

REVIEWED

By Celena Shrum at 4:38 pm, Oct 23, 2019

10/11/2019

TS

Worklist: 3755

| <u>LAB CASE</u> | <u>ITEM</u> | <u>ITEM TYPE</u> | <u>DESCRIPTION</u> |
|-----------------|-------------|------------------|--|
| P2019-2733 | 1 | BCK | AM 28 Blood Multi-Drug Quant Panel 2 by LC-QQQ |
| P2019-2805 | 1 | BCK | AM 28 Blood Multi-Drug Quant Panel 2 by LC-QQQ |
| P2019-2889 | 1 | BCK | AM 28 Blood Multi-Drug Quant Panel 2 by LC-QQQ |
| P2019-2911 | 1 | BCK | AM 28 Blood Multi-Drug Quant Panel 2 by LC-QQQ |
| P2019-2933 | 1 | BCK | AM 28 Blood Multi-Drug Quant Panel 2 by LC-QQQ |



TS

AM# 28: Multi-Drug Quantitation in Blood by LC-MS/MS

Extraction Date: 10/15/19
Plate lot#: Item #:IDP-112 Lot:190730

Analyst: Tamara Salazar
Plate Expiration: 01/30/20

Mobile phase A: 5mM Amm Form + 0.01% FA
0.5M Ammonium Hydroxide

Mobile phase B: 0.01% Formic Acid in MeOH
Ethyl Acetate 20% Methanol in Water

Blank Blood Lot: 445283-2

Column: Agilent 120 EC-C18 (2.1x 100-2.7um)

LCMS-QQQ ID: 069901

Pre-Analytic:

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

Analytic:

- 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
- 2. Pipette **250µL blood (calibrated pipette) Pipette ID: 3** in wells of analytical (standards) plate.
- 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes. *Shaker ID: 067105*
- 4. Pipette **250µL 0.5M ammonium hydroxide** in wells of analytical plate.
- 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 6. Transfer **300µL of blood+base** mixture to corresponding wells of SLE+ plate.
- 7. Apply positive pressure for approx. 10-15 seconds (or until no liquid remains on top of sorbent).
(Load at 85-100 PSI- Selector to the right) Manifold ID: 067104
- 8. Wait 5 minutes.
- 9. Add **900uL ethyl acetate**.
- 10. Wait 5 minutes.
- 11. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left)*.
- 12. Add **900uL ethyl acetate**.
- 13. Wait 5 minutes.
- 14. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left)*.
- 15. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C.
SPE Dry ID: 067103
- 16. Reconstitute in **100µL 20% MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

- 1. Create batch and process data.
Worklist path: *D:\MassHunter\Data\2019\AM 28\101519 MDQ P1 and P2_THCQ TS*
Batch Name: *MDQ P2 wklst 375 TS_evaluated compounds*
- 2. Make necessary changes to integration limits
- 3. Integration linear and R² values ≥0.98 for each analyte.
- 4. For unknown samples and controls: response ratio within 20% of average of controls and standards, RT within +/- 5% (tramadol RT +/-2%), S/N for primary transition >10 and secondary transitions >5.
- 5. Did all QCs pass for each analyte? Y / N _____ Add Control data to QC tracking spreadsheet.
- 6. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports.

COMMENTS: *Compounds evaluated: Amitriptyline, Maprotiline, Methocarbamol, Midazolam, Nortriptyline, Phenytoin*
Curves limited: Maprotiline 5-500, Phenytoin 5-500

TS

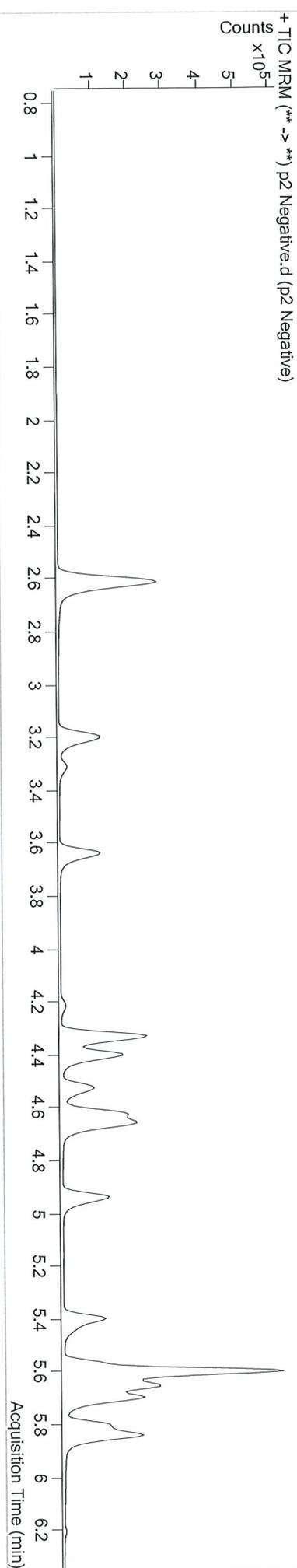
AM #28 Multi-Drug Quant. Results



Batch results D:\MassHunter\Data\2019\AM 28\101519 MDQ P1 and P2_THCQ TS\QuantResults\MDQ P2 wk1et 3755 TS_evaluated compounds_batch.bin
Calibration Last Update 10/16/2019 3:26:35 PM

| | | | |
|-------------------------|--------------------------|------------------|---------------|
| Instrument | Falco | Data File | p2 Negative.d |
| Type | Sample | Sample | p2 Negative |
| Acq. Method | MDQ P2 Combined 092319.m | Operator | |
| Sample Position | P1-E2 | Comment | |
| Injection Volume | 2 | | |
| Acq. Date-Time | 10/15/2019 4:58:00 PM | | |
| Sample Info. | | | |

Sample Chromatogram



15

AM #28 Multi-Drug Quant. Results

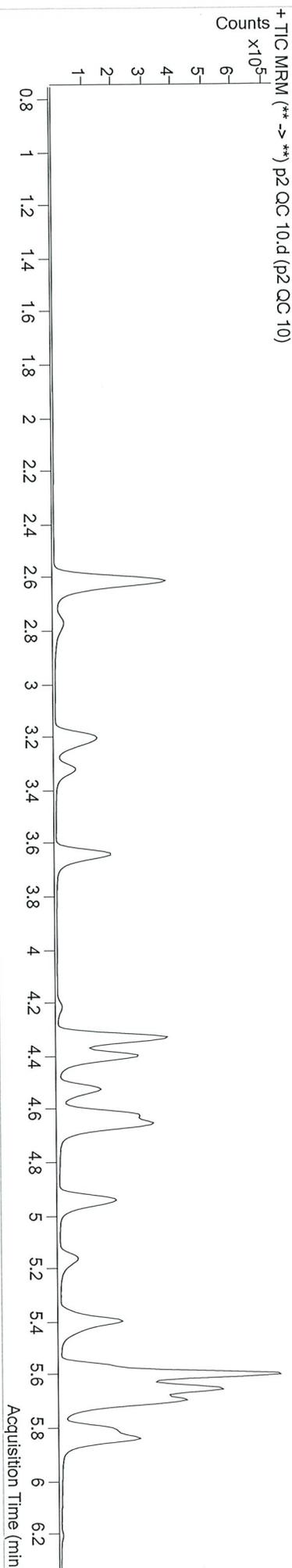


Batch results Calibration Last Update D:\MassHunter\Data\2019\AM 28\101519 MDQ P1 and P2_THCQ.TS\QuantResults\MDQ P2 wk1st 3755 TS_evaluated compounds.batch.bin
10/16/2019 3:26:35 PM

Instrument Type Falco
Acq. Method QC
Sample Position MDQ P2 Combined 092319.m
Injection Volume P1-A2
Acq. Date-Time 2
Sample Info. 10/15/2019 3:12:52 PM

Data File p2 QC 10.d
Sample p2 QC 10
Operator
Comment

Sample Chromatogram



| Name | RT | Resp. | S/N | Ratio | S/N | ISTD Resp. | Final Conc. |
|---------------|-------|-------|---------|-------|----------|------------|---------------|
| Amitriptyline | 5.696 | 96115 | 983.09 | 46.5 | 683.76 | 179764 | 9.4673 ng/ml |
| Maprotiline | 5.696 | 96115 | 983.09 | 28.7 | 408.12 | 179764 | 9.6486 ng/ml |
| Methocarbamol | 4.420 | 10803 | ∞ | 91.2 | ∞ | 1001642 | 10.6109 ng/ml |
| Midazolam | 5.836 | 17135 | ∞ | 90.0 | 397.20 | 188476 | 10.0823 ng/ml |
| Nortriptyline | 5.717 | 50886 | 5009.29 | 29.3 | 19425.06 | 166167 | 11.0616 ng/ml |
| Phenytoin | 5.473 | 1508 | 112.99 | 70.2 | ∞ | 7767 | 9.3131 ng/ml |

