

## Worklist: 6941

| <u>LAB CASE</u> | <u>ITEM</u> | <u>ITEM TYPE</u> | <u>DESCRIPTION</u>                               |                                                                                       |
|-----------------|-------------|------------------|--------------------------------------------------|---------------------------------------------------------------------------------------|
| M2024-3550      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |    |
| M2024-3567      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |    |
| M2024-3618      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |    |
| M2024-3646      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |    |
| M2024-3707      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |    |
| M2024-3707      | 2           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |    |
| M2024-3833      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |    |
| M2024-3937      | 2           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |    |
| P2024-2845      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |    |
| P2024-2891      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |   |
| P2024-2950      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |  |
| P2024-2960      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |  |
| P2024-2976      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |  |
| P2024-2985      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |  |
| P2024-2988      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |  |
| P2024-2995      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |  |
| P2024-2999      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |  |
| P2024-3000      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |  |
| P2024-3001      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |  |
| P2024-3003      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |  |
| P2024-3010      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |  |

**Worklist: 6941**

TS

| <u>LAB CASE</u> | <u>ITEM</u> | <u>ITEM TYPE</u> | <u>DESCRIPTION</u>                               |                                                                                     |
|-----------------|-------------|------------------|--------------------------------------------------|-------------------------------------------------------------------------------------|
| P2024-3012      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |  |
| P2024-3013      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |  |
| P2024-3014      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |  |
| P2024-3027      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |  |
| P2024-3030      | 2           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |  |
| P2024-3037      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |  |
| P2024-3038      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |  |
| P2024-3039      | 1           | BCK              | AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ |  |

## AM# 25: Multi-Drug Screen in Blood and Urine by LC-MS/MS

Extraction Date: 010/01/2024

Plate lot#: 240524

Mobile phase A: 10mM Amm Form in LCMS Water

Blank Blood Lot: Lampire 24C52816

LCMS-QQQ ID: 069901

Analyst: Tamara Salazar

Plate Retest Date: 11/24/2024

Mobile phase B: 0.1% Formic Acid in MeOH

Blank Urine Lot:

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

### 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.

### Analytic:

- ☒ 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
- ☐ 2. **Urine Hydrolysis: In blank well, add 250µL urine, 40µL BG Turbo, and 100µL Instant Buffer I. Place on plate shaker for 5 minutes.**
- ☒ 3. Using a calibrated pipette, pipette 250µL blood or 250µL hydrolyzed urine in wells of analytical (standards) plate. Pipette ID: 42
- ☒ 4. Pipette **250µL 0.5 M ammonium hydroxide** in wells of analytical plate.
- ☒ 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- ☒ 6. Transfer **200-450µL of blood+base and urine+base (if applicable)** mixture to corresponding wells of SLE+ plate. Amount transferred: 250uL
- ☒ 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).**
- ☒ 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.
- ☒ 16. Add 50µL 1% HCl in MeOH to wells and place plate cover on plate before drying. This step is required for urine samples, but optional for blood samples.
- ☒ 17. Reconstitute in **100µL 20% LC MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

### Post-Analytic

- ☒ 1. Open quantitation software and create a new quantitation batch.
- ☒ 2. Make necessary changes to integration limits
- ☒ 3. Evaluate samples, S/N of primary transition >5 and S/N of secondary transition >3 or evaluation of peak symmetry and resolution. Within +/- 2% or 0.1 min RT of administrative control. Calculated concentration of 5 or greater or 2-5 for discretionary range.
- ☒ 4. Did all QCs pass for each analyte? If no, describe issue in comments (below).
- ☒ 5. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS:

