:51 PM   | Analyst Name | ISP TOX |  |



Oxycodone





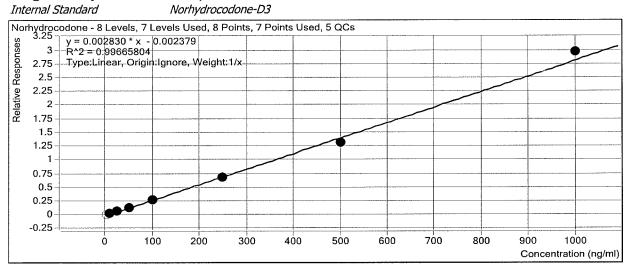
| Sample            | Level | Enabled   | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-----------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     | $\square$ | 5        | 5.1        | 101.5    |
| a cal 2-10ng/mL   | 2     | $\square$ | 10       | 9.9        | 99.0     |
| a QC 10           | 2     | $\square$ | 10       | 9.4        | 93.5     |
| a cal 3-25ng/mL   | 3     | $\square$ | 25       | 23.7       | 94.7     |
| a cal 4-50ng/mL   | 4     | $\square$ | 50       | 49.9       | 99.8     |
| a cal 5-100ng/mL  | 5     | $\square$ | 100      | 101.4      | 101.4    |
| a qc 100          | 5     | $\square$ | 100      | 91.9       | 91.9     |
| a qc 100 2nd      | 5     | $\square$ | 100      | 89.7       | 89.7     |
| a cal 6-250ng/mL  | 6     | $\square$ | 250      | 249.2      | 99.7     |
| a QC 250          | 6     | Ø         | 250      | 264.1      | 105.6    |
| a cal 7-500ng/mL  | 7     | М         | 500      | 503.8      | 100.8    |
| a cal 8-1000ng/mL | 8     | $\square$ | 1000     | 1031.2     | 103.1    |
| a qc 1000         | 8     | $\square$ | 1000     | 1053.3     | 105.3    |



| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |              |         |  |  |
|-------------------|--|--------------|---------|--|--|
| Last Calib Update | 6/1/2017 3:51 PM   | Analyst Name | ISP TOX |  |  |

#### Target Compound

Norhydrocodone Norhydrocodone-D3

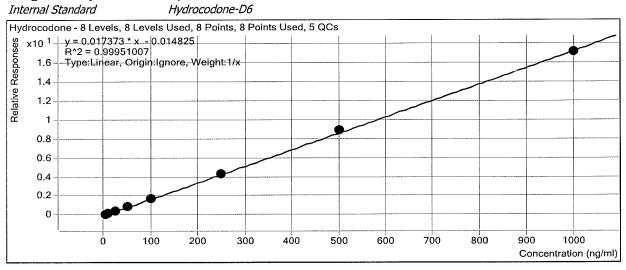


| Sample            | Level | Enabled           | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-------------------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     |                   | 5        | 5.5        | 109.7    |
| a cal 2-10ng/mL   | 2     | $\mathbf{\nabla}$ | 10       | 12.0       | 120.2    |
| a QC 10           | 2     | $\square$         | 10       | 11.4       | 114.4    |
| a cal 3-25ng/mL   | 3     | $\square$         | 25       | 23.0       | 91.8     |
| a cal 4-50ng/mL   | 4     | Ø                 | 50       | 48.9       | 97.9     |
| a cal 5-100ng/mL  | 5     | $\square$         | 100      | 96.3       | 96.3     |
| a qc 100          | 5     | $\square$         | 100      | 104.1      | 104.1    |
| a qc 100 2nd      | 5     | $\square$         | 100      | 102.0      | 102.0    |
| a cal 6-250ng/mL  | 6     |                   | 250      | 238.0      | 95.2     |
| a QC 250          | 6     | $\square$         | 250      | 265.3      | 106.1    |
| a cal 7-500ng/mL  | 7     | $\square$         | 500      | 468.8      | 93.8     |
| a cal 8-1000ng/mL | 8     | $\square$         | 1000     | 1048.0     | 104.8    |
| a qc 1000         | 8     | $\mathbf{\nabla}$ | 1000     | 1156.6     | 115.7    |

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |              |         |  |
|-------------------|--|--------------|---------|--|
| Last Calib Update | 6/1/2017 3:51 PM   | Analyst Name | ISP TOX |  |

#### Target Compound

Hydrocodone Hydrocodone-D6

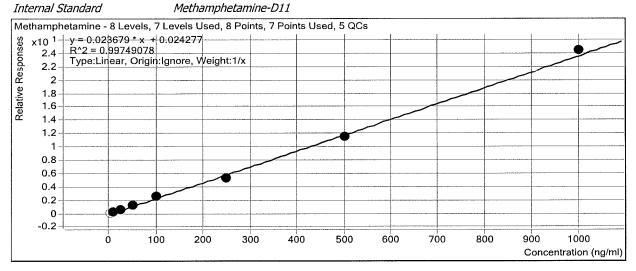


| Sample            | Level | Enabled           | Exp Conc | <b>Final Conc</b> | Accuracy |
|-------------------|-------|-------------------|----------|-------------------|----------|
| a cal 1-5ng/mL    | 1     | $\square$         | 5        | 5.5               | 110.9    |
| a cal 2-10ng/mL   | 2     | $\square$         | 10       | 9.5               | 94.9     |
| a QC 10           | 2     | $\mathbf{\Sigma}$ | 10       | 9.2               | 92.2     |
| a cal 3-25ng/mL   | 3     |                   | 25       | 23.0              | 91.8     |
| a cal 4-50ng/mL   | 4     | $\square$         | 50       | 51.7              | 103.5    |
| a cal 5-100ng/mL  | 5     | $\blacksquare$    | 100      | 97.2              | 97.2     |
| a qc 100          | 5     | $\square$         | 100      | 99.0              | 99.0     |
| a qc 100 2nd      | 5     |                   | 100      | 98.6              | 98.6     |
| a cal 6-250ng/mL  | 6     | $\square$         | 250      | 250.4             | 100.2    |
| a QC 250          | 6     | Ø                 | 250      | 254.4             | 101.7    |
| a cal 7-500ng/mL  | 7     | $\square$         | 500      | 513.5             | 102.7    |
| a cal 8-1000ng/mL | 8     | $\Box$            | 1000     | 989.2             | 98.9     |
| a qc 1000         | 8     |                   | 1000     | 959.8             | 96.0     |

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |              |         |  |
|-------------------|--|--------------|---------|--|
| Last Calib Update | 6/1/2017 3:51 PM   | Analyst Name | ISP TOX |  |
|                   |  |              |         |  |

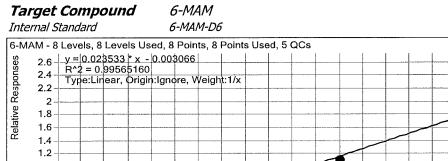
Target Compound

Methamphetamine



| Sample            | Level | Enabled           | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-------------------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     |                   | 5        | 5.6        | 111.0    |
| a cal 2-10ng/mL   | 2     | Ø                 | 10       | 10.9       | 108.8    |
| a QC 10           | 2     | $\square$         | 10       | 11.7       | 116.6    |
| a cal 3-25ng/mL   | 3     | $\square$         | 25       | 23.2       | 93.0     |
| a cal 4-50ng/mL   | 4     | $\square$         | 50       | 50.6       | 101.2    |
| a cal 5-100ng/mL  | 5     | $\square$         | 100      | 106.1      | 106.1    |
| a qc 100          | 5     | $\square$         | 100      | 109.9      | 109.9    |
| a qc 100 2nd      | 5     | $\square$         | 100      | 111.9      | 111.9    |
| a cal 6-250ng/mL  | б     | $\square$         | 250      | 225.4      | 90.1     |
| a QC 250          | 6     | $\square$         | 250      | 238.9      | 95.6     |
| a cal 7-500ng/mL  | 7     | $\mathbf{\nabla}$ | 500      | 488.7      | 97.7     |
| a cal 8-1000ng/mL | 8     | $\square$         | 1000     | 1030.1     | 103.0    |
| a qc 1000         | 8     | $\square$         | 1000     | 1060.1     | 106.0    |

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |              |         |  |
|-------------------|--|--------------|---------|--|
| Last Calib Update | 6/1/2017 3:51 PM   | Analyst Name | ISP TOX |  |



1. 0.8 0.6 0.4 0.2 0--0.2 45 50 55 60 65 70 75 80 85 95 100 105 -5 10 15 20 25 30 35 40 90 Ò 5 Concentration (ng/ml)

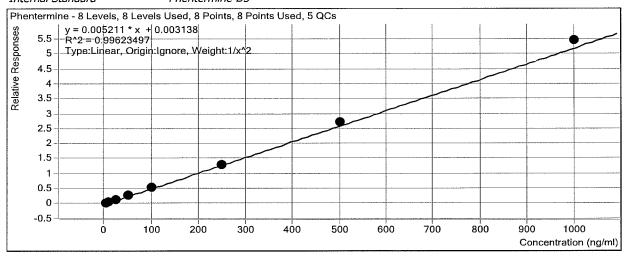
| Sample            | Level | Enabled           | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-------------------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     | Ø                 | 0.5      | 0.6        | 126.5    |
| a cal 2-10ng/mL   | 2     | $\square$         | 1        | 1.1        | 107.8    |
| a QC 10           | 2     | M                 | 1        | 1.0        | 101.6    |
| a cal 3-25ng/mL   | 3     | $\square$         | 2.5      | 2.3        | 91.8     |
| a cal 4-50ng/mL   | 4     | $\square$         | 5        | 4.4        | 88.8     |
| a cal 5-100ng/mL  | 5     |                   | 10       | 9.1        | 90.7     |
| a qc 100          | 5     | $\square$         | 10       | 9.1        | 90.6     |
| a qc 100 2nd      | 5     |                   | 10       | 9.3        | 93.4     |
| a cal 6-250ng/mL  | 6     |                   | 25       | 23.5       | 94.1     |
| a QC 250          | 6     | Ø                 | 25       | 23.8       | 95.2     |
| a cal 7-500ng/mL  | 7     | $\square$         | 50       | 47.2       | 94.5     |
| a cal 8-1000ng/mL | 8     | $\square$         | 100      | 105.7      | 105.7    |
| a qc 1000         | 8     | $\mathbf{\nabla}$ | 100      | 100.4      | 100.4    |



| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |              |         |  |
|-------------------|--|--------------|---------|--|
| Last Calib Update | 6/1/2017 3:51 PM   | Analyst Name | ISP TOX |  |

#### Target Compound Internal Standard

Phentermine Phentermine-D5



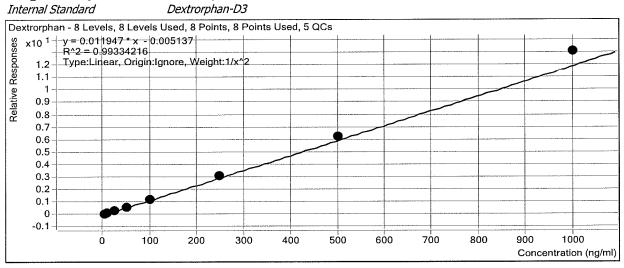
| Sample            | Level | Enabled           | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-------------------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     | Ø                 | 5        | 5.2        | 104.1    |
| a cal 2-10ng/mL   | 2     | Ø                 | 10       | 9.6        | 95.6     |
| a QC 10           | 2     | $\square$         | 10       | 9.9        | 98.7     |
| a cal 3-25ng/mL   | 3     | $\square$         | 25       | 22.3       | 89.2     |
| a cal 4-50ng/mL   | 4     | $\square$         | 50       | 50.3       | 100.6    |
| a cal 5-100ng/mL  | 5     |                   | 100      | 101.8      | 101.8    |
| a qc 100          | 5     | $\square$         | 100      | 103.9      | 103.9    |
| a qc 100 2nd      | 5     | Ø                 | 100      | 105.4      | 105.4    |
| a cal 6-250ng/mL  | 6     | $\square$         | 250      | 248.4      | 99.4     |
| a QC 250          | 6     | $\square$         | 250      | 264.3      | 105.7    |
| a cal 7-500ng/mL  | 7     | $\mathbf{\nabla}$ | 500      | 523.9      | 104.8    |
| a cal 8-1000ng/mL | 8     | $\square$         | 1000     | 1044.7     | 104.5    |
| a qc 1000         | 8     |                   | 1000     | 1106.7     | 110.7    |



| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |              |         |  |
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| Last Calib Update | 6/1/2017 3:51 PM   | Analyst Name | ISP TOX |  |

#### Target Compound

Dextrorphan Dextrorphan-D3

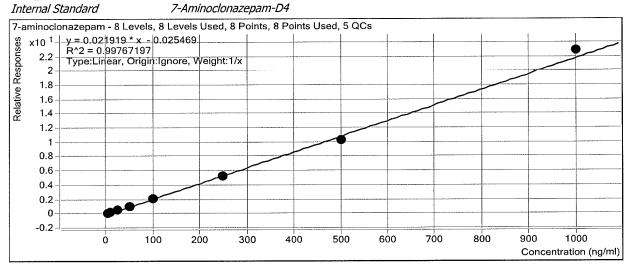


| Sample            | Level | Enabled           | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-------------------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     | $\square$         | 5        | 5.3        | 106.3    |
| a cal 2-10ng/mL   | 2     | $\square$         | 10       | 9.2        | 92.2     |
| a QC 10           | 2     | Ø                 | 10       | 9.3        | 92.9     |
| a cal 3-25ng/mL   | 3     | Ø                 | 25       | 22.4       | 89.5     |
| a cal 4-50ng/mL   | 4     | Ø                 | 50       | 48.1       | 96.3     |
| a cal 5-100ng/mL  | 5     | $\square$         | 100      | 98.0       | 98.0     |
| a qc 100          | 5     | Ø                 | 100      | 104.1      | 104.1    |
| a qc 100 2nd      | 5     |                   | 100      | 102.1      | 102.1    |
| a cal 6-250ng/mL  | 6     |                   | 250      | 258.5      | 103.4    |
| a QC 250          | 6     | $\mathbf{\nabla}$ | 250      | 261.6      | 104.6    |
| a cal 7-500ng/mL  | 7     | $\square$         | 500      | 524.9      | 105.0    |
| a cal 8-1000ng/mL | 8     | $\square$         | 1000     | 1093.5     | 109.4    |
| a qc 1000         | 8     |                   | 1000     | 1081.3     | 108.1    |

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |              |         |  |
|-------------------|--|--------------|---------|--|
| Last Calib Update | 6/1/2017 3:51 PM   | Analyst Name | ISP TOX |  |

#### Target Compound

7-aminoclonazepam 7-Aminoclonazepam-D4



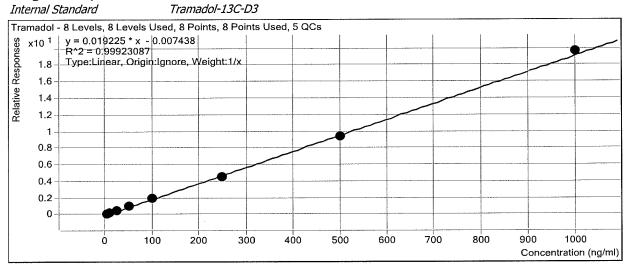
| Sample            | Level | Enabled   | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-----------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     | M         | 5        | 5.6        | 112.8    |
| a cal 2-10ng/mL   | 2     | $\square$ | 10       | 10.2       | 101.9    |
| a QC 10           | 2     | $\square$ | 10       | 10.1       | 101.4    |
| a cal 3-25ng/mL   | 3     | $\square$ | 25       | 24.1       | 96.5     |
| a cal 4-50ng/mL   | 4     | $\square$ | 50       | 48.0       | 96.0     |
| a cal 5-100ng/mL  | 5     |           | 100      | 98.5       | 98.5     |
| a qc 100          | 5     | Ø         | 100      | 101.9      | 101.9    |
| a qc 100 2nd      | 5     | Ø         | 100      | 102.9      | 102.9    |
| a cal 6-250ng/mL  | 6     |           | 250      | 239.3      | 95.7     |
| a QC 250          | 6     | Ø         | 250      | 270.1      | 108.0    |
| a cal 7-500ng/mL  | 7     | $\square$ | 500      | 471.5      | 94.3     |
| a cal 8-1000ng/mL | 8     |           | 1000     | 1042.7     | 104.3    |
| a qc 1000         | 8     |           | 1000     | 1025.0     | 102.5    |

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| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |              |         |  |
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Tramadol Tramadol-13C-D3



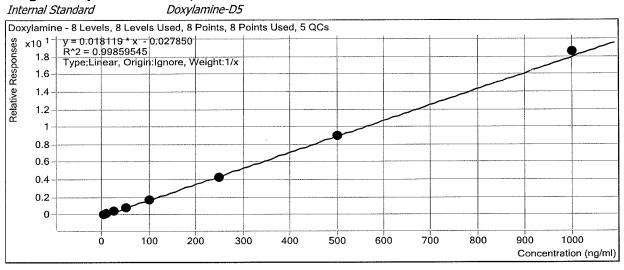
| Sample            | Level | Enabled           | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-------------------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     | $\mathbf{Y}$      | 5        | 5.3        | 106.1    |
| a cal 2-10ng/mL   | 2     | $\mathbf{V}$      | 10       | 9.9        | 98.5     |
| a QC 10           | 2     | $\square$         | 10       | 10.4       | 103.7    |
| a cal 3-25ng/mL   | 3     | $\square$         | 25       | 25.1       | 100.5    |
| a cal 4-50ng/mL   | 4     | $\square$         | 50       | 48.7       | 97.5     |
| a cal 5-100ng/mL  | 5     | $\square$         | 100      | 102.0      | 102.0    |
| a qc 100          | 5     | $\mathbf{\nabla}$ | 100      | 99.9       | 99.9     |
| a qc 100 2nd      | 5     | $\square$         | 100      | 95.1       | 95.1     |
| a cal 6-250ng/mL  | 6     | V                 | 250      | 238.3      | 95.3     |
| a QC 250          | 6     | $\square$         | 250      | 239.1      | 95.6     |
| a cal 7-500ng/mL  | 7     | $\square$         | 500      | 488.9      | 97.8     |
| a cal 8-1000ng/mL | 8     | $\mathbf{V}$      | 1000     | 1021.7     | 102.2    |
| a qc 1000         | 8     |                   | 1000     | 1126.5     | 112.7    |



| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |              |         |  |
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| Last Calib Update | 6/1/2017 3:51 PM   | Analyst Name | ISP TOX |  |

#### Target Compound

Doxylamine Doxylamine-D5



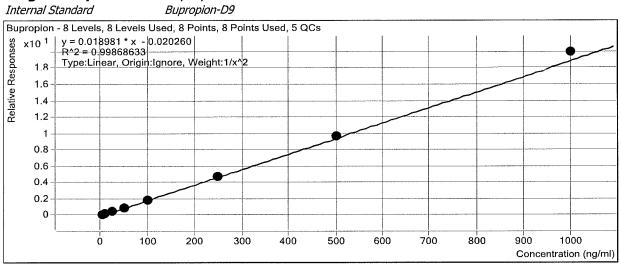
| Sample            | Level | Enabled           | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-------------------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     | Ø                 | 5        | 6.2        | 123.9    |
| a cal 2-10ng/mL   | 2     | Ø                 | 10       | 10.4       | 103.9    |
| a QC 10           | 2     | $\mathbf{\nabla}$ | 10       | 11.3       | 113.4    |
| a cal 3-25ng/mL   | 3     | $\square$         | 25       | 21.2       | 84.7     |
| a cal 4-50ng/mL   | 4     | $\square$         | 50       | 47.8       | 95.6     |
| a cal 5-100ng/mL  | 5     | $\square$         | 100      | 94.8       | 94.8     |
| a qc 100          | 5     | $\square$         | 100      | 103.0      | 103.0    |
| a qc 100 2nd      | 5     | $\square$         | 100      | 102.9      | 102.9    |
| a cal 6-250ng/mL  | 6     | $\square$         | 250      | 238.6      | 95.4     |
| a QC 250          | 6     | $\mathbf{\nabla}$ | 250      | 293.8      | 117.5    |
| a cal 7-500ng/mL  | 7     | $\square$         | 500      | 495.0      | 99.0     |
| a cal 8-1000ng/mL | 8     | Ø                 | 1000     | 1026.0     | 102.6    |
| a qc 1000         | 8     |                   | 1000     | 1287.8     | 128.8    |

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| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |              |         |  |  |
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| Last Calib Update | 6/1/2017 3:51 PM   | Analyst Name | ISP TOX |  |  |

### Target Compound

Bupropion Bupropion-D9

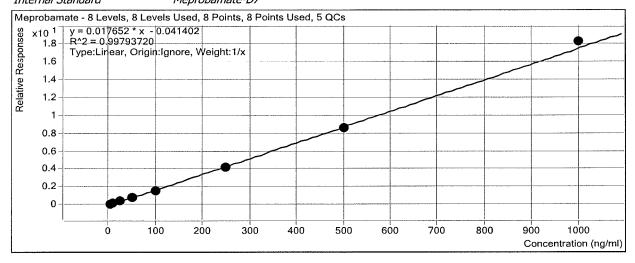


| Sample            | Level | Enabled           | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-------------------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     | $\mathbf{\nabla}$ | 5        | 5.0        | 100.2    |
| a cal 2-10ng/mL   | 2     | $\mathbf{\nabla}$ | 10       | 10.2       | 102.1    |
| a QC 10           | 2     | $\square$         | 10       | 10.5       | 105.5    |
| a cal 3-25ng/mL   | 3     | Ø                 | 25       | 23.9       | 95.4     |
| a cal 4-50ng/mL   | 4     | $\mathbf{M}$      | 50       | 48.7       | 97.4     |
| a cal 5-100ng/mL  | 5     |                   | 100      | 98.6       | 98.6     |
| a qc 100          | 5     | $\mathbf{N}$      | 100      | 101.7      | 101.7    |
| a qc 100 2nd      | 5     |                   | 100      | 96.5       | 96.5     |
| a cal 6-250ng/mL  | 6     |                   | 250      | 246.5      | 98.6     |
| a QC 250          | 6     |                   | 250      | 248.2      | 99.3     |
| a cal 7-500ng/mL  | 7     | $\mathbf{V}$      | 500      | 512.7      | 102.5    |
| a cal 8-1000ng/mL | 8     | $\square$         | 1000     | 1051.6     | 105.2    |
| a qc 1000         | 8     | $\mathbf{\nabla}$ | 1000     | 1109.7     | 111.0    |

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |              |         |  |
|-------------------|--|--------------|---------|--|
| Last Calib Update | 6/1/2017 3:51 PM   | Analyst Name | ISP TOX |  |

Target Compound Internal Standard

Meprobamate Meprobamate-D7



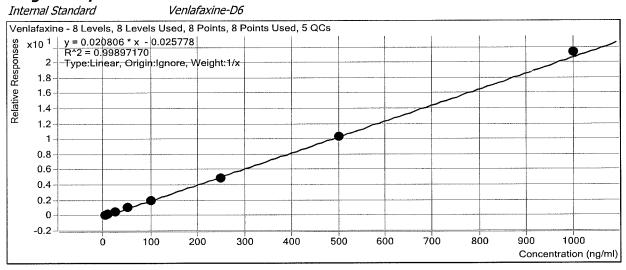
| Sample            | Level | Enabled                 | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-------------------------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     | $\mathbf{\nabla}$       | 5        | 5.6        | 111.9    |
| a cal 2-10ng/mL   | 2     | $\mathbf{\Sigma}$       | 10       | 11.3       | 113.5    |
| a QC 10           | 2     | $\blacksquare$          | 10       | 11.2       | 112.0    |
| a cal 3-25ng/mL   | 3     | $\square$               | 25       | 23.1       | 92.3     |
| a cal 4-50ng/mL   | 4     | $\mathbf{\overline{M}}$ | 50       | 47.7       | 95.4     |
| a cal 5-100ng/mL  | 5     | $\square$               | 100      | 91.1       | 91.1     |
| a qc 100          | 5     | $\square$               | 100      | 102.5      | 102.5    |
| a qc 100 2nd      | 5     | $\square$               | 100      | 100.1      | 100.1    |
| a cal 6-250ng/mL  | 6     | $\square$               | 250      | 236.5      | 94.6     |
| a QC 250          | 6     | $\square$               | 250      | 252.9      | 101.1    |
| a cal 7-500ng/mL  | 7     | $\square$               | 500      | 487.9      | 97.6     |
| a cal 8-1000ng/mL | 8     | $\square$               | 1000     | 1036.7     | 103.7    |
| a qc 1000         | 8     | $\square$               | 1000     | 1086.0     | 108.6    |



| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |              |         |  |
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#### Target Compound

Venlafaxine Venlafaxine-D6

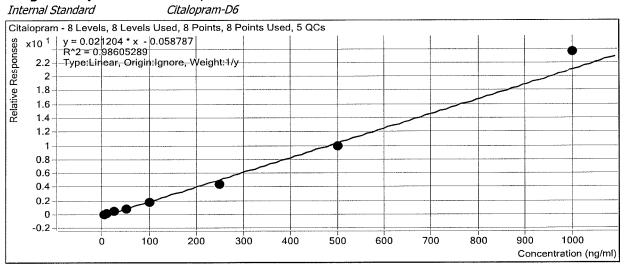


| Sample            | Level | Enabled   | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-----------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     | $\square$ | 5        | 5.4        | 107.3    |
| a cal 2-10ng/mL   | 2     | Ø         | 10       | 10.4       | 104.2    |
| a QC 10           | 2     | $\square$ | 10       | 10.1       | 101.3    |
| a cal 3-25ng/mL   | 3     | Ø         | 25       | 25.0       | 99.9     |
| a cal 4-50ng/mL   | 4     | $\square$ | 50       | 48.8       | 97.7     |
| a cal 5-100ng/mL  | 5     | $\square$ | 100      | 95.3       | 95.3     |
| a qc 100          | 5     | $\square$ | 100      | 93.4       | 93.4     |
| a qc 100 2nd      | 5     |           | 100      | 98.1       | 98.1     |
| a cal 6-250ng/mL  | 6     | $\Box$    | 250      | 235.3      | 94.1     |
| a QC 250          | 6     | Ø         | 250      | 247.1      | 98.8     |
| a cal 7-500ng/mL  | 7     | V         | 500      | 494.9      | 99.0     |
| a cal 8-1000ng/mL | 8     | M         | 1000     | 1024.8     | 102.5    |
| a qc 1000         | 8     |           | 1000     | 921.5      | 92.1     |

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |  |         |  |
|-------------------|--|--|---------|--|
| Last Calib Update | 6/1/2017 3:51 PM Analyst Name                                  |  | ISP TOX |  |
|                   |  |  |         |  |

#### Target Compound

Citalopram Citalopram-D6

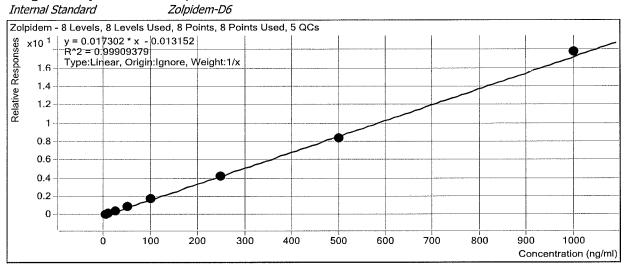


| Sample            | Level | Enabled      | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|--------------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     | $\mathbf{M}$ | 5        | 6.3        | 125.6    |
| a cal 2-10ng/mL   | 2     | M            | 10       | 10.4       | 104.4    |
| a QC 10           | 2     |              | 10       | 11.4       | 113.9    |
| a cal 3-25ng/mL   | 3     | $\square$    | 25       | 26.0       | 104.2    |
| a cal 4-50ng/mL   | 4     | Ø            | 50       | 44.7       | 89.4     |
| a cal 5-100ng/mL  | 5     | $\square$    | 100      | 84.9       | 84.9     |
| a qc 100          | 5     |              | 100      | 98.0       | 98.0     |
| a qc 100 2nd      | 5     |              | 100      | 97.4       | 97.4     |
| a cal 6-250ng/mL  | 6     |              | 250      | 209.3      | 83.7     |
| a QC 250          | 6     | $\square$    | 250      | 252.7      | 101.1    |
| a cal 7-500ng/mL  | 7     | Ø            | 500      | 470.7      | 94.1     |
| a cal 8-1000ng/mL | 8     | $\square$    | 1000     | 1112.9     | 111.3    |
| a qc 1000         | 8     |              | 1000     | 1001.5     | 100.2    |

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |              |         |  |
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| Last Calib Update | 6/1/2017 3:51 PM   | Analyst Name | ISP TOX |  |

#### Target Compound

Zolpidem Zolpidem-D6

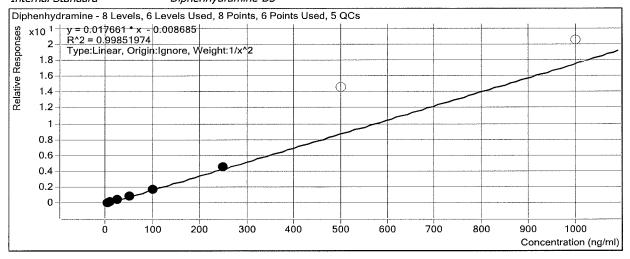


| Sample            | Level | Enabled   | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-----------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     | Ø         | 5        | 5.4        | 107.9    |
| a cal 2-10ng/mL   | 2     | $\square$ | 10       | 10.3       | 102.5    |
| a QC 10           | 2     | Ø         | 10       | 10.8       | 108.3    |
| a cal 3-25ng/mL   | 3     | $\square$ | 25       | 23.7       | 94.8     |
| a cal 4-50ng/mL   | 4     | $\square$ | 50       | 49.5       | 98.9     |
| a cal 5-100ng/mL  | 5     | $\square$ | 100      | 100.0      | 100.0    |
| a qc 100          | 5     | $\square$ | 100      | 104.2      | 104.2    |
| a qc 100 2nd      | 5     | $\square$ | 100      | 104.3      | 104.3    |
| a cal 6-250ng/mL  | 6     | Ø         | 250      | 241.0      | 96.4     |
| a QC 250          | 6     | $\square$ | 250      | 260.1      | 104.0    |
| a cal 7-500ng/mL  | 7     | $\square$ | 500      | 484.2      | 96.8     |
| a cal 8-1000ng/mL | 8     | $\square$ | 1000     | 1025.9     | 102.6    |
| a qc 1000         | 8     |           | 1000     | 1066.2     | 106.6    |

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |  |         |  |
|-------------------|--|--|---------|--|
| Last Calib Update | 6/1/2017 3:51 PM Analyst Name                                  |  | ISP TOX |  |
|                   |  |  |         |  |