TS

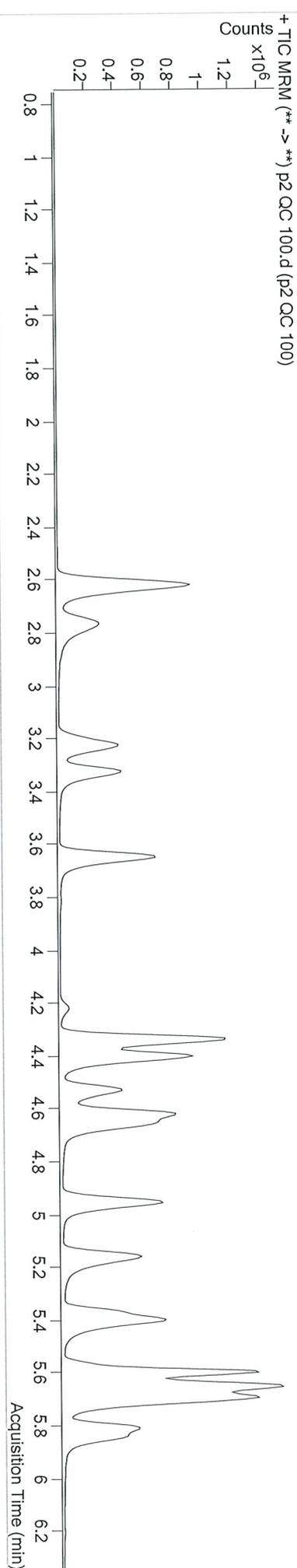
AM #28 Multi-Drug Quant. Results



Batch results D:\MassHunter\Data\2019\AM 28\101519 MDQ P1 and P2_THCQ TS\QuantResults\MDQ P2 wk1st 3755 TS_evaluated compounds_batch.bin
Calibration Last Update 10/16/2019 3:26:35 PM

Instrument Falco Data File p2 QC 100.d
Type QC Sample p2 QC 100
Acq. Method MDQ P2 Combined 092319.m Operator
Sample Position P1-B2 Comment
Injection Volume 2
Acq. Date-Time 10/15/2019 3:33:53 PM
Sample Info.

Sample Chromatogram



| Name | RT | Resp. | S/N | Ratio | S/N | ISTD Resp. | Final Conc. |
|---------------|-------|--------|---------|-------|---------|------------|----------------|
| Amitriptyline | 5.696 | 744618 | 2588.85 | 47.7 | 1033.60 | 145178 | 105.4299 ng/ml |
| Maprotiline | 5.696 | 744618 | 2588.85 | 25.0 | 7762.04 | 145178 | 103.1098 ng/ml |
| Methocarbamol | 4.420 | 92903 | 1128.86 | 90.6 | ∞ | 936693 | 112.0939 ng/ml |
| Midazolam | 5.836 | 141525 | 3096.81 | 86.4 | 2563.15 | 153245 | 89.5201 ng/ml |
| Nortriptyline | 5.717 | 389466 | 4416.04 | 29.9 | 2752.63 | 129126 | 105.7002 ng/ml |
| Phenytoin | 5.479 | 13330 | ∞ | 77.3 | 234.66 | 7244 | 91.6174 ng/ml |

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AM #28 Multi-Drug Quant. Results

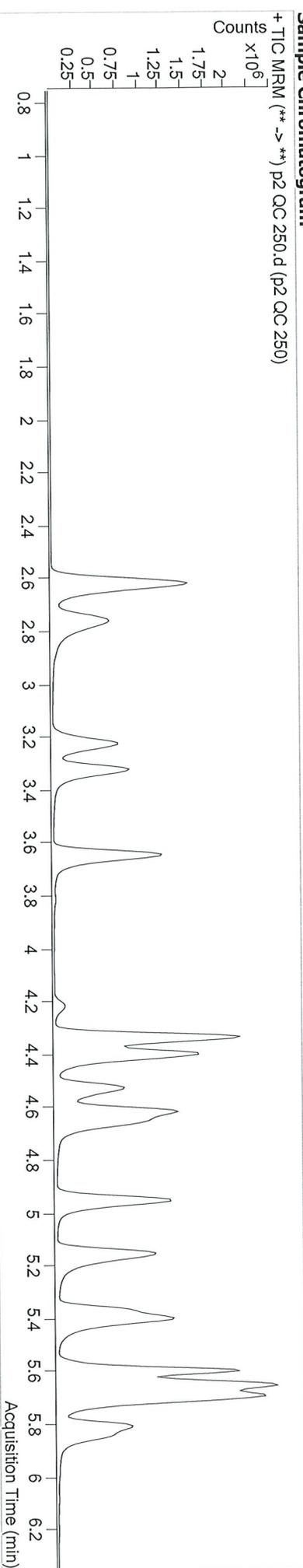


Batch results D:\MassHunter\Data\2019\AM 28\101519 MDQ P1 and P2_THCQ TS\QuantResults\MDQ P2 wk1st 3755 TS_evaluated compounds batch.bin
Calibration Last Update 10/16/2019 3:26:35 PM

Instrument Falco
Type QC
Acq. Method MDQ P2 Combined 092319.m
Sample Position P1-C2
Injection Volume 2
Acq. Date-Time 10/15/2019 3:54:55 PM
Sample Info.

Data File p2 QC 250.d
Sample Operator p2 QC 250
Comment

Sample Chromatogram



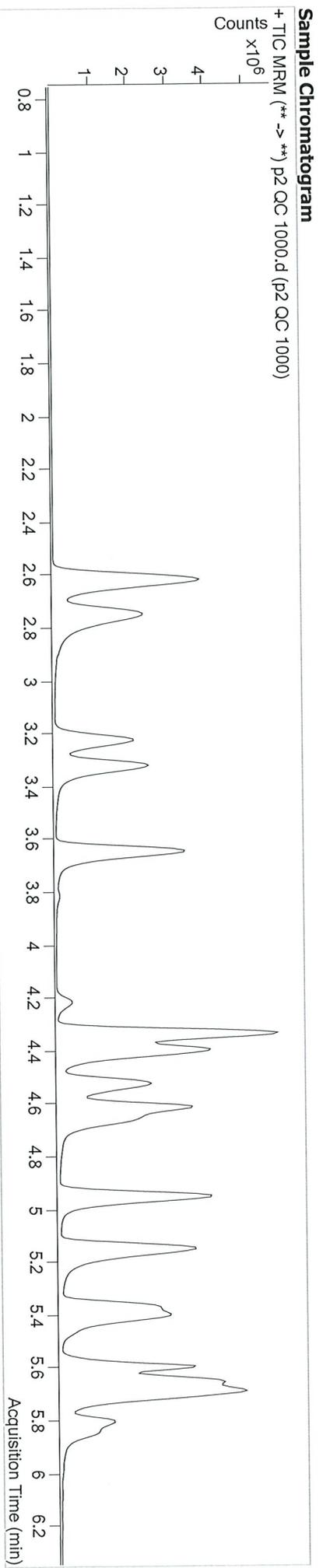
| Name | RT | Resp. | S/N | Ratio | S/N | ISTD Resp. | Final Conc. |
|---------------|-------|---------|-----------|-------|----------|------------|----------------|
| Amtriptyline | 5.696 | 1466450 | 19094.71 | 48.6 | 1780.19 | 119189 | 255.2859 ng/ml |
| Maprotiline | 5.696 | 1466450 | 19094.71 | 22.2 | 2011.92 | 119189 | 249.0596 ng/ml |
| Methocarbamol | 4.420 | 192961 | 18354.56 | 89.4 | 43307.49 | 792809 | 277.6513 ng/ml |
| Midazolam | 5.836 | 287350 | 8846.06 | 88.9 | 3456.94 | 119725 | 230.3975 ng/ml |
| Nortriptyline | 5.717 | 756002 | 143200.84 | 30.2 | 31154.52 | 104962 | 251.9041 ng/ml |
| Phenytoin | 5.479 | 34088 | 3629.69 | 78.1 | 2913.00 | 7036 | 241.8630 ng/ml |



AM #28 Multi-Drug Quant. Results

Batch results Calibration Last Update D:\MassHunter\Data\2019\AM 28\101519 MDQ P1 and P2_THQC_TS\QuantResults\MDQ P2 wk1st 3755_TS_evaluated compounds.batch.bin
10/16/2019 3:26:35 PM

Instrument Type Acq. Method Sample Position Injection Volume Acq. Date-Time Sample Info. Data File
Falco QC MDQ P2 Combined 092319.m P1-D2 2 10/15/2019 4:15:59 PM p2 QC 1000.d
p2 QC 1000
Sample Operator Comment



| Name | RT | Resp. | S/N | Ratio | S/N | ISTD Resp. | Final Conc. |
|---------------|-------|---------|-----------|-----------------|-----------|------------|-----------------|
| Amitriptyline | 5.696 | 3518397 | 39119.11 | 52.6 | 56092.48 | 78274 | 937.1664 ng/ml |
| Maprotiline | 5.696 | 3518397 | 39119.11 | 14.9 Low | 13162.17 | 78274 | 913.1662 ng/ml |
| Methocarbamol | 4.427 | 428715 | 43569.07 | 90.2 | 161280.25 | 609434 | 805.8417 ng/ml |
| Midazolam | 5.836 | 649804 | 2246.51 | 88.6 | 22341.84 | 59451 | 1044.2386 ng/ml |
| Nortriptyline | 5.717 | 1824150 | 137712.84 | 30.6 | 14432.39 | 61583 | 1034.8224 ng/ml |
| Phenytoin | 5.473 | 194008 | ∞ | 76.1 | 7607.07 | 6883 | 1409.1753 ng/ml |

Outside curve range.
Outside curve range.