|   | 1              | 2           | 3           | 4           | 5           | 6           | 7           | 8            | 9            | 10           | 11           | 12             |
|---|----------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|----------------|
| A | IS + Cal. 1    | IS + Sample | IS + Sample | IS + Sample | IS + Sample | IS + Sample | IS + Sample | IS + Sample  | P2024-3037-1 | P2024-3001-1 | P2024-2950-1 | M2024-3618-1   |
| B | IS + Cal. 1    | IS + Sample | IS + Sample | IS + Sample | IS + Sample | IS + Sample | IS + Sample | IS + Sample  | P2024-3030-2 | P2024-3000-1 | P2024-2891-1 | M2024-3567-1   |
| C | IS + Control 1 | IS + Sample | IS + Sample | IS + Sample | IS + Sample | IS + Sample | IS + Sample | IS + Sample  | P2024-3027-1 | P2024-2999-1 | P2024-2845-1 | M2024-3550-1   |
| D | IS + Control 1 | IS + Sample | IS + Sample | IS + Sample | IS + Sample | IS + Sample | IS + Sample | IS + Sample  | P2024-3014-1 | P2024-2995-1 | M2024-3937-2 | Neg Blood      |
| E | IS + Sample    | IS + Sample | IS + Sample | IS + Sample | IS + Sample | IS + Sample | IS + Sample | IS + Sample  | P2024-3013-1 | P2024-2988-1 | M2024-3833-1 | IS + Control 1 |
| F | IS + Sample    | IS + Sample | IS + Sample | IS + Sample | IS + Sample | IS + Sample | IS + Sample | IS + Sample  | P2024-3012-1 | P2024-2985-1 | M2024-3707-2 | IS + Control 1 |
| G | IS + Sample    | IS + Sample | IS + Sample | IS + Sample | IS + Sample | IS + Sample | IS + Sample | P2024-3039-1 | P2024-3010-1 | P2024-2976-1 | M2024-3707-1 | IS + Cal. 1    |
| H | IS + Sample    | IS + Sample | IS + Sample | IS + Sample | IS + Sample | IS + Sample | IS + Sample | P2024-3038-1 | P2024-3003-1 | P2024-2960-1 | M2024-3646-1 | IS + Cal. 1    |

All wells to contain 60 µl of residual DMSO





# AM #25 Multi-Drug Screen. Results

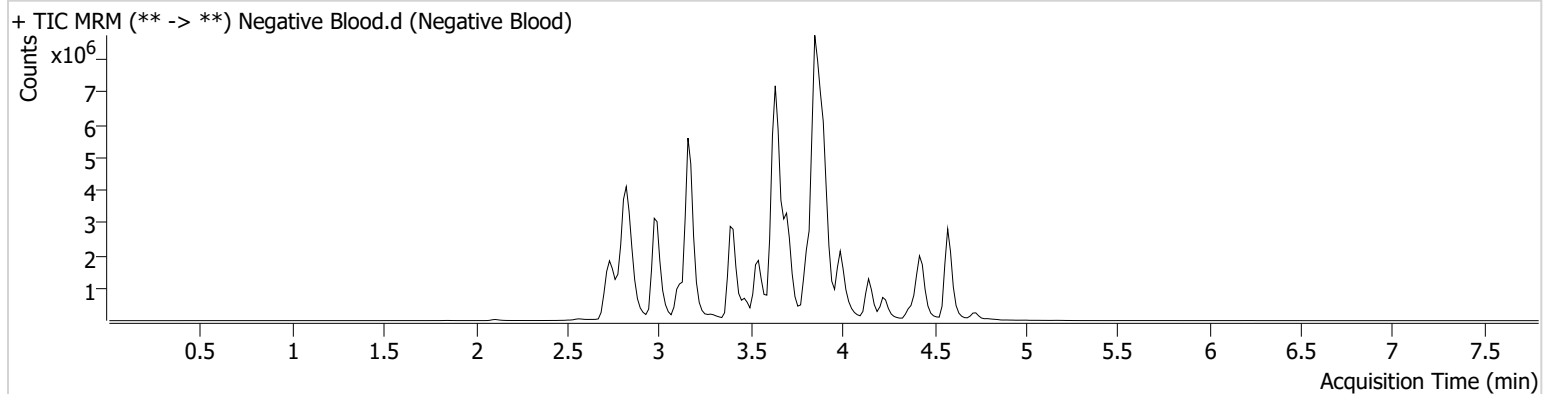
**Batch results** D:\MassHunter\Data\2024\AM 25 26\100124 AM 25 26 TS\QuantResults\AM 25.batch.bin  
**Calibration Last Update** 10/2/2024 10:49:04 AM