#### Target Compound Internal Standard

Diphenhydramine Diphenhydramine-D3

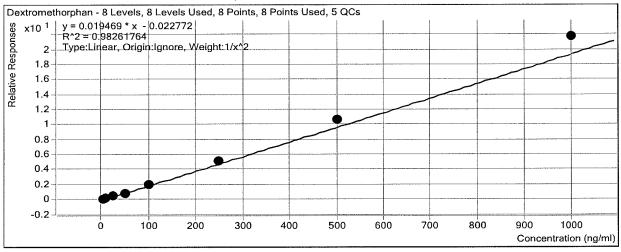


| Sample            | Level | Enabled           | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-------------------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     | $\square$         | 5        | 5.1        | 102.5    |
| a cal 2-10ng/mL   | 2     | $\mathbf{\nabla}$ | 10       | 9.6        | 95.9     |
| a QC 10           | 2     | $\square$         | 10       | 11.6       | 116.1    |
| a cal 3-25ng/mL   | 3     | $\mathbf{\nabla}$ | 25       | 24.4       | 97.7     |
| a cal 4-50ng/mL   | 4     | Ø                 | 50       | 49.4       | 98.8     |
| a cal 5-100ng/mL  | 5     | $\square$         | 100      | 100.7      | 100.7    |
| a qc 100          | 5     | $\square$         | 100      | 108.3      | 108.3    |
| a qc 100 2nd      | 5     | $\mathbf{\nabla}$ | 100      | 107.6      | 107.6    |
| a cal 6-250ng/mL  | 6     | $\square$         | 250      | 261.0      | 104.4    |
| a QC 250          | 6     | $\mathbf{N}$      | 250      | 263.0      | 105.2    |
| a cal 7-500ng/mL  | 7     |                   | 500      | 829.9      | 166.0    |
| a cal 8-1000ng/mL | 8     |                   | 1000     | 1160.9     | 116.1    |
| a qc 1000         | 8     | Ø                 | 1000     | 1165.3     | 116.5    |

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |  |  |  |  |
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| Last Calib Update | 6/1/2017 3:51 PM         Analyst Name         ISP TOX          |  |  |  |  |
| Target Compound   | Dextromethorphan   |  |  |  |  |

Internal Standard

Dextromethorphan-D3

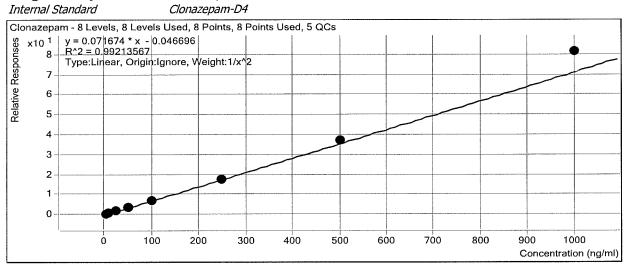


| Sample            | Level | Enabled           | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-------------------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     | $\mathbf{\nabla}$ | 5        | 5.5        | 110.1    |
| a cal 2-10ng/mL   | 2     | Ø                 | 10       | 8.5        | 84.6     |
| a QC 10           | 2     | $\mathbf{M}$      | 10       | 12.0       | 120.1    |
| a cal 3-25ng/mL   | 3     | $\mathbf{\nabla}$ | 25       | 23.7       | 94.9     |
| a cal 4-50ng/mL   | 4     | $\mathbf{M}$      | 50       | 41.1       | 82.2     |
| a cal 5-100ng/mL  | 5     | $\square$         | 100      | 101.9      | 101.9    |
| a qc 100          | 5     | Ø                 | 100      | 105.9      | 105.9    |
| a qc 100 2nd      | 5     | $\square$         | 100      | 99.0       | 99.0     |
| a cal 6-250ng/mL  | 6     |                   | 250      | 263.1      | 105.2    |
| a QC 250          | 6     | $\square$         | 250      | 278.1      | 111.3    |
| a cal 7-500ng/mL  | 7     | $\mathbf{\nabla}$ | 500      | 547.9      | 109.6    |
| a cal 8-1000ng/mL | 8     | $\mathbf{\nabla}$ | 1000     | 1114.0     | 111.4    |
| a qc 1000         | 8     | $\square$         | 1000     | 1153.3     | 115.3    |

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |              |         |  |
|-------------------|--|--------------|---------|--|
| Last Calib Update | 6/1/2017 3:51 PM   | Analyst Name | ISP TOX |  |

#### Target Compound

Clonazepam Clonazepam-D4



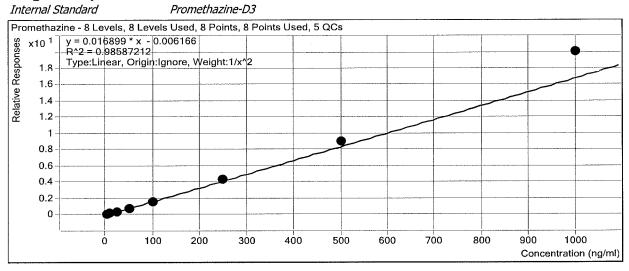
| Sample            | Level | Enabled           | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-------------------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     | $\square$         | 5        | 5.3        | 105.9    |
| a cal 2-10ng/mL   | 2     | $\square$         | 10       | 9.2        | 91.9     |
| a QC 10           | 2     | $\square$         | 10       | 9.8        | 98.0     |
| a cal 3-25ng/mL   | 3     | $\mathbf{M}$      | 25       | 23.7       | 94.9     |
| a cal 4-50ng/mL   | 4     | $\square$         | 50       | 45.2       | 90.5     |
| a cal 5-100ng/mL  | 5     | $\square$         | 100      | 100.1      | 100.1    |
| a qc 100          | 5     |                   | 100      | 95.6       | 95.6     |
| a qc 100 2nd      | 5     |                   | 100      | 93.0       | 93.0     |
| a cal 6-250ng/mL  | 6     | $\square$         | 250      | 248.2      | 99.3     |
| a QC 250          | 6     | $\mathbf{\nabla}$ | 250      | 239.3      | 95.7     |
| a cal 7-500ng/mL  | 7     | M                 | 500      | 519.0      | 103.8    |
| a cal 8-1000ng/mL | 8     | $\square$         | 1000     | 1136.3     | 113.6    |
| a qc 1000         | 8     |                   | 1000     | 976.1      | 97.6     |



| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |  |         |  |
|-------------------|--|--|---------|--|
| Last Calib Update | 6/1/2017 3:51 PM Analyst Name                                  |  | ISP TOX |  |
|                   |  |  |         |  |

#### Target Compound

Promethazine Promethazine-D3



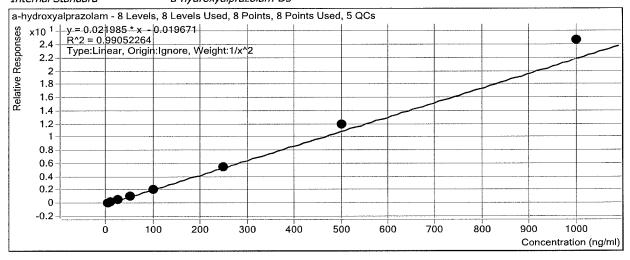
| Sample            | Level | Enabled      | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|--------------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     | $\square$    | 5        | 5.3        | 105.9    |
| a cal 2-10ng/mL   | 2     |              | 10       | 9.6        | 95.6     |
| a QC 10           | 2     |              | 10       | 10.8       | 107.5    |
| a cal 3-25ng/mL   | 3     | Ø            | 25       | 21.8       | 87.0     |
| a cal 4-50ng/mL   | 4     | $\square$    | 50       | 45.5       | 91.0     |
| a cal 5-100ng/mL  | 5     |              | 100      | 92.5       | 92.5     |
| a qc 100          | 5     | $\square$    | 100      | 94.9       | 94.9     |
| a qc 100 2nd      | 5     | M            | 100      | 104.1      | 104.1    |
| a cal 6-250ng/mL  | 6     | $\square$    | 250      | 257.0      | 102.8    |
| a QC 250          | 6     | Ø            | 250      | 244.9      | 98.0     |
| a cal 7-500ng/mL  | 7     | $\checkmark$ | 500      | 533.8      | 106.8    |
| a cal 8-1000ng/mL | 8     |              | 1000     | 1185.0     | 118.5    |
| a qc 1000         | 8     | $\square$    | 1000     | 1150.0     | 115.0    |



| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |              |         |  |  |
|-------------------|--|--------------|---------|--|--|
| Last Calib Update | 6/1/2017 3:51 PM   | Analyst Name | ISP TOX |  |  |
| Target Compound   | a-hvdroxvalprazolam  |              |         |  |  |

Internal Standard

a-hydroxyalprazolam a-hydroxyalprazolam-D5



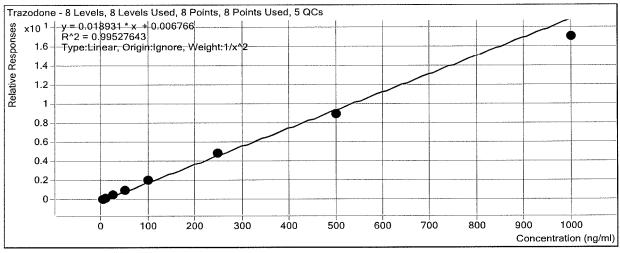
| Sample            | Level | Enabled   | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-----------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     | Ø         | 5        | 5.4        | 107.1    |
| a cal 2-10ng/mL   | 2     | $\square$ | 10       | 9.1        | 90.9     |
| a QC 10           | 2     | $\square$ | 10       | 9.5        | 95.3     |
| a cal 3-25ng/mL   | 3     | Ø         | 25       | 22.2       | 88.6     |
| a cal 4-50ng/mL   | 4     | Ø         | 50       | 49.4       | 98.8     |
| a cal 5-100ng/mL  | 5     |           | 100      | 94.9       | 94.9     |
| a qc 100          | 5     | Ø         | 100      | 98.9       | 98.9     |
| a qc 100 2nd      | 5     | Ø         | 100      | 106.9      | 106.9    |
| a cal 6-250ng/mL  | 6     | Ø         | 250      | 248.6      | 99.4     |
| a QC 250          | 6     | $\square$ | 250      | 265.9      | 106.4    |
| a cal 7-500ng/mL  | 7     | Ø         | 500      | 540.7      | 108.1    |
| a cal 8-1000ng/mL | 8     | $\square$ | 1000     | 1121.5     | 112.2    |
| a qc 1000         | 8     |           | 1000     | 1140.9     | 114.1    |

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |              |         |  |  |
|-------------------|--|--------------|---------|--|--|
| Last Calib Update | 6/1/2017 3:51 PM   | Analyst Name | ISP TOX |  |  |

#### Target Compound Trazodone

Internal Standard

Trazodone-D6

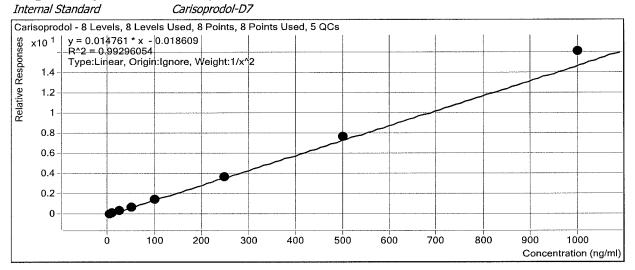


| Sample            | Level | Enabled      | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|--------------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     | $\mathbf{M}$ | 5        | 4.8        | 96.4     |
| a cal 2-10ng/mL   | 2     | $\square$    | 10       | 10.6       | 105.6    |
| a QC 10           | 2     | Ø            | 10       | 10.3       | 102.6    |
| a cal 3-25ng/mL   | 3     | $\square$    | 25       | 25.2       | 100.6    |
| a cal 4-50ng/mL   | 4     | $\square$    | 50       | 51.9       | 103.9    |
| a cal 5-100ng/mL  | 5     | $\square$    | 100      | 107.4      | 107.4    |
| a qc 100          | 5     | $\square$    | 100      | 114.0      | 114.0    |
| a qc 100 2nd      | 5     | $\square$    | 100      | 107.9      | 107.9    |
| a cal 6-250ng/mL  | 6     | $\square$    | 250      | 253.9      | 101.6    |
| a QC 250          | 6     | $\square$    | 250      | 267.0      | 106.8    |
| a cal 7-500ng/mL  | 7     | $\square$    | 500      | 474.0      | 94.8     |
| a cal 8-1000ng/mL | 8     | Ø            | 1000     | 897.2      | 89.7     |
| a qc 1000         | 8     |              | 1000     | 882.7      | 88.3     |

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |              |         |  |
|-------------------|--|--------------|---------|--|
| Last Calib Update | 6/1/2017 3:51 PM   | Analyst Name | ISP TOX |  |

Target Compound

Carisoprodol



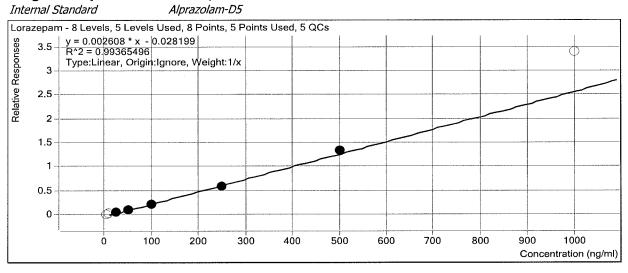
| Sample            | Level | Enabled   | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-----------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     | Ø         | 5        | 5.1        | 101.1    |
| a cal 2-10ng/mL   | 2     | Ø         | 10       | 10.4       | 104.3    |
| a QC 10           | 2     | M         | 10       | 10.1       | 100.8    |
| a cal 3-25ng/mL   | 3     | Ø         | 25       | 21.8       | 87.1     |
| a cal 4-50ng/mL   | 4     | V         | 50       | 45.4       | 90.8     |
| a cal 5-100ng/mL  | 5     | M         | 100      | 102.7      | 102.7    |
| a qc 100          | 5     | $\square$ | 100      | 113.0      | 113.0    |
| a qc 100 2nd      | 5     |           | 100      | 100.0      | 100.0    |
| a cal 6-250ng/mL  | 6     | $\square$ | 250      | 253.5      | 101.4    |
| a QC 250          | 6     | Ø         | 250      | 259.0      | 103.6    |
| a cal 7-500ng/mL  | 7     | M         | 500      | 518.5      | 103.7    |
| a cal 8-1000ng/mL | 8     | $\square$ | 1000     | 1089.3     | 108.9    |
| a qc 1000         | 8     |           | 1000     | 672.5      | 67.3     |



| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |              |         |  |  |
|-------------------|--|--------------|---------|--|--|
| Last Calib Update | 6/1/2017 3:51 PM   | Analyst Name | ISP TOX |  |  |

#### Target Compound

Lorazepam Alprazolam-D5

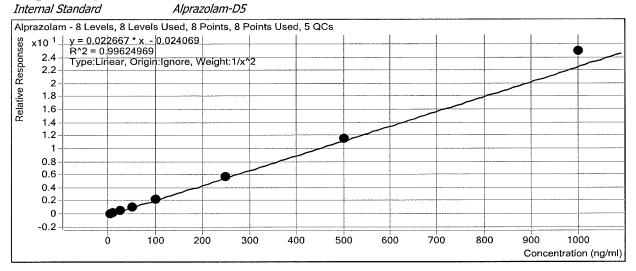


| Sample            | Level | Enabled   | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-----------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     |           | 5        | 14.8       | 296.1    |
| a cal 2-10ng/mL   | 2     |           | 10       | 18.2       | 182.3    |
| a QC 10           | 2     | $\square$ | 10       | 16.8       | 168.3    |
| a cal 3-25ng/mL   | 3     | M         | 25       | 28.4       | 113.6    |
| a cal 4-50ng/mL   | 4     | Ø         | 50       | 49.3       | 98.5     |
| a cal 5-100ng/mL  | 5     | $\square$ | 100      | 89.7       | 89.7     |
| a qc 100          | 5     | $\square$ | 100      | 88.5       | 88.5     |
| a qc 100 2nd      | 5     | $\square$ | 100      | 89.4       | 89.4     |
| a cal 6-250ng/mL  | 6     |           | 250      | 233.4      | 93.4     |
| a QC 250          | 6     | Ø         | 250      | 227.7      | 91.1     |
| a cal 7-500ng/mL  | 7     | Ø         | 500      | 524.2      | 104.8    |
| a cal 8-1000ng/mL | 8     |           | 1000     | 1310.3     | 131.0    |
| a qc 1000         | 8     |           | 1000     | 1411.7     | 141.2    |

## Batch Data PathD:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.binLast Calib Update6/1/2017 3:51 PMAnalyst NameISP TOX

Target Compound

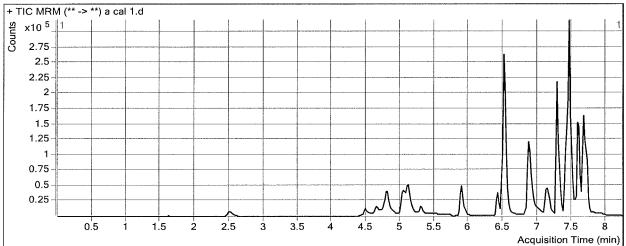
Alprazolam



| Sample            | Level | Enabled   | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-----------|----------|------------|----------|
| a cal 1-5ng/mL    | 1     | Ø         | 5        | 5.1        | 101.6    |
| a cal 2-10ng/mL   | 2     | $\square$ | 10       | 10.1       | 100.7    |
| a QC 10           | 2     | $\square$ | 10       | 10.4       | 104.0    |
| a cal 3-25ng/mL   | 3     | $\square$ | 25       | 23.5       | 94.2     |
| a cal 4-50ng/mL   | 4     | $\square$ | 50       | 46.3       | 92.7     |
| a cal 5-100ng/mL  | 5     | Ø         | 100      | 98.0       | 98.0     |
| a qc 100          | 5     | $\square$ | 100      | 113.9      | 113.9    |
| a qc 100 2nd      | 5     | $\square$ | 100      | 107.2      | 107.2    |
| a cal 6-250ng/mL  | 6     | $\square$ | 250      | 252.2      | 100.9    |
| a QC 250          | 6     | $\square$ | 250      | 257.9      | 103.2    |
| a cal 7-500ng/mL  | 7     | $\square$ | 500      | 510.8      | 102.2    |
| a cal 8-1000ng/mL | 8     | Ø         | 1000     | 1099.1     | 109.9    |
| a qc 1000         | 8     | $\square$ | 1000     | 1181.1     | 118.1    |

| Batch Data Path   | D:\2017 Data\53117 mc | dq p1\QuantResults\ | 53117 mdq p1a.batch.bin  |
|-------------------|-----------------------|---------------------|--------------------------|
| Analysis Time     | 6/1/2017 3:51 PM      | Analyst Name        | ISP Tox                  |
| Report Time       | 6/1/2017 3:55 PM      | Reporter Name       | ISP Tox                  |
| Last Calib Update | 6/1/2017 3:51 PM      | Batch State         | Processed                |
| Analysis Info     |                       |                     |                          |
| Acq Time          | 2017-05-31 10:18      | Data File           | a cal 1.d                |
| Sample Type       | Calibration           | Sample Name         | a cal 1-5ng/mL           |
| Dilution          | 1                     | Acq Method          | Quant Panel 1a 2-13-17.m |
| Position          | P1-A1                 | Sample Info         |                          |
| Inj Vol           | -1                    | Comment             | AM 28                    |

#### Sample Chromatogram



#### Results

| Results           |                      |       |          |           |            |            |
|-------------------|----------------------|-------|----------|-----------|------------|------------|
| Compound          | ISTD Compound        | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
| Morphine          | Morphine-D6          | 1.608 | 1009     | 2057      | 0.4906     | 5.6205     |
| Hydromorphone     | Hydromorphone-D6     | 2.548 | 5135     | 40826     | 0.1258     | 5.1155     |
| Codeine           | Codeine-D6           | 4.573 | 2582     | 20734     | 0.1245     | 5.0592     |
| Amphetamine       | Amphetamine-D11      | 4.784 | 53161    | 59212     | 0.8978     | 4,8324     |
| Oxycodone         | Oxycodone-D6         | 4.850 | 12607    | 118469    | 0.1064     | 5.0750     |
| Norhydrocodone    | Norhydrocodone-D3    | 5.118 | 477      | 36265     | 0.0131     | 5.4872     |
| Hydrocodone       | Hydrocodone-D6       | 5.155 | 7676     | 94216     | 0.0815     | 5.5427     |
| Methamphetamine   | Methamphetamine-D11  | 5.162 | 28417    | 182492    | 0.1557     | 5.5510     |
| 6-MAM             | 6-MAM-D6             | 5.329 | 419      | 35483     | 0.0118     | 0.6326     |
| Phentermine       | Phentermine-D5       | 5.946 | 5148     | 170049    | 0.0303     | 5.2074     |
| Dextrorphan       | Dextrorphan-D3       | 6.423 | 5755     | 98589     | 0.0584     | 5.3158     |
| 7-aminoclonazepam | 7-Aminoclonazepam-D4 | 6.515 | 9154     | 93286     | 0.0981     | 5.6388     |
| Tramadol          | Tramadol-13C-D3      | 6.521 | 67523    | 713845    | 0.0946     | 5.3072     |
| Doxylamine        | Doxylamine-D5        | 6.883 | 39147    | 464047    | 0.0844     | 6.1929     |
| Bupropion         | Bupropion-D9         | 7.152 | 7085     | 94708     | 0.0748     | 5.0088     |
| Meprobamate       | Meprobamate-D7       | 7.173 | 2930     | 51118     | 0.0573     | 5.5925     |
| Venlafaxine       | Venlafaxine-D6       | 7.286 | 45000    | 524065    | 0.0859     | 5.3661     |
| Citalopram        | Citalopram-D6        | 7.398 | 11481    | 154271    | 0.0744     | 6.2822     |
| Zolpidem          | Zolpidem-D6          | 7.465 | 54521    | 680175    | 0.0802     | 5.3931     |
| Diphenhydramine   | Diphenhydramine-D3   | 7.432 | 19729    | 241145    | 0.0818     | 5.1243     |
| Dextromethorphan  | Dextromethorphan-D3  | 7.428 | 2292     | 27151     | 0.0844     | 5.5062     |
| Clonazepam        | Clonazepam-D4        | 7.603 | 3562     | 10701     | 0.3329     | 5.2957     |
| Promethazine      | Promethazine-D3      | 7,607 | 15951    | 191507    | 0.0833     | 5.2936     |
|                   |                      |       |          |           |            | \$         |

Printed at: 3:56 PM on: 6/1/2017

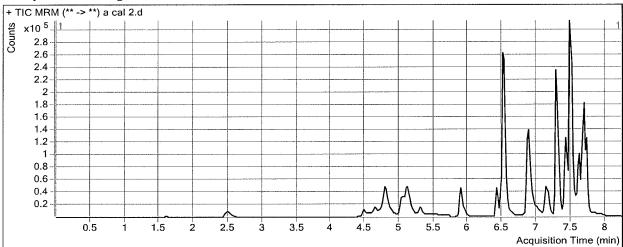
a cal 1

### ISP FORENSICS - Cd'A Instrument # 62340 Multi-Drug Confirmatory Analysis Report

| <b>Compound</b><br>a-hydroxyalprazolam | ISTD Compound<br>a-hydroxyalprazolam-D5 | <b>RT</b><br>7.660 | Response<br>1648 | ISTD Resp<br>16808 | Resp Ratio<br>0.0981 | Final Conc<br>5.3546 |
|--|---|--------------------|------------------|--------------------|----------------------|----------------------|
| Trazodone                              | Trazodone-D6                            | 7.617              | 16402            | 167398             | 0.0980               | 4.8183               |
| Carisoprodol                           | Carisoprodol-D7                         | 7.693              | 16795            | 299820             | 0.0560               | 5.0555               |
| Lorazepam                              | Alprazolam-D5                           | 7.703              | 1842             | 176905             | 0.0104               | 14.8070              |
| Alprazolam                             | Alprazolam-D5                           | 7.727              | 16106            | 176905             | 0.0910               | 5.0784               |

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1a.batch.bin |               |                          |  |  |
|-------------------|--|---------------|--------------------------|--|--|
| Analysis Time     | 6/1/2017 3:51 PM   | Analyst Name  | ISP Tox                  |  |  |
| Report Time       | 6/1/2017 3:55 PM   | Reporter Name | ISP Tox                  |  |  |
| Last Calib Update | 6/1/2017 3:51 PM   | Batch State   | Processed                |  |  |
| Analysis Info     |  |               |                          |  |  |
| Acq Time          | 2017-05-31 10:43   | Data File     | a cal 2.d                |  |  |
| Sample Type       | Calibration  | Sample Name   | a cal 2-10ng/mL          |  |  |
| Dilution          | 1  | Acq Method    | Quant Panel 1a 2-13-17.m |  |  |
| Position          | P1-B1  | Sample Info   |                          |  |  |
| Inj Vol           | -1   | Comment       | AM 28                    |  |  |

#### Sample Chromatogram



#### Results

| Results           |                      |       |          |           |            |            |
|-------------------|----------------------|-------|----------|-----------|------------|------------|
| Compound          | ISTD Compound        | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
| Morphine          | Morphine-D6          | 1.608 | 2194     | 2182      | 1.0056     | 10.3569    |
| Hydromorphone     | Hydromorphone-D6     | 2.528 | 10343    | 40961     | 0.2525     | 9.7568     |
| Codeine           | Codeine-D6           | 4.573 | 4858     | 20029     | 0.2426     | 9.9974     |
| Amphetamine       | Amphetamine-D11      | 4.784 | 74776    | 55993     | 1.3355     | 10.4275    |
| Oxycodone         | Oxycodone-D6         | 4.850 | 26285    | 120685    | 0.2178     | 9.8975     |
| Norhydrocodone    | Norhydrocodone-D3    | 5.138 | 1164     | 36785     | 0.0316     | 12.0214    |
| Hydrocodone       | Hydrocodone-D6       | 5.155 | 14358    | 95747     | 0.1500     | 9.4851     |
| Methamphetamine   | Methamphetamine-D11  | 5.162 | 38395    | 136177    | 0.2820     | 10.8820    |
| 6-MAM             | 6-MAM-D6             | 5.309 | 795      | 35644     | 0.0223     | 1.0784     |
| Phentermine       | Phentermine-D5       | 5.946 | 8693     | 164180    | 0.0530     | 9.5590     |
| Dextrorphan       | Dextrorphan-D3       | 6.423 | 11453    | 109076    | 0.1050     | 9.2192     |
| 7-aminoclonazepam | 7-Aminoclonazepam-D4 | 6.534 | 16419    | 82960     | 0.1979     | 10.1911    |
| Tramadol          | Tramadol-13C-D3      | 6.521 | 135665   | 745364    | 0.1820     | 9.8546     |
| Doxylamine        | Doxylamine-D5        | 6.883 | 91002    | 567151    | 0.1605     | 10.3927    |
| Bupropion         | Bupropion-D9         | 7.172 | 12160    | 70072     | 0.1735     | 10.2101    |
| Meprobamate       | Meprobamate-D7       | 7.173 | 8155     | 51327     | 0.1589     | 11.3468    |
| Venlafaxine       | Venlafaxine-D6       | 7.286 | 101157   | 529513    | 0.1910     | 10.4210    |
| Citalopram        | Citalopram-D6        | 7.398 | 22367    | 137518    | 0.1626     | 10.4428    |
| Zolpidem          | Zolpidem-D6          | 7.505 | 108555   | 660943    | 0.1642     | 10.2531    |
| Diphenhydramine   | Diphenhydramine-D3   | 7.452 | 33265    | 206922    | 0.1608     | 9.5942     |
| Dextromethorphan  | Dextromethorphan-D3  | 7.428 | 2711     | 19093     | 0.1420     | 8.4636     |
| Clonazepam        | Clonazepam-D4        | 7.603 | 7315     | 11949     | 0.6122     | 9.1934     |
| Promethazine      | Promethazine-D3      | 7.607 | 14334    | 92276     | 0.1553     | 9.5567     |
|                   |                      |       |          |           |            |            |



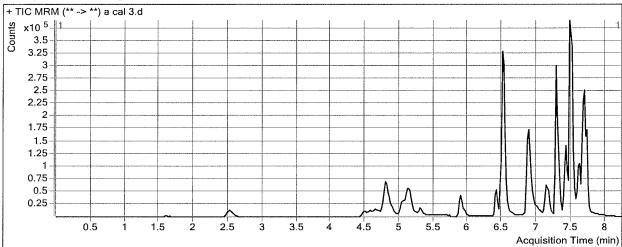
| <b>Compound</b>         | <b>ISTD Compound</b>           | <b>RT</b>      | <b>Response</b> | <b>ISTD Resp</b>           | <b>Resp Ratio</b>          | Final Conc         |
|-------------------------|--------------------------------|----------------|-----------------|----------------------------|----------------------------|--------------------|
| a-hydroxyalprazolam     | a-hydroxyalprazolam-D5         | 7.660          | 3202            | 17783                      | 0.1801                     | 9.0851             |
| Trazodone               | Trazodone-D6                   | 7.658          | 26893           | 130062                     | 0.2068                     | 10.5647            |
| Carisoprodol            | Carisoprodol-D7                | 7.693          | 39757           | 293719                     | 0.1354                     | 10.4305            |
| Lorazepam<br>Alprazolam | Alprazolam-D5<br>Alprazolam-D5 | 7.703<br>7.727 | 3364<br>35531   | 174027<br>174027<br>174027 | 0.1334<br>0.0193<br>0.2042 | 18.2273<br>10.0691 |



a cal 2

| D:\2017 Data\53117 m | dq p1\QuantResults\   | 53117 mdq p1a.batch.bin  |
|----------------------|---|--|
| 6/1/2017 3:51 PM     | Analyst Name  | ISP Tox  |
| 6/1/2017 3:55 PM     | Reporter Name   | ISP Tox  |
| 6/1/2017 3:51 PM     | Batch State   | Processed  |
|                      |   |  |
|                      |   |  |
| 2017-05-31 11:09     | Data File   | a cal 3.d  |
| Calibration          | Sample Name   | a cal 3-25ng/mL  |
| 1                    | Acq Method  | Quant Panel 1a 2-13-17.m   |
| P1-C1                | Sample Info   |  |
| -1                   | Comment   | AM 28  |
|                      | 6/1/2017 3:51 PM<br>6/1/2017 3:55 PM<br>6/1/2017 3:51 PM<br>2017-05-31 11:09<br>Calibration<br>1<br>P1-C1 | 6/1/2017 3:55 PM<br>6/1/2017 3:51 PMReporter Name<br>Batch State2017-05-31 11:09<br>CalibrationData File<br>Sample Name<br>Acq Method<br>Sample Info |