TS



AM #28 Multi-Drug Quant. Calibration Curve Report

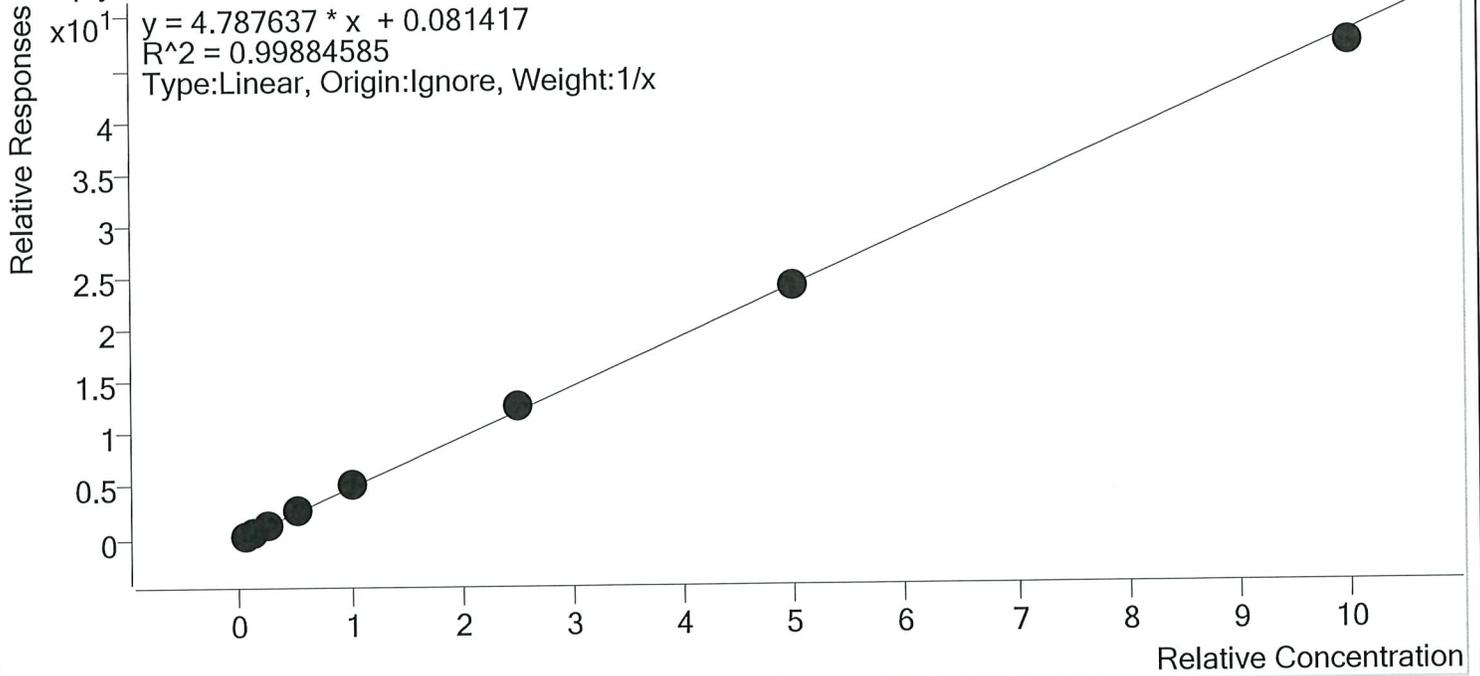
Batch results D:\MassHunter\Data\2019\AM 28\101519 MDQ P1 and P2_THCQ TS\QuantResults\MDQ P2 wk1st
3755 TS_evaluated compounds.batch.bin

Last Cal. Update 10/16/2019 3:26 PM

Analyst Name ISP\datastor

Analyte Amitriptyline **Internal Standard** Amitriptyline-D3

Amitriptyline - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 4 QCs



| Sample | Level | Enabled | Expected Concentration | Final Concentration | Accuracy |
|-----------------|-------|---------|------------------------|---------------------|----------|
| p2 Cal 1-5ng | 1 | ✓ | 5.0 | 4.1 | 82.2 |
| p2 Cal 2- 10ng | 2 | ✓ | 10.0 | 10.0 | 99.6 |
| p2 Cal 3 -25ng | 3 | ✓ | 25.0 | 26.0 | 104.0 |
| p2 Cal 4-50ng | 4 | ✓ | 50.0 | 51.3 | 102.6 |
| p2 Cal 5-100ng | 5 | ✓ | 100.0 | 109.5 | 109.5 |
| p2 Cal 6-250ng | 6 | ✓ | 250.0 | 260.2 | 104.1 |
| p2 Cal 7-500ng | 7 | ✓ | 500.0 | 501.0 | 100.2 |
| p2 Cal 8-1000ng | 8 | ✓ | 1000.0 | 977.9 | 97.8 |

TS



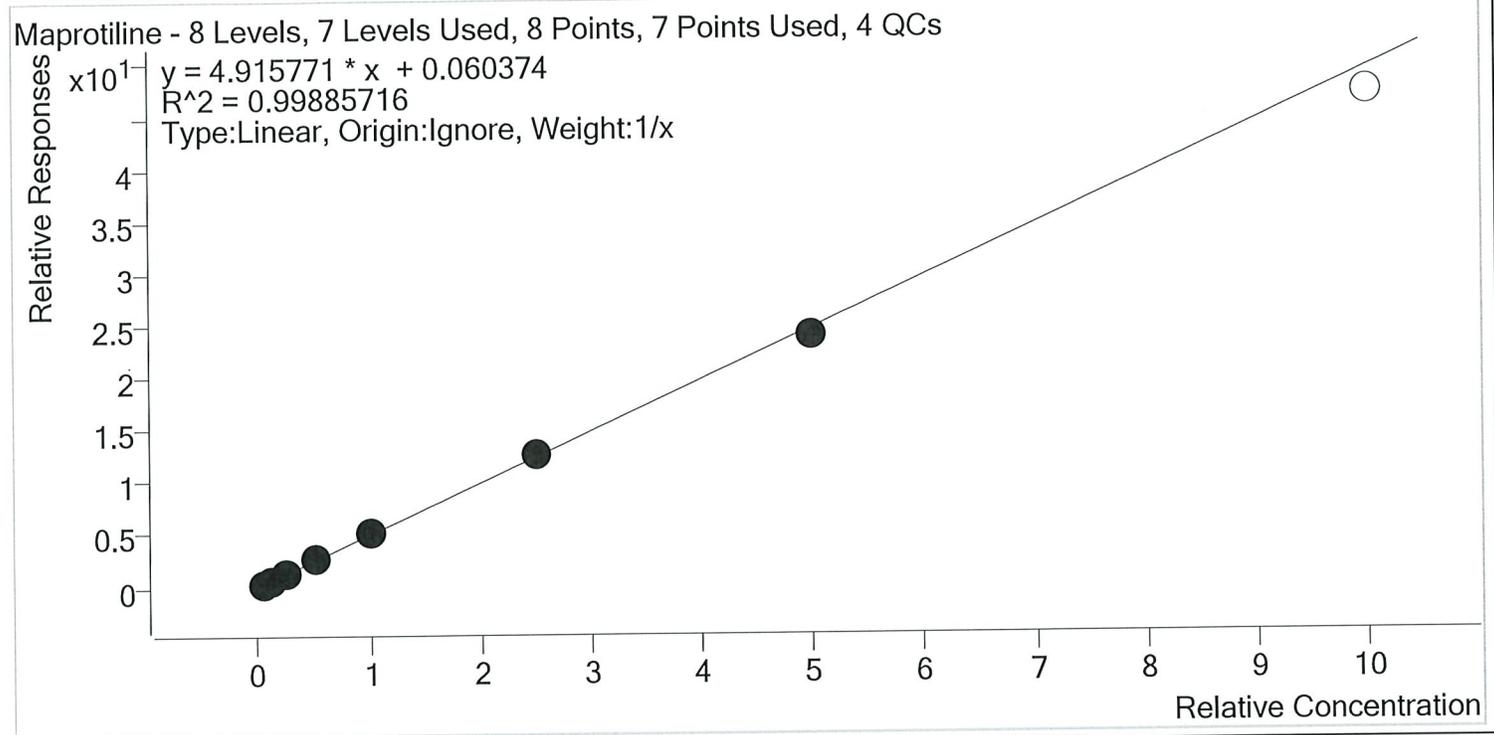
AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\101519 MDQ P1 and P2_THCQ TS\QuantResults\MDQ P2 wk1st
3755 TS_evaluated compounds.batch.bin