**Instrument** Falco (069901)  
**Type** Sample  
**Acq. Method** AM 25 MDS.m  
**Sample Position** P2-D12  
**Injection Volume** 5  
**Acq. Date-Time** 10/1/2024 5:52:53 PM  
**Sample Info.**

**Data File** Negative Blood.d  
**Sample** Negative Blood  
**Operator** Tamara Salazar  
**Comment**

Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

## Sample Chromatogram





# AM #25 Multi-Drug Screen. Results

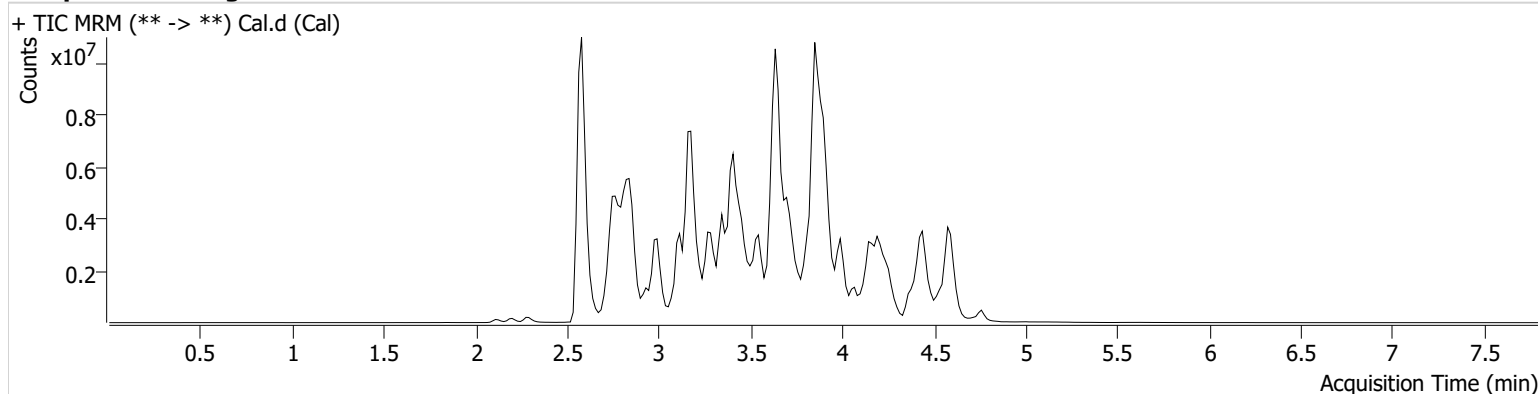
**Batch results** D:\MassHunter\Data\2024\AM 25 26\100124 AM 25 26 TS\QuantResults\AM 25.batch.bin  
**Calibration Last Update** 10/2/2024 10:49:04 AM

**Instrument** Falco (069901)  
**Type** Cal  
**Acq. Method** AM 25 MDS.m  
**Sample Position** P2-H12  
**Injection Volume** 5  
**Acq. Date-Time** 10/1/2024 5:44:17 PM  
**Sample Info.**