#### Sample Chromatogram



#### Results

| ncouno            |                      |       |          |           |            |              |
|-------------------|----------------------|-------|----------|-----------|------------|--------------|
| Compound          | ISTD Compound        | RT    | Response | ISTD Resp | Resp Ratio | Final Conc   |
| Morphine          | Morphine-D6          | 1.608 | 5481     | 2134      | 2.5689     | 24.7339      |
| Hydromorphone     | Hydromorphone-D6     | 2.548 | 25775    | 40463     | 0.6370     | 23.8376      |
| Codeine           | Codeine-D6           | 4.573 | 12136    | 20406     | 0.5947     | 24.7328      |
| Amphetamine       | Amphetamine-D11      | 4.804 | 130289   | 52190     | 2.4964     | 25.2707      |
| Oxycodone         | Oxycodone-D6         | 4.850 | 66034    | 123159    | 0.5362     | 23.6812      |
| Norhydrocodone    | Norhydrocodone-D3    | 5.118 | 2184     | 34896     | 0.0626     | 22.9567      |
| Hydrocodone       | Hydrocodone-D6       | 5.155 | 36716    | 95594     | 0.3841     | 22.9613      |
| Methamphetamine   | Methamphetamine-D11  | 5.162 | 73907    | 128636    | 0.5745     | 23.2387      |
| 6-MAM             | 6-MAM-D6             | 5.309 | 1889     | 37057     | 0.0510     | 2.2962       |
| Phentermine       | Phentermine-D5       | 5.946 | 18013    | 150868    | 0.1194     | 22.3098      |
| Dextrorphan       | Dextrorphan-D3       | 6.423 | 26239    | 100107    | 0.2621     | 22.3694      |
| 7-aminoclonazepam | 7-Aminoclonazepam-D4 | 6.515 | 44978    | 89363     | 0.5033     | 24.1247      |
| Tramadol          | Tramadol-13C-D3      | 6.521 | 344975   | 725147    | 0.4757     | 25.1328      |
| Doxylamine        | Doxylamine-D5        | 6.883 | 192260   | 540191    | 0.3559     | 21.1802      |
| Bupropion         | Bupropion-D9         | 7.172 | 28817    | 66636     | 0.4324     | 23.8501      |
| Meprobamate       | Meprobamate-D7       | 7.173 | 19743    | 53944     | 0.3660     | 23.0789      |
| Venlafaxine       | Venlafaxine-D6       | 7.286 | 239053   | 483980    | 0.4939     | 24.9792      |
| Citalopram        | Citalopram-D6        | 7.398 | 52857    | 107129    | 0.4934     | 26.0411      |
| Zolpidem          | Zolpidem-D6          | 7.505 | 274354   | 691165    | 0.3969     | 23.7029      |
| Diphenhydramine   | Diphenhydramine-D3   | 7.432 | 71701    | 169631    | 0.4227     | 24,4252      |
| Dextromethorphan  | Dextromethorphan-D3  | 7.428 | 7062     | 16080     | 0.4392     | 23.7294      |
| Clonazepam        | Clonazepam-D4        | 7.603 | 19658    | 11889     | 1.6534     | 23.7205      |
| Promethazine      | Promethazine-D3      | 7.607 | 35754    | 98916     | 0.3615     | 21.7538<br>( |

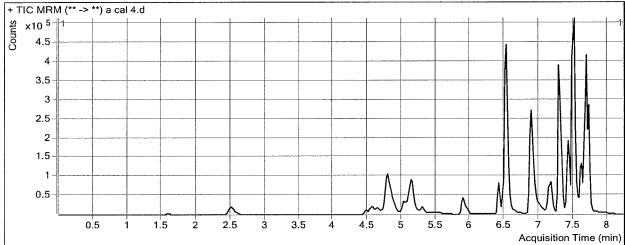


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| Compound            | ISTD Compound          | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
|---------------------|------------------------|-------|----------|-----------|------------|------------|
| a-hydroxyalprazolam | a-hydroxyalprazolam-D5 | 7.660 | 8512     | 18206     | 0.4676     | 22.1619    |
| Trazodone           | Trazodone-D6           | 7.658 | 62975    | 130388    | 0.4830     | 25,1550    |
| Carisoprodol        | Carisoprodol-D7        | 7.693 | 92175    | 304550    | 0.3027     | 21.7643    |
| Lorazepam           | Alprazolam-D5          | 7.703 | 8241     | 179768    | 0.0458     | 28.3938    |
| Alprazolam          | Alprazolam-D5          | 7.727 | 91592    | 179768    | 0.5095     | 23.5392    |

| Batch Data Path   | • •              | q p1\QuantResults\ | 53117 mdq p1a.batch.bin  |
|-------------------|------------------|--------------------|--------------------------|
| Analysis Time     | 6/1/2017 3:51 PM | Analyst Name       | ISP Tox                  |
| Report Time       | 6/1/2017 3:55 PM | Reporter Name      | ISP Tox                  |
| Last Calib Update | 6/1/2017 3:51 PM | Batch State        | Processed                |
|                   |                  |                    |                          |
| Analysis Info     |                  |                    |                          |
| Acq Time          | 2017-05-31 11:34 | Data File          | a cal 4.d                |
| Sample Type       | Calibration      | Sample Name        | a cal 4-50ng/mL          |
| Dilution          | 1                | Acq Method         | Quant Panel 1a 2-13-17.m |
| Position          | P1-D1            | Sample Info        |                          |
| Inj Vol           | -1               | Comment            | AM 28                    |

### Sample Chromatogram



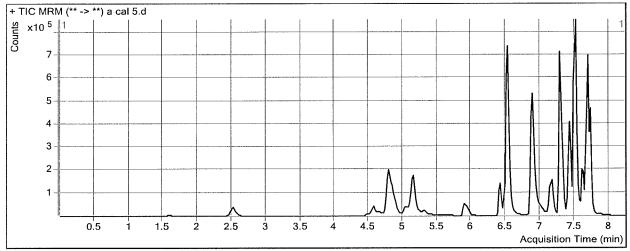
| Compound          | ISTD Compound        | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
|-------------------|----------------------|-------|----------|-----------|------------|------------|
| Morphine          | Morphine-D6          | 1.608 | 11053    | 2047      | 5.4006     | 50.7767    |
| Hydromorphone     | Hydromorphone-D6     | 2.528 | 53128    | 39914     | 1.3311     | 49.2555    |
| Codeine           | Codeine-D6           | 4.573 | 23275    | 19999     | 1.1638     | 48.5471    |
| Amphetamine       | Amphetamine-D11      | 4.784 | 247629   | 52953     | 4.6764     | 53.1405    |
| Oxycodone         | Oxycodone-D6         | 4.850 | 138552   | 121365    | 1.1416     | 49.8943    |
| Norhydrocodone    | Norhydrocodone-D3    | 5.138 | 4761     | 34977     | 0.1361     | 48.9388    |
| Hydrocodone       | Hydrocodone-D6       | 5.155 | 76041    | 86036     | 0.8838     | 51.7271    |
| Methamphetamine   | Methamphetamine-D11  | 5.141 | 152925   | 125075    | 1.2227     | 50.6102    |
| 6-MAM             | 6-MAM-D6             | 5.309 | 3634     | 35821     | 0.1014     | 4.4408     |
| Phentermine       | Phentermine-D5       | 5.946 | 40093    | 151137    | 0.2653     | 50.3043    |
| Dextrorphan       | Dextrorphan-D3       | 6.423 | 55891    | 98059     | 0.5700     | 48.1393    |
| 7-aminoclonazepam | 7-Aminoclonazepam-D4 | 6.515 | 93549    | 91140     | 1.0264     | 47.9903    |
| Tramadol          | Tramadol-13C-D3      | 6.521 | 669328   | 720078    | 0.9295     | 48.7375    |
| Doxylamine        | Doxylamine-D5        | 6.883 | 412733   | 492277    | 0.8384     | 47.8101    |
| Bupropion         | Bupropion-D9         | 7.172 | 61730    | 68289     | 0.9039     | 48.6897    |
| Meprobamate       | Meprobamate-D7       | 7.173 | 40934    | 51151     | 0.8003     | 47.6804    |
| Venlafaxine       | Venlafaxine-D6       | 7.286 | 493117   | 498030    | 0.9901     | 48.8285    |
| Citalopram        | Citalopram-D6        | 7.398 | 101742   | 114425    | 0.8892     | 44.7050    |
| Zolpidem          | Zolpidem-D6          | 7.505 | 550802   | 653534    | 0.8428     | 49.4728    |
| Diphenhydramine   | Diphenhydramine-D3   | 7.452 | 152844   | 176936    | 0.8638     | 49,4039    |
| Dextromethorphan  | Dextromethorphan-D3  | 7.428 | 12915    | 16606     | 0.7777     | 41,1178    |
| Clonazepam        | Clonazepam-D4        | 7.603 | 37820    | 11837     | 3.1952     | 45.2315    |
| Promethazine      | Promethazine-D3      | 7.607 | 72501    | 95015     | 0.7630     | 45.5173 L  |

| a            | cal | 4 |
|--------------|-----|---|
| $\mathbf{v}$ | •   |   |

| <b>Compound</b><br>a-hydroxyalprazolam | ISTD Compound<br>a-hydroxyalprazolam-D5 | <b>RT</b><br>7.660 | <b>Response</b><br>18739 | <b>ISTD Resp</b><br>17579 | <b>Resp Ratio</b><br>1.0659 | <b>Final Conc</b><br>49.3786 |
|--|---|--------------------|--------------------------|---------------------------|-----------------------------|------------------------------|
| Trazodone                              | Trazodone-D6                            | 7.678              | 138460                   | 139844                    | 0.9901                      | 51.9425                      |
| Carisoprodol                           | Carisoprodol-D7                         | 7.693              | 185575                   | 284712                    | 0.6518                      | 45.4168                      |
| Lorazepam                              | Alprazolam-D5                           | 7.703              | 17071                    | 170308                    | 0.1002                      | 49.2526                      |
| Alprazolam                             | Alprazolam-D5                           | 7.727              | 174786                   | 170308                    | 1.0263                      | 46.3385                      |

| Batch Data Path   | D:\2017 Data\53117 md | lq p1\QuantResults\ | 53117 mdq p1a.batch.bin  |
|-------------------|-----------------------|---------------------|--------------------------|
| Analysis Time     | 6/1/2017 3:51 PM      | Analyst Name        | ISP Tox                  |
| Report Time       | 6/1/2017 3:55 PM      | Reporter Name       | ISP Tox                  |
| Last Calib Update | 6/1/2017 3:51 PM      | Batch State         | Processed                |
| Analysis Info     |                       |                     |                          |
| Acq Time          | 2017-05-31 12:00      | Data File           | a cal 5.d                |
| Sample Type       | Calibration           | Sample Name         | a cal 5-100ng/mL         |
| Dilution          | 1                     | Acq Method          | Quant Panel 1a 2-13-17.m |
| Position          | P1-E1                 | Sample Info         |                          |
| Inj Vol           | -1                    | Comment             | AM 28                    |

### Sample Chromatogram



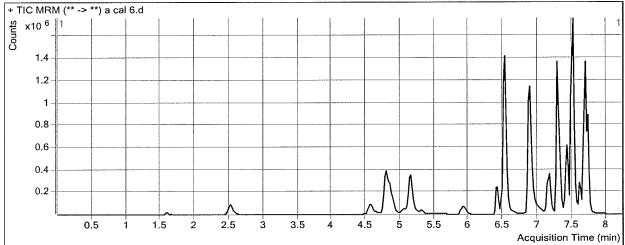
| Compound          | ISTD Compound        | RT    | Response | ISTD Resp | <b>Resp Ratio</b> | Final Conc |
|-------------------|----------------------|-------|----------|-----------|-------------------|------------|
| Morphine          | Morphine-D6          | 1.608 | 21831    | 2020      | 10.8064           | 100.4914   |
| Hydromorphone     | Hydromorphone-D6     | 2.528 | 107470   | 39959     | 2.6895            | 99.0052    |
| Codeine           | Codeine-D6           | 4.573 | 48612    | 20380     | 2.3852            | 99.6559    |
| Amphetamine       | Amphetamine-D11      | 4.804 | 537929   | 59459     | 9.0471            | 109.0194   |
| Oxycodone         | Oxycodone-D6         | 4.850 | 294434   | 126236    | 2.3324            | 101.4498   |
| Norhydrocodone    | Norhydrocodone-D3    | 5.138 | 9880     | 36563     | 0.2702            | 96.3211    |
| Hydrocodone       | Hydrocodone-D6       | 5.155 | 161114   | 96227     | 1.6743            | 97.2277    |
| Methamphetamine   | Methamphetamine-D11  | 5.162 | 383186   | 151048    | 2.5368            | 106.1100   |
| 6-MAM             | 6-MAM-D6             | 5.329 | 7843     | 37284     | 0.2104            | 9.0690     |
| Phentermine       | Phentermine-D5       | 5.946 | 94043    | 176223    | 0.5337            | 101.8078   |
| Dextrorphan       | Dextrorphan-D3       | 6.423 | 131978   | 113235    | 1.1655            | 97.9886    |
| 7-aminoclonazepam | 7-Aminoclonazepam-D4 | 6.515 | 190749   | 89364     | 2,1345            | 98.5427    |
| Tramadol          | Tramadol-13C-D3      | 6.521 | 1526919  | 781379    | 1.9541            | 102.0344   |
| Doxylamine        | Doxylamine-D5        | 6.883 | 981578   | 580705    | 1.6903            | 94.8276    |
| Bupropion         | Bupropion-D9         | 7.172 | 150403   | 81205     | 1.8522            | 98.6443    |
| Meprobamate       | Meprobamate-D7       | 7.173 | 83402    | 53205     | 1.5676            | 91.1488    |
| Venlafaxine       | Venlafaxine-D6       | 7.286 | 1120516  | 572641    | 1.9568            | 95.2877    |
| Citalopram        | Citalopram-D6        | 7.398 | 272580   | 156483    | 1.7419            | 84.9209    |
| Zolpidem          | Zolpidem-D6          | 7.505 | 1144410  | 666398    | 1.7173            | 100.0175   |
| Diphenhydramine   | Diphenhydramine-D3   | 7.432 | 415697   | 234978    | 1.7691            | 100.6611   |
| Dextromethorphan  | Dextromethorphan-D3  | 7.428 | 39785    | 20296     | 1.9603            | 101.8578   |
| Clonazepam        | Clonazepam-D4        | 7.603 | 78215    | 10974     | 7.1272            | 100.0910   |
| Promethazine      | Promethazine-D3      | 7.607 | 171702   | 110329    | 1.5563            | 92.4556 >  |
|                   |                      |       |          |           |                   | (          |

| Compound            | ISTD Compound          | RT    | Response | ISTD Resp | <b>Resp Ratio</b> | Final Conc |
|---------------------|------------------------|-------|----------|-----------|-------------------|------------|
| a-hydroxyalprazolam | a-hydroxyalprazolam-D5 | 7.660 | 35885    | 17361     | 2.0671            | 94.9136    |
| Trazodone           | Trazodone-D6           | 7.678 | 334013   | 163759    | 2.0397            | 107.3826   |
| Carisoprodol        | Carisoprodol-D7        | 7.693 | 394414   | 263493    | 1.4969            | 102.6659   |
| Lorazepam           | Alprazolam-D5          | 7.703 | 34255    | 166509    | 0.2057            | 89.7076    |
| Alprazolam          | Alprazolam-D5          | 7.727 | 365737   | 166509    | 2.1965            | 97.9637    |



| Batch Data Path   | D:\2017 Data\53117 m | dq p1\QuantResults\ | 53117 mdq p1a.batch.bin  |
|-------------------|----------------------|---------------------|--------------------------|
| Analysis Time     | 6/1/2017 3:51 PM     | Analyst Name        | ISP Tox                  |
| Report Time       | 6/1/2017 3:55 PM     | Reporter Name       | ISP Tox                  |
| Last Calib Update | 6/1/2017 3:51 PM     | Batch State         | Processed                |
| Analysis Info     |                      |                     |                          |
| Acq Time          | 2017-05-31 12:25     | Data File           | a cal 6.d                |
| Sample Type       | Calibration          | Sample Name         | a cal 6-250ng/mL         |
| Dilution          | 1                    | Acq Method          | Quant Panel 1a 2-13-17.m |
| Position          | P1-F1                | Sample Info         |                          |
| Inj Vol           | -1                   | Comment             | AM 28                    |

### Sample Chromatogram



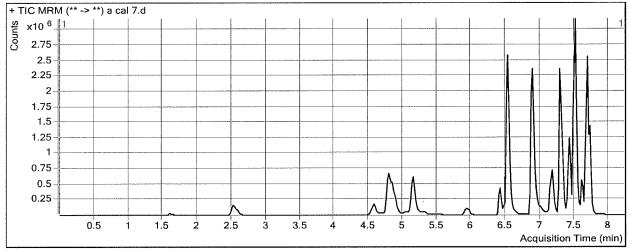
| Compound          | ISTD Compound        | RT    | Response | ISTD Resp | Resp Ratio | Final Conc   |
|-------------------|----------------------|-------|----------|-----------|------------|--------------|
| Morphine          | Morphine-D6          | 1.608 | 53369    | 1920      | 27.7960    | 256.7395     |
| Hydromorphone     | Hydromorphone-D6     | 2.528 | 265614   | 39326     | 6.7542     | 247.8615     |
| Codeine           | Codeine-D6           | 4,573 | 126553   | 20410     | 6.2004     | 259.2968     |
| Amphetamine       | Amphetamine-D11      | 4.804 | 1106464  | 53396     | 20.7218    | 258.2792     |
| Oxycodone         | Oxycodone-D6         | 4.850 | 725299   | 126245    | 5.7452     | 249.2054     |
| Norhydrocodone    | Norhydrocodone-D3    | 5.138 | 23451    | 34938     | 0.6712     | 238.0246     |
| Hydrocodone       | Hydrocodone-D6       | 5.155 | 376436   | 86832     | 4.3352     | 250.3895     |
| Methamphetamine   | Methamphetamine-D11  | 5.141 | 698391   | 130288    | 5.3604     | 225.3516     |
| 6-MAM             | 6-MAM-D6             | 5.309 | 19202    | 34885     | 0.5504     | 23.5208      |
| Phentermine       | Phentermine-D5       | 5.946 | 200227   | 154311    | 1.2976     | 248.4016     |
| Dextrorphan       | Dextrorphan-D3       | 6.403 | 297429   | 96465     | 3.0833     | 258.5135     |
| 7-aminoclonazepam | 7-Aminoclonazepam-D4 | 6.515 | 407871   | 78136     | 5.2200     | 239.3102     |
| Tramadol          | Tramadol-13C-D3      | 6.521 | 3465485  | 757735    | 4.5735     | 238.2840     |
| Doxylamine        | Doxylamine-D5        | 6.883 | 2437805  | 567502    | 4.2957     | 238.6198     |
| Bupropion         | Bupropion-D9         | 7.172 | 382563   | 82122     | 4.6585     | 246.4898     |
| Meprobamate       | Meprobamate-D7       | 7.173 | 220506   | 53350     | 4.1332     | 236.4925     |
| Venlafaxine       | Venlafaxine-D6       | 7.286 | 2561988  | 525996    | 4.8707     | 235.3445     |
| Citalopram        | Citalopram-D6        | 7.398 | 501974   | 114623    | 4.3794     | 209,3030     |
| Zolpidem          | Zolpidem-D6          | 7.505 | 2824777  | 679675    | 4.1561     | 240.9735     |
| Diphenhydramine   | Diphenhydramine-D3   | 7.432 | 762957   | 165829    | 4.6009     | 261.0023     |
| Dextromethorphan  | Dextromethorphan-D3  | 7.428 | 69305    | 13591     | 5.0995     | 263.0990     |
| Clonazepam        | Clonazepam-D4        | 7.603 | 194797   | 10978     | 17.7435    | 248.2114     |
| Promethazine      | Promethazine-D3      | 7.607 | 221963   | 51176     | 4.3372     | 257.0144 🏼 🎽 |
|                   |                      |       |          |           |            |              |

| <b>Compound</b><br>a-hydroxyalprazolam<br>Trazodone | ISTD Compound<br>a-hydroxyalprazolam-D5<br>Trazodone-D6 | <b>RT</b><br>7.660<br>7.678 | <b>Response</b><br>91839<br>717303 | <b>ISTD Resp</b><br>16863<br>148999 | <b>Resp Ratio</b><br>5.4463<br>4.8142 | <b>Final Conc</b><br>248.6161<br>253.9391 |
|---|---|-----------------------------|------------------------------------|-------------------------------------|---------------------------------------|---|
| Carisoprodol  | Carisoprodol-D7   | 7.693                       | 910258                             | 244492                              | 3.7231                                | 253.4785                                  |
| Lorazepam   | Alprazolam-D5   | 7.703                       | 84610                              | 145765                              | 0.5805                                | 233.4134                                  |
| Alprazolam  | Alprazolam-D5   | 7.727                       | 829679                             | 145765                              | 5.6919                                | 252.1686                                  |

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| Batch Data Path<br>Analysis Time<br>Report Time<br>Last Calib Update | D:\2017 Data\53117 md<br>6/1/2017 3:51 PM<br>6/1/2017 3:55 PM<br>6/1/2017 3:51 PM | q p1\QuantResults\<br>Analyst Name<br>Reporter Name<br>Batch State | 53117 mdq p1a.batch.bin<br>ISP Tox<br>ISP Tox<br>Processed |
|--|---|--|--|
| Analysis Info<br>Acq Time<br>Sample Type                             | 2017-05-31 12:51<br>Calibration   | Data File<br>Sample Name   | a cal 7.d<br>a cal 7-500ng/mL<br>Quart Danal 1a 2 13 17 m  |
| Dilution<br>Position<br>Inj Vol                                      | 1<br>P1-G1<br>-1  | Acq Method<br>Sample Info<br>Comment                               | Quant Panel 1a 2-13-17.m<br>AM 28                          |

### Sample Chromatogram



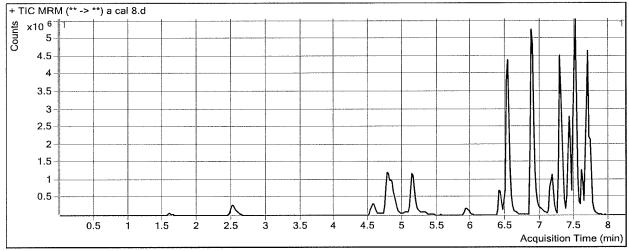
| Compound          | ISTD Compound        | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
|-------------------|----------------------|-------|----------|-----------|------------|------------|
| Morphine          | Morphine-D6          | 1.608 | 102287   | 1895      | 53.9675    | 497.4309   |
| Hydromorphone     | Hydromorphone-D6     | 2.528 | 514049   | 36925     | 13.9213    | 510.3337   |
| Codeine           | Codeine-D6           | 4.573 | 243515   | 20304     | 11.9935    | 501.7023   |
| Amphetamine       | Amphetamine-D11      | 4.804 | 1802906  | 49851     | 36.1658    | 455.7289   |
| Oxycodone         | Oxycodone-D6         | 4.850 | 1441368  | 123987    | 11.6251    | 503.7775   |
| Norhydrocodone    | Norhydrocodone-D3    | 5.138 | 43312    | 32708     | 1.3242     | 468.7634   |
| Hydrocodone       | Hydrocodone-D6       | 5.155 | 709709   | 79693     | 8.9056     | 513.4614   |
| Methamphetamine   | Methamphetamine-D11  | 5.162 | 1308357  | 112819    | 11.5969    | 488.7332   |
| 6-MAM             | 6-MAM-D6             | 5.329 | 37758    | 34054     | 1.1088     | 47.2460    |
| Phentermine       | Phentermine-D5       | 5.946 | 370086   | 135410    | 2.7331     | 523.8801   |
| Dextrorphan       | Dextrorphan-D3       | 6.423 | 512073   | 81719     | 6.2663     | 524.9424   |
| 7-aminoclonazepam | 7-Aminoclonazepam-D4 | 6.534 | 747596   | 72522     | 10.3086    | 471.4610   |
| Tramadol          | Tramadol-13C-D3      | 6.521 | 6707415  | 714188    | 9.3917     | 488.9101   |
| Doxylamine        | Doxylamine-D5        | 6.883 | 5494035  | 614475    | 8.9410     | 495.0008   |
| Bupropion         | Bupropion-D9         | 7.172 | 848126   | 87328     | 9.7119     | 512.7211   |
| Meprobamate       | Meprobamate-D7       | 7.173 | 430246   | 50193     | 8.5718     | 487.9412   |
| Venlafaxine       | Venlafaxine-D6       | 7.286 | 5036822  | 490370    | 10.2715    | 494.9239   |
| Citalopram        | Citalopram-D6        | 7.398 | 1162702  | 117187    | 9.9218     | 470.6840   |
| Zolpidem          | Zolpidem-D6          | 7.505 | 5463468  | 653132    | 8.3650     | 484,2439   |
| Diphenhydramine   | Diphenhydramine-D3   | 7.432 | 1630601  | 111316    | 14.6484    | 829.9133   |
| Dextromethorphan  | Dextromethorphan-D3  | 7.428 | 152306   | 14308     | 10.6448    | 547,9248   |
| Clonazepam        | Clonazepam-D4        | 7.603 | 381732   | 10275     | 37.1517    | 518.9968   |
| Promethazine      | Promethazine-D3      | 7.607 | 532458   | 59069     | 9.0142     | 533.7668   |



| <b>Compound</b><br>a-hydroxyalprazolam | <b>ISTD Compound</b><br>a-hydroxyalprazolam-D5 | <b>RT</b><br>7.660 | <b>Response</b><br>172404 | <b>ISTD Resp</b><br>14527 | <b>Resp Ratio</b><br>11.8679 | Final Conc<br>540.7003 |
|--|--|--------------------|---------------------------|---------------------------|------------------------------|------------------------|
| Trazodone                              | Trazodone-D6                                   | 7.678              | 1665487                   | 185452                    | 8.9807                       | 474.0265               |
| Carisoprodol                           | Carisoprodol-D7                                | 7.693              | 1543623                   | 202159                    | 7.6357                       | 518.5393               |
| Lorazepam                              | Alprazolam-D5                                  | 7.703              | 164213                    | 122657                    | 1.3388                       | 524.2326               |
| Alprazolam                             | Alprazolam-D5                                  | 7.727              | 1417292                   | 122657                    | 11.5550                      | 510.8270               |

| Batch Data Path<br>Analysis Time<br>Report Time | D:\2017 Data\53117 md<br>6/1/2017 3:51 PM<br>6/1/2017 3:55 PM | q p1\QuantResults\<br>Analyst Name<br>Reporter Name | 53117 mdq p1a.batch.bin<br>ISP Tox<br>ISP Tox |
|---|---|---|---|
| Last Calib Update                               | 6/1/2017 3:51 PM  | Batch State   | Processed                                     |
| Analysis Info                                   |   |   |   |
| Acq Time  | 2017-05-31 13:16  | Data File   | a cal 8.d                                     |
| Sample Type                                     | Calibration   | Sample Name   | a cal 8-1000ng/mL                             |
| Dilution  | 1   | Acq Method  | Quant Panel 1a 2-13-17.m                      |
| Position  | P1-H1   | Sample Info   |   |
| Inj Vol   | -1  | Comment   | AM 28   |

### Sample Chromatogram

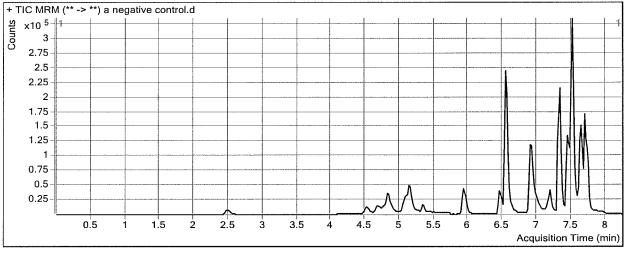


| Compound          | ISTD Compound        | RT    | Response | ISTD Resp | <b>Resp Ratio</b> | Final Conc |
|-------------------|----------------------|-------|----------|-----------|-------------------|------------|
| Morphine          | Morphine-D6          | 1.608 | 187025   | 1778      | 105.1756          | 968.3761   |
| Hydromorphone     | Hydromorphone-D6     | 2.528 | 974210   | 33661     | 28.9422           | 1060.4296  |
| Codeine           | Codeine-D6           | 4.573 | 468300   | 19770     | 23.6871           | 991.0084   |
| Amphetamine       | Amphetamine-D11      | 4.784 | 3373901  | 48520     | 69.5361           | 882.3641   |
| Oxycodone         | Oxycodone-D6         | 4.850 | 2902011  | 121891    | 23.8083           | 1031.2491  |
| Norhydrocodone    | Norhydrocodone-D3    | 5.118 | 83277    | 28102     | 2.9634            | 1047.9740  |
| Hydrocodone       | Hydrocodone-D6       | 5.155 | 1295121  | 75426     | 17.1707           | 989.2053   |
| Methamphetamine   | Methamphetamine-D11  | 5.141 | 2827248  | 115798    | 24.4153           | 1030.0743  |
| 6-MAM             | 6-MAM-D6             | 5.309 | 75983    | 30580     | 2.4847            | 105.7163   |
| Phentermine       | Phentermine-D5       | 5.946 | 767677   | 140935    | 5.4470            | 1044.6915  |
| Dextrorphan       | Dextrorphan-D3       | 6.403 | 955709   | 73183     | 13.0591           | 1093.5278  |
| 7-aminoclonazepam | 7-Aminoclonazepam-D4 | 6.515 | 1322920  | 57945     | 22.8305           | 1042.7412  |
| Tramadol          | Tramadol-13C-D3      | 6.521 | 12864482 | 655178    | 19.6351           | 1021.7393  |
| Doxylamine        | Doxylamine-D5        | 6.863 | 11197625 | 603265    | 18.5617           | 1025.9758  |
| Bupropion         | Bupropion-D9         | 7.172 | 1273555  | 63868     | 19.9404           | 1051.5863  |
| Meprobamate       | Meprobamate-D7       | 7.173 | 837634   | 45875     | 18.2589           | 1036.7190  |
| Venlafaxine       | Venlafaxine-D6       | 7.286 | 10148560 | 476526    | 21.2970           | 1024.8492  |
| Citalopram        | Citalopram-D6        | 7.398 | 2618883  | 111250    | 23.5405           | 1112.9445  |
| Zolpidem          | Zolpidem-D6          | 7.505 | 10320300 | 581842    | 17.7373           | 1025.9434  |
| Diphenhydramine   | Diphenhydramine-D3   | 7.432 | 3929155  | 191720    | 20.4942           | 1160.9176  |
| Dextromethorphan  | Dextromethorphan-D3  | 7.428 | 399722   | 18449     | 21.6665           | 1114.0426  |
| Clonazepam        | Clonazepam-D4        | 7.603 | 691209   | 8492      | 81.3977           | 1136.3230  |
| Promethazine      | Promethazine-D3      | 7.607 | 1626338  | 81239     | 20.0191           | 1184.9734  |

| Compound            | ISTD Compound          | RT    | Response | ISTD Resp | <b>Resp Ratio</b> | Final Conc |
|---------------------|------------------------|-------|----------|-----------|-------------------|------------|
| a-hydroxyalprazolam | a-hydroxyalprazolam-D5 | 7.660 | 310661   | 12609     | 24,6374           | 1121,5164  |
| Trazodone           | Trazodone-D6           | 7.678 | 3769763  | 221862    | 16.9915           | 897.1783   |
| Carisoprodol        | Carisoprodol-D7        | 7.693 | 2335241  | 145401    | 16.0607           | 1089.2943  |
| Lorazepam           | Alprazolam-D5          | 7.703 | 298259   | 88020     | 3.3885            | 1310.2768  |
| Alprazolam          | Alprazolam-D5          | 7.727 | 2190780  | 88020     | 24.8894           | 1099.0991  |

| Batch Data Path   | D:\2017 Data\53117 m | dq p1\QuantResults\ | 53117 mdq p1a.batch.bin  |
|-------------------|----------------------|---------------------|--------------------------|
| Analysis Time     | 6/1/2017 3:51 PM     | Analyst Name        | ISP Tox                  |
| Report Time       | 6/1/2017 3:55 PM     | Reporter Name       | ISP Tox                  |
| Last Calib Update | 6/1/2017 3:51 PM     | Batch State         | Processed                |
| Analysis Info     |                      |                     |                          |
| Acq Time          | 2017-05-31 13:54     | Data File           | a negative control.d     |
| Sample Type       | Sample               | Sample Name         | a negative control       |
| Dilution          | 1                    | Acq Method          | Quant Panel 1a 2-13-17.m |
| Position          | P1-E5                | Sample Info         |                          |
| Inj Vol           | -1                   | Comment             | AM 28                    |