Last Cal. Update 10/16/2019 3:26 PM

Analyst Name ISP\datastor

Analyte Maprotiline **Internal Standard** Amitriptyline-D3



| Sample | Level | Enabled | Expected Concentration | Final Concentration | Accuracy |
|-----------------|-------|---------|------------------------|---------------------|----------|
| p2 Cal 1-5ng | 1 | ✓ | 5.0 | 4.4 | 88.7 |
| p2 Cal 2- 10ng | 2 | ✓ | 10.0 | 10.1 | 101.3 |
| p2 Cal 3 -25ng | 3 | ✓ | 25.0 | 25.7 | 103.0 |
| p2 Cal 4-50ng | 4 | ✓ | 50.0 | 50.4 | 100.8 |
| p2 Cal 5-100ng | 5 | ✓ | 100.0 | 107.1 | 107.1 |
| p2 Cal 6-250ng | 6 | ✓ | 250.0 | 253.9 | 101.5 |
| p2 Cal 7-500ng | 7 | ✓ | 500.0 | 488.3 | 97.7 |
| p2 Cal 8-1000ng | 8 | × | 1000.0 | 952.9 | 95.3 |

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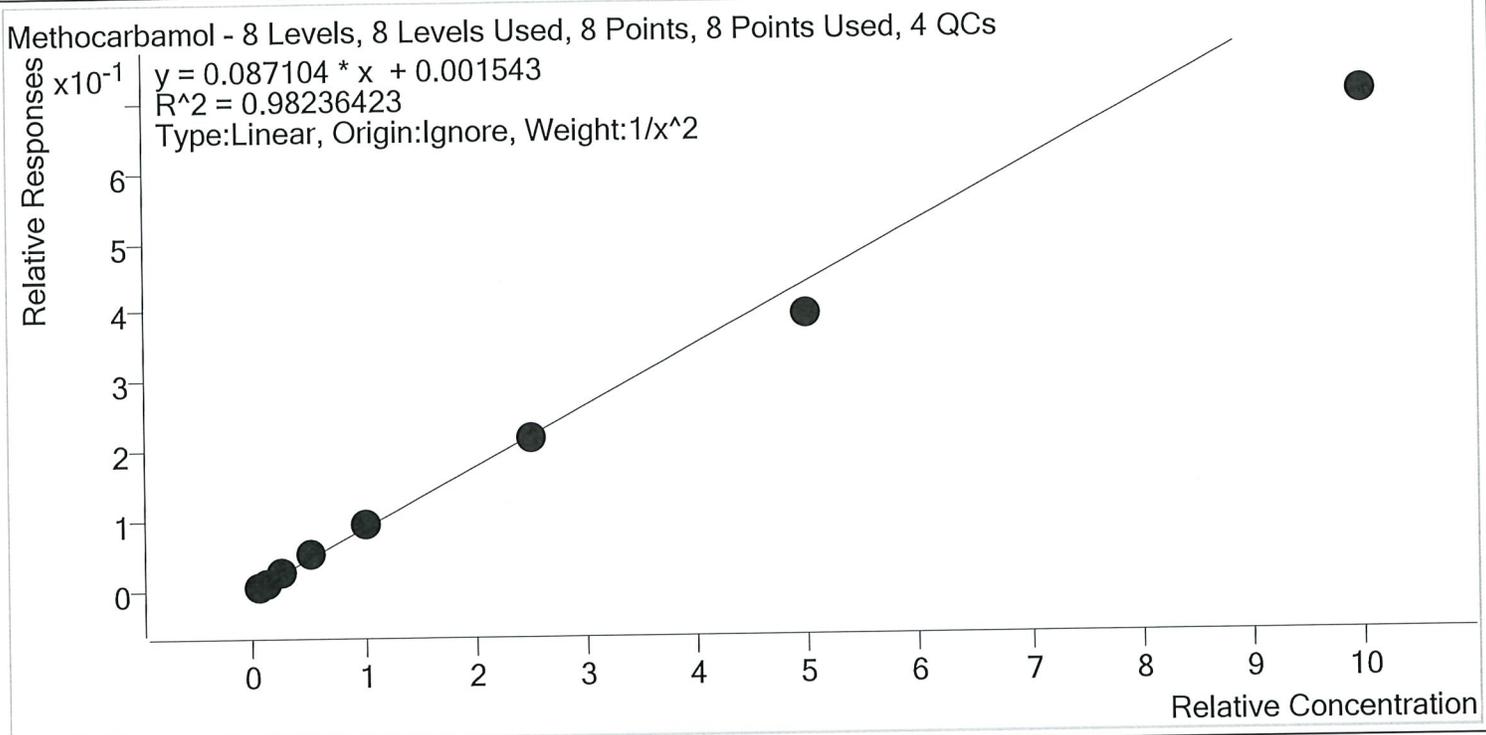
AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\101519 MDQ P1 and P2_THCQ TS\QuantResults\MDQ P2 wk1st
3755 TS_evaluated compounds.batch.bin

Last Cal. Update 10/16/2019 3:26 PM

Analyst Name ISP\datastor

Analyte Methocarbamol **Internal Standard** Pseudoephedrine-D3



| Sample | Level | Enabled | Expected Concentration | Final Concentration | Accuracy |
|-----------------|-------|---------|------------------------|---------------------|----------|
| p2 Cal 1-5ng | 1 | ✓ | 5.0 | 4.7 | 93.6 |
| p2 Cal 2- 10ng | 2 | ✓ | 10.0 | 10.5 | 104.9 |
| p2 Cal 3 -25ng | 3 | ✓ | 25.0 | 28.4 | 113.5 |
| p2 Cal 4-50ng | 4 | ✓ | 50.0 | 55.6 | 111.2 |
| p2 Cal 5-100ng | 5 | ✓ | 100.0 | 108.6 | 108.6 |
| p2 Cal 6-250ng | 6 | ✓ | 250.0 | 246.9 | 98.8 |
| p2 Cal 7-500ng | 7 | ✓ | 500.0 | 444.9 | 89.0 |
| p2 Cal 8-1000ng | 8 | ✓ | 1000.0 | 805.7 | 80.6 |

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AM #28 Multi-Drug Quant. Calibration Curve Report

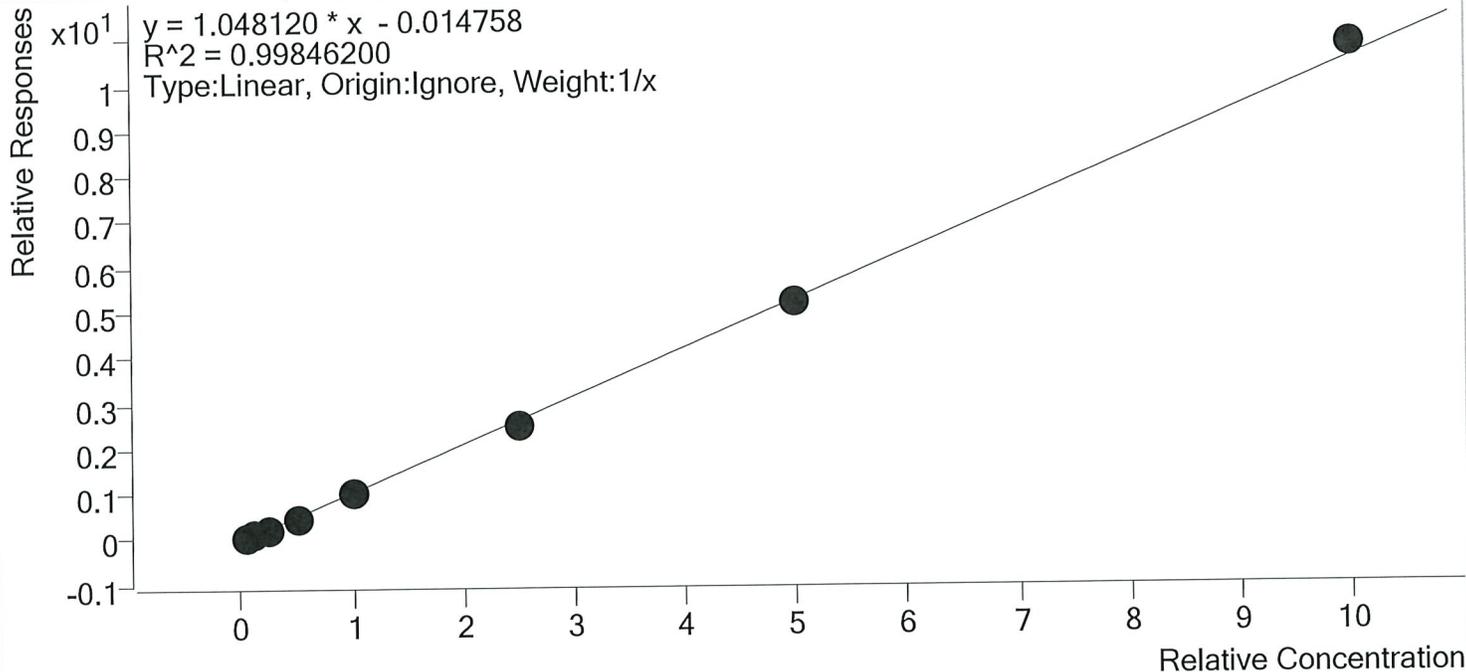
Batch results D:\MassHunter\Data\2019\AM 28\101519 MDQ P1 and P2_THCQ TS\QuantResults\MDQ P2 wk1st
3755 TS_evaluated compounds.batch.bin