**Data File** Cal.d  
**Sample** Cal  
**Operator** Tamara Salazar  
**Comment**

Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

## Sample Chromatogram



| Name                   | RT    | Resp.   | S/N       | S/N      | ISTD Resp. | Calc. Conc. |
|------------------------|-------|---------|-----------|----------|------------|-------------|
| 10-OH-Carbamazepine    | 3.702 | 1513764 | 135.49    | 3292.75  | 7408819    | 10.0000     |
| 6-MAM                  | 2.729 | 17312   | 63.37     | 7188.68  | 420040     | 10.0000     |
| 7-aminoclonazepam      | 3.485 | 326873  | 314.18    | 613.75   | 1105653    | 10.0000     |
| 7-aminoflunitrazepam   | 3.685 | 541061  | 484.91    | 327.40   | 1105653    | 10.0000     |
| 9-Hydroxyrisperidone   | 3.647 | 3150145 | 1255.25   | 56328.87 | 11914333   | 10.0000     |
| Acetyl Fentanyl        | 3.588 | 131157  | 332.43    | 24303.17 | 15628286   | 10.0000     |
| Acetyl Norfentanyl     | 2.768 | 184670  | 1463.56   | 355.73   | 15628286   | 10.0000     |
| a-hydroxyalprazolam    | 4.437 | 81113   | 13289.17  | 29709.60 | 1105653    | 10.0000     |
| alpha-hydroxymidazolam | 4.451 | 631611  | 648.77    | 1392.24  | 1105653    | 10.0000     |
| Alpha-PHP              | 3.611 | 1433861 | 14086.00  | 1151.90  | 15628286   | 10.0000     |
| alpha-PVP              | 3.350 | 2317128 | 693.16    | 617.71   | 3008096    | 10.0000     |
| Alprazolam             | 4.532 | 1019031 | 658.34    | 666.80   | 6656912    | 10.0000     |
| Amitriptyline          | 4.227 | 496718  | 228.94    | 312.42   | 1867318    | 10.0000     |
| Amphetamine            | 2.757 | 1712132 | 1051.45   | ∞        | 3008096    | 10.0000     |
| Benzoylecgonine        | 3.314 | 46311   | 47.67     | 100.11   | 195434     | 10.0000     |
| Bromazolam             | 4.589 | 678985  | 3728.79   | 1236.11  | 6656912    | 10.0000     |
| Brompheniramine        | 3.851 | 35517   | 3028.47   | 369.47   | 24029614   | 10.0000     |
| Buprenorphine          | 3.923 | 28985   | 226.35    | 1753.05  | 1201554    | 10.0000     |
| Bupropion              | 3.550 | 1854448 | 819706.06 | 1431.08  | 5969573    | 10.0000     |
| Carbamazepine          | 4.168 | 3393106 | 796.10    | 329.64   | 150698     | 10.0000     |
| Carisoprodol           | 4.152 | 444476  | 352.88    | 152.87   | 2743833    | 10.0000     |
| Chlordiazepoxide       | 4.565 | 345224  | 615.37    | 120.38   | 6656912    | 10.0000     |
| Chlorpheniramine       | 3.763 | 2660916 | 8849.25   | 8.60     | 3870293    | 10.0000     |
| Chlorpromazine         | 4.407 | 343195  | 199643.75 | 479.07   | 1683687    | 10.0000     |
| Citalopram             | 3.897 | 1366409 | 556.80    | 164555.6 | 24029614   | 10.0000     |
| Clomipramine           | 4.423 | 516577  | 3093.73   | 2662.74  | 24029614   | 10.0000     |
| Clonazepam             | 4.377 | 550688  | 997.82    | 657.01   | 150698     | 10.0000     |
| Clonazepam             | 4.281 | 485727  | 206446.39 | 109082.3 | 6656912    | 10.0000     |
| Clozapine              | 3.989 | 1418303 | 9678.60   | 6590.43  | 5307727    | 10.0000     |
| Cocaethylene           | 3.604 | 1603262 | 4224.96   | 1971.30  | 9609849    | 10.0000     |