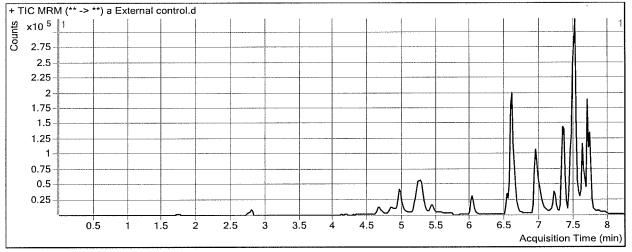
### Sample Chromatogram



| Compound    | ISTD Compound   | RT    | Response | ISTD Resp | Resp Ratio | <b>Final Conc</b> |
|-------------|-----------------|-------|----------|-----------|------------|-------------------|
| Amphetamine | Amphetamine-D11 | 4.784 | 29338    | 56508     | 0.5192     | 0.0000            |

| Batch Data Path   | D:\2017 Data\53117 r | ndq p1\QuantResults\ | 53117 mdq p1a.batch.bin  |
|-------------------|----------------------|----------------------|--|
| Analysis Time     | 6/1/2017 3:51 PM     | Analyst Name         | ISP Tox  |
| Report Time       | 6/1/2017 3:55 PM     | Reporter Name        | ISP Tox  |
| Last Calib Update | 6/1/2017 3:51 PM     | Batch State          | Processed  |
| Analysis Info     |                      |                      |  |
| Acq Time          | 2017-05-31 14:19     | Data File            | a External control.d   |
| Sample Type       | Sample               | Sample Name          | a External control-50ng/mL                                     |
| Dilution          | 1                    | Acq Method           | Quant Panel 1a 2-13-17.m                                       |
| Position          | P1-F5                | Sample Info          |  |
| Inj Vol           | -1                   | Comment              | AM 28; lot 81017 50 ng hydrocodone, diphenhydramine, lorazepam |

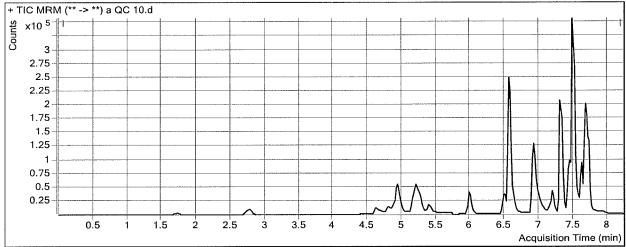
### Sample Chromatogram



| Compound        | ISTD Compound      | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
|-----------------|--------------------|-------|----------|-----------|------------|------------|
| Amphetamine     | Amphetamine-D11    | 4.944 | 30753    | 43909     | 0.7004     | 2.3082 4 5 |
| Hydrocodone     | Hydrocodone-D6     | 5.295 | 74804    | 109627    | 0.6823     | 40.1296    |
| Diphenhydramine | Diphenhydramine-D3 | 7.472 | 113759   | 153979    | 0.7388     | 42.3240    |
| Lorazepam       | Alprazolam-D5      | 7.723 | 17773    | 222717    | 0.0798     | 41.4169    |

| Batch Data Path   | , ,              |               | 53117 mdq p1a.batch.bin  | highlighted lines     |
|-------------------|------------------|---------------|--------------------------|-----------------------|
| Analysis Time     | 6/1/2017 3:51 PM | Analyst Name  | ISP Tox                  | nightighter the s     |
| Report Time       | 6/1/2017 3:55 PM | Reporter Name | ISP Tox                  | outside linear range  |
| Last Calib Update | 6/1/2017 3:51 PM | Batch State   | Processed                | of curve. Co not      |
| Analysis Info     |                  |               |                          | onter for uncertainty |
| Acq Time          | 2017-05-31 14:45 | Data File     | a QC 10.d                | hadart                |
| Sample Type       | QC               | Sample Name   | a QC 10                  | budget. A             |
| Dilution          | 1                | Acq Method    | Quant Panel 1a 2-13-17.m |                       |
| Position          | P1-A2            | Sample Info   |                          |                       |
| Inj Vol           | -1               | Comment       | AM 28                    |                       |

### Sample Chromatogram



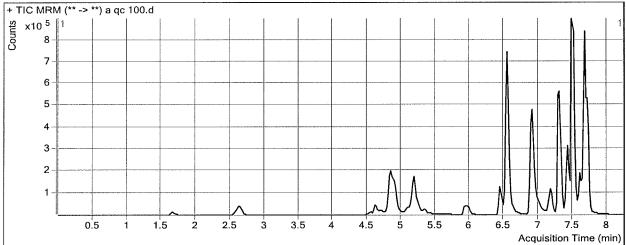
| Compound          | ISTD Compound        | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
|-------------------|----------------------|-------|----------|-----------|------------|------------|
| Morphine          | Morphine-D6          | 1.748 | 2596     | 3558      | 0.7297     | 7.8195     |
| Hydromorphone     | Hydromorphone-D6     | 2.808 | 11306    | 37516     | 0.3014     | 11.5454    |
| Codeine           | Codeine-D6           | 4.693 | 5351     | 24723     | 0.2164     | 8.9038     |
| Amphetamine       | Amphetamine-D11      | 4.944 | 77568    | 53176     | 1.4587     | 12.0031    |
| Oxycodone         | Oxycodone-D6         | 4.971 | 28396    | 138401    | 0.2052     | 9.3507     |
| Norhydrocodone    | Norhydrocodone-D3    | 5.258 | 1148     | 38279     | 0.0300     | 11.4394    |
| Hydrocodone       | Hydrocodone-D6       | 5.255 | 15443    | 106263    | 0.1453     | 9.2187     |
| Methamphetamine   | Methamphetamine-D11  | 5.281 | 36814    | 122539    | 0.3004     | 11.6625    |
| 6-MAM             | 6-MAM-D6             | 5.409 | 816      | 39119     | 0.0209     | 1.0163     |
| Phentermine       | Phentermine-D5       | 6.026 | 7665     | 140471    | 0.0546     | 9.8687     |
| Dextrorphan       | Dextrorphan-D3       | 6.504 | 10654    | 100636    | 0.1059     | 9.2912     |
| 7-aminoclonazepam | 7-Aminoclonazepam-D4 | 6.575 | 17411    | 88460     | 0.1968     | 10.1416    |
| Tramadol          | Tramadol-13C-D3      | 6.580 | 132378   | 689498    | 0.1920     | 10.3737    |
| Doxylamine        | Doxylamine-D5        | 6.944 | 92258    | 519245    | 0.1777     | 11.3433    |
| Bupropion         | Bupropion-D9         | 7.192 | 5705     | 31705     | 0.1800     | 10.5480    |
| Meprobamate       | Meprobamate-D7       | 7.213 | 10587    | 67708     | 0.1564     | 11.2034    |
| Venlafaxine       | Venlafaxine-D6       | 7.306 | 90143    | 487136    | 0.1850     | 10.1330    |
| Citalopram        | Citalopram-D6        | 7.418 | 18471    | 101066    | 0.1828     | 11.3917    |
| Zolpidem          | Zolpidem-D6          | 7.505 | 128282   | 736493    | 0.1742     | 10.8274    |
| Diphenhydramine   | Diphenhydramine-D3   | 7.452 | 29254    | 148915    | 0.1964     | 11.6150    |
| Dextromethorphan  | Dextromethorphan-D3  | 7.449 | 2451     | 11620     | 0.2110     | 12.0057    |
| Clonazepam        | Clonazepam-D4        | 7.623 | 8381     | 12778     | 0.6559     | 9.8024     |
| Promethazine      | Promethazine-D3      | 7,607 | 7045     | 40133     | 0.1755     | 10.7528    |

| a ( | 20 | 0 |
|-----|----|---|
|-----|----|---|

| <b>Compound</b><br>a-hydroxyalprazolam | ISTD Compound<br>a-hydroxyalprazolam-D5 | <b>RT</b><br>7.660 | <b>Response</b><br>3967 | <b>ISTD Resp</b><br>20898 | <b>Resp Ratio</b><br>0.1898 | Final Conc<br>9.5278 |
|--|---|--------------------|-------------------------|---------------------------|-----------------------------|----------------------|
| Trazodone                              | Trazodone-D6                            | 7.658              | 29202                   | 145263                    | 0.2010                      | 10.2613              |
| Carisoprodol                           | Carisoprodol-D7                         | 7.693              | 44873                   | 344605                    | 0.1302                      | 10.0821              |
| Lorazepam                              | Alprazolam-D5                           | 7.703              | 3274                    | 208761                    | 0.0157                      | 16.8276              |
| Alprazolam                             | Alprazolam-D5                           | 7.727              | 44211                   | 208761                    | 0.2118                      | 10.4047              |

| Batch Data Path   | D:\2017 Data\53117 md | q p1\QuantResults\ | 53117 mdq p1a.batch.bin  |
|-------------------|-----------------------|--------------------|--------------------------|
| Analysis Time     | 6/1/2017 3:51 PM      | Analyst Name       | ISP Tox                  |
| Report Time       | 6/1/2017 3:55 PM      | Reporter Name      | ISP Tox                  |
| Last Calib Update | 6/1/2017 3:51 PM      | Batch State        | Processed                |
|                   |                       |                    |                          |
| Analysis Info     |                       |                    |                          |
| Acq Time          | 2017-05-31 18:08      | Data File          | a qc 100.d               |
| Sample Type       | QC                    | Sample Name        | a qc 100                 |
| Dilution          | 1                     | Acq Method         | Quant Panel 1a 2-13-17.m |
| Position          | P1-B2                 | Sample Info        |                          |
| Inj Vol           | -1                    | Comment            | AM 28                    |

### Sample Chromatogram



### Results

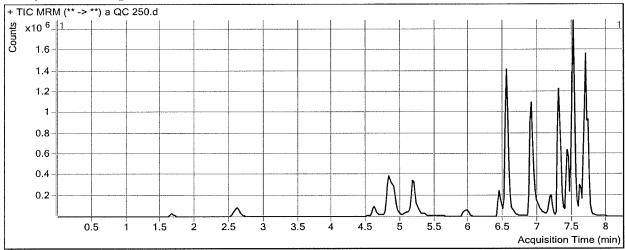
| Compound          | ISTD Compound        | RT    | Response | ISTD Resp | Resp Ratio | Final Conc             |
|-------------------|----------------------|-------|----------|-----------|------------|------------------------|
| Morphine          | Morphine-D6          | 1.668 | 25213    | 2317      | 10.8826    | 101.1928               |
| Hydromorphone     | Hydromorphone-D6     | 2.628 | 122525   | 41986     | 2.9183     | 107.3818 not contrated |
| Codeine           | Codeine-D6           | 4.613 | 54269    | 24921     | 2.1776     | 90.9680                |
| Amphetamine       | Amphetamine-D11      | 4.864 | 509050   | 55845     | 9.1155     | 109.8941               |
| Oxycodone         | Oxycodone-D6         | 4.890 | 278550   | 131936    | 2.1113     | 91.8747                |
| Norhydrocodone    | Norhydrocodone-D3    | 5.179 | 11202    | 38317     | 0.2923     | 104.1448               |
| Hydrocodone       | Hydrocodone-D6       | 5.195 | 175278   | 102809    | 1.7049     | 98.9870                |
| Methamphetamine   | Methamphetamine-D11  | 5.203 | 333361   | 126884    | 2.6273     | 109.9294               |
| 6-MAM             | 6-MAM-D6             | 5.369 | 7837     | 37313     | 0.2100     | 9.0550                 |
| Phentermine       | Phentermine-D5       | 5.987 | 77386    | 142150    | 0.5444     | 103.8689               |
| Dextrorphan       | Dextrorphan-D3       | 6.441 | 120954   | 97682     | 1.2382     | 104.0752               |
| 7-aminoclonazepam | 7-Aminoclonazepam-D4 | 6.534 | 206455   | 93513     | 2.2078     | 101.8853               |
| Tramadol          | Tramadol-13C-D3      | 6.540 | 1420706  | 742670    | 1.9130     | 99.8933                |
| Doxylamine        | Doxylamine-D5        | 6.903 | 921798   | 501342    | 1.8387     | 103.0147               |
| Bupropion         | Bupropion-D9         | 7.172 | 50920    | 26661     | 1.9099     | 101.6879               |
| Meprobamate       | Meprobamate-D7       | 7.193 | 105616   | 59751     | 1.7676     | 102.4808               |
| Venlafaxine       | Venlafaxine-D6       | 7.306 | 1028182  | 536346    | 1.9170     | 93.3776                |
| Citalopram        | Citalopram-D6        | 7.398 | 237727   | 117730    | 2.0193     | 98.0007                |
| Zolpidem          | Zolpidem-D6          | 7.505 | 1346834  | 752746    | 1.7892     | 104.1743               |
| Diphenhydramine   | Diphenhydramine-D3   | 7.432 | 312454   | 164073    | 1.9044     | 108.3205               |
| Dextromethorphan  | Dextromethorphan-D3  | 7.428 | 29113    | 14274     | 2.0396     | 105.9314               |
| Clonazepam        | Clonazepam-D4        | 7.603 | 82993    | 12202     | 6.8018     | 95.5518                |
| Promethazine      | Promethazine-D3      | 7.607 | 114854   | 71866     | 1.5982     | 94.9347                |
|                   |                      |       |          |           |            | A                      |

a QC 100

| Compound            | ISTD Compound          | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
|---------------------|------------------------|-------|----------|-----------|------------|------------|
| a-hydroxyalprazolam | a-hydroxyalprazolam-D5 | 7.660 | 42684    | 19805     | 2.1552     | 98,9251    |
| Trazodone           | Trazodone-D6           | 7.658 | 323063   | 149169    | 2.1658     | 114.0433   |
| Carisoprodol        | Carisoprodol-D7        | 7.672 | 486395   | 294956    | 1.6490     | 112.9751   |
| Lorazepam           | Alprazolam-D5          | 7.703 | 35488    | 175175    | 0.2026     | 88.5037    |
| Alprazolam          | Alprazolam-D5          | 7.727 | 447969   | 175175    | 2.5573     | 113.8799   |

| Batch Data Path   | D:\2017 Data\53117 md | q p1\QuantResults\ | 53117 mdq p1a.batch.bin  |
|-------------------|-----------------------|--------------------|--------------------------|
| Analysis Time     | 6/1/2017 3:51 PM      | Analyst Name       | ISP Tox                  |
| Report Time       | 6/1/2017 3:55 PM      | Reporter Name      | ISP Tox                  |
| Last Calib Update | 6/1/2017 3:51 PM      | Batch State        | Processed                |
|                   |                       |                    |                          |
| Analysis Info     |                       |                    |                          |
| Acq Time          | 2017-05-31 22:09      | Data File          | a QC 250.d               |
| Sample Type       | QC                    | Sample Name        | a QC 250                 |
| Dilution          | 1                     | Acq Method         | Quant Panel 1a 2-13-17.m |
| Position          | P1-C2                 | Sample Info        |                          |
| Inj Vol           | -1                    | Comment            | AM 28                    |

### Sample Chromatogram



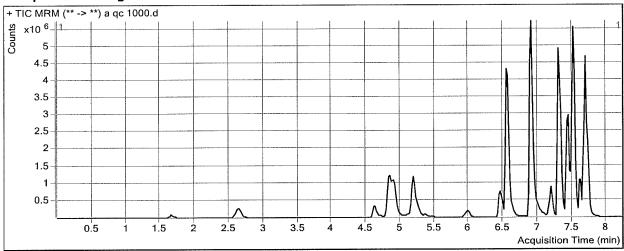
| Results          |                        |       | _        |           |            |                        |
|------------------|------------------------|-------|----------|-----------|------------|------------------------|
| Compound         | ISTD Compound          | RT    | Response | ISTD Resp | Resp Ratio | Final Conc             |
| Morphine         | Morphine-D6            | 1.651 | 55632    | 2106      | 26.4157    | 244.0459               |
| Hydromorphone    | Hydromorphone-D6       | 2.608 | 273898   | 37780     | 7.2497     | 266.0091 Not craluated |
| Codeine          | Codeine-D6             | 4.613 | 128396   | 21033     | 6.1044     | 255.2810               |
| Amphetamine      | Amphetamine-D11        | 4.844 | 1100375  | 51848     | 21.2231    | 264.6891               |
| Oxycodone        | Oxycodone-D6           | 4.890 | 713484   | 117174    | 6.0891     | 264.0944               |
| Norhydrocodone   | Norhydrocodone-D3      | 5.159 | 24885    | 33253     | 0.7484     | 265.2795               |
| Hydrocodone      | Hydrocodone-D6         | 5.195 | 391945   | 88991     | 4,4043     | 254.3679               |
| Methamphetamine  | Methamphetamine-D11    | 5.182 | 674297   | 118698    | 5.6808     | 238.8828               |
| 6-MAM            | 6-MAM-D6               | 5.349 | 18207    | 32672     | 0.5573     | 23.8104                |
| Phentermine      | Phentermine-D5         | 5.966 | 191943   | 139041    | 1.3805     | 264.3129               |
| Dextrorphan      | Dextrorphan-D3         | 6.441 | 275764   | 88383     | 3.1201     | 261.5958               |
| 7-aminoclonazepa | m 7-Aminoclonazepam-D4 | 6.534 | 432231   | 73333     | 5.8941     | 270.0639               |
| Tramadol         | Tramadol-13C-D3        | 6.540 | 3320413  | 723526    | 4.5892     | 239.1021               |
| Doxylamine       | Doxylamine-D5          | 6.903 | 2686242  | 507252    | 5.2957     | 293.8104               |
| Bupropion        | Bupropion-D9           | 7.192 | 66475    | 14172     | 4.6905     | 248.1744               |
| Meprobamate      | Meprobamate-D7         | 7.193 | 234205   | 52961     | 4.4222     | 252.8672               |
| Venlafaxine      | Venlafaxine-D6         | 7.306 | 2597983  | 507909    | 5.1151     | 247.0871               |
| Citalopram       | Citalopram-D6          | 7.398 | 597827   | 112785    | 5.3006     | 252.7477               |
| Zolpidem         | Zolpidem-D6            | 7.505 | 2949924  | 657542    | 4.4863     | 260.0596               |
| Diphenhydramine  | Diphenhydramine-D3     | 7.452 | 854474   | 184326    | 4.6357     | 262.9724               |
| Dextromethorphar | Dextromethorphan-D3    | 7.428 | 80188    | 14871     | 5.3923     | 278.1401               |
| Clonazepam       | Clonazepam-D4          | 7.603 | 202332   | 11831     | 17.1022    | 239.2636               |
| Promethazine     | Promethazine-D3        | 7.607 | 277236   | 67089     | 4.1324     | 244.8940               |
|                  |                        |       |          |           |            |                        |

| Compound            | ISTD Compound          | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
|---------------------|------------------------|-------|----------|-----------|------------|------------|
| a-hydroxyalprazolam | a-hydroxyalprazolam-D5 | 7.660 | 95529    | 16395     | 5.8267     | 265.9179   |
| Trazodone           | Trazodone-D6           | 7.678 | 959825   | 189664    | 5.0607     | 266.9604   |
| Carisoprodol        | Carisoprodol-D7        | 7.693 | 950992   | 249980    | 3.8043     | 258.9813   |
| Lorazepam           | Alprazolam-D5          | 7.703 | 84416    | 149267    | 0.5655     | 227.6908   |
| Alprazolam          | Alprazolam-D5          | 7.727 | 869003   | 149267    | 5.8218     | 257.9000   |



| Batch Data Path   | D:\2017 Data\53117 md | lq p1\QuantResults\ | 53117 mdq p1a.batch.bin  |
|-------------------|-----------------------|---------------------|--------------------------|
| Analysis Time     | 6/1/2017 3:51 PM      | Analyst Name        | ISP Tox                  |
| Report Time       | 6/1/2017 3:55 PM      | Reporter Name       | ISP Tox                  |
| Last Calib Update | 6/1/2017 3:51 PM      | Batch State         | Processed                |
| Analysis Info     |                       |                     |                          |
| Acq Time          | 2017-05-31 23:25      | Data File           | a qc 1000.d              |
| Sample Type       | QC                    | Sample Name         | a qc 1000                |
| Dilution          | 1                     | Acq Method          | Quant Panel 1a 2-13-17.m |
| Position          | P1-D2                 | Sample Info         |                          |
| Inj Vol           | -1                    | Comment             | AM 28                    |

### Sample Chromatogram



### Results

| Results           |                        |       |          |           |            |                        |
|-------------------|------------------------|-------|----------|-----------|------------|------------------------|
| Compound          | ISTD Compound          | RT    | Response | ISTD Resp | Resp Ratio | Final Conc             |
| Morphine          | Morphine-D6            | 1.651 | 187488   | 1638      | 114.4622   | 1053.7826              |
| Hydromorphone     | Hydromorphone-D6       | 2.628 | 970220   | 31996     | 30.3228    | 1110.9908 not crahated |
| Codeine           | Codeine-D6             | 4.633 | 460637   | 18992     | 24,2542    | 1014.7354              |
| Amphetamine       | Amphetamine-D11        | 4.844 | 3531974  | 48028     | 73.5394    | 933.5461               |
| Oxycodone         | Oxycodone-D6           | 4.910 | 2859155  | 117573    | 24.3181    | 1053.3200              |
| Norhydrocodone    | Norhydrocodone-D3      | 5.179 | 89434    | 27344     | 3.2707     | 1156.5883              |
| Hydrocodone       | Hydrocodone-D6         | 5.195 | 1381106  | 82897     | 16.6606    | 959.8442               |
| Methamphetamine   | Methamphetamine-D11    | 5.203 | 2598407  | 103414    | 25.1264    | 1060.1035              |
| 6-MAM             | 6-MAM-D6               | 5.369 | 69753    | 29563     | 2.3595     | 100.3946               |
| Phentermine       | Phentermine-D5         | 5.987 | 765463   | 132662    | 5.7700     | 1106.6726              |
| Dextrorphan       | Dextrorphan-D3         | 6.463 | 993773   | 76959     | 12.9131    | 1081.3041              |
| 7-aminoclonazepam | n 7-Aminoclonazepam-D4 | 6.555 | 1309992  | 58371     | 22.4424    | 1025.0314              |
| Tramadol          | Tramadol-13C-D3        | 6.540 | 13741092 | 634707    | 21.6495    | 1126.5219              |
| Doxylamine        | Doxylamine-D5          | 6.903 | 13442114 | 576759    | 23.3063    | 1287.8334              |
| Bupropion         | Bupropion-D9           | 7.192 | 592192   | 28142     | 21.0428    | 1109.6640              |
| Meprobamate       | Meprobamate-D7         | 7.193 | 881478   | 46079     | 19.1295    | 1086.0398              |
| Venlafaxine       | Venlafaxine-D6         | 7.306 | 10311709 | 538586    | 19.1459    | 921.4603               |
| Citalopram        | Citalopram-D6          | 7.398 | 2969036  | 140193    | 21.1782    | 1001.5394              |
| Zolpidem          | Zolpidem-D6            | 7.505 | 10373699 | 562750    | 18.4339    | 1066.2085              |
| Diphenhydramine   | Diphenhydramine-D3     | 7.452 | 4663782  | 226710    | 20.5715    | 1165.2947              |
| Dextromethorphan  | Dextromethorphan-D3    | 7.428 | 442932   | 19747     | 22.4302    | 1153.2688              |
| Clonazepam        | Clonazepam-D4          | 7.623 | 692448   | 9904      | 69.9147    | 976.1107               |
| Promethazine      | Promethazine-D3        | 7.628 | 1543447  | 79444     | 19.4281    | 1150.0021              |
|                   |                        |       |          |           |            |                        |

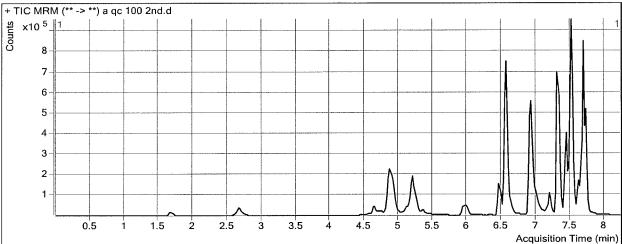
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| 9 | qc | 1000 |
|---|----|------|
|---|----|------|

| Compound                   | ISTD Compound          | RT     | Response | ISTD Resp   | Resp Ratio | Final Conc         |
|----------------------------|------------------------|--------|----------|-------------|------------|--------------------|
| a-hydroxyalprazolam        | a-hydroxyalprazolam-D5 | 7.660  | 293048   | 11692       | 25,0633    | 1140.8851          |
| Trazodone                  | Trazodone-D6           | 7.678  | 4688384  | 280456      | 16.7170    | 882.6787           |
| Carisoprodol               | Carisoprodol-D7        | 7.672  | 1398885  | 141173      | 9.9090     | 672.5438 - Act + A |
| Lorazepam                  | Alprazolam-D5          | 7.703  | 296061   | 81048       | 3.6529     | 1411.6665          |
| Alprazolam                 | Alprazolam-D5          | 7.727  | 2167833  | 81048       | 26.7474    | 1181.0679          |
| At The 1000 ng<br>Cut off. | carisoprodul<br>Ø-     | sample | was not  | e val nated | dup of     | peak is            |

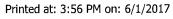
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|-------------------|----------------------|---------------------|--------------------------|
| Analysis Time     | 6/1/2017 3:51 PM     | Analyst Name        | ISP Tox                  |
| Report Time       | 6/1/2017 3:55 PM     | Reporter Name       | ISP Tox                  |
| Last Calib Update | 6/1/2017 3:51 PM     | Batch State         | Processed                |
| Analysis Info     |                      |                     |                          |
| Acq Time          | 2017-05-31 23:50     | Data File           | a qc 100 2nd.d           |
| Sample Type       | QC                   | Sample Name         | a qc 100 2nd             |
| Dilution          | 1                    | Acq Method          | Quant Panel 1a 2-13-17.m |
| Position          | P1-E2                | Sample Info         |                          |
| Inj Vol           | -1                   | Comment             | AM 28                    |

### Sample Chromatogram



### Results

| Results           |                      |       |          |           |            |                        |
|-------------------|----------------------|-------|----------|-----------|------------|------------------------|
| Compound          | ISTD Compound        | RT    | Response | ISTD Resp | Resp Ratio | Final Conc             |
| Morphine          | Morphine-D6          | 1.668 | 22521    | 2155      | 10.4508    | 97.2216                |
| Hydromorphone     | Hydromorphone-D6     | 2.668 | 110338   | 37682     | 2.9281     | 107.7436 not craluated |
| Codeine           | Codeine-D6           | 4.653 | 53388    | 22513     | 2.3715     | 99.0789                |
| Amphetamine       | Amphetamine-D11      | 4.884 | 571015   | 58259     | 9.8014     | 118.6633               |
| Oxycodone         | Oxycodone-D6         | 4.910 | 260667   | 126533    | 2.0601     | 89.6586                |
| Norhydrocodone    | Norhydrocodone-D3    | 5.199 | 11202    | 39139     | 0.2862     | 101.9742               |
| Hydrocodone       | Hydrocodone-D6       | 5.215 | 173331   | 102048    | 1.6985     | 98.6211                |
| Methamphetamine   | Methamphetamine-D11  | 5.223 | 390048   | 145863    | 2.6741     | 111.9051               |
| 6-MAM             | 6-MAM-D6             | 5.369 | 7601     | 35055     | 0.2168     | 9.3438                 |
| Phentermine       | Phentermine-D5       | 6.007 | 92995    | 168285    | 0.5526     | 105.4434               |
| Dextrorphan       | Dextrorphan-D3       | 6.463 | 139461   | 114808    | 1.2147     | 102.1080               |
| 7-aminoclonazepam | 7-Aminoclonazepam-D4 | 6.555 | 190816   | 85593     | 2,2293     | 102.8690               |
| Tramadol          | Tramadol-13C-D3      | 6.560 | 1468835  | 807058    | 1.8200     | 95.0565                |
| Doxylamine        | Doxylamine-D5        | 6.924 | 1228005  | 668668    | 1.8365     | 102.8949               |
| Bupropion         | Bupropion-D9         | 7.192 | 34663    | 19142     | 1.8109     | 96.4687                |
| Meprobamate       | Meprobamate-D7       | 7.193 | 94322    | 54654     | 1.7258     | 100.1124               |
| Venlafaxine       | Venlafaxine-D6       | 7.306 | 1170536  | 580911    | 2.0150     | 98.0872                |
| Citalopram        | Citalopram-D6        | 7.418 | 283453   | 141195    | 2.0075     | 97.4474                |
| Zolpidem          | Zolpidem-D6          | 7.505 | 1222237  | 682018    | 1.7921     | 104.3396               |
| Diphenhydramine   | Diphenhydramine-D3   | 7.452 | 403778   | 213421    | 1.8919     | 107.6167               |
| Dextromethorphan  | Dextromethorphan-D3  | 7.449 | 34824    | 18287     | 1.9043     | 98.9801                |
| Clonazepam        | Clonazepam-D4        | 7,623 | 78413    | 11845     | 6.6201     | 93.0154                |
| Promethazine      | Promethazine-D3      | 7.628 | 100229   | 57151     | 1.7538     | 104.1421               |
|                   |                      |       |          |           |            |                        |



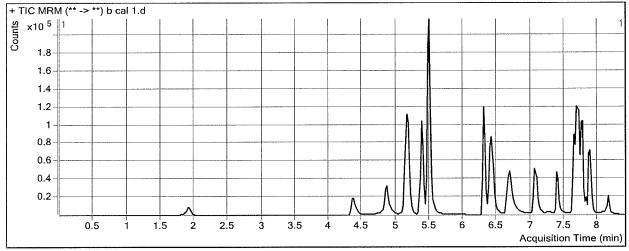
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a qc 100 2nd

| <b>Compound</b><br>a-hydroxyalprazolam<br>Trazodone<br>Carisoprodol<br>Lorazepam | ISTD Compound<br>a-hydroxyalprazolam-D5<br>Trazodone-D6<br>Carisoprodol-D7<br>Alprazolam-D5<br>Alprazolam-D5 | <b>RT</b><br>7.681<br>7.678<br>7.693<br>7.703 | <b>Response</b><br>37908<br>407563<br>403607<br>34053<br>399992 | ISTD Resp<br>16259<br>198816<br>276925<br>166185<br>166185 | Resp Ratio<br>2.3315<br>2.0499<br>1.4575<br>0.2049<br>2.4069 | Final Conc<br>106.9419<br>107.9262<br>99.9960<br>89.3945<br>107.2461 |
|--|--|---|---|--|--|--|
| Alprazolam   | Alprazolam-D5  | 7.727   | 399992  | 166185   | 2.4069   | 107.2461   |

| Batch Data Path   | D:\2017 Data\53117 md | iq p1\QuantResults\  | 53117 mdq p1b.batch.bin     |
|-------------------|-----------------------|----------------------|-----------------------------|
| Analysis Time     | 6/1/2017 3:33 PM      | Analyst Name         | ISP Tox                     |
| Report Time       | 6/1/2017 3:53 PM      | <b>Reporter Name</b> | ISP Tox                     |
| Last Calib Update | 6/1/2017 3:33 PM      | Batch State          | Processed                   |
| Analysis Info     |                       |                      |                             |
| Acq Time          | 2017-05-31 10:30      | Data File            | b cal 1.d                   |
| Sample Type       | Calibration           | Sample Name          | b cal 1-5ng/mL              |
| Dilution          | 1                     | Acq Method           | Quant Panel 1b 11-18-2016.m |
| Position          | P1-A1                 | Sample Info          |                             |
| Inj Vol           | -1                    | Comment              | AM 28                       |