Last Cal. Update 10/16/2019 3:26 PM

Analyst Name ISP\datastor

Analyte Midazolam **Internal Standard** Midazolam-D4

Midazolam - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 4 QCs



| Sample | Level | Enabled | Expected Concentration | Final Concentration | Accuracy |
|-----------------|-------|---------|------------------------|---------------------|----------|
| p2 Cal 1-5ng | 1 | ✓ | 5.0 | 6.1 | 121.6 |
| p2 Cal 2- 10ng | 2 | ✓ | 10.0 | 10.2 | 102.4 |
| p2 Cal 3 -25ng | 3 | ✓ | 25.0 | 23.4 | 93.6 |
| p2 Cal 4-50ng | 4 | ✓ | 50.0 | 45.4 | 90.7 |
| p2 Cal 5-100ng | 5 | ✓ | 100.0 | 95.7 | 95.7 |
| p2 Cal 6-250ng | 6 | ✓ | 250.0 | 234.5 | 93.8 |
| p2 Cal 7-500ng | 7 | ✓ | 500.0 | 496.7 | 99.3 |
| p2 Cal 8-1000ng | 8 | ✓ | 1000.0 | 1028.0 | 102.8 |

TS



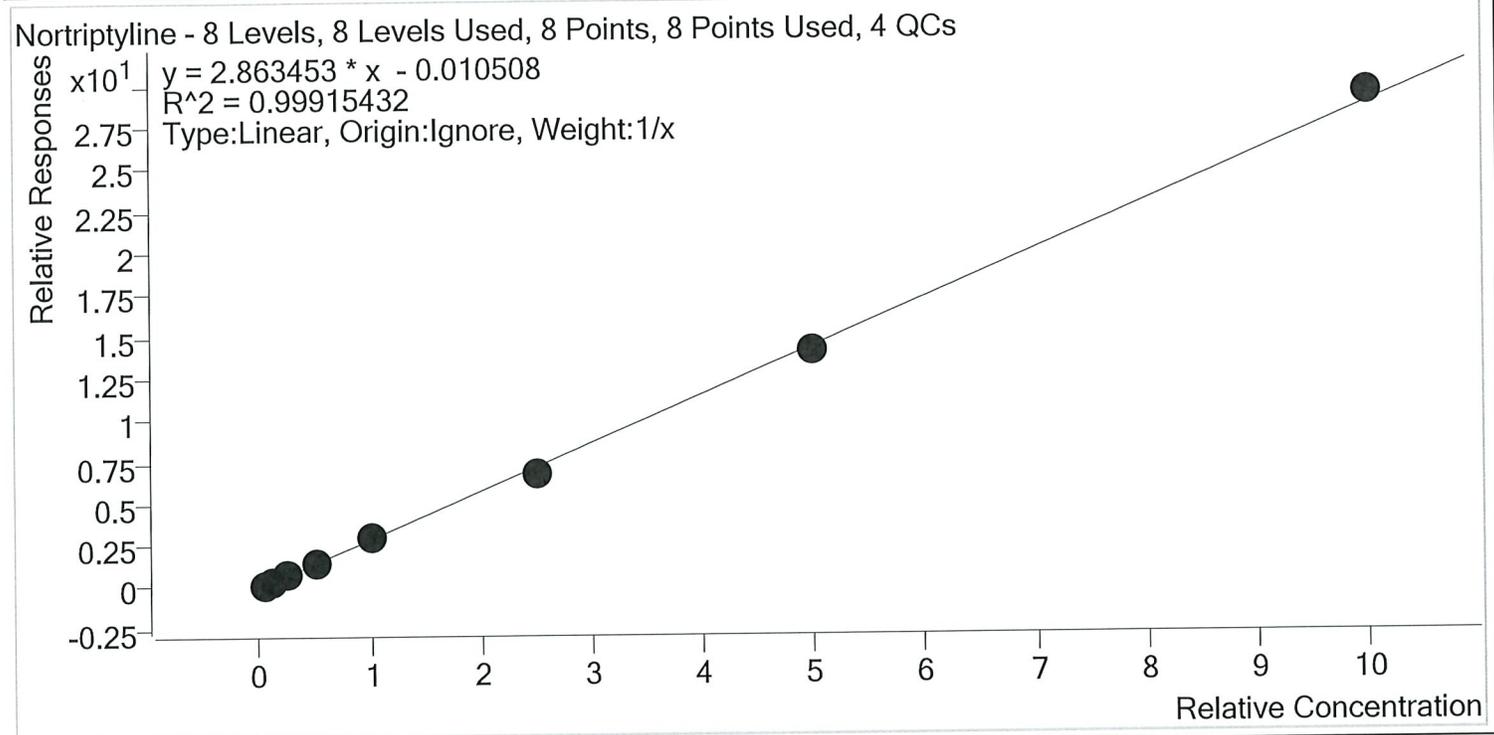
AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\101519 MDQ P1 and P2_THCQ TS\QuantResults\MDQ P2 wk1st
3755 TS_evaluated compounds.batch.bin

Last Cal. Update 10/16/2019 3:26 PM

Analyst Name ISP\datastor

Analyte Nortriptyline **Internal Standard** Nortriptyline-d3



| Sample | Level | Enabled | Expected Concentration | Final Concentration | Accuracy |
|-----------------|-------|---------|------------------------|---------------------|----------|
| p2 Cal 1-5ng | 1 | ✓ | 5.0 | 5.4 | 107.2 |
| p2 Cal 2- 10ng | 2 | ✓ | 10.0 | 10.3 | 103.1 |
| p2 Cal 3 -25ng | 3 | ✓ | 25.0 | 24.4 | 97.8 |
| p2 Cal 4-50ng | 4 | ✓ | 50.0 | 47.3 | 94.7 |
| p2 Cal 5-100ng | 5 | ✓ | 100.0 | 101.8 | 101.8 |
| p2 Cal 6-250ng | 6 | ✓ | 250.0 | 237.7 | 95.1 |
| p2 Cal 7-500ng | 7 | ✓ | 500.0 | 490.8 | 98.2 |
| p2 Cal 8-1000ng | 8 | ✓ | 1000.0 | 1022.3 | 102.2 |

TS



AM #28 Multi-Drug Quant. Calibration Curve Report

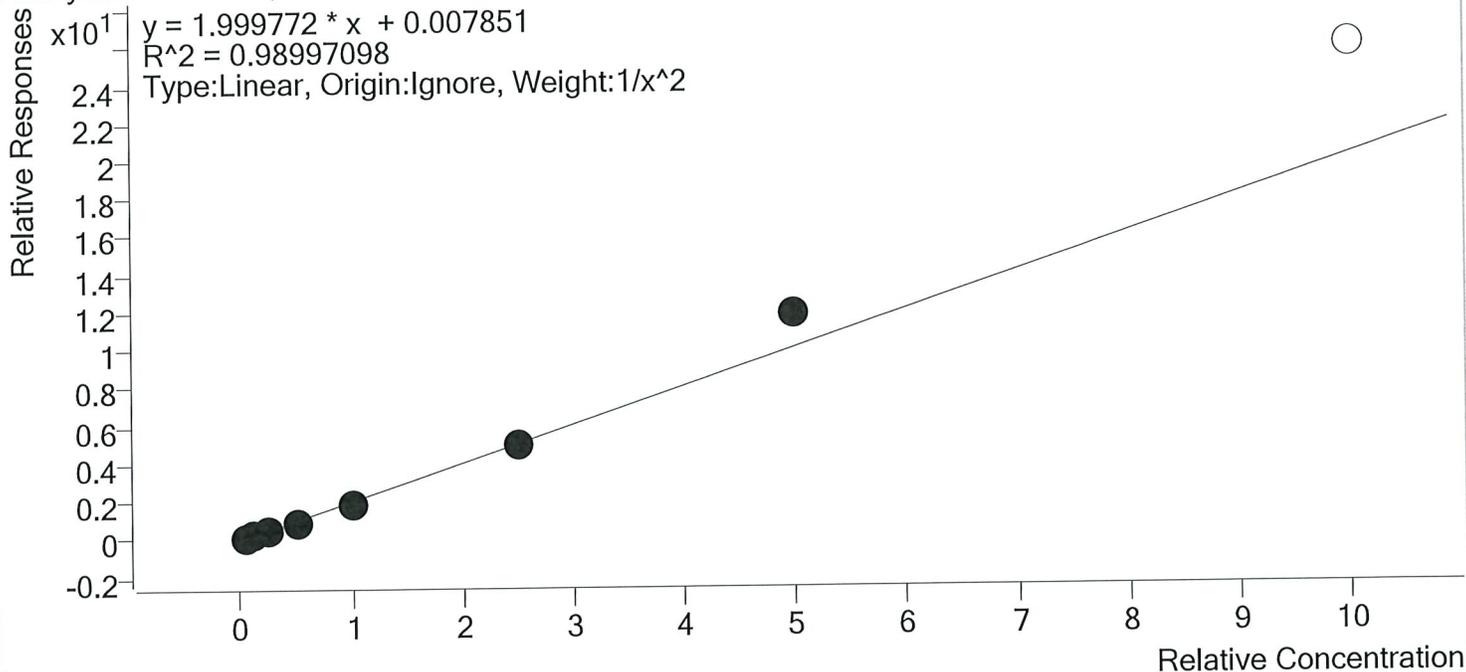
Batch results D:\MassHunter\Data\2019\AM 28\101519 MDQ P1 and P2_THCQ TS\QuantResults\MDQ P2 wk1st
3755 TS_evaluated compounds.batch.bin

Last Cal. Update 10/16/2019 3:26 PM

Analyst Name ISP\datastor

Analyte Phenytoin **Internal Standard** Phenytoin-D10

Phenytoin - 8 Levels, 7 Levels Used, 8 Points, 7 Points Used, 4 QCs



| Sample | Level | Enabled | Expected Concentration | Final Concentration | Accuracy |
|-----------------|-------|---------|------------------------|---------------------|----------|
| p2 Cal 1-5ng | 1 | ✓ | 5.0 | 5.1 | 102.6 |
| p2 Cal 2- 10ng | 2 | ✓ | 10.0 | 9.9 | 98.6 |
| p2 Cal 3 -25ng | 3 | ✓ | 25.0 | 23.6 | 94.3 |
| p2 Cal 4-50ng | 4 | ✓ | 50.0 | 46.9 | 93.8 |
| p2 Cal 5-100ng | 5 | ✓ | 100.0 | 94.8 | 94.8 |
| p2 Cal 6-250ng | 6 | ✓ | 250.0 | 244.8 | 97.9 |
| p2 Cal 7-500ng | 7 | ✓ | 500.0 | 589.9 | 118.0 |
| p2 Cal 8-1000ng | 8 | × | 1000.0 | 1291.3 | 129.1 |

13

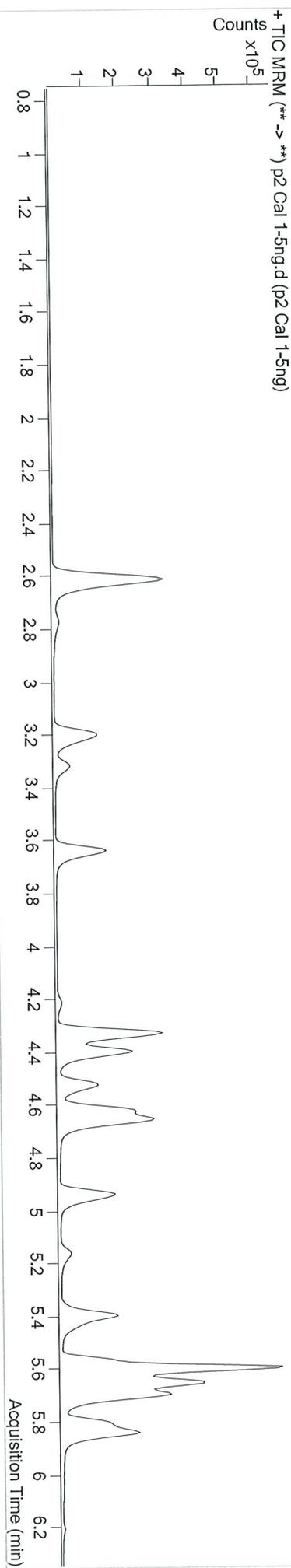
AM #28 Multi-Drug Quant. Results



Batch results
Calibration Last Update 10/16/2019 3:26:35 PM
D:\MassHunter\Data\2019\AM 28\101519 MDQ P1 and P2_THCQ.TS\QuantResults\MDQ P2 wk1st 3755 TS_evaluated compounds.batch.bin

Instrument Type: Falco Cal
Acq. Method: MDQ P2 Combined 092319.m
Sample Position: P1-A1
Injection Volume: 2
Acq. Date-Time: 10/15/2019 1:17:03 PM
Sample Info.
Data File: p2 Cal 1-5ng.d
Sample Operator: p2 Cal 1-5ng
Comment:

Sample Chromatogram



| Name | RT | Resp. | S/N | Ratio | S/N | ISTD Resp. | Final Conc. |
|---------------|-------|-------|---------|-------|---------|------------|--------------|
| Amitriptyline | 5.696 | 46947 | 385.25 | 46.9 | 1685.92 | 168693 | 4.1123 ng/ml |
| Maprotiline | 5.696 | 46947 | 385.25 | 28.4 | 4443.62 | 168693 | 4.4332 ng/ml |
| Methocarbamol | 4.420 | 5447 | 624.14 | 90.4 | ∞ | 969706 | 4.6777 ng/ml |
| Midazolam | 5.836 | 8890 | 3491.77 | 80.3 | ∞ | 181510 | 6.0811 ng/ml |
| Nortriptyline | 5.717 | 21751 | ∞ | 29.7 | 426.13 | 152156 | 5.3592 ng/ml |
| Phenytoin | 5.473 | 810 | 658.81 | 67.7 | 67.66 | 7335 | 5.1298 ng/ml |

TS

AM #28 Multi-Drug Quant. Results

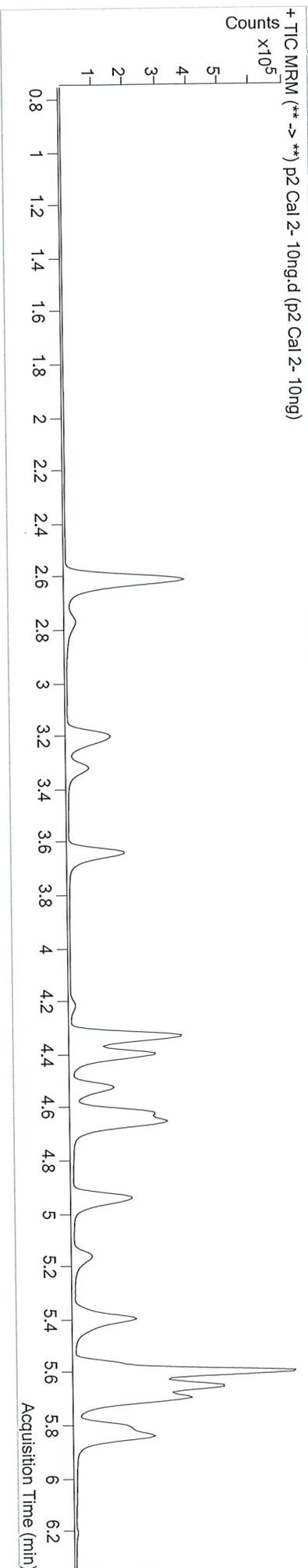


Batch results
 Calibration Last Update: 10/16/2019 3:26:35 PM
 D:\MassHunter\Data\2019\AM 28\101519 MDQ P1 and P2_THCQ TS\QuantResults\MDQ P2 wk1st 3755 TS_evaluated compounds_batch.bin

Instrument: Falco
Type: Cal
Acq. Method: MDQ P2 Combined 092319.m
Sample Position: P1-B1
Injection Volume: 2
Acq. Date-Time: 10/15/2019 1:27:43 PM
Sample Info.

Data File: p2 Cal 2- 10ng.d
Sample: p2 Cal 2- 10ng
Operator
Comment

Sample Chromatogram



| Name | RT | Resp. | S/N | Ratio | S/N | ISTD Resp. | Final Conc. |
|---------------|-------|-------|---------|-------|---------|------------|---------------|
| Amitriptyline | 5.696 | 85073 | 2097.74 | 46.7 | 1608.40 | 152398 | 9.9593 ng/ml |
| Maprotiline | 5.696 | 85073 | 2097.74 | 27.5 | 232.13 | 152398 | 10.1277 ng/ml |
| Methocarbamol | 4.420 | 10705 | 506.02 | 93.3 | ∞ | 1002567 | 10.4868 ng/ml |
| Midazolam | 5.836 | 17178 | ∞ | 86.0 | ∞ | 185592 | 10.2387 ng/ml |
| Nortriptyline | 5.717 | 39811 | 4865.74 | 29.9 | ∞ | 139787 | 10.3129 ng/ml |
| Phenytoin | 5.473 | 1528 | 2169.03 | 76.2 | ∞ | 7455 | 9.8562 ng/ml |

TS

AM #28 Multi-Drug Quant. Results

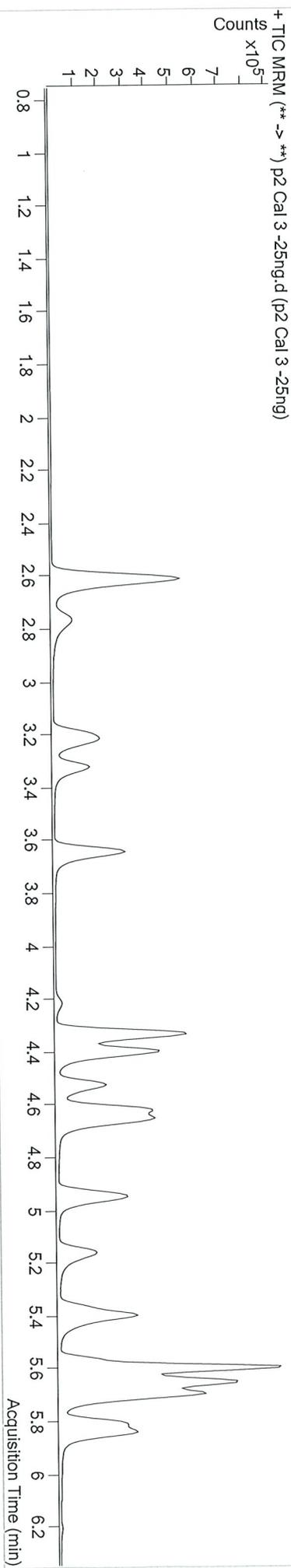


Batch results
 Calibration Last Update: 10/16/2019 3:26:35 PM
 D:\MassHunter\Data\2019\AM 28\101519 MDQ P1 and P2_THCQ TS\QuantResults\MDQ P2 wk1st 3755 TS_evaluated compounds.batch.bin

Instrument Falco
Type Cal
Acq. Method MDQ P2 Combined 092319.m
Sample Position P1-C1
Injection Volume 2
Acq. Date-Time 10/15/2019 1:38:14 PM
Sample Info.