### Sample Chromatogram



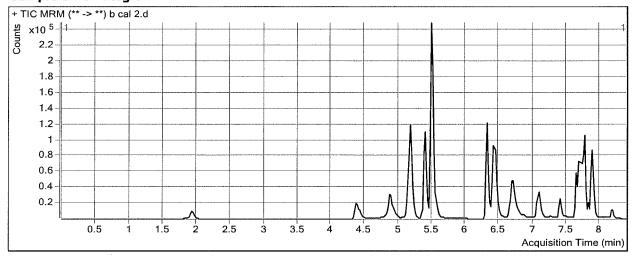
| ILUGAILU             |                         |       |          |           |            |            |   |
|----------------------|-------------------------|-------|----------|-----------|------------|------------|---|
| Compound             | ISTD Compound           | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |   |
| Oxymorphone          | Oxymorphone-D3          | 1.928 | 3997     | 40838     | 0.0979     | 6.1240     |   |
| Dihydrocodeine       | Dihydrocodeine-D6       | 4.437 | 7943     | 86436     | 0.0919     | 5.4523     |   |
| Noroxycodone         | Noroxycodone-D3         | 4.897 | 5086     | 50206     | 0.1013     | 6.4082     |   |
| Naloxone             | Naloxone-D5             | 4.954 | 4909     | 86277     | 0.0569     | 5.6586     |   |
| Naltrexone           | Naltrexone-D3           | 5.172 | 11027    | 120474    | 0.0915     | 5.1693     |   |
| Acetyl Norfentanyl   | Acetyl Norfentanyl-D5   | 5.224 | 2773     | 290399    | 0.0095     | 0.5353     |   |
| Naltrexol            | Naltrexol-D3            | 5.390 | 31859    | 283032    | 0.1126     | 5.0549     |   |
| O-desmethyl-tramadol | O-desmethyl-tramadol-D6 | 5.499 | 68037    | 686983    | 0.0990     | 5.6172     |   |
| Ketamine             | Ketamine-D4             | 6.422 | 20701    | 202789    | 0.1021     | 5.1046     |   |
| Norfentanyl          | Norfentanyl-D5          | 6.324 | 2641     | 343731    | 0.0077     | 0.6598     |   |
| alpha-PVP            | alpha-PVP-d8            | 6.709 | 21206    | 235797    | 0.0899     | 5.1419     |   |
| Acetyl Fentanyl      | Acetyl Fentanyl-D5      | 7.080 | 1231     | 165174    | 0.0075     | 0.5773     |   |
| Norbuprenorphine     | Norbuprenorphine-D3     | 7.255 | 34       | 4319      | 0.0078     | 0.0000     |   |
| Fentanyl             | Fentanyl-D5             | 7.400 | 1022     | 111873    | 0.0091     | 0.5346     |   |
| EDDP                 | EDDP-D3                 | 7.410 | 1314     | 14672     | 0.0896     | 6.4932     |   |
| Cyclobenzaprine      | Cyclobenzaprine-D3      | 7.633 | 4355     | 50438     | 0.0863     | 6.1959     |   |
| Sufentanil           | Sufentanil-D5           | 7.720 | 1054     | 90435     | 0.0117     | 0.6210     |   |
| Quetiapine           | Quetiapine-D8           | 7.700 | 30552    | 87746     | 0.3482     | 5.7815     |   |
| Methadone            | Methadone-D9            | 7.643 | 10907    | 137825    | 0.0791     | 5.9381     |   |
| Fluoxetine           | Fluoxetine-D6           | 7.685 | 12086    | 135868    | 0.0890     | 6.1093     |   |
| Oxazepam             | Oxazepam-D5             | 7.710 | 2641     | 24790     | 0.1065     | 5.2065     |   |
| Sertraline           | Sertraline-D3           | 7.746 | 3369     | 38983     | 0.0864     | 5.9546     |   |
| Temazepam            | Temazepam-D5            | 7.768 | 15654    | 185551    | 0.0844     | 8.1173     | Ć |
|                      |                         |       |          |           |            |            |   |



| Compound      | ISTD Compound    | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
|---------------|------------------|-------|----------|-----------|------------|------------|
| Nordiazepam   | Nordiazepam-D5   | 7.836 | 4167     | 26705     | 0.1560     | 5.6513     |
| Diazepam      | Diazepam-D5      | 7.891 | 13610    | 160650    | 0.0847     | 5.5710     |
| Buprenorphine | Buprenorphine-D4 | 8.219 | 612      | 46110     | 0.0133     | 0.6218     |

| Batch Data Path<br>Analysis Time<br>Report Time<br>Last Calib Update | D:\2017 Data\53117 m<br>6/1/2017 3:33 PM<br>6/1/2017 3:53 PM<br>6/1/2017 3:33 PM | dq p1\QuantResults\<br>Analyst Name<br>Reporter Name<br>Batch State | 53117 mdq p1b.batch.bin<br>ISP Tox<br>ISP Tox<br>Processed |
|--|--|---|--|
| Analysis Info  |  |   |  |
| Acq Time   | 2017-05-31 10:56   | Data File   | b cal 2.d  |
| Sample Type  | Calibration  | Sample Name   | b cal 2-10ng/mL  |
| Dilution   | 1  | Acq Method  | Quant Panel 1b 11-18-2016.m                                |
| Position   | P1-B1  | Sample Info   |  |
| Inj Vol  | -1   | Comment   | AM 28  |

#### Sample Chromatogram



### Results

| Compound             | ISTD Compound           | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
|----------------------|-------------------------|-------|----------|-----------|------------|------------|
| Oxymorphone          | Oxymorphone-D3          | 1.948 | 7888     | 40282     | 0.1958     | 10.5634    |
| Dihydrocodeine       | Dihydrocodeine-D6       | 4.437 | 15016    | 89091     | 0.1685     | 9.5676     |
| Noroxycodone         | Noroxycodone-D3         | 4.917 | 9067     | 51755     | 0.1752     | 9.8063     |
| Naloxone             | Naloxone-D5             | 4.974 | 8282     | 78147     | 0.1060     | 9.6647     |
| Naltrexone           | Naltrexone-D3           | 5.192 | 21948    | 115963    | 0.1893     | 9.7336     |
| Acetyl Norfentanyl   | Acetyl Norfentanyl-D5   | 5.224 | 4980     | 289984    | 0.0172     | 0.9189     |
| Naltrexol            | Naltrexol-D3            | 5.390 | 60650    | 275072    | 0.2205     | 9.8206     |
| O-desmethyl-tramadol | O-desmethyl-tramadol-D6 | 5.519 | 134231   | 687387    | 0.1953     | 10.1981    |
| Ketamine             | Ketamine-D4             | 6.442 | 40396    | 194987    | 0.2072     | 9.8576     |
| Norfentanyl          | Norfentanyl-D5          | 6.344 | 5863     | 341530    | 0.0172     | 1.1284     |
| alpha-PVP            | alpha-PVP-d8            | 6.709 | 42941    | 236208    | 0.1818     | 9.7250     |
| Acetyl Fentanyl      | Acetyl Fentanyl-D5      | 7.100 | 1607     | 105591    | 0.0152     | 1.0613     |
| Norbuprenorphine     | Norbuprenorphine-D3     | 7.255 | 80       | 2766      | 0.0291     | 0.3972     |
| Fentanyl             | Fentanyl-D5             | 7.420 | 1195     | 50608     | 0.0236     | 1.2249     |
| EDDP                 | EDDP-D3                 | 7.410 | 2152     | 14828     | 0.1451     | 9.2876     |
| Cyclobenzaprine      | Cyclobenzaprine-D3      | 7.653 | 4167     | 21090     | 0.1976     | 11.0526    |
| Sufentanil           | Sufentanil-D5           | 7.720 | 726      | 35694     | 0.0203     | 1.0228     |
| Quetiapine           | Quetiapine-D8           | 7.721 | 49748    | 72269     | 0.6884     | 10.1421    |
| Methadone            | Methadone-D9            | 7.643 | 14005    | 87872     | 0.1594     | 10.3336    |
| Fluoxetine           | Fluoxetine-D6           | 7.685 | 8845     | 52379     | 0.1689     | 10.0885    |
| Oxazepam             | Oxazepam-D5             | 7.730 | 4973     | 25974     | 0.1915     | 9.5289     |
| Sertraline           | Sertraline-D3           | 7.767 | 2591     | 14776     | 0.1754     | 10.4242    |
| Temazepam            | Temazepam-D5            | 7.768 | 27947    | 170388    | 0.1640     | 12.1740    |

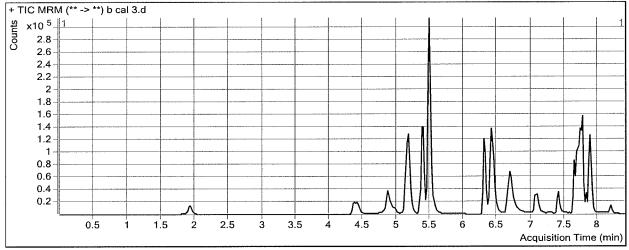
b cal 2

b cal 2

| Compound      | ISTD Compound    | RT    | Response | ISTD Resp | <b>Resp Ratio</b> | <b>Final Conc</b> |
|---------------|------------------|-------|----------|-----------|-------------------|-------------------|
| Nordiazepam   | Nordiazepam-D5   | 7.836 | 7096     | 25484     | 0.2785            | 9.4831            |
| Diazepam      | Diazepam-D5      | 7.891 | 27904    | 149869    | 0.1862            | 9.8075            |
| Buprenorphine | Buprenorphine-D4 | 8.240 | 661      | 27225     | 0.0243            | 1.1554            |

| Batch Data Path   | D:\2017 Data\53117 md | q p1\QuantResults\ | 53117 mdq p1b.batch.bin     |
|-------------------|-----------------------|--------------------|-----------------------------|
| Analysis Time     | 6/1/2017 3:33 PM      | Analyst Name       | ISP Tox                     |
| Report Time       | 6/1/2017 3:53 PM      | Reporter Name      | ISP Tox                     |
| Last Calib Update | 6/1/2017 3:33 PM      | Batch State        | Processed                   |
| Analysis Info     |                       |                    |                             |
| Acq Time          | 2017-05-31 11:21      | Data File          | b cal 3.d                   |
| Sample Type       | Calibration           | Sample Name        | b cal 3-25ng/mL             |
| Dilution          | 1                     | Acq Method         | Quant Panel 1b 11-18-2016.m |
| Position          | P1-C1                 | Sample Info        |                             |
| Inj Vol           | -1                    | Comment            | AM 28                       |

### Sample Chromatogram



#### Results

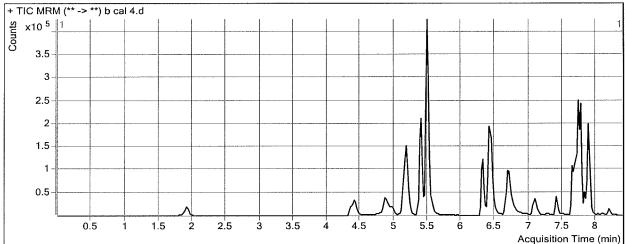
| 1.000100             |                         |       |          |           |            |            |
|----------------------|-------------------------|-------|----------|-----------|------------|------------|
| Compound             | ISTD Compound           | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
| Oxymorphone          | Oxymorphone-D3          | 1.928 | 19839    | 42067     | 0.4716     | 23.0666    |
| Dihydrocodeine       | Dihydrocodeine-D6       | 4.437 | 39001    | 88179     | 0.4423     | 24.2636    |
| Noroxycodone         | Noroxycodone-D3         | 4.917 | 23915    | 52490     | 0.4556     | 22.7035    |
| Naloxone             | Naloxone-D5             | 4.974 | 23783    | 85176     | 0.2792     | 23.8040    |
| Naltrexone           | Naltrexone-D3           | 5.192 | 55532    | 116924    | 0.4749     | 23.0746    |
| Acetyl Norfentanyl   | Acetyl Norfentanyl-D5   | 5.224 | 13126    | 296702    | 0.0442     | 2.2808     |
| Naltrexol            | Naltrexol-D3            | 5.390 | 159748   | 286035    | 0.5585     | 24.7457    |
| O-desmethyl-tramadol | O-desmethyl-tramadol-D6 | 5.499 | 343623   | 708464    | 0.4850     | 23.9900    |
| Ketamine             | Ketamine-D4             | 6.422 | 102600   | 203296    | 0.5047     | 23.3132    |
| Norfentanyl          | Norfentanyl-D5          | 6.324 | 15872    | 364871    | 0.0435     | 2,4294     |
| alpha-PVP            | alpha-PVP-d8            | 6.709 | 108368   | 234324    | 0.4625     | 23.7292    |
| Acetyl Fentanyl      | Acetyl Fentanyl-D5      | 7.080 | 3504     | 109194    | 0.0321     | 2.1123     |
| Norbuprenorphine     | Norbuprenorphine-D3     | 7.255 | 214      | 3062      | 0.0700     | 2.7754     |
| Fentanyl             | Fentanyl-D5             | 7.400 | 3075     | 68268     | 0.0450     | 2.2463     |
| EDDP                 | EDDP-D3                 | 7.410 | 7353     | 16209     | 0.4536     | 24.8023    |
| Cyclobenzaprine      | Cyclobenzaprine-D3      | 7.633 | 15282    | 32186     | 0.4748     | 23.1533    |
| Sufentanil           | Sufentanil-D5           | 7.720 | 2269     | 47020     | 0.0483     | 2.3168     |
| Quetiapine           | Quetiapine-D8           | 7.721 | 130858   | 72535     | 1.8041     | 24.4431    |
| Methadone            | Methadone-D9            | 7.643 | 38634    | 97604     | 0.3958     | 23.2861    |
| Fluoxetine           | Fluoxetine-D6           | 7.685 | 33338    | 76122     | 0.4380     | 23.4864    |
| Oxazepam             | Oxazepam-D5             | 7.730 | 12012    | 25067     | 0.4792     | 24.1756    |
| Sertraline           | Sertraline-D3           | 7.767 | 8744     | 20597     | 0.4245     | 22.9447    |
| Temazepam            | Temazepam-D5            | 7.768 | 80140    | 184168    | 0.4351     | 25.9815    |
|                      |                         |       |          |           |            |            |

b cal 3

| Compound      | ISTD Compound    | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
|---------------|------------------|-------|----------|-----------|------------|------------|
| Nordiazepam   | Nordiazepam-D5   | 7.836 | 20617    | 28070     | 0.7345     | 23.7575    |
| Diazepam      | Diazepam-D5      | 7,891 | 83284    | 158800    | 0.5245     | 23.9298    |
| Buprenorphine | Buprenorphine-D4 | 8.260 | 1505     | 32463     | 0.0463     | 2.2246     |

| Batch Data Path   | D:\2017 Data\53117 m | dq p1\QuantResults\ | 53117 mdq p1b.batch.bin     |
|-------------------|----------------------|---------------------|-----------------------------|
| Analysis Time     | 6/1/2017 3:33 PM     | Analyst Name        | ISP Tox                     |
| Report Time       | 6/1/2017 3:53 PM     | Reporter Name       | ISP Tox                     |
| Last Calib Update | 6/1/2017 3:33 PM     | Batch State         | Processed                   |
| Analysis Info     |                      |                     |                             |
| Acq Time          | 2017-05-31 11:47     | Data File           | b cal 4.d                   |
| Sample Type       | Calibration          | Sample Name         | b cal 4-50ng/mL             |
| Dilution          | 1                    | Acq Method          | Quant Panel 1b 11-18-2016.m |
| Position          | P1-D1                | Sample Info         |                             |
| Inj Vol           | -1                   | Comment             | AM 28                       |

#### Sample Chromatogram



| <b>NESUILS</b>       |                         |       |          |           |            |            |
|----------------------|-------------------------|-------|----------|-----------|------------|------------|
| Compound             | ISTD Compound           | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
| Oxymorphone          | Oxymorphone-D3          | 1.928 | 40227    | 41692     | 0.9649     | 45.4276    |
| Dihydrocodeine       | Dihydrocodeine-D6       | 4.417 | 79805    | 88766     | 0.8990     | 48.7841    |
| Noroxycodone         | Noroxycodone-D3         | 4.917 | 48709    | 49790     | 0.9783     | 46.7411    |
| Naloxone             | Naloxone-D5             | 4.974 | 46759    | 79438     | 0.5886     | 49.0565    |
| Naltrexone           | Naltrexone-D3           | 5.192 | 108072   | 108035    | 1.0003     | 47.6102    |
| Acetyl Norfentanyl   | Acetyl Norfentanyl-D5   | 5.224 | 28017    | 290638    | 0.0964     | 4.9051     |
| Naltrexol            | Naltrexol-D3            | 5.390 | 316566   | 276707    | 1.1440     | 50.6019    |
| O-desmethyl-tramadol | O-desmethyl-tramadol-D6 | 5.499 | 697697   | 698947    | 0.9982     | 48.4175    |
| Ketamine             | Ketamine-D4             | 6.442 | 215480   | 198423    | 1.0860     | 49.6029    |
| Norfentanyl          | Norfentanyl-D5          | 6.344 | 32886    | 361493    | 0.0910     | 4.7745     |
| alpha-PVP            | alpha-PVP-d8            | 6.709 | 232592   | 245215    | 0.9485     | 47.9800    |
| Acetyl Fentanyl      | Acetyl Fentanyl-D5      | 7.100 | 8186     | 107871    | 0.0759     | 4.8407     |
| Norbuprenorphine     | Norbuprenorphine-D3     | 7.255 | 349      | 3482      | 0.1003     | 4.5328     |
| Fentanyl             | Fentanyl-D5             | 7.400 | 6031     | 63328     | 0.0952     | 4.6393     |
| EDDP                 | EDDP-D3                 | 7.410 | 14517    | 16891     | 0.8595     | 45.2115    |
| Cyclobenzaprine      | Cyclobenzaprine-D3      | 7.653 | 27178    | 28420     | 0.9563     | 44.1733    |
| Sufentanil           | Sufentanil-D5           | 7,740 | 4747     | 46993     | 0.1010     | 4.7609     |
| Quetiapine           | Quetiapine-D8           | 7.721 | 271516   | 73562     | 3.6910     | 48.6292    |
| Methadone            | Methadone-D9            | 7.664 | 79391    | 94991     | 0.8358     | 47.3863    |
| Fluoxetine           | Fluoxetine-D6           | 7.705 | 67607    | 73600     | 0.9186     | 47.4162    |
| Oxazepam             | Oxazepam-D5             | 7.730 | 23568    | 26070     | 0.9040     | 45.8009    |
| Sertraline           | Sertraline-D3           | 7.767 | 16464    | 19004     | 0.8663     | 45.1441    |
| Temazepam            | Temazepam-D5            | 7.768 | 151604   | 178425    | 0.8497     | 47.0928    |
|                      |                         |       |          |           |            |            |



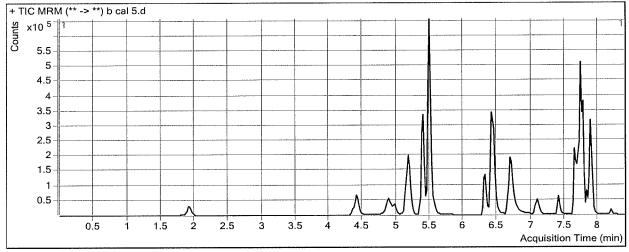
| Compound      | ISTD Compound    | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
|---------------|------------------|-------|----------|-----------|------------|------------|
| Nordiazepam   | Nordiazepam-D5   | 7.836 | 42946    | 28025     | 1,5324     | 48.7344    |
| Diazepam      | Diazepam-D5      | 7.891 | 163842   | 148744    | 1.1015     | 48.0213    |
| Buprenorphine | Buprenorphine-D4 | 8.260 | 2904     | 31446     | 0.0923     | 4.4533     |



b cal 4

| Batch Data Path<br>Analysis Time<br>Report Time<br>Last Calib Update | D:\2017 Data\53117 mc<br>6/1/2017 3:33 PM<br>6/1/2017 3:53 PM<br>6/1/2017 3:33 PM | iq p1\QuantResults\<br>Analyst Name<br>Reporter Name<br>Batch State | 53117 mdq p1b.batch.bin<br>ISP Tox<br>ISP Tox<br>Processed |
|--|---|---|--|
| Analysis Info  |   |   |  |
| Acq Time   | 2017-05-31 12:12  | Data File   | b cal 5.d  |
| Sample Type  | Calibration   | Sample Name   | b cal 5-100ng/mL   |
| Dilution   | 1   | Acq Method  | Quant Panel 1b 11-18-2016.m                                |
| Position   | P1-E1   | Sample Info   |  |
| Inj Vol  | -1  | Comment   | AM 28  |

### Sample Chromatogram

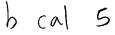


| 94.1517  |
|----------|
|          |
| 102.0182 |
| 95,7076  |
| 99.1472  |
| 97.2726  |
| 9.9292   |
| 101.7632 |
| 97.8306  |
| 100.5720 |
| 9.8963   |
| 97.9166  |
| 9.5437   |
| 9.5937   |
| 9.0739   |
| 94.6522  |
| 88.1523  |
| 9.5250   |
| 93.0608  |
| 94,7241  |
| 93.5494  |
| 92.3006  |
| 99.6515  |
| 88.6341  |
|          |

A

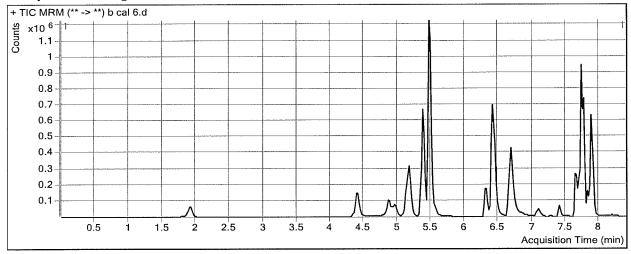
| Compound      | ISTD Compound    | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
|---------------|------------------|-------|----------|-----------|------------|------------|
| Nordiazepam   | Nordiazepam-D5   | 7.836 | 81555    | 26348     | 3.0953     | 97.6549    |
| Diazepam      | Diazepam-D5      | 7.891 | 320485   | 148057    | 2.1646     | 92.4050    |
| Buprenorphine | Buprenorphine-D4 | 8.260 | 7200     | 37755     | 0.1907     | 9.2189     |





| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |               |                             |  |  |  |  |
|-------------------|--|---------------|-----------------------------|--|--|--|--|
| Analysis Time     | 6/1/2017 3:33 PM   | Analyst Name  | ISP Tox                     |  |  |  |  |
| Report Time       | 6/1/2017 3:53 PM   | Reporter Name | ISP Tox                     |  |  |  |  |
| Last Calib Update | 6/1/2017 3:33 PM   | Batch State   | Processed                   |  |  |  |  |
| Analysis Info     |  |               |                             |  |  |  |  |
| Acq Time          | 2017-05-31 12:38   | Data File     | b cal 6.d                   |  |  |  |  |
| Sample Type       | Calibration  | Sample Name   | b cal 6-250ng/mL            |  |  |  |  |
| Dilution          | 1  | Acq Method    | Quant Panel 1b 11-18-2016.m |  |  |  |  |
| Position          | P1-F1  | Sample Info   |                             |  |  |  |  |
| Inj Vol           | -1   | Comment       | AM 28                       |  |  |  |  |

### Sample Chromatogram



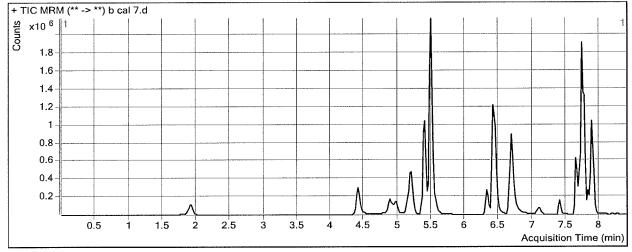
| Compound             | ISTD Compound           | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
|----------------------|-------------------------|-------|----------|-----------|------------|------------|
| Oxymorphone          | Oxymorphone-D3          | 1.928 | 202656   | 39251     | 5,1630     | 235.7488   |
| Dihydrocodeine       | Dihydrocodeine-D6       | 4.417 | 404018   | 89347     | 4.5219     | 243.2761   |
| Noroxycodone         | Noroxycodone-D3         | 4.897 | 234806   | 47779     | 4.9144     | 227.7677   |
| Naloxone             | Naloxone-D5             | 4.954 | 193896   | 67388     | 2.8773     | 235.8508   |
| Naltrexone           | Naltrexone-D3           | 5.172 | 473197   | 89210     | 5.3043     | 248.6033   |
| Acetyl Norfentanyl   | Acetyl Norfentanyl-D5   | 5.204 | 152386   | 287627    | 0.5298     | 26.7119    |
| Naltrexol            | Naltrexol-D3            | 5.370 | 1459630  | 260536    | 5.6024     | 247.4692   |
| O-desmethyl-tramadol | O-desmethyl-tramadol-D6 | 5.479 | 3528137  | 712960    | 4.9486     | 236.4536   |
| Ketamine             | Ketamine-D4             | 6.422 | 1096396  | 201836    | 5.4321     | 246.1678   |
| Norfentanyl          | Norfentanyl-D5          | 6.324 | 197549   | 417826    | 0.4728     | 23.6380    |
| alpha-PVP            | alpha-PVP-d8            | 6.688 | 1237879  | 250081    | 4.9499     | 247.6232   |
| Acetyl Fentanyl      | Acetyl Fentanyl-D5      | 7.100 | 37635    | 94314     | 0.3990     | 24.9738    |
| Norbuprenorphine     | Norbuprenorphine-D3     | 7.255 | 1152     | 2488      | 0.4632     | 25.5981    |
| Fentanyl             | Fentanyl-D5             | 7.400 | 19889    | 41191     | 0.4828     | 23.1184    |
| EDDP                 | EDDP-D3                 | 7.410 | 85249    | 18970     | 4.4939     | 227.9887   |
| Cyclobenzaprine      | Cyclobenzaprine-D3      | 7.653 | 76353    | 14524     | 5.2569     | 231.9047   |
| Sufentanil           | Sufentanil-D5           | 7.740 | 11355    | 23279     | 0.4878     | 22.6783    |
| Quetiapine           | Quetiapine-D8           | 7.721 | 1304621  | 71380     | 18.2770    | 235.5916   |
| Methadone            | Methadone-D9            | 7.664 | 336644   | 79110     | 4.2554     | 234.7119   |
| Fluoxetine           | Fluoxetine-D6           | 7.705 | 152815   | 32123     | 4.7572     | 238.5429   |
| Oxazepam             | Oxazepam-D5             | 7.730 | 118343   | 24249     | 4.8804     | 248.2107   |
| Sertraline           | Sertraline-D3           | 7.767 | 37676    | 8447      | 4.4604     | 225.7445   |
| Temazepam            | Temazepam-D5            | 7.768 | 738955   | 167572    | 4.4098     | 228.3996 Z |

| Compound      | ISTD Compound    | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
|---------------|------------------|-------|----------|-----------|------------|------------|
| Nordiazepam   | Nordiazepam-D5   | 7.836 | 192175   | 23639     | 8.1295     | 255.2310   |
| Diazepam      | Diazepam-D5      | 7.891 | 753612   | 118091    | 6.3816     | 268.4636   |
| Buprenorphine | Buprenorphine-D4 | 8.260 | 10322    | 22572     | 0.4573     | 22.1346    |



| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |               |                             |  |  |  |
|-------------------|--|---------------|-----------------------------|--|--|--|
| Analysis Time     | 6/1/2017 3:33 PM   | Analyst Name  | ISP Tox                     |  |  |  |
| Report Time       | 6/1/2017 3:53 PM   | Reporter Name | ISP Tox                     |  |  |  |
| Last Calib Update | 6/1/2017 3:33 PM   | Batch State   | Processed                   |  |  |  |
| Analysis Info     |  |               |                             |  |  |  |
| Acq Time          | 2017-05-31 13:03   | Data File     | b cal 7.d                   |  |  |  |
| Sample Type       | Calibration  | Sample Name   | b cal 7-500ng/mL            |  |  |  |
| Dilution          | 1  | Acq Method    | Quant Panel 1b 11-18-2016.m |  |  |  |
| Position          | P1-G1  | Sample Info   |                             |  |  |  |
| Inj Vol           | -1   | Comment       | AM 28                       |  |  |  |

### Sample Chromatogram



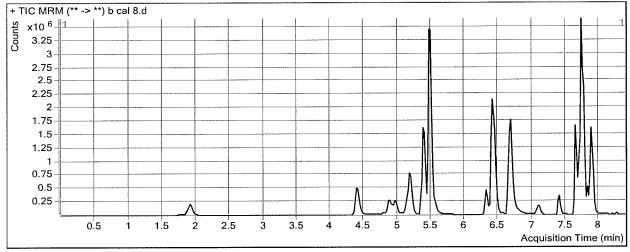
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|----------------------|-------------------------|-------|----------|-----------|------------|------------|
| Compound             | ISTD Compound           | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
| Oxymorphone          | Oxymorphone-D3          | 1.908 | 392597   | 37350     | 10.5113    | 478.2059   |
| Dihydrocodeine       | Dihydrocodeine-D6       | 4.417 | 792321   | 84043     | 9.4276     | 506.6381   |
| Noroxycodone         | Noroxycodone-D3         | 4.897 | 448526   | 41756     | 10.7416    | 495,7642   |
| Naloxone             | Naloxone-D5             | 4.974 | 361124   | 57141     | 6.3198     | 516.8180   |
| Naltrexone           | Naltrexone-D3           | 5.172 | 793156   | 69084     | 11.4810    | 537.0479   |
| Acetyl Norfentanyl   | Acetyl Norfentanyl-D5   | 5.224 | 311651   | 274549    | 1.1351     | 57.1695    |
| Naltrexol            | Naltrexol-D3            | 5.390 | 2620449  | 232838    | 11.2544    | 497.0433   |
| O-desmethyl-tramadol | O-desmethyl-tramadol-D6 | 5.499 | 6716520  | 657436    | 10.2162    | 487,1919   |
| Ketamine             | Ketamine-D4             | 6.422 | 2068814  | 183235    | 11,2905    | 511.1266   |
| Norfentanyl          | Norfentanyl-D5          | 6.344 | 423398   | 426344    | 0.9931     | 49.3416    |
| alpha-PVP            | alpha-PVP-d8            | 6.688 | 2569547  | 246530    | 10,4229    | 520,6884   |
| Acetyl Fentanyl      | Acetyl Fentanyl-D5      | 7.100 | 91011    | 111665    | 0.8150     | 50.8910    |
| Norbuprenorphine     | Norbuprenorphine-D3     | 7.255 | 1755     | 2241      | 0.7830     | 44.1596    |
| Fentanyl             | Fentanyl-D5             | 7,400 | 49342    | 45699     | 1.0797     | 51,5725    |
| EDDP                 | EDDP-D3                 | 7.410 | 240253   | 24952     | 9.6288     | 486.2296   |
| Cyclobenzaprine      | Cyclobenzaprine-D3      | 7.653 | 195802   | 17128     | 11.4315    | 501.4437   |
| Sufentanil           | Sufentanil-D5           | 7,740 | 27394    | 27288     | 1.0039     | 46,5908    |
| Quetiapine           | Quetiapine-D8           | 7.721 | 2770615  | 73598     | 37.6451    | 483.8501   |
| Methadone            | Methadone-D9            | 7.643 | 727250   | 81545     | 8.9184     | 490.1483   |
| Fluoxetine           | Fluoxetine-D6           | 7,705 | 334871   | 35523     | 9.4269     | 471.0438   |
| Oxazepam             | Oxazepam-D5             | 7.730 | 228872   | 22376     | 10.2283    | 520.4382   |
| Sertraline           | Sertraline-D3           | 7.767 | 91256    | 8908      | 10.2439    | 516.3668   |
| Temazepam            | Temazepam-D5            | 7.768 | 1364487  | 149439    | 9.1307     | 468.8263   |
|                      | •                       |       |          |           |            |            |

| Compound      | ISTD Compound    | RT    | Response | ISTD Resp | <b>Resp Ratio</b> | Final Conc |
|---------------|------------------|-------|----------|-----------|-------------------|------------|
| Nordiazepam   | Nordiazepam-D5   | 7.836 | 333730   | 20946     | 15.9329           | 499.4878   |
| Diazepam      | Diazepam-D5      | 7.891 | 1385203  | 121691    | 11.3829           | 477.2663   |
| Buprenorphine | Buprenorphine-D4 | 8.260 | 22757    | 23386     | 0.9731            | 47.1251    |



| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |               |                             |  |  |  |
|-------------------|--|---------------|-----------------------------|--|--|--|
| Analysis Time     | 6/1/2017 3:33 PM   | Analyst Name  | ISP Tox                     |  |  |  |
| Report Time       | 6/1/2017 3:53 PM   | Reporter Name | ISP Tox                     |  |  |  |
| Last Calib Update | 6/1/2017 3:33 PM   | Batch State   | Processed                   |  |  |  |
| Analysis Info     |  |               |                             |  |  |  |
| Acq Time          | 2017-05-31 13:29   | Data File     | b cal 8.d                   |  |  |  |
| Sample Type       | Calibration  | Sample Name   | b cal 8-1000ng/mL           |  |  |  |
| Dilution          | 1  | Acq Method    | Quant Panel 1b 11-18-2016.m |  |  |  |
| Position          | P1-H1  | Sample Info   |                             |  |  |  |
| Inj Vol           | -1   | Comment       | AM 28                       |  |  |  |

#### Sample Chromatogram



#### Results

| Compound             | ISTD Compound           | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
|----------------------|-------------------------|-------|----------|-----------|------------|------------|
| Oxymorphone          | Oxymorphone-D3          | 1.908 | 765135   | 33192     | 23.0516    | 1046.7120  |
| Dihydrocodeine       | Dihydrocodeine-D6       | 4.395 | 1437209  | 79883     | 17.9913    | 966.3772   |
| Noroxycodone         | Noroxycodone-D3         | 4.897 | 827972   | 36850     | 22.4687    | 1035.1015  |
| Naloxone             | Naloxone-D5             | 4.974 | 712185   | 45387     | 15.6915    | 1281,7048  |
| Naltrexone           | Naltrexone-D3           | 5.172 | 1303872  | 56617     | 23.0297    | 1076.3642  |
| Acetyl Norfentanyl   | Acetyl Norfentanyl-D5   | 5.204 | 620782   | 241264    | 2.5730     | 129.5179   |
| Naltrexol            | Naltrexol-D3            | 5.370 | 4465584  | 196515    | 22.7239    | 1003.5012  |
| O-desmethyl-tramadol | O-desmethyl-tramadol-D6 | 5.499 | 12474672 | 576832    | 21.6262    | 1030.3010  |
| Ketamine             | Ketamine-D4             | 6,422 | 3831172  | 164148    | 23.3398    | 1056.0834  |
| Norfentanyl          | Norfentanyl-D5          | 6.324 | 857595   | 415321    | 2.0649     | 102.2918   |
| alpha-PVP            | alpha-PVP-d8            | 6.688 | 5366739  | 248238    | 21.6193    | 1079.3208  |
| Acetyl Fentanyl      | Acetyl Fentanyl-D5      | 7,100 | 270444   | 143522    | 1.8843     | 117.5107   |
| Norbuprenorphine     | Norbuprenorphine-D3     | 7.255 | 4276     | 2048      | 2,0880     | 119.9154   |
| Fentanyl             | Fentanyl-D5             | 7.400 | 133240   | 62587     | 2.1289     | 101.5902   |
| EDDP                 | EDDP-D3                 | 7.390 | 570393   | 27494     | 20.7462    | 1045.3348  |
| Cyclobenzaprine      | Cyclobenzaprine-D3      | 7.653 | 497495   | 21054     | 23.6295    | 1033.9241  |
| , ,                  | Sufentanil-D5           | 7.740 | 75472    | 32861     | 2.2967     | 106.4843   |
| Sufentanil           |                         | 7.721 | 5546234  | 68542     | 80.9167    | 1038.5017  |
| Quetiapine           | Quetiapine-D8           | 7.643 | 1890030  | 100337    | 18.8368    | 1033.4716  |
| Methadone            | Methadone-D9            |       | 717597   | 34090     | 21.0501    | 1049.7634  |
| Fluoxetine           | Fluoxetine-D6           | 7.685 |          |           | 22.9111    | 1166.0393  |
| Oxazepam             | Oxazepam-D5             | 7.730 | 422466   | 18439     |            | 1013.7696  |
| Sertraline           | Sertraline-D3           | 7.767 | 234323   | 11633     | 20.1425    |            |
| Temazepam            | Temazepam-D5            | 7.768 | 2637070  | 126689    | 20.8153    | 1063.8917  |
|                      |                         |       |          |           |            |            |

$$\mathcal{A}^{-}$$

Buprenorphine

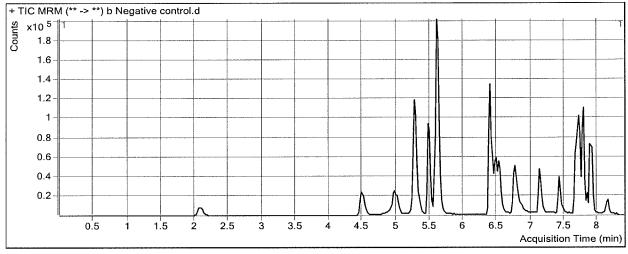
Buprenorphine-D4

b-cal

8

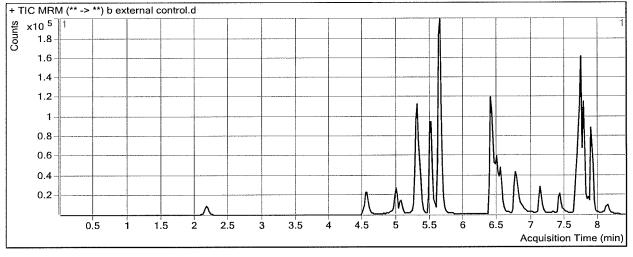
| Batch Data Path   | D:\2017 Data\53117 mc                          | dq p1\QuantResults\  | 53117 mdq p1b.batch.bin  |
|---|--|--|--|
| Analysis Time   | 6/1/2017 3:33 PM                               | Analyst Name   | ISP Tox  |
| Report Time   | 6/1/2017 3:53 PM                               | Reporter Name  | ISP Tox  |
| Last Calib Update   | 6/1/2017 3:33 PM                               | Batch State  | Processed  |
| Analysis Info<br>Acq Time<br>Sample Type<br>Dilution<br>Position<br>Inj Vol | 2017-05-31 14:07<br>Sample<br>1<br>P1-E5<br>-1 | Data File<br>Sample Name<br>Acq Method<br>Sample Info<br>Comment | b Negative control.d<br>b Negative control<br>Quant Panel 1b 11-18-2016.m<br>AM 28 |

#### Sample Chromatogram



| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |               |                                   |  |  |  |
|-------------------|--|---------------|-----------------------------------|--|--|--|
| Analysis Time     | 6/1/2017 3:33 PM   | Analyst Name  | ISP Tox                           |  |  |  |
| Report Time       | 6/1/2017 3:53 PM   | Reporter Name | ISP Tox                           |  |  |  |
| Last Calib Update | 6/1/2017 3:33 PM   | Batch State   | Processed                         |  |  |  |
| Analysis Info     |  |               |                                   |  |  |  |
| Acq Time          | 2017-05-31 14:32   | Data File     | b external control.d              |  |  |  |
| Sample Type       | Sample   | Sample Name   | b external control-50ng/mL        |  |  |  |
| Dilution          | 1  | Acq Method    | Quant Panel 1b 11-18-2016.m       |  |  |  |
| Position          | P1-F5  | Sample Info   |                                   |  |  |  |
| Inj Vol           | -1   | Comment       | AM 28: lot 81017 50 ng quetiapine |  |  |  |

#### Sample Chromatogram

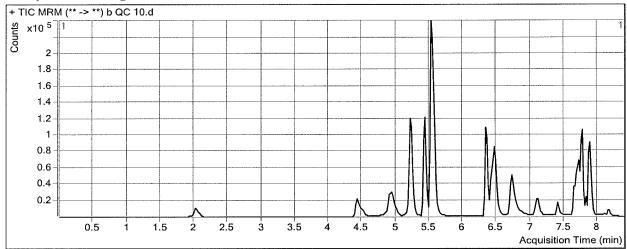


#### Results

| Compound   | ISTD Compound | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
|------------|---------------|-------|----------|-----------|------------|------------|
| Quetiapine | Quetiapine-D8 | 7,721 | 234094   | 75741     | 3.0907     | 40.9353    |

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |                      |                             |  |  |  |
|-------------------|--|----------------------|-----------------------------|--|--|--|
| Analysis Time     | 6/1/2017 3:33 PM   | Analyst Name         | ISP Tox                     |  |  |  |
| Report Time       | 6/1/2017 3:53 PM   | <b>Reporter Name</b> | ISP Tox                     |  |  |  |
| Last Calib Update | 6/1/2017 3:33 PM   | Batch State          | Processed                   |  |  |  |
| Analysis Info     |  |                      |                             |  |  |  |
| Acq Time          | 2017-05-31 14:58   | Data File            | b QC 10.d                   |  |  |  |
| Sample Type       | QC   | Sample Name          | b QC 10                     |  |  |  |
| Dilution          | 1  | Acq Method           | Quant Panel 1b 11-18-2016.m |  |  |  |
| Position          | P1-A2  | Sample Info          |                             |  |  |  |
| Inj Vol           | -1   | Comment              | AM 28                       |  |  |  |

#### Sample Chromatogram



#### Results

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| $\sim$   |
| $\prec$  |
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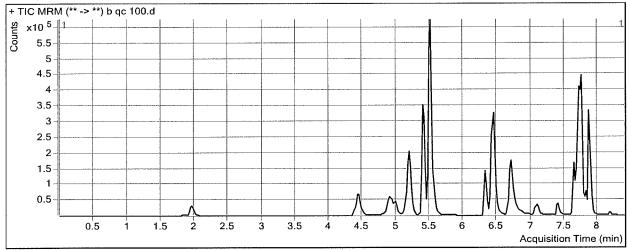
b qc 10

### ISP FORENSICS - Cd'A Instrument # 62340 Multi-Drug Confirmatory Analysis Report

| Compound      | ISTD Compound    | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
|---------------|------------------|-------|----------|-----------|------------|------------|
| Nordiazepam   | Nordiazepam-D5   | 7.836 | 8549     | 26647     | 0.3208     | 10.8090    |
| Diazepam      | Diazepam-D5      | 7.891 | 37331    | 172536    | 0.2164     | 11.0672    |
| Buprenorphine | Buprenorphine-D4 | 8.240 | 391      | 18794     | 0.0208     | 0.9872     |

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |               |                             |  |  |  |
|-------------------|--|---------------|-----------------------------|--|--|--|
| Analysis Time     | 6/1/2017 3:33 PM   | Analyst Name  | ISP Tox                     |  |  |  |
| Report Time       | 6/1/2017 3:53 PM   | Reporter Name | ISP Tox                     |  |  |  |
| Last Calib Update | 6/1/2017 3:33 PM   | Batch State   | Processed                   |  |  |  |
| Analysis Info     |  |               |                             |  |  |  |
| Acq Time          | 2017-05-31 18:21   | Data File     | b qc 100.d                  |  |  |  |
| Sample Type       | QC   | Sample Name   | b qc 100                    |  |  |  |
| Dilution          | 1  | Acq Method    | Quant Panel 1b 11-18-2016.m |  |  |  |
| Position          | P1-B2  | Sample Info   |                             |  |  |  |
| Inj Vol           | -1   | Comment       | AM 28                       |  |  |  |

#### Sample Chromatogram



#### Results

| Results              |                         |       |          |           |            |                       |
|----------------------|-------------------------|-------|----------|-----------|------------|-----------------------|
| Compound             | ISTD Compound           | RT    | Response | ISTD Resp | Resp Ratio | Final Conc            |
| Oxymorphone          | Oxymorphone-D3          | 1.968 | 88501    | 40601     | 2.1797     | 100.5031              |
| Dihydrocodeine       | Dihydrocodeine-D6       | 4.457 | 179986   | 90651     | 1.9855     | 107.1090              |
| Noroxycodone         | Noroxycodone-D3         | 4.937 | 111978   | 51175     | 2.1881     | 102.3838              |
| Naloxone             | Naloxone-D5             | 4.994 | 103187   | 76593     | 1,3472     | 110.9697              |
| Naltrexone           | Naltrexone-D3           | 5.192 | 229608   | 112623    | 2.0387     | 96.1025               |
| Acetyl Norfentanyl   | Acetyl Norfentanyl-D5   | 5.224 | 65761    | 305039    | 0.2156     | 10.9019               |
| Naltrexol            | Naltrexol-D3            | 5.390 | 694013   | 284301    | 2.4411     | 107.8767              |
| O-desmethyl-tramadol | O-desmethyl-tramadol-D6 | 5.519 | 1469615  | 713025    | 2.0611     | 99.0105               |
| Ketamine             | Ketamine-D4             | 6.442 | 476038   | 204826    | 2.3241     | 105.6009              |
| Norfentanyl          | Norfentanyl-D5          | 6.344 | 72665    | 383691    | 0.1894     | 9.6364                |
| alpha-PVP            | alpha-PVP-d8            | 6.709 | 516696   | 240045    | 2.1525     | 108.0503              |
| Acetyl Fentanyl      | Acetyl Fentanyl-D5      | 7.100 | 14099    | 94141     | 0.1498     | 9.4434                |
| Norbuprenorphine     | Norbuprenorphine-D3     | 7.255 | 475      | 2100      | 0.2261     | 11.8360 not cualuated |
| Fentanyl             | Fentanyl-D5             | 7.400 | 10402    | 51153     | 0.2034     | 9.7940                |
| EDDP                 | EDDP-D3                 | 7.410 | 33684    | 16525     | 2.0384     | 104.5005              |
| Cyclobenzaprine      | Cyclobenzaprine-D3      | 7.633 | 44713    | 21839     | 2.0474     | 91.8042               |
| Sufentanil           | Sufentanil-D5           | 7.720 | 6574     | 33936     | 0.1937     | 9.0564                |
| Quetiapine           | Quetiapine-D8           | 7.721 | 618593   | 75313     | 8.2136     | 106.6003              |
| Methadone            | Methadone-D9            | 7.643 | 146726   | 81304     | 1.8047     | 100.4608              |
| Fluoxetine           | Fluoxetine-D6           | 7.685 | 109850   | 53994     | 2.0345     | 102.9766              |
| Oxazepam             | Oxazepam-D5             | 7.710 | 51208    | 22708     | 2.2550     | 114.5725              |
| Sertraline           | Sertraline-D3           | 7.746 | 37622    | 18282     | 2.0579     | 105.0210              |
| Temazepam            | Temazepam-D5            | 7.748 | 364001   | 182489    | 1.9946     | 105.4029              |
|                      |                         |       |          |           |            |                       |

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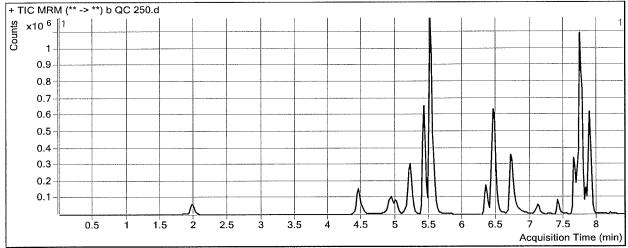
b ec 100

| Compound      | ISTD Compound    | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
|---------------|------------------|-------|----------|-----------|------------|------------|
| Nordiazepam   | Nordiazepam-D5   | 7.836 | 85886    | 26124     | 3.2877     | 103.6753   |
| Diazepam      | Diazepam-D5      | 7.871 | 375539   | 152403    | 2.4641     | 104.9100   |
| Buprenorphine | Buprenorphine-D4 | 8.240 | 4548     | 24139     | 0.1884     | 9.1067     |

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| Batch Data Path   | D:\2017 Data\53117 md | q p1\QuantResults\ | 53117 mdq p1b.batch.bin     |
|-------------------|-----------------------|--------------------|-----------------------------|
| Analysis Time     | 6/1/2017 3:33 PM      | Analyst Name       | ISP Tox                     |
| Report Time       | 6/1/2017 3:53 PM      | Reporter Name      | ISP Tox                     |
| Last Calib Update | 6/1/2017 3:33 PM      | Batch State        | Processed                   |
|                   |                       |                    |                             |
| Analysis Info     |                       |                    |                             |
| Acq Time          | 2017-05-31 22:21      | Data File          | b QC 250.d                  |
| Sample Type       | QC                    | Sample Name        | b QC 250                    |
| Dilution          | 1                     | Acq Method         | Quant Panel 1b 11-18-2016.m |
| Position          | P1-C2                 | Sample Info        |                             |
| Inj Vol           | -1                    | Comment            | AM 28                       |

#### Sample Chromatogram



#### Results

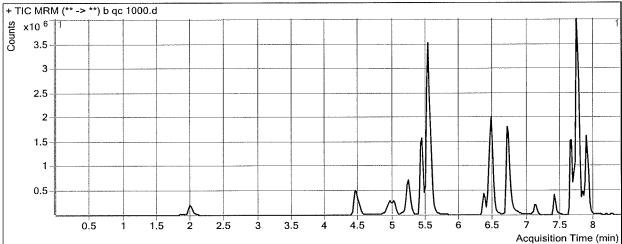
| ICG0103              |                         |       |          |           |            |                      |
|----------------------|-------------------------|-------|----------|-----------|------------|----------------------|
| Compound             | ISTD Compound           | RT    | Response | ISTD Resp | Resp Ratio | Final Conc           |
| Oxymorphone          | Oxymorphone-D3          | 1.989 | 205057   | 37064     | 5.5325     | 252.4990             |
| Dihydrocodeine       | Dihydrocodeine-D6       | 4.457 | 414611   | 83771     | 4,9493     | 266.2233             |
| Noroxycodone         | Noroxycodone-D3         | 4.937 | 252810   | 45665     | 5.5362     | 256.3638             |
| Naloxone             | Naloxone-D5             | 5.014 | 209315   | 59172     | 3.5374     | 289.7266             |
| Naltrexone           | Naltrexone-D3           | 5.212 | 494249   | 82734     | 5.9739     | 279.8739             |
| Acetyl Norfentanyl   | Acetyl Norfentanyl-D5   | 5.244 | 156996   | 282313    | 0.5561     | 28.0354              |
| Naltrexol            | Naltrexol-D3            | 5.410 | 1475810  | 253335    | 5.8255     | 257.3213             |
| O-desmethyl-tramadol | O-desmethyl-tramadol-D6 | 5.519 | 3385374  | 656243    | 5.1587     | 246.4561             |
| Ketamine             | Ketamine-D4             | 6.442 | 1114889  | 191711    | 5.8155     | 263.5053             |
| Norfentanyl          | Norfentanyl-D5          | 6.364 | 198522   | 393555    | 0.5044     | 25.2006              |
| alpha-PVP            | alpha-PVP-d8            | 6.709 | 1179242  | 221004    | 5.3358     | 266.8788             |
| Acetyl Fentanyl      | Acetyl Fentanyl-D5      | 7.100 | 47595    | 115157    | 0.4133     | 25.8625              |
| Norbuprenorphine     | Norbuprenorphine-D3     | 7.275 | 1000     | 2378      | 0.4203     | 23.1089 not crahaded |
| Fentanyl             | Fentanyl-D5             | 7.420 | 26289    | 49987     | 0.5259     | 25.1716              |
| EDDP                 | EDDP-D3                 | 7.410 | 106354   | 20402     | 5.2128     | 264.1453             |
| Cyclobenzaprine      | Cyclobenzaprine-D3      | 7.653 | 94145    | 16542     | 5.6913     | 250.8666             |
| Sufentanil           | Sufentanil-D5           | 7.740 | 17119    | 31175     | 0.5491     | 25.5208              |
| Quetiapine           | Quetiapine-D8           | 7.721 | 1581271  | 78835     | 20.0580    | 258.4195             |
| Methadone            | Methadone-D9            | 7.643 | 393236   | 85906     | 4.5775     | 252.3571             |
| Fluoxetine           | Fluoxetine-D6           | 7.685 | 140633   | 28483     | 4.9374     | 247.5141             |
| Oxazepam             | Oxazepam-D5             | 7.730 | 118994   | 22909     | 5.1943     | 264.1889             |
| Sertraline           | Sertraline-D3           | 7.767 | 40475    | 9222      | 4.3891     | 222.1627             |
| Temazepam            | Temazepam-D5            | 7.768 | 778430   | 157014    | 4.9577     | 256.3040             |
|                      |                         |       |          |           |            |                      |

| Compound      | ISTD Compound    | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
|---------------|------------------|-------|----------|-----------|------------|------------|
| Nordiazepam   | Nordiazepam-D5   | 7.836 | 179205   | 23153     | 7.7399     | 243.0378   |
| Diazepam      | Diazepam-D5      | 7.891 | 800101   | 135455    | 5.9067     | 248.6379   |
| Buprenorphine | Buprenorphine-D4 | 8.260 | 12186    | 24896     | 0.4895     | 23.6940    |

b ac 250

| Batch Data Path   | D:\2017 Data\53117 mc | lq p1\QuantResults\ | 53117 mdq p1b.batch.bin     |
|-------------------|-----------------------|---------------------|-----------------------------|
| Analysis Time     | 6/1/2017 3:33 PM      | Analyst Name        | ISP Tox                     |
| Report Time       | 6/1/2017 3:53 PM      | Reporter Name       | ISP Tox                     |
| Last Calib Update | 6/1/2017 3:33 PM      | Batch State         | Processed                   |
| Analysis Info     |                       |                     |                             |
| Acq Time          | 2017-05-31 23:38      | Data File           | b qc 1000.d                 |
| Sample Type       | QC                    | Sample Name         | b qc 1000                   |
| Dilution          | 1                     | Acq Method          | Quant Panel 1b 11-18-2016.m |
| Position          | P1-D2                 | Sample Info         |                             |
| Inj Vol           | -1                    | Comment             | AM 28                       |

#### Sample Chromatogram



#### Results

| Results              |                         |       |          |           |            |   |
|----------------------|-------------------------|-------|----------|-----------|------------|---|
| Compound             | ISTD Compound           | RT    | Response | ISTD Resp | Resp Ratio | Final Conc  |
| Oxymorphone          | Oxymorphone-D3          | 1,989 | 765830   | 31418     | 24.3755    | 1106.7309   |
| Dihydrocodeine       | Dihydrocodeine-D6       | 4.457 | 1464852  | 78068     | 18,7638    | 1007.8493   |
| Noroxycodone         | Noroxycodone-D3         | 4.957 | 850163   | 36404     | 23.3538    | 1075.8038   |
| Naloxone             | Naloxone-D5             | 5.014 | 727284   | 50990     | 14.2633    | 1165.1384 not croluated                                       |
| Naltrexone           | Naltrexone-D3           | 5.232 | 1228392  | 56428     | 21.7694    | 1017.5086   |
| Acetyl Norfentanyl   | Acetyl Norfentanyl-D5   | 5.264 | 590992   | 237884    | 2.4844     | 125.0560  |
| Naltrexol            | Naltrexol-D3            | 5.430 | 4436968  | 190149    | 23.3341    | 1030.4449   |
| O-desmethyl-tramadol | O-desmethyl-tramadol-D6 | 5.539 | 12195658 | 557695    | 21.8680    | 1041.8098   |
| Ketamine             | Ketamine-D4             | 6.462 | 3775464  | 165422    | 22.8233    | 1032.7218   |
| Norfentanyl          | Norfentanyl-D5          | 6.364 | 904946   | 417832    | 2.1658     | 107.2773  |
| alpha-PVP            | alpha-PVP-d8            | 6.709 | 5563496  | 252605    | 22.0245    | 1099.5368   |
| Acetyl Fentanyl      | Acetyl Fentanyl-D5      | 7.120 | 329482   | 179246    | 1.8382     | 114.6332 not cramatu  |
| Norbuprenorphine     | Norbuprenorphine-D3     | 7.275 | 3826     | 2189      | 1.7476     | 1099.5368<br>114.6332 not craluated<br>100.1578 not craluated |
| Fentanyl             | Fentanyl-D5             | 7.420 | 151059   | 66238     | 2.2805     | 108.8209  |
| EDDP                 | EDDP-D3                 | 7.410 | 649893   | 30739     | 21.1422    | 1065.2493   |
| Cyclobenzaprine      | Cyclobenzaprine-D3      | 7.653 | 444475   | 19456     | 22.8446    | 999.6582  |
| Sufentanil           | Sufentanil-D5           | 7.740 | 82302    | 35019     | 2.3502     | 108.9637  |
| Quetiapine           | Quetiapine-D8           | 7.721 | 6661052  | 82787     | 80.4598    | 1032.6448   |
| Methadone            | Methadone-D9            | 7.664 | 2152624  | 112796    | 19.0842    | 1047.0220   |
| Fluoxetine           | Fluoxetine-D6           | 7.705 | 481521   | 24383     | 19.7479    | 984.9268  |
| Oxazepam             | Oxazepam-D5             | 7.730 | 399875   | 18662     | 21.4267    | 1090.4766   |
| Sertraline           | Sertraline-D3           | 7.767 | 170823   | 7600      | 22.4758    | 1131.0176   |
| Temazepam            | Temazepam-D5            | 7.768 | 2495141  | 122046    | 20.4442    | 1044.9937   |
|                      |                         |       |          |           |            |   |

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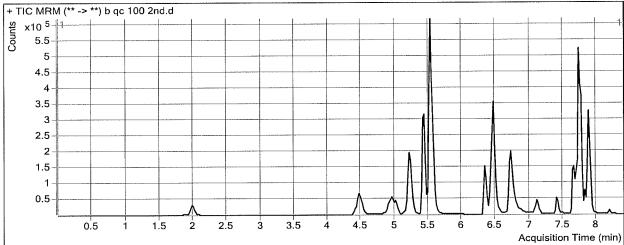
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| Compound      | ISTD Compound    | RT    | Response | ISTD Resp | Resp Ratio | Final Conc             |
|---------------|------------------|-------|----------|-----------|------------|------------------------|
| Nordiazepam   | Nordiazepam-D5   | 7.836 | 566476   | 16239     | 34.8845    | 1092.6994 not evaluate |
| Diazepam      | Diazepam-D5      | 7.891 | 2340277  | 82406     | 28.3993    | 1187.6891              |
| Buprenorphine | Buprenorphine-D4 | 8.260 | 57276    | 26475     | 2.1634     | 104.7943               |

b qc 1000

| Batch Data Path   | D:\2017 Data\53117 m | dq p1\QuantResults\ | 53117 mdq p1b.batch.bin     |
|-------------------|----------------------|---------------------|-----------------------------|
| Analysis Time     | 6/1/2017 3:33 PM     | Analyst Name        | ISP Tox                     |
| Report Time       | 6/1/2017 3:53 PM     | Reporter Name       | ISP Tox                     |
| Last Calib Update | 6/1/2017 3:33 PM     | Batch State         | Processed                   |
| Analysis Info     |                      |                     |                             |
| Acq Time          | 2017-06-01 00:03     | Data File           | b qc 100 2nd.d              |
| Sample Type       | QC                   | Sample Name         | b qc 100 2nd                |
| Dilution          | 1                    | Acq Method          | Quant Panel 1b 11-18-2016.m |
| Position          | P1-E2                | Sample Info         |                             |
| Inj Vol           | -1                   | Comment             | AM 28                       |