Data File p2 Cal 3 -25ng.d
Sample Operator p2 Cal 3 -25ng
Comment

Sample Chromatogram



| Name | RT | Resp. | S/N | Ratio | S/N | ISTD Resp. | Final Conc. |
|---------------|-------|--------|---------|-------|---------|------------|---------------|
| Amitriptyline | 5.696 | 222859 | 1037.10 | 47.7 | 3823.78 | 168109 | 25.9891 ng/ml |
| Maprotiline | 5.696 | 222859 | 1037.10 | 25.9 | 2081.22 | 168109 | 25.7398 ng/ml |
| Methocarbamol | 4.420 | 29447 | ∞ | 87.0 | 7216.44 | 1121670 | 28.3678 ng/ml |
| Midazolam | 5.836 | 45856 | 1257.25 | 84.1 | 1220.27 | 198917 | 23.4025 ng/ml |
| Nortriptyline | 5.711 | 101807 | 3961.57 | 30.3 | 3181.51 | 147682 | 24.4416 ng/ml |
| Phenytoin | 5.473 | 4059 | ∞ | 75.7 | ∞ | 8468 | 23.5784 ng/ml |

TS

AM #28 Multi-Drug Quant. Results

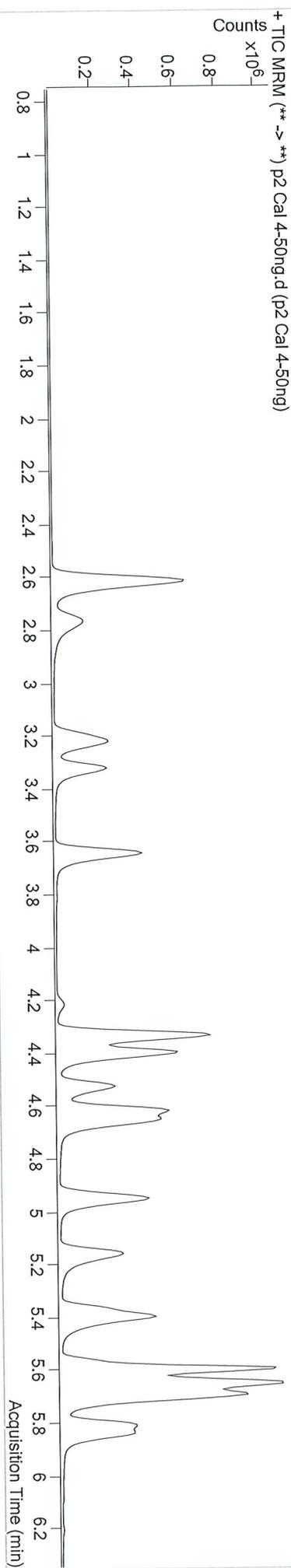


Batch results
 Calibration Last Update: 10/16/2019 3:26:35 PM
 D:\MassHunter\Data\2019\AM 28\101519 MDQ P1 and P2_THCQ_TS\QuantResults\MDQ P2 wk1st 3755 TS_evaluated compounds.batch.bin

Instrument: Falco
Type: Cal
Acq. Method: MDQ P2 Combined 092319.m
Sample Position: P1-D1
Injection Volume: 2
Acq. Date-Time: 10/15/2019 1:48:45 PM
Sample Info.

Data File: p2 Cal 4-50ng.d
Sample Operator: p2 Cal 4-50ng
Comment

Sample Chromatogram



| Name | RT | Resp. | S/N | Ratio | S/N | ISTD Resp. | Final Conc. |
|---------------|-------|--------|----------|-------|---------|------------|---------------|
| Amitriptyline | 5.696 | 431660 | 12607.58 | 47.8 | 860.14 | 170108 | 51.3020 ng/ml |
| Maprotiline | 5.696 | 431660 | 12607.58 | 25.7 | 9352.72 | 170108 | 50.3928 ng/ml |
| Methocarbamol | 4.420 | 49340 | 1489.10 | 89.6 | ∞ | 987172 | 55.6095 ng/ml |
| Midazolam | 5.836 | 81880 | 1231.27 | 87.5 | ∞ | 177682 | 45.3745 ng/ml |
| Nortriptyline | 5.717 | 203011 | 9318.27 | 30.3 | ∞ | 150917 | 47.3448 ng/ml |
| Phenytoln | 5.473 | 6800 | 8319.04 | 78.1 | ∞ | 7188 | 46.9099 ng/ml |

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AM #28 Multi-Drug Quant. Results

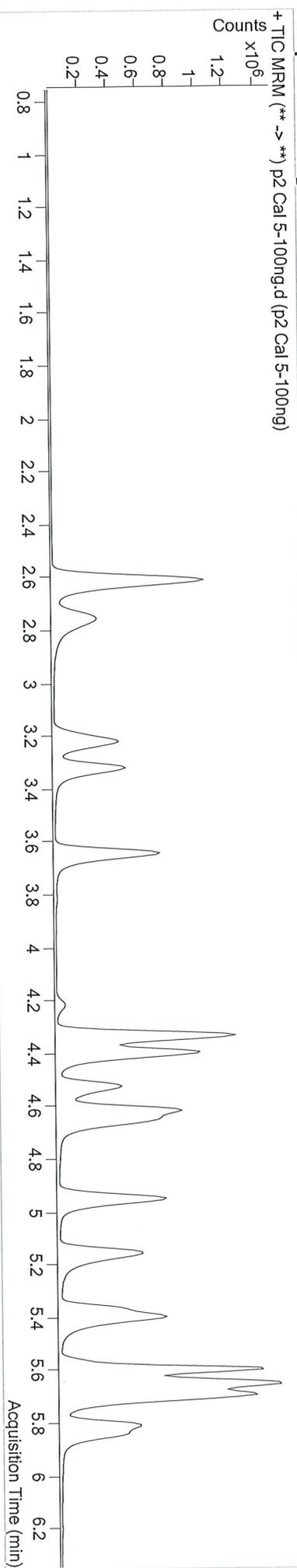


Batch results
D:\MassHunter\Data\2019\AM 28\101519 MDQ P1 and P2_THCQ TS\QuantResults\MDQ P2 wk1st 3755 TS_evaluated compounds.batch.bin
Calibration Last Update
10/16/2019 3:26:35 PM

Instrument Type
Falco Cal
Acq. Method
MDQ P2 Combined 092319.m
Sample Position
P1-E1
Injection Volume
2
Acq. Date-Time
10/15/2019 1:59:15 PM
Data File
p2 Cal 5-100ng.d
Sample Operator
p2 Cal 5-100ng
Comment

Sample Info.

Sample Chromatogram



| Name | RT | Resp. | S/N | Ratio | S/N | ISTD Resp. | Final Conc. |
|---------------|-------|--------|----------|-------|---------|------------|----------------|
| Amitriptyline | 5.696 | 731730 | 24280.70 | 48.0 | 2982.98 | 137406 | 109.5302 ng/ml |
| Maprotiline | 5.696 | 731730 | 24280.70 | 24.3 | 2399.41 | 137406 | 107.1032 ng/ml |
| Methocarbamol | 4.420 | 96728 | 5697.28 | 90.2 | 6275.36 | 1006372 | 108.5738 ng/ml |
| Mildazolam | 5.836 | 156500 | 3226.45 | 86.6 | 6835.84 | 158352 | 95.7007 ng/ml |
| Nortriptyline | 5.717 | 356268 | 7212.15 | 29.7 | 2394.54 | 122689 | 101.7771 ng/ml |
| Phenytoln | 5.473 | 14490 | 11070.36 | 75.2 | 306.48 | 7612 | 94.7926 ng/ml |