#### Sample Chromatogram



#### Results

| 1/2041/02            |                         |       |          |           |            |                      |
|----------------------|-------------------------|-------|----------|-----------|------------|----------------------|
| Compound             | ISTD Compound           | RT    | Response | ISTD Resp | Resp Ratio | Final Conc           |
| Oxymorphone          | Oxymorphone-D3          | 2.009 | 84325    | 39148     | 2.1540     | 99.3354              |
| Dihydrocodeine       | Dihydrocodeine-D6       | 4.477 | 176451   | 89712     | 1.9669     | 106.1099             |
| Noroxycodone         | Noroxycodone-D3         | 4.957 | 109751   | 50602     | 2.1689     | 101.4998             |
| Naloxone             | Naloxone-D5             | 5.014 | 99224    | 70895     | 1.3996     | 115.2441             |
| Naltrexone           | Naltrexone-D3           | 5.232 | 207688   | 100252    | 2.0717     | 97.6404              |
| Acetyl Norfentanyl   | Acetyl Norfentanyl-D5   | 5.264 | 64711    | 303576    | 0.2132     | 10.7803              |
| Naltrexol            | Naltrexol-D3            | 5.430 | 659163   | 272028    | 2.4231     | 107.0831             |
|                      |                         | 5 500 | 1405047  | 600007    | 2.0649     | 99.1889              |
| O-desmethyl-tramadol | O-desmethyl-tramadol-D6 | 5.539 | 1405947  | 680897    | 2.0648     |                      |
| Ketamine             | Ketamine-D4             | 6.462 | 474560   | 210031    | 2.2595     | 102.6778             |
| Norfentanyl          | Norfentanyl-D5          | 6.364 | 80668    | 418994    | 0.1925     | 9.7917               |
| alpha-PVP            | alpha-PVP-d8            | 6.729 | 579758   | 279436    | 2.0747     | 104.1710             |
| Acetyl Fentanyl      | Acetyl Fentanyl-D5      | 7.100 | 18568    | 116401    | 0.1595     | 10.0511              |
| Norbuprenorphine     | Norbuprenorphine-D3     | 7.275 | 442      | 2618      | 0.1687     | 8.5006 not craluated |
| Fentanyl             | Fentanyl-D5             | 7.420 | 9571     | 47924     | 0.1997     | 9.6203               |
| EDDP                 | EDDP-D3                 | 7.410 | 50272    | 28320     | 1.7751     | 91.2620              |
| Cyclobenzaprine      | Cyclobenzaprine-D3      | 7.653 | 30260    | 13422     | 2.2545     | 100.8417             |
| Sufentanil           | Sufentanil-D5           | 7.740 | 5966     | 27280     | 0.2187     | 10.2123              |
| Quetiapine           | Quetiapine-D8           | 7.721 | 683721   | 90650     | 7,5424     | 97.9967              |
| Methadone            | Methadone-D9            | 7.664 | 163725   | 92746     | 1.7653     | 98.3053              |
| Fluoxetine           | Fluoxetine-D6           | 7.705 | 46973    | 23078     | 2.0354     | 103.0240             |
| Oxazepam             | Oxazepam-D5             | 7.730 | 47620    | 23633     | 2.0150     | 102.3517             |
| Sertraline           | Sertraline-D3           | 7.767 | 13140    | 6394      | 2.0549     | 104.8700             |
| Temazepam            | Temazepam-D5            | 7.768 | 329048   | 170876    | 1.9256     | 101.8892             |
|                      |                         |       |          |           |            |                      |

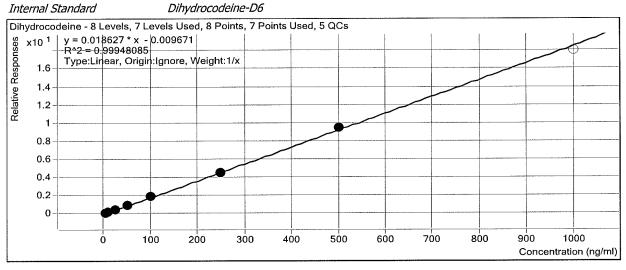
| Compound      | ISTD Compound    | RT    | Response | ISTD Resp | Resp Ratio | Final Conc |
|---------------|------------------|-------|----------|-----------|------------|------------|
| Nordiazepam   | Nordiazepam-D5   | 7.836 | 75746    | 23514     | 3.2213     | 101.5984   |
| Diazepam      | Diazepam-D5      | 7.891 | 350360   | 148856    | 2.3537     | 100.2993   |
| Buprenorphine | Buprenorphine-D4 | 8.260 | 6091     | 28722     | 0.2121     | 10.2539    |

| Bat                | tch Da             | nta Path                                | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |                           |            |     |     |         |     |              |              |      |
|--------------------|--------------------|---|--|---------------------------|------------|-----|-----|---------|-----|--------------|--------------|------|
| Las                | st Cali            | b Update                                | 6/1/2017 3:3   | 2017 3:33 PM Analyst Name |            |     | me  | ISP TOX |     |              |              |      |
| Ta                 | nget               | Compound                                | Oxymorph   | none                      |            |     |     |         |     |              |              |      |
| Int                | ernal S            | Standard                                | Oxymorphol   | ne-D3                     |            |     |     |         |     |              |              |      |
| Ox                 | ymorph             | one - 8 Levels, 8 Lev                   | els Used, 8 Poin   | ts, 8 Poin                | ts Used, 5 | QCs |     |         |     |              |              |      |
| es                 | x10 <sup>1</sup> - | y = 0.022058 * x -                      | 0.037202   |                           |            |     |     |         |     |              |              | _    |
| Relative Responses | 2.2-               | R^2 = 0.99710569<br>Type:Linear, Origin | lanore Weight  |                           |            |     |     |         |     |              |              |      |
| esp                | 2 -                | Type.Ellical, Oligi                     | ingriore, vieigni.   |                           |            |     |     |         |     |              |              |      |
| ۵<br>۵             | 1.8-               |   |  |                           |            |     |     |         |     |              |              |      |
| ativ               | 1.6-               |   |  |                           |            |     |     |         |     |              |              |      |
| Rel                | 1.4 -              |   |  |                           |            |     |     |         |     |              |              |      |
|                    | 1.2-               |   |  |                           |            |     |     |         |     |              |              |      |
|                    | 1 -                |   |  |                           |            |     |     |         |     |              |              |      |
|                    | 0.8-               |   |  |                           |            |     |     |         |     |              |              |      |
|                    | 0.6-               |   |  |                           |            |     |     |         |     |              |              |      |
|                    | 0.4 -              |   |  |                           |            |     |     |         |     |              |              |      |
|                    | 0.2 -              |   |  |                           |            |     |     |         |     |              |              |      |
|                    | 0                  | ······                                  |  |                           |            |     |     |         |     |              |              |      |
|                    | -0.2 -             |   |  |                           | 100        |     |     | 700     |     |              | 1000         |      |
|                    |                    | 0 10                                    | 00 200   | 300                       | 400        | 500 | 600 | 700     | 800 | 900<br>Conce | ntration (ng | /ml) |

| Sample            | Level | Enabled   | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-----------|----------|------------|----------|
| b cal 1-5ng/mL    | 1     | $\square$ | 5        | 6.1        | 122.5    |
| b cal 2-10ng/mL   | 2     | ¥         | 10       | 10.6       | 105.6    |
| b QC 10           | 2     | $\square$ | 10       | 10.7       | 106.6    |
| b cal 3-25ng/mL   | 3     | $\square$ | 25       | 23.1       | 92.3     |
| b cal 4-50ng/mL   | 4     | $\square$ | 50       | 45.4       | 90.9     |
| b cal 5-100ng/mL  | 5     |           | 100      | 94.2       | 94.2     |
| b qc 100          | 5     | Ø         | 100      | 100.5      | 100.5    |
| b qc 100 2nd      | 5     | $\square$ | 100      | 99.3       | 99.3     |
| b cal 6-250ng/mL  | 6     |           | 250      | 235.7      | 94.3     |
| b QC 250          | 6     | $\square$ | 250      | 252.5      | 101.0    |
| b cal 7-500ng/mL  | 7     | $\square$ | 500      | 478.2      | 95.6     |
| b cal 8-1000ng/mL | 8     | $\square$ | 1000     | 1046.7     | 104.7    |
| b qc 1000         | 8     |           | 1000     | 1106.7     | 110.7    |

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |         |  |  |  |  |  |
|-------------------|--|---------|--|--|--|--|--|
| Last Calib Update | 6/1/2017 3:33 PM   | ISP TOX |  |  |  |  |  |
|                   |  |         |  |  |  |  |  |
| Target Compound   | Dihydrocodeine   |         |  |  |  |  |  |

Dihydrocodeine-D6

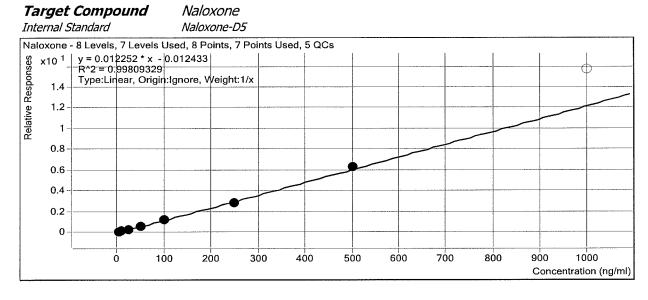


| Sample            | Level | Enabled           | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-------------------|----------|------------|----------|
| b cal 1-5ng/mL    | 1     | $\mathbf{N}$      | 5        | 5.5        | 109.0    |
| b cal 2-10ng/mL   | 2     | $\square$         | 10       | 9.6        | 95.7     |
| b QC 10           | 2     | $\mathbf{N}$      | 10       | 10.3       | 103.2    |
| b cal 3-25ng/mL   | 3     | M                 | 25       | 24.3       | 97.1     |
| b cal 4-50ng/mL   | 4     | $\mathbf{\nabla}$ | 50       | 48.8       | 97.6     |
| b cal 5-100ng/mL  | 5     | $\square$         | 100      | 102.0      | 102.0    |
| b qc 100          | 5     | $\square$         | 100      | 107.1      | 107.1    |
| b qc 100 2nd      | 5     | $\square$         | 100      | 106.1      | 106.1    |
| b cal 6-250ng/mL  | 6     | $\square$         | 250      | 243.3      | 97.3     |
| b QC 250          | 6     | $\square$         | 250      | 266.2      | 106.5    |
| b cal 7-500ng/mL  | 7     | V                 | 500      | 506.6      | 101.3    |
| b cal 8-1000ng/mL | 8     |                   | 1000     | 966.4      | 96.6     |
| b qc 1000         | 8     |                   | 1000     | 1007.8     | 100.8    |

| Batch Da                    | ata Path |                        | D:\20    | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |           |            |     |          |     |     |              |                        |     |
|-----------------------------|----------|------------------------|----------|--|-----------|------------|-----|----------|-----|-----|--------------|------------------------|-----|
| Last Cali                   | ib Updat | e                      | 6/1/2    | 017 3:33   | PM        |            | An  | alyst Na | me  | ISP | тох          |                        |     |
| <b>Target</b><br>Internal S | Standard |                        | Norox    | xycodd<br>wcodone  | -D3       |            |     |          |     |     |              |                        |     |
|                             |          | evels, 8 Le            |          |  | , 8 Point | ts Used, 5 | QCs |          |     |     |              |                        |     |
| 8 x10 <sup>1</sup> −        |          | 1744 * x -<br>99760322 | 0.038038 |  |           |            |     |          |     |     |              |                        | -   |
| Su 2.2-                     |          | ear, Origin            |          | Veight: 1/x  | :         |            |     |          |     |     |              |                        | _   |
| 4                           |          |                        |          |  |           |            |     |          |     |     |              |                        |     |
| ຍ<br>ຍິ                     |          |                        |          |  |           |            |     |          |     |     |              |                        |     |
| -6.1 afi                    |          |                        |          | ÷  |           |            |     |          |     |     |              |                        |     |
| <u>a</u> 1.4-               |          |                        |          |  |           |            |     |          |     |     |              |                        | -   |
| 1.2                         |          |                        |          |  |           |            |     |          |     |     |              |                        | -   |
| 1-                          |          |                        |          |  |           |            |     |          |     |     |              |                        | -   |
| 0.8-                        |          |                        |          |  |           |            |     |          |     |     |              |                        | -   |
| 0.6                         |          |                        |          |  |           |            |     |          |     |     |              |                        |     |
| 0.4                         |          |                        |          |  |           |            |     |          |     |     |              |                        |     |
| 0.2                         |          |                        |          |  |           |            |     |          |     |     |              |                        |     |
| 0.                          |          |                        |          |  |           |            |     |          |     |     |              |                        | -   |
| -0.2                        |          |                        |          |  |           |            |     |          |     |     |              |                        |     |
|                             |          | Ó 1                    | 00 2     | òo :   | 300       | 400        | 500 | 600      | 700 | 800 | 900<br>Conce | 1000<br>ntration (ng/m | 0   |
|                             |          |                        |          |  |           |            |     |          |     |     |              |                        | ليت |

| Sample            | Level | Enabled           | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-------------------|----------|------------|----------|
| b cal 1-5ng/mL    | 1     | Ŋ                 | 5        | 6.4        | 128.2    |
| b cal 2-10ng/mL   | 2     | $\mathbf{\nabla}$ | 10       | 9.8        | 98.1     |
| b QC 10           | 2     | $\mathbf{N}$      | 10       | 10.5       | 105.0    |
| b cal 3-25ng/mL   | 3     | $\square$         | 25       | 22.7       | 90.8     |
| b cal 4-50ng/mL   | 4     | Ø                 | 50       | 46.7       | 93.5     |
| b cal 5-100ng/mL  | 5     |                   | 100      | 95.7       | 95.7     |
| b qc 100          | 5     | Ø                 | 100      | 102.4      | 102.4    |
| b qc 100 2nd      | 5     |                   | 100      | 101.5      | 101.5    |
| b cal 6-250ng/mL  | 6     | $\square$         | 250      | 227.8      | 91.1     |
| b QC 250          | 6     | $\mathbf{\nabla}$ | 250      | 256.4      | 102.5    |
| b cal 7-500ng/mL  | 7     | Ø                 | 500      | 495.8      | 99.2     |
| b cal 8-1000ng/mL | 8     | $\square$         | 1000     | 1035.1     | 103.5    |
| b qc 1000         | 8     | $\square$         | 1000     | 1075.8     | 107.6    |

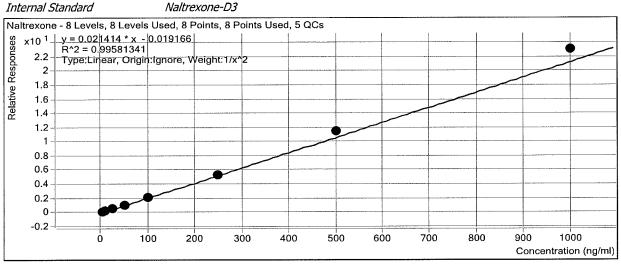
| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |              |         |  |  |
|-------------------|--|--------------|---------|--|--|
| Last Calib Update | 6/1/2017 3:33 PM   | Analyst Name | ISP TOX |  |  |



| Sample            | Level | Enabled      | Exp Conc | <b>Final Conc</b> | Accuracy |
|-------------------|-------|--------------|----------|-------------------|----------|
| b cal 1-5ng/mL    | 1     | $\square$    | 5        | 5.7               | 113.2    |
| b cal 2-10ng/mL   | 2     | $\square$    | 10       | 9.7               | 96.6     |
| b QC 10           | 2     | $\mathbf{N}$ | 10       | 12.9              | 128.8    |
| b cal 3-25ng/mL   | 3     | Ø            | 25       | 23.8              | 95.2     |
| b cal 4-50ng/mL   | 4     | $\square$    | 50       | 49.1              | 98.1     |
| b cal 5-100ng/mL  | 5     | Ø            | 100      | 99.1              | 99.1     |
| b qc 100          | 5     | $\square$    | 100      | 111.0             | 111.0    |
| b qc 100 2nd      | 5     | $\square$    | 100      | 115.2             | 115.2    |
| b cal 6-250ng/mL  | 6     | Ø            | 250      | 235.9             | 94.3     |
| b QC 250          | 6     | $\square$    | 250      | 289.7             | 115.9    |
| b cal 7-500ng/mL  | 7     | $\square$    | 500      | 516.8             | 103.4    |
| b cal 8-1000ng/mL | 8     |              | 1000     | 1281.7            | 128.2    |
| b qc 1000         | 8     |              | 1000     | 1165.1            | 116.5    |

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |              |         |  |  |  |
|-------------------|--|--------------|---------|--|--|--|
| Last Calib Update | 6/1/2017 3:33 PM   | Analyst Name | ISP TOX |  |  |  |
| _                 |  |              |         |  |  |  |
| Target Compound   | Naltrexone   |              |         |  |  |  |

Naltrexone-D3

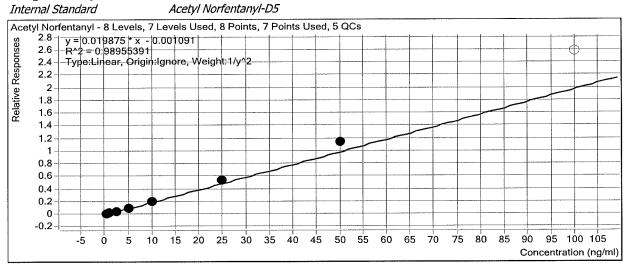


| Sample            | Level | Enabled      | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|--------------|----------|------------|----------|
| b cal 1-5ng/mL    | 1     | $\square$    | 5        | 5.2        | 103.4    |
| b cal 2-10ng/mL   | 2     |              | 10       | 9.7        | 97.3     |
| b QC 10           | 2     | M            | 10       | 9.8        | 97.5     |
| b cal 3-25ng/mL   | 3     | M            | 25       | 23.1       | 92.3     |
| b cal 4-50ng/mL   | 4     | V            | 50       | 47.6       | 95.2     |
| b cal 5-100ng/mL  | 5     | $\square$    | 100      | 97.3       | 97.3     |
| b qc 100          | 5     | $\square$    | 100      | 96.1       | 96.1     |
| b qc 100 2nd      | 5     | $\square$    | 100      | 97.6       | 97.6     |
| b cal 6-250ng/mL  | 6     | $\square$    | 250      | 248.6      | 99.4     |
| b QC 250          | 6     | $\square$    | 250      | 279.9      | 111.9    |
| b cal 7-500ng/mL  | 7     | Ø            | 500      | 537.0      | 107.4    |
| b cal 8-1000ng/mL | 8     | $\mathbf{M}$ | 1000     | 1076.4     | 107.6    |
| b qc 1000         | 8     |              | 1000     | 1017.5     | 101.8    |

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |              |         |  |  |
|-------------------|--|--------------|---------|--|--|
| Last Calib Update | 6/1/2017 3:33 PM   | Analyst Name | ISP TOX |  |  |

#### Target Compound

Acetyl Norfentanyl Acetyl Norfentanyl-D5



| Sample            | Level | Enabled      | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|--------------|----------|------------|----------|
| b cal 1-5ng/mL    | 1     | Ø            | 0.5      | 0.5        | 107.1    |
| b cal 2-10ng/mL   | 2     | Ø            | 1        | 0.9        | 91.9     |
| b QC 10           | 2     | $\square$    | 1        | 0.9        | 92.9     |
| b cal 3-25ng/mL   | 3     | $\mathbf{N}$ | 2.5      | 2.3        | 91.2     |
| b cal 4-50ng/mL   | 4     | $\square$    | 5        | 4.9        | 98.1     |
| b cal 5-100ng/mL  | 5     | $\square$    | 10       | 9.9        | 99.3     |
| b qc 100          | 5     | $\square$    | 10       | 10.9       | 109.0    |
| b qc 100 2nd      | 5     | $\square$    | 10       | 10.8       | 107.8    |
| b cal 6-250ng/mL  | 6     | $\square$    | 25       | 26.7       | 106.8    |
| b QC 250          | 6     | $\square$    | 25       | 28.0       | 112.1    |
| b cal 7-500ng/mL  | 7     | Ø            | 50       | 57.2       | 114.3    |
| b cal 8-1000ng/mL | 8     |              | 100      | 129.5      | 129.5    |
| b qc 1000         | 8     | $\square$    | 100      | 125.1      | 125.1    |

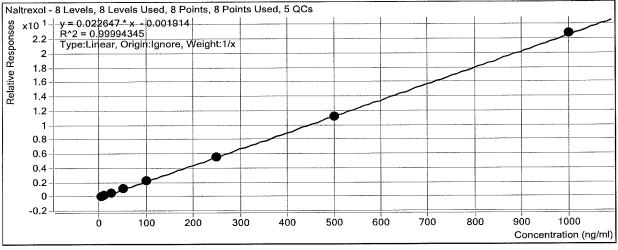


| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |              |         |  |  |
|-------------------|--|--------------|---------|--|--|
| Last Calib Update | 6/1/2017 3:33 PM   | Analyst Name | ISP TOX |  |  |

#### Target Compound Naltrexol

Internal Standard

Naltrexol-D3



| Sample            | Level | Enabled   | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-----------|----------|------------|----------|
| b cal 1-5ng/mL    | 1     |           | 5        | 5.1        | 101.1    |
| b cal 2-10ng/mL   | 2     | Ø         | 10       | 9.8        | 98.2     |
| b QC 10           | 2     | Ø         | 10       | 10.2       | 102.4    |
| b cal 3-25ng/mL   | 3     | $\square$ | 25       | 24.7       | 99.0     |
| b cal 4-50ng/mL   | 4     | Ø         | 50       | 50.6       | 101.2    |
| b cal 5-100ng/mL  | 5     | $\square$ | 100      | 101.8      | 101.8    |
| b qc 100          | 5     |           | 100      | 107.9      | 107.9    |
| b qc 100 2nd      | 5     | $\square$ | 100      | 107.1      | 107.1    |
| b cal 6-250ng/mL  | 6     | $\square$ | 250      | 247.5      | 99.0     |
| b QC 250          | 6     | $\square$ | 250      | 257.3      | 102.9    |
| b cal 7-500ng/mL  | 7     | $\square$ | 500      | 497.0      | 99.4     |
| b cal 8-1000ng/mL | 8     | $\square$ | 1000     | 1003.5     | 100.4    |
| b qc 1000         | 8     |           | 1000     | 1030.4     | 103.0    |

| Batch Data Path<br>Last Calib Update  | D:\2017 Data\53117 mdq p1\Quar<br>6/1/2017 3:33 PM | atch.bin<br>ISP TOX |  |
|---|--|---------------------|--|
| Target Compound<br>Internal Standard  | O-desmethyl-tramadol<br>O-desmethyl-tramadol-D6    |                     |  |
| O-desmethyl-tramadol - 8 Levels $39$ $x10^{-1}$ $y = 0.02 1009 + x -  0.02 1009 +  0.$ |  | d, 5 QCs            |  |

400

5**0**0

600

700

| Sample            | Level | Enabled           | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-------------------|----------|------------|----------|
| b cal 1-5ng/mL    | 1     | $\square$         | 5        | 5.6        | 112.3    |
| b cal 2-10ng/mL   | 2     | $\square$         | 10       | 10.2       | 102.0    |
| b QC 10           | 2     | $\mathbf{M}$      | 10       | 10.0       | 100.4    |
| b cal 3-25ng/mL   | 3     | $\square$         | 25       | 24.0       | 96.0     |
| b cal 4-50ng/mL   | 4     | $\square$         | 50       | 48.4       | 96.8     |
| b cal 5-100ng/mL  | 5     | $\square$         | 100      | 97.8       | 97.8     |
| b qc 100          | 5     | $\mathbf{M}$      | 100      | 99.0       | 99.0     |
| b qc 100 2nd      | 5     | $\square$         | 100      | 99.2       | 99.2     |
| b cal 6-250ng/mL  | 6     | $\square$         | 250      | 236.5      | 94.6     |
| b QC 250          | 6     | $\square$         | 250      | 246.5      | 98.6     |
| b cal 7-500ng/mL  | 7     | $\square$         | 500      | 487.2      | 97.4     |
| b cal 8-1000ng/mL | 8     | $\mathbf{\nabla}$ | 1000     | 1030.3     | 103.0    |
| b qc 1000         | 8     |                   | 1000     | 1041.8     | 104.2    |

ø

300

200

100

ò



900

800

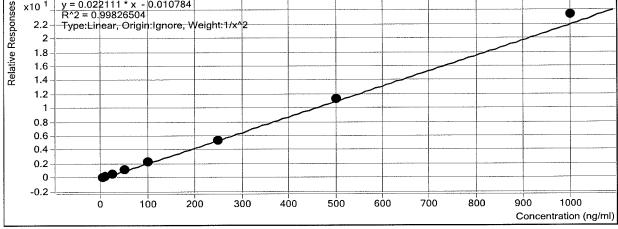
1000

Concentration (ng/ml)

1.2 -1 -0.8 -0.6 -

0.4 0.2 0 -0.2

| Batch Data Path                              | tch Data Path D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |              |         |  |  |
|--|--|--------------|---------|--|--|
| Last Calib Update                            | 6/1/2017 3:33 PM   | Analyst Name | ISP TOX |  |  |
| Target Compound                              | Ketamine   |              |         |  |  |
| Internal Standard                            | Ketamine-D4  |              |         |  |  |
| Ketamine - 8 Levels, 8 Levels                | Jsed, 8 Points, 8 Points Used, 5   | QCs          |         |  |  |
| $3^{\circ} \times 10^{1} y = 0.022111 * x -$ | 0.010784   |              |         |  |  |



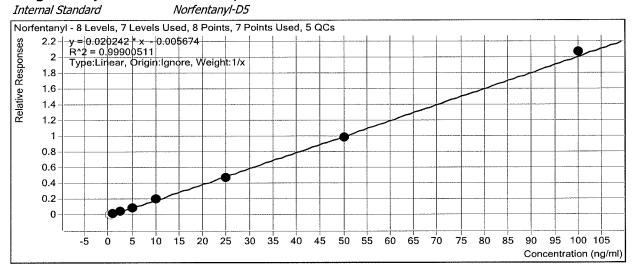
| Sample            | Level | Enabled           | Exp Conc | <b>Final Conc</b> | Accuracy |
|-------------------|-------|-------------------|----------|-------------------|----------|
| b cal 1-5ng/mL    | 1     | V                 | 5        | 5.1               | 102.1    |
| b cal 2-10ng/mL   | 2     | $\mathbf{N}$      | 10       | 9.9               | 98.6     |
| b QC 10           | 2     | M                 | 10       | 9.7               | 97.0     |
| b cal 3-25ng/mL   | 3     | $\mathbf{N}$      | 25       | 23.3              | 93.3     |
| b cal 4-50ng/mL   | 4     | $\mathbf{\nabla}$ | 50       | 49.6              | 99.2     |
| b cal 5-100ng/mL  | 5     | $\square$         | 100      | 100.6             | 100.6    |
| b qc 100          | 5     | $\mathbf{\nabla}$ | 100      | 105.6             | 105.6    |
| b qc 100 2nd      | 5     | $\square$         | 100      | 102.7             | 102.7    |
| b cal 6-250ng/mL  | 6     | $\square$         | 250      | 246.2             | 98.5     |
| b QC 250          | 6     | $\square$         | 250      | 263.5             | 105.4    |
| b cal 7-500ng/mL  | 7     | $\square$         | 500      | 511.1             | 102.2    |
| b cal 8-1000ng/mL | 8     | Ø                 | 1000     | 1056.1            | 105.6    |
| b qc 1000         | 8     | $\square$         | 1000     | 1032.7            | 103.3    |



| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |              |         |  |
|-------------------|--|--------------|---------|--|
| Last Calib Update | 6/1/2017 3:33 PM   | Analyst Name | ISP TOX |  |



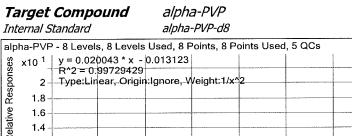
Norfentanyl

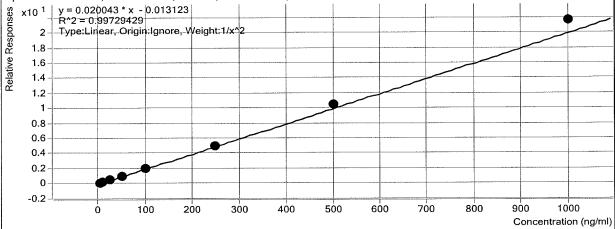


| Sample            | Level | Enabled   | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-----------|----------|------------|----------|
| b cal 1-5ng/mL    | 1     |           | 0.5      | 0.7        | 132.0    |
| b cal 2-10ng/mL   | 2     | Ø         | 1        | 1.1        | 112.8    |
| b QC 10           | 2     | $\square$ | 1        | 1.1        | 113.7    |
| b cal 3-25ng/mL   | 3     | $\square$ | 2.5      | 2.4        | 97.2     |
| b cal 4-50ng/mL   | 4     | $\square$ | 5        | 4.8        | 95.5     |
| b cal 5-100ng/mL  | 5     | ☑         | 10       | 9.9        | 99.0     |
| b qc 100          | 5     | $\square$ | 10       | 9.6        | 96.4     |
| b qc 100 2nd      | 5     | ☑         | 10       | 9.8        | 97.9     |
| b cal 6-250ng/mL  | 6     | $\square$ | 25       | 23.6       | 94.6     |
| b QC 250          | 6     | $\square$ | 25       | 25.2       | 100.8    |
| b cal 7-500ng/mL  | 7     | Ø         | 50       | 49.3       | 98.7     |
| b cal 8-1000ng/mL | 8     | $\square$ | 100      | 102.3      | 102.3    |
| b qc 1000         | 8     |           | 100      | 107.3      | 107.3    |



| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |              |         |  |  |
|-------------------|--|--------------|---------|--|--|
| Last Calib Update | 6/1/2017 3:33 PM   | Analyst Name | ISP TOX |  |  |





| Sample            | Level | Enabled   | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-----------|----------|------------|----------|
| b cal 1-5ng/mL    | 1     | Ø         | 5        | 5.1        | 102.8    |
| b cal 2-10ng/mL   | 2     | $\square$ | 10       | 9.7        | 97.2     |
| b QC 10           | 2     |           | 10       | 10.2       | 102.5    |
| b cal 3-25ng/mL   | 3     |           | 25       | 23.7       | 94.9     |
| b cal 4-50ng/mL   | 4     | Ø         | 50       | 48.0       | 96.0     |
| b cal 5-100ng/mL  | 5     |           | 100      | 97.9       | 97.9     |
| b qc 100          | 5     | $\square$ | 100      | 108.1      | 108.1    |
| b qc 100 2nd      | 5     |           | 100      | 104.2      | 104.2    |
| b cal 6-250ng/mL  | 6     | $\square$ | 250      | 247.6      | 99.0     |
| b QC 250          | 6     |           | 250      | 266.9      | 106.8    |
| b cal 7-500ng/mL  | 7     | $\square$ | 500      | 520.7      | 104.1    |
| b cal 8-1000ng/mL | 8     | $\square$ | 1000     | 1079.3     | 107.9    |
| b qc 1000         | 8     |           | 1000     | 1099.5     | 110.0    |

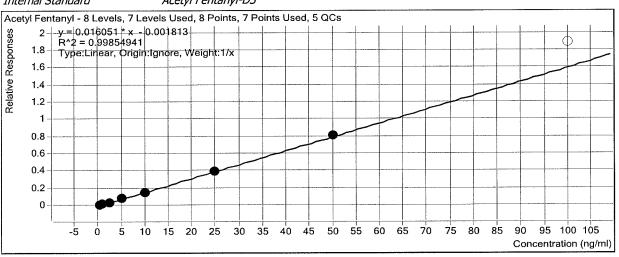


| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |              |         |  |
|-------------------|--|--------------|---------|--|
| Last Calib Update | 6/1/2017 3:33 PM   | Analyst Name | ISP TOX |  |

Target Compound

Acetyl Fentanyl Acetyl Fentanyl-D5





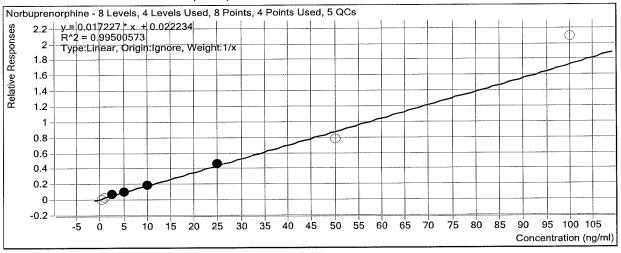
| Sample            | Level | Enabled           | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-------------------|----------|------------|----------|
| b cal 1-5ng/mL    | 1     | $\square$         | 0.5      | 0.6        | 115.5    |
| b cal 2-10ng/mL   | 2     | $\mathbf{\nabla}$ | 1        | 1.1        | 106.1    |
| b QC 10           | 2     |                   | 1        | 1.0        | 102.6    |
| b cal 3-25ng/mL   | 3     | M                 | 2.5      | 2.1        | 84.5     |
| b cal 4-50ng/mL   | 4     | $\mathbf{\Sigma}$ | 5        | 4.8        | 96.8     |
| b cal 5-100ng/mL  | 5     | $\square$         | 10       | 9.5        | 95.4     |
| b qc 100          | 5     | $\square$         | 10       | 9.4        | 94.4     |
| b qc 100 2nd      | 5     | $\square$         | 10       | 10.1       | 100.5    |
| b cal 6-250ng/mL  | 6     | Ø                 | 25       | 25.0       | 99.9     |
| b QC 250          | 6     | ☑                 | 25       | 25.9       | 103.4    |
| b cal 7-500ng/mL  | 7     | M                 | 50       | 50.9       | 101.8    |
| b cal 8-1000ng/mL | 8     |                   | 100      | 117.5      | 117.5    |
| b qc 1000         | 8     | $\square$         | 100      | 114.6      | 114.6    |



| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |              |         |  |  |
|-------------------|--|--------------|---------|--|--|
| Last Calib Update | 6/1/2017 3:33 PM   | Analyst Name | ISP TOX |  |  |
| Target Compound   | Norbuprenorphine   |              |         |  |  |

Internal Standard

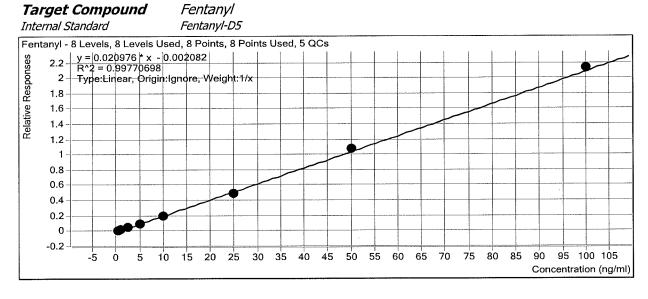
Norbuprenorphine-D3



| Sample            | Level | Enabled   | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-----------|----------|------------|----------|
| b cal 1-5ng/mL    | 1     |           | 0.5      | 0.0        | 0.0      |
| b cal 2-10ng/mL   | 2     |           | 1        | 0.4        | 39.7     |
| b QC 10           | 2     |           | 1        | 0.0        | 0.0      |
| b cal 3-25ng/mL   | 3     | Ø         | 2.5      | 2.8        | 111.0    |
| b cal 4-50ng/mL   | 4     | $\square$ | 5        | 4.5        | 90.7     |
| b cal 5-100ng/mL  | 5     | $\square$ | 10       | 9.6        | 95.9     |
| b qc 100          | 5     | $\square$ | 10       | 11.8       | 118.4    |
| b qc 100 2nd      | 5     | $\square$ | 10       | 8.5        | 85.0     |
| b cal 6-250ng/mL  | 6     | $\square$ | 25       | 25.6       | 102.4    |
| b QC 250          | 6     | $\square$ | 25       | 23.1       | 92.4     |
| b cal 7-500ng/mL  | 7     |           | 50       | 44.2       | 88.3     |
| b cal 8-1000ng/mL | 8     |           | 100      | 119.9      | 119.9    |
| b qc 1000         | 8     |           | 100      | 100.2      | 100.2    |

Not evaluated the Signal to noise ratio Failed for many of the Calibrators and controls.