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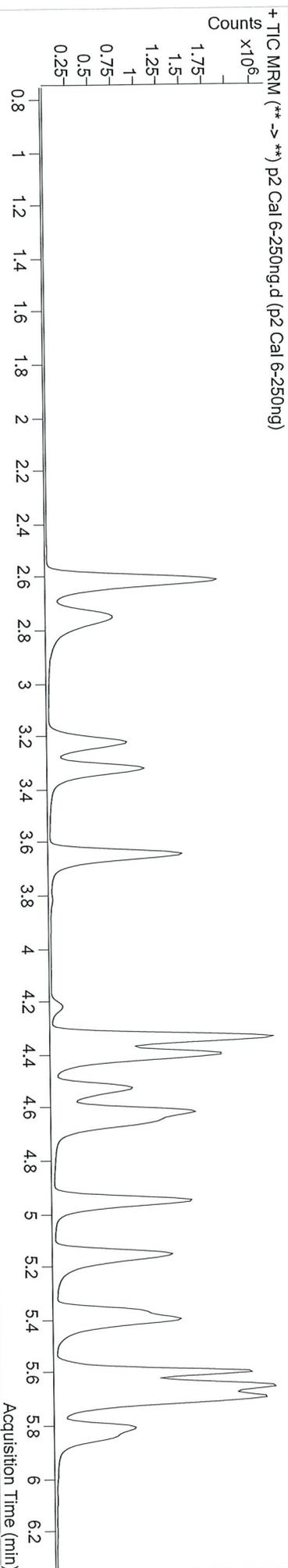
AM #28 Multi-Drug Quant. Results



Batch results
 Calibration Last Update: 10/16/2019 3:26:35 PM
 D:\MassHunter\Data\2019\AM 28\101519 MDQ P1 and P2_THCQ TS\QuantResults\MDQ P2 wk1st 3755 TS_evaluated compounds_batch.bin

Instrument Type: Falco
Accq. Method: MDQ P2 Combined 092319.m
Injection Volume: P1-F1
Acq. Date-Time: 10/15/2019 2:09:46 PM
Sample Info: 2
Data File: p2 Cal 6-250ng.d
Sample Operator Comment: p2 Cal 6-250ng

Sample Chromatogram



| Name | RT | Resp. | S/N | Ratio | S/N | ISTD Resp. | Final Conc. |
|---------------|-------|---------|----------|-------|----------|------------|----------------|
| Amitriptyline | 5.696 | 1414495 | 27830.89 | 49.8 | 1013.19 | 112805 | 260.2096 ng/ml |
| Maprotiline | 5.696 | 1414495 | 27830.89 | 20.9 | 672.07 | 112805 | 253.8550 ng/ml |
| Methocarbamol | 4.420 | 195580 | 58136.93 | 90.0 | 1734.61 | 902843 | 246.9264 ng/ml |
| Midazolam | 5.836 | 315904 | 2408.69 | 87.3 | 1766.00 | 129329 | 234.4569 ng/ml |
| Nortriptyline | 5.717 | 654183 | 47100.62 | 30.4 | 12669.90 | 96273 | 237.6706 ng/ml |
| Phenytoln | 5.473 | 37387 | 48290.87 | 74.2 | 1928.26 | 7624 | 244.8181 ng/ml |



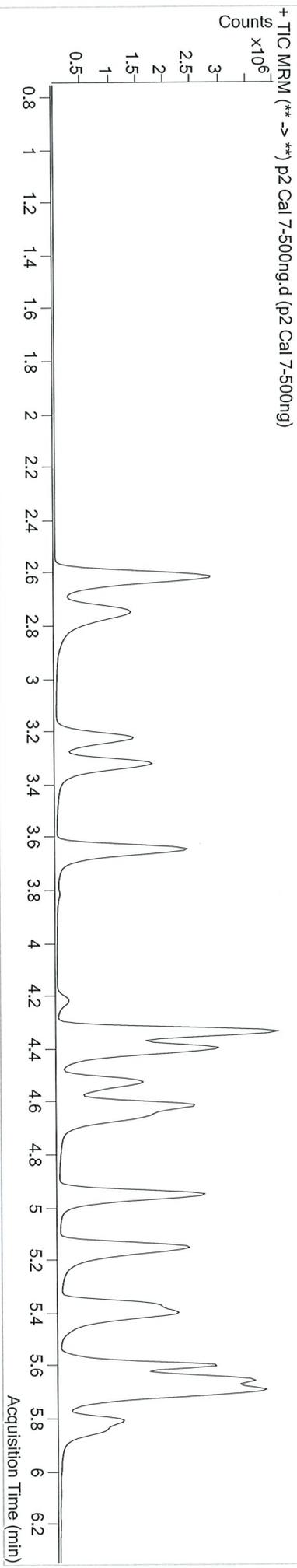
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2019\AM 28\101519 MDQ P1 and P2_THCQ TS\QuantResults\MDQ P2 wkst 3755 TS_evaluated compounds.batch.bin
Calibration Last Update 10/16/2019 3:26:35 PM

Instrument Type Falco
Acq. Method Cal
Sample Position MDQ P2 Combined 092319.m
Injection Volume P1-G1
Acq. Date-Time 2
Sample Info. 10/15/2019 2:20:16 PM

Data File p2 Cal 7-500ng.d
Sample Operator p2 Cal 7-500ng
Comment

Sample Chromatogram



| Name | RT | Resp. | S/N | Ratio | S/N | ISTD Resp. | Final Conc. |
|---------------|-------|---------|----------|-------|----------|------------|----------------|
| Amitriptyline | 5.696 | 2590909 | 42488.14 | 51.3 | 10915.55 | 107656 | 500.9788 ng/ml |
| Maprotiline | 5.696 | 2590909 | 42488.14 | 19.6 | 11357.57 | 107656 | 488.3483 ng/ml |
| Methocarbamol | 4.427 | 299085 | 10237.94 | 90.0 | 36715.98 | 768801 | 444.8527 ng/ml |
| Mildazolam | 5.836 | 494268 | 2736.73 | 86.5 | 1791.70 | 95206 | 496.7313 ng/ml |
| Nortriptyline | 5.717 | 1236877 | 31654.36 | 30.3 | 16580.50 | 88083 | 490.7593 ng/ml |
| Phenytoin | 5.473 | 85912 | 1716.27 | 77.7 | 18760.09 | 7277 | 589.9437 ng/ml |

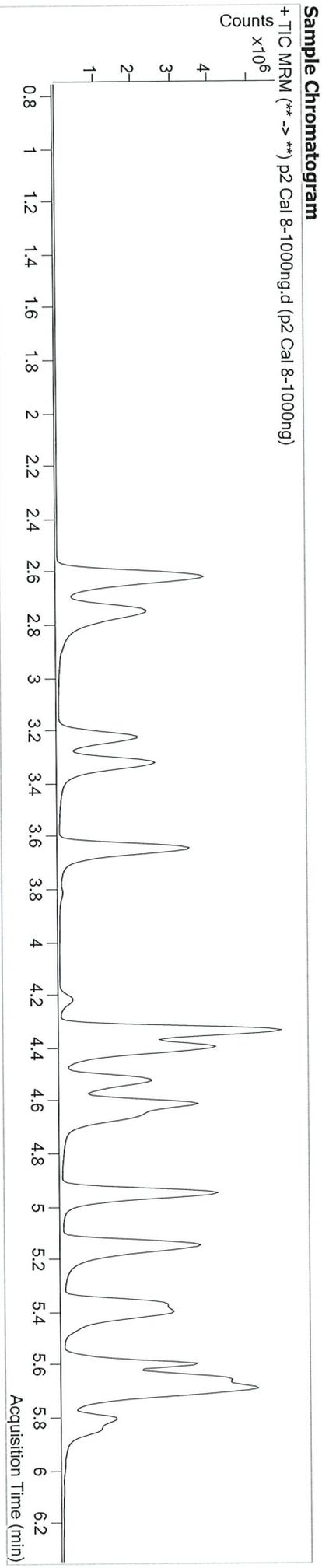


AM #28 Multi-Drug Quant. Results

Batch results Calibration Last Update 10/16/2019 3:26:35 PM
 D:\MassHunter\Data\2019\AM 28\101519 MDQ P1 and P2_THCQ TS\QuantResults\MDQ P2 wk1st 3755 TS_evaluated compounds_batch.bln

Instrument Type Falco Cal
 Acq. Method MDQ P2 Combined 092319.m
 Sample Position P1-H1
 Injection Volume 2
 Acq. Date-Time 10/15/2019 2:30:45 PM
 Sample Info.

Data File p2 Cal 8-1000ng.d
 Sample Operator p2 Cal 8-1000ng
 Comment



| Name | RT | Resp. | S/N | Ratio | S/N | ISTD Resp. | Final Conc. |
|---------------|-------|---------|-----------|-----------------|-----------|------------|-----------------|
| Amitriptyline | 5.696 | 3797726 | 335977.48 | 53.5 | 1920.40 | 80974 | 977.9189 ng/ml |
| Maprotiline | 5.696 | 3797726 | 335977.48 | 13.1 Low | 15091.94 | 80974 | 952.8564 ng/ml |
| Methocarbamol | 4.427 | 424254 | 29536.74 | 90.5 | 117422.84 | 603169 | 805.7378 ng/ml |
| Midazolam | 5.836 | 660536 | 4308.14 | 87.0 | 2736.26 | 61388 | 1028.0143 ng/ml |
| Nortriptyline | 5.717 | 1837483 | 182336.48 | 29.9 | 13171.71 | 62791 | 1022.3346 ng/ml |
| Phenytoin | 5.473 | 187612 | 208177.54 | 78.3 | 49182.19 | 7263 | 1291.3253 ng/ml |