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |              |         |  |  |
|-------------------|--|--------------|---------|--|--|
| Last Calib Update | 6/1/2017 3:33 PM   | Analyst Name | ISP TOX |  |  |



| Sample            | Level | Enabled   | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-----------|----------|------------|----------|
| b cal 1-5ng/mL    | 1     |           | 0.5      | 0.5        | 106.9    |
| b cal 2-10ng/mL   | 2     | Ø         | 1        | 1.2        | 122.5    |
| b QC 10           | 2     | Ø         | 1        | 1.1        | 109.4    |
| b cal 3-25ng/mL   | 3     | $\square$ | 2.5      | 2.2        | 89.9     |
| b cal 4-50ng/mL   | 4     | $\square$ | 5        | 4.6        | 92.8     |
| b cal 5-100ng/mL  | 5     | Ø         | 10       | 9.1        | 90.7     |
| b qc 100          | 5     |           | 10       | 9.8        | 97.9     |
| b qc 100 2nd      | 5     |           | 10       | 9.6        | 96.2     |
| b cal 6-250ng/mL  | 6     |           | 25       | 23.1       | 92.5     |
| b QC 250          | 6     | $\square$ | 25       | 25.2       | 100.7    |
| b cal 7-500ng/mL  | 7     | $\square$ | 50       | 51.6       | 103.1    |
| b cal 8-1000ng/mL | 8     | $\square$ | 100      | 101.6      | 101.6    |
| b qc 1000         | 8     |           | 100      | 108.8      | 108.8    |

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |              |         |  |  |
|-------------------|--|--------------|---------|--|--|
| Last Calib Update | 6/1/2017 3:33 PM   | Analyst Name | ISP TOX |  |  |

EDDP

Internal Standard EDDP-D3 EDDP - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 5 QCs x10 1 y = 0.019884 \* x - 0.039547 R^2 = 0.99683797 2 Type:Linear, Origin:Ignore, Weight:1/x Relative Responses 1.8 1.6 1.4 1.2 1 0.8 0.6 0.4 0.2 0 800 900 1000 100 200 зóо 4**0**0 5**0**0 600 7Ó0 ò Concentration (ng/ml)

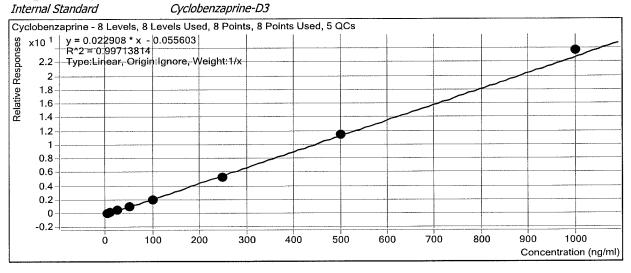
| Sample            | Level | Enabled   | Exp Conc | <b>Final Conc</b> | Accuracy |
|-------------------|-------|-----------|----------|-------------------|----------|
| b cal 1-5ng/mL    | 1     | $\square$ | 5        | 6.5               | 129.9    |
| b cal 2-10ng/mL   | 2     | Ø         | 10       | 9.3               | 92.9     |
| b QC 10           | 2     | $\square$ | 10       | 11.3              | 113.4    |
| b cal 3-25ng/mL   | 3     | $\square$ | 25       | 24.8              | 99.2     |
| b cal 4-50ng/mL   | 4     |           | 50       | 45.2              | 90.4     |
| b cal 5-100ng/mL  | 5     |           | 100      | 94.7              | 94.7     |
| b qc 100          | 5     | Ø         | 100      | 104.5             | 104.5    |
| b qc 100 2nd      | 5     |           | 100      | 91.3              | 91.3     |
| b cal 6-250ng/mL  | 6     | ☑         | 250      | 228.0             | 91.2     |
| b QC 250          | 6     | $\square$ | 250      | 264.1             | 105.7    |
| b cal 7-500ng/mL  | 7     | Ø         | 500      | 486.2             | 97.2     |
| b cal 8-1000ng/mL | 8     | $\square$ | 1000     | 1045.3            | 104.5    |
| b qc 1000         | 8     |           | 1000     | 1065.2            | 106.5    |

Target Compound

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |              |         |  |  |
|-------------------|--|--------------|---------|--|--|
| Last Calib Update | 6/1/2017 3:33 PM   | Analyst Name | ISP TOX |  |  |
|                   |  |              |         |  |  |

#### Target Compound

Cyclobenzaprine Cyclobenzaprine-D3



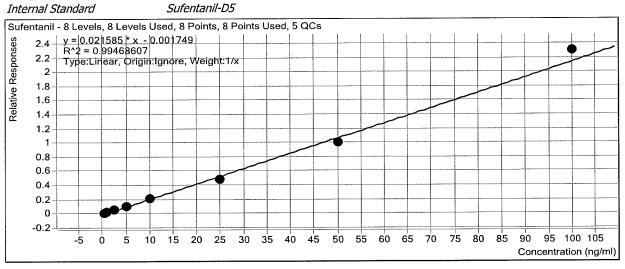
| Sample            | Level | Enabled           | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-------------------|----------|------------|----------|
| b cal 1-5ng/mL    | 1     | $\mathbf{\nabla}$ | 5        | 6.2        | 123.9    |
| b cal 2-10ng/mL   | 2     | $\mathbf{\nabla}$ | 10       | 11.1       | 110.5    |
| b QC 10           | 2     | $\mathbf{\nabla}$ | 10       | 11.8       | 118.5    |
| b cal 3-25ng/mL   | 3     | V                 | 25       | 23.2       | 92.6     |
| b cal 4-50ng/mL   | 4     | $\mathbf{V}$      | 50       | 44.2       | 88.3     |
| b cal 5-100ng/mL  | 5     | M                 | 100      | 88.2       | 88.2     |
| b qc 100          | 5     | $\square$         | 100      | 91.8       | 91.8     |
| b qc 100 2nd      | 5     | $\square$         | 100      | 100.8      | 100.8    |
| b cal 6-250ng/mL  | 6     | $\square$         | 250      | 231.9      | 92.8     |
| b QC 250          | 6     | $\square$         | 250      | 250.9      | 100.3    |
| b cal 7-500ng/mL  | 7     | $\square$         | 500      | 501.4      | 100.3    |
| b cal 8-1000ng/mL | 8     | Ø                 | 1000     | 1033.9     | 103.4    |
| b qc 1000         | 8     |                   | 1000     | 999.7      | 100.0    |

A

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |              |         |  |
|-------------------|--|--------------|---------|--|
| Last Calib Update | 6/1/2017 3:33 PM   | Analyst Name | ISP TOX |  |

#### Target Compound

Sufentanil Sufentanil-D5



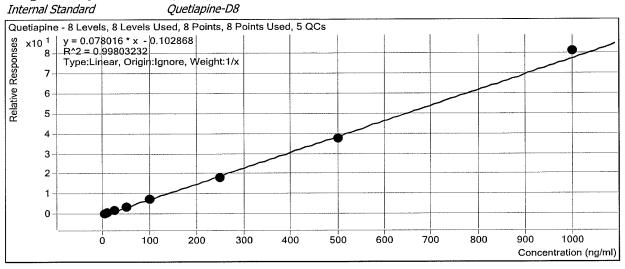
| Sample            | Level | Enabled   | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-----------|----------|------------|----------|
| b cal 1-5ng/mL    | 1     | Ø         | 0.5      | 0.6        | 124.2    |
| b cal 2-10ng/mL   | 2     | $\square$ | 1        | 1.0        | 102.3    |
| b QC 10           | 2     | V         | 1        | 1.1        | 106.3    |
| b cal 3-25ng/mL   | 3     | $\square$ | 2.5      | 2.3        | 92.7     |
| b cal 4-50ng/mL   | 4     |           | 5        | 4.8        | 95.2     |
| b cal 5-100ng/mL  | 5     | $\square$ | 10       | 9.5        | 95.2     |
| b qc 100          | 5     | $\square$ | 10       | 9.1        | 90.6     |
| b qc 100 2nd      | 5     | Ø         | 10       | 10.2       | 102.1    |
| b cal 6-250ng/mL  | 6     | Ø         | 25       | 22.7       | 90.7     |
| b QC 250          | 6     | Ø         | 25       | 25.5       | 102.1    |
| b cal 7-500ng/mL  | 7     | $\square$ | 50       | 46.6       | 93.2     |
| b cal 8-1000ng/mL | 8     | $\square$ | 100      | 106.5      | 106.5    |
| b qc 1000         | 8     |           | 100      | 109.0      | 109.0    |



| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |              |         |  |  |
|-------------------|--|--------------|---------|--|--|
| Last Calib Update | 6/1/2017 3:33 PM   | Analyst Name | ISP TOX |  |  |

#### Target Compound

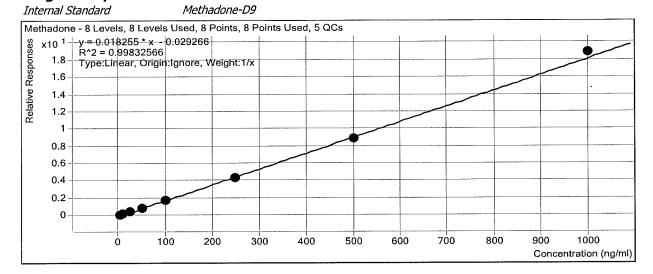
Quetiapine Quetiapine-D8



| Sample            | Level | Enabled   | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-----------|----------|------------|----------|
| b cal 1-5ng/mL    | 1     | $\square$ | 5        | 5.8        | 115.6    |
| b cal 2-10ng/mL   | 2     | Ø         | 10       | 10.1       | 101.4    |
| b QC 10           | 2     | $\square$ | 10       | 11.4       | 114.4    |
| b cal 3-25ng/mL   | 3     | $\square$ | 25       | 24.4       | 97.8     |
| b cal 4-50ng/mL   | 4     | $\square$ | 50       | 48.6       | 97.3     |
| b cal 5-100ng/mL  | 5     | $\square$ | 100      | 93.1       | 93.1     |
| b qc 100          | 5     | $\square$ | 100      | 106.6      | 106.6    |
| b qc 100 2nd      | 5     |           | 100      | 98.0       | 98.0     |
| b cal 6-250ng/mL  | 6     | $\square$ | 250      | 235.6      | 94.2     |
| b QC 250          | 6     | Ø         | 250      | 258.4      | 103.4    |
| b cal 7-500ng/mL  | 7     | $\square$ | 500      | 483.9      | 96.8     |
| b cal 8-1000ng/mL | 8     | $\square$ | 1000     | 1038.5     | 103.9    |
| b qc 1000         | 8     |           | 1000     | 1032.6     | 103.3    |

| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |              |         |  |  |
|-------------------|--|--------------|---------|--|--|
| Last Calib Update | 6/1/2017 3:33 PM   | Analyst Name | ISP TOX |  |  |

#### Target Compound Methadone



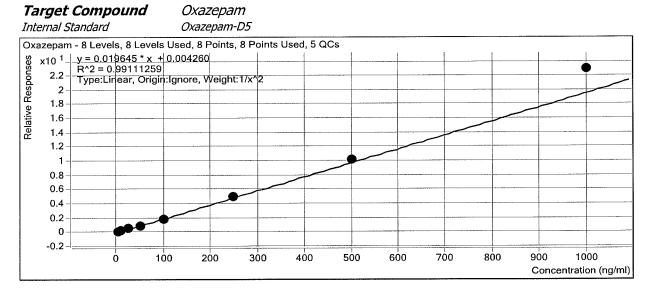
| Sample            | Level | Enabled      | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|--------------|----------|------------|----------|
| b cal 1-5ng/mL    | 1     |              | 5        | 5.9        | 118.8    |
| b cal 2-10ng/mL   | 2     |              | 10       | 10.3       | 103.3    |
| b QC 10           | 2     | $\square$    | 10       | 10.8       | 108.2    |
| b cal 3-25ng/mL   | 3     | $\square$    | 25       | 23.3       | 93.1     |
| b cal 4-50ng/mL   | 4     | $\mathbf{M}$ | 50       | 47.4       | 94.8     |
| b cal 5-100ng/mL  | 5     |              | 100      | 94.7       | 94.7     |
| b qc 100          | 5     | $\square$    | 100      | 100.5      | 100.5    |
| b qc 100 2nd      | 5     | $\square$    | 100      | 98.3       | 98.3     |
| b cal 6-250ng/mL  | 6     | $\square$    | 250      | 234.7      | 93.9     |
| b QC 250          | 6     | $\square$    | 250      | 252.4      | 100.9    |
| b cal 7-500ng/mL  | 7     | ☑            | 500      | 490.1      | 98.0     |
| b cal 8-1000ng/mL | 8     | $\square$    | 1000     | 1033.5     | 103.3    |
| b qc 1000         | 8     |              | 1000     | 1047.0     | 104.7    |

| Batch Data Path   | D:\2017 Data\53117 mdq p | \53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |         |  |  |
|-------------------|--------------------------|--|---------|--|--|
| Last Calib Update | 6/1/2017 3:33 PM         | Analyst Name                                       | ISP TOX |  |  |
| Target Compound   | Fluoxetine               |  |         |  |  |

Internal Standard Fluoxetine-D6 Fluoxetine - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 5 QCs x10 1 y = 0.020084 \* x - 0.033749 R^2 = 0.99686536 2 Type:Linear, Origin:Ignore, Weight:1/x Relative Responses 1.8 1.6 1.4 1.2 1 0.8 0.6 0.4 0.2 0 -0.2 100 зóо 400 500 600 700 800 900 1000 200 Ò Concentration (ng/ml)

| Sample            | Level | Enabled   | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-----------|----------|------------|----------|
| b cal 1-5ng/mL    | 1     | Ø         | 5        | 6.1        | 122.2    |
| b cal 2-10ng/mL   | 2     |           | 10       | 10.1       | 100.9    |
| b QC 10           | 2     | $\square$ | 10       | 11.9       | 119.2    |
| b cal 3-25ng/mL   | 3     | $\square$ | 25       | 23.5       | 93.9     |
| b cal 4-50ng/mL   | 4     | $\square$ | 50       | 47.4       | 94.8     |
| b cal 5-100ng/mL  | 5     | $\square$ | 100      | 93.5       | 93.5     |
| b qc 100          | 5     | M         | 100      | 103.0      | 103.0    |
| b qc 100 2nd      | 5     | ☑         | 100      | 103.0      | 103.0    |
| b cal 6-250ng/mL  | 6     | $\square$ | 250      | 238.5      | 95.4     |
| b QC 250          | 6     | $\square$ | 250      | 247.5      | 99.0     |
| b cal 7-500ng/mL  | 7     | $\square$ | 500      | 471.0      | 94.2     |
| b cal 8-1000ng/mL | 8     | $\square$ | 1000     | 1049.8     | 105.0    |
| b qc 1000         | 8     |           | 1000     | 984.9      | 98.5     |

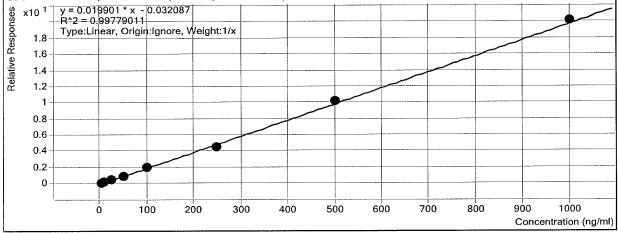
| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |              |         |  |  |
|-------------------|--|--------------|---------|--|--|
| Last Calib Update | 6/1/2017 3:33 PM   | Analyst Name | ISP TOX |  |  |
|                   |  |              |         |  |  |



| Sample            | Level | Enabled   | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-----------|----------|------------|----------|
| b cal 1-5ng/mL    | 1     | $\square$ | 5        | 5.2        | 104.1    |
| b cal 2-10ng/mL   | 2     | $\square$ | 10       | 9.5        | 95.3     |
| b QC 10           | 2     | V         | 10       | 9.3        | 93.4     |
| b cal 3-25ng/mL   | 3     | M         | 25       | 24.2       | 96.7     |
| b cal 4-50ng/mL   | 4     | Ø         | 50       | 45.8       | 91.6     |
| b cal 5-100ng/mL  | 5     |           | 100      | 92.3       | 92.3     |
| b qc 100          | 5     | $\square$ | 100      | 114.6      | 114.6    |
| b qc 100 2nd      | 5     | $\square$ | 100      | 102.4      | 102.4    |
| b cal 6-250ng/mL  | 6     | $\square$ | 250      | 248.2      | 99.3     |
| b QC 250          | 6     |           | 250      | 264.2      | 105.7    |
| b cal 7-500ng/mL  | 7     | $\square$ | 500      | 520.4      | 104.1    |
| b cal 8-1000ng/mL | 8     | Ø         | 1000     | 1166.0     | 116.6    |
| b qc 1000         | 8     |           | 1000     | 1090.5     | 109.0    |



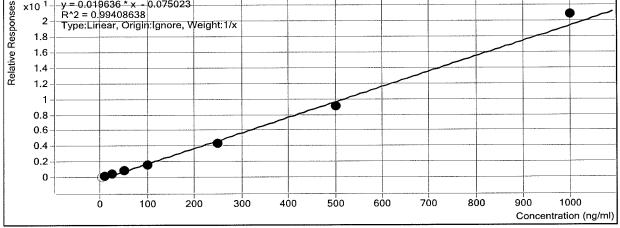
| Batch Data Path   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |              |         |  |  |  |
|-------------------|--|--------------|---------|--|--|--|
| Last Calib Update | 6/1/2017 3:33 PM   | Analyst Name | ISP TOX |  |  |  |
| Target Compound   | Sertraline   |              |         |  |  |  |
| Internal Standard | Sertraline-D3  |              |         |  |  |  |
|                   | Jsed, 8 Points, 8 Points Used, 5 (                             | QCs          |         |  |  |  |



| Sample            | Level | Enabled           | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-------------------|----------|------------|----------|
| b cal 1-5ng/mL    | 1     | $\mathbf{\nabla}$ | 5        | 6.0        | 119.1    |
| b cal 2-10ng/mL   | 2     | $\square$         | 10       | 10.4       | 104.2    |
| b QC 10           | 2     | $\square$         | 10       | 12.8       | 127.9    |
| b cal 3-25ng/mL   | 3     | $\square$         | 25       | 22.9       | 91.8     |
| b cal 4-50ng/mL   | 4     | $\mathbf{N}$      | 50       | 45.1       | 90.3     |
| b cal 5-100ng/mL  | 5     | $\square$         | 100      | 99.7       | 99.7     |
| b qc 100          | 5     | N                 | 100      | 105.0      | 105.0    |
| b qc 100 2nd      | 5     |                   | 100      | 104.9      | 104.9    |
| b cal 6-250ng/mL  | 6     | $\square$         | 250      | 225.7      | 90.3     |
| b QC 250          | 6     | $\square$         | 250      | 222.2      | 88.9     |
| b cal 7-500ng/mL  | 7     | Ø                 | 500      | 516.4      | 103.3    |
| b cal 8-1000ng/mL | 8     | $\square$         | 1000     | 1013.8     | 101.4    |
| b qc 1000         | 8     |                   | 1000     | 1131.0     | 113.1    |



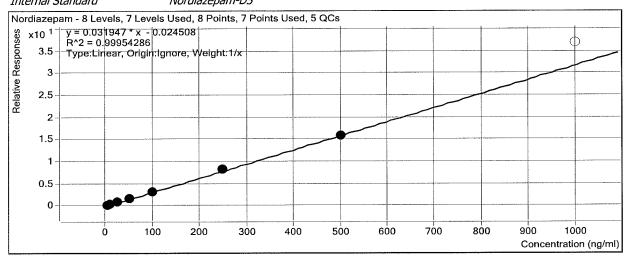
| Batch Data Path                                  | D:\2017 Data\53117 mdq j         | 2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |         |   |  |  |
|--|----------------------------------|---|---------|---|--|--|
| Last Calib Update                                | 6/1/2017 3:33 PM                 | Analyst Name  | ISP TOX |   |  |  |
| Target Compound                                  | Temazepam                        |   |         |   |  |  |
| Internal Standard                                | Temazepam-D5                     |   |         |   |  |  |
|  | ls Used, 8 Points, 7 Points Used | 5 QCs   |         |   |  |  |
| $  \psi \rangle_{v10}   1   v = 0.019636 * x - $ | 0.075023                         |   |         | + |  |  |



| Sample            | Level | Enabled   | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-----------|----------|------------|----------|
| b cal 1-5ng/mL    | 1     |           | 5        | 8.1        | 162.3    |
| b cal 2-10ng/mL   | 2     |           | 10       | 12.2       | 121.7    |
| b QC 10           | 2     | $\square$ | 10       | 12.7       | 126.6    |
| b cal 3-25ng/mL   | 3     | $\square$ | 25       | 26.0       | 103.9    |
| b cal 4-50ng/mL   | 4     | $\square$ | 50       | 47.1       | 94.2     |
| b cal 5-100ng/mL  | 5     | $\square$ | 100      | 88.6       | 88.6     |
| b qc 100          | 5     | $\square$ | 100      | 105.4      | 105.4    |
| b qc 100 2nd      | 5     | $\square$ | 100      | 101.9      | 101.9    |
| b cal 6-250ng/mL  | 6     | $\square$ | 250      | 228.4      | 91.4     |
| b QC 250          | 6     |           | 250      | 256.3      | 102.5    |
| b cal 7-500ng/mL  | 7     |           | 500      | 468.8      | 93.8     |
| b cal 8-1000ng/mL | 8     | $\square$ | 1000     | 1063.9     | 106.4    |
| b qc 1000         | 8     |           | 1000     | 1045.0     | 104.5    |

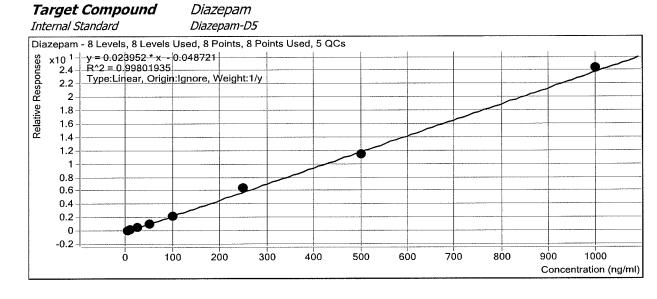


| Batch Data Path                      | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |         |  |  |  |  |
|--------------------------------------|--|---------|--|--|--|--|
| Last Calib Update                    | 6/1/2017 3:33 PM   | ISP TOX |  |  |  |  |
| Target Compound<br>Internal Standard | Nordiazepam<br>Nordiazepam-D5                                  |         |  |  |  |  |



| Sample            | Level | Enabled           | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-------------------|----------|------------|----------|
| b cal 1-5ng/mL    | 1     | $\mathbf{M}$      | 5        | 5.7        | 113.0    |
| b cal 2-10ng/mL   | 2     | $\blacksquare$    | 10       | 9.5        | 94.8     |
| b QC 10           | 2     | $\square$         | 10       | 10.8       | 108.1    |
| b cal 3-25ng/mL   | 3     | $\square$         | 25       | 23.8       | 95.0     |
| b cal 4-50ng/mL   | 4     | $\square$         | 50       | 48.7       | 97.5     |
| b cal 5-100ng/mL  | 5     | $\square$         | 100      | 97.7       | 97.7     |
| b qc 100          | 5     | $\square$         | 100      | 103.7      | 103.7    |
| b qc 100 2nd      | 5     | $\square$         | 100      | 101.6      | 101.6    |
| b cal 6-250ng/mL  | 6     | $\square$         | 250      | 255.2      | 102.1    |
| b QC 250          | 6     | $\mathbf{\nabla}$ | 250      | 243.0      | 97.2     |
| b cal 7-500ng/mL  | 7     | $\mathbf{\nabla}$ | 500      | 499.5      | 99.9     |
| b cal 8-1000ng/mL | 8     |                   | 1000     | 1155.3     | 115.5    |
| b qc 1000         | 8     |                   | 1000     | 1092.7     | 109.3    |

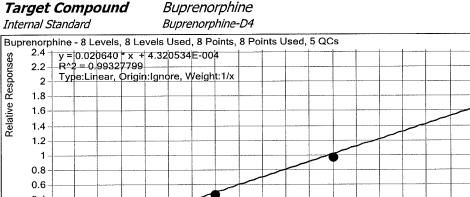
| Batch Data Path D:\2   | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |              |         |  |  |
|------------------------|--|--------------|---------|--|--|
| Last Calib Update 6/1/ | 2017 3:33 PM A   | Analyst Name | ISP TOX |  |  |



| Sample            | Level | Enabled   | Exp Conc | Final Conc | Accuracy |
|-------------------|-------|-----------|----------|------------|----------|
| b cal 1-5ng/mL    | 1     | Ø         | 5        | 5.6        | 111.4    |
| b cal 2-10ng/mL   | 2     | M         | 10       | 9.8        | 98.1     |
| b QC 10           | 2     | M         | 10       | 11.1       | 110.7    |
| b cal 3-25ng/mL   | 3     |           | 25       | 23.9       | 95.7     |
| b cal 4-50ng/mL   | 4     | Ø         | 50       | 48.0       | 96.0     |
| b cal 5-100ng/mL  | 5     |           | 100      | 92.4       | 92.4     |
| b qc 100          | 5     | Ø         | 100      | 104.9      | 104.9    |
| b qc 100 2nd      | 5     | v         | 100      | 100.3      | 100.3    |
| b cal 6-250ng/mL  | 6     | Ø         | 250      | 268.5      | 107.4    |
| b QC 250          | 6     | Ø         | 250      | 248.6      | 99.5     |
| b cal 7-500ng/mL  | 7     |           | 500      | 477.3      | 95.5     |
| b cal 8-1000ng/mL | 8     | $\square$ | 1000     | 1018.1     | 101.8    |
| b qc 1000         | 8     | Ø         | 1000     | 1187.7     | 118.8    |



| Batch Data Path   |  | D:\2017 Data\53117 mdq p1\QuantResults\53117 mdq p1b.batch.bin |              |         |  |  |  |
|-------------------|--|--|--------------|---------|--|--|--|
| Last Calib Update |  | 6/1/2017 3:33 PM   | Analyst Name | ISP TOX |  |  |  |
|                   |  |  |              |         |  |  |  |



0.4 0.2 0 -0.2 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 15 20 25 -5 10 0 5 Concentration (ng/ml) Enabled Exp Conc **Final Conc** Accuracy Sample Level

| b cal 1-5ng/mL    | 1 | $\square$ | 0.5 | 0.6   | 124.4 |
|-------------------|---|-----------|-----|-------|-------|
| b cal 2-10ng/mL   | 2 | $\square$ | 1   | 1.2   | 115.5 |
| b QC 10           | 2 | $\square$ | 1   | 1.0   | 98.7  |
| b cal 3-25ng/mL   | 3 | $\square$ | 2.5 | 2.2   | 89.0  |
| b cal 4-50ng/mL   | 4 | $\square$ | 5   | 4.5   | 89.1  |
| b cal 5-100ng/mL  | 5 | $\square$ | 10  | 9.2   | 92.2  |
| b qc 100          | 5 | $\square$ | 10  | 9.1   | 91.1  |
| b qc 100 2nd      | 5 | Ø         | 10  | 10.3  | 102.5 |
| b cal 6-250ng/mL  | 6 | ☑         | 25  | 22.1  | 88.5  |
| b QC 250          | 6 | $\square$ | 25  | 23.7  | 94.8  |
| b cal 7-500ng/mL  | 7 | $\square$ | 50  | 47.1  | 94.3  |
| b cal 8-1000ng/mL | 8 | $\square$ | 100 | 107.1 | 107.1 |
| b qc 1000         | 8 |           | 100 | 104.8 | 104.8 |

Relative Responses