# AM #25 Multi-Drug Screen. Results

| Name                   | RT    | Resp.   | S/N      | S/N           | ISTD Resp. | Calc. Conc. |
|------------------------|-------|---------|----------|---------------|------------|-------------|
| Cocaine                | 3.390 | 1983072 | 1821.55  | 131.43        | 9609849    | 10.0000     |
| Codeine                | 2.611 | 158354  | 1438.68  | 1081.84       | 2944807    | 10.0000     |
| Cyclobenzaprine        | 4.150 | 594086  | 463.84   | 68.79         | 1867318    | 10.0000     |
| Desipramine            | 4.197 | 1320303 | 2817.60  | 1246.28       | 1867318    | 10.0000     |
| Dextromethorphan       | 3.886 | 810135  | 320.22   | 688.01        | 3870293    | 10.0000     |
| Dextrorphan            | 3.225 | 1158948 | 1850.41  | 6079.94       | 3870293    | 10.0000     |
| Diazepam               | 4.766 | 547013  | 1575.83  | 1631.52       | 6656912    | 10.0000     |
| Dihydrocodeine         | 2.580 | 383713  | 632.42   | 350.90        | 2944807    | 10.0000     |
| Diphenhydramine        | 3.857 | 2843984 | 1747.33  | 744.48        | 24029614   | 10.0000     |
| DMT                    | 2.831 | 82773   | 709.33   | 466.02        | 3870293    | 10.0000     |
| Doxepin                | 3.963 | 783058  | 411.93   | 56.55         | 5623916    | 10.0000     |
| Doxylamine             | 3.455 | 3684976 | 824.46   | 468.56        | 3870293    | 10.0000     |
| Duloxetine             | 4.163 | 17244   | 6629.85  | 4864.67       | 228403     | 10.0000     |
| EDDP                   | 3.901 | 129216  | 218.00   | 287.99        | 711027     | 10.0000     |
| Estazolam              | 4.442 | 1820421 | 1565.29  | 655.11        | 6656912    | 10.0000     |
| Etizolam               | 4.544 | 187348  | 75567.39 | 70423.05      | 6656912    | 10.0000     |
| Fentanyl               | 3.819 | 85822   | 116.64   | 354.14        | 5774776    | 10.0000     |
| Flualprazolam          | 4.391 | 313215  | 2961.78  | 8933.48       | 6656912    | 10.0000     |
| Flunitrazepam          | 4.485 | 1050758 | 1330.63  | 585.67        | 6656912    | 10.0000     |
| Fluorofentanyl         | 3.848 | 185753  | 735.42   | 1207.13       | 5774776    | 10.0000     |
| Fluoxetine             | 4.177 | 621440  | 748.64   | 83.28         | 724089     | 10.0000     |
| Flurazepam             | 3.925 | 965324  | 2019.78  | 85492.83      | 6656912    | 10.0000     |
| Gabapentin             | 2.511 | 1115    | 14.28    | 24.60         | 5307727    | 10.0000     |
| Hydrocodone            | 2.794 | 508896  | 471.22   | 272.10        | 2944807    | 10.0000     |
| Hydromorphone          | 2.293 | 337063  | 705.80   | 493.23        | 2944807    | 10.0000     |
| Hydroxyzine            | 4.249 | 957883  | 7367.78  | 1318.20       | 5307727    | 10.0000     |
| Imipramine             | 4.195 | 1532701 | 1528.23  | 624.10        | 1867318    | 10.0000     |
| Ketamine               | 3.181 | 1790978 | 1991.10  | 272.88        | 3724430    | 10.0000     |
| Lamotrigine            | 3.363 | 1362638 | 11726.67 | 9875.85       | 24029614   | 10.0000     |
| Levamisole             | 2.768 | 1262498 | 5587.29  | 430.83        | 9609849    | 10.0000     |
| Levetiracetam          | 2.588 | 475943  | 319.41   | 271.48        | 24029614   | 10.0000     |
| Lorazepam              | 4.361 | 217485  | 317.52   | ∞             | 6656912    | 10.0000     |
| Maprotiline            | 4.227 | 290779  | 40.05    | 231.67        | 1867318    | 10.0000     |
| MDA                    | 2.861 | 889019  | 393.90   | 1124.39       | 11027305   | 10.0000     |
| MDEA                   | 3.090 | 1620941 | 1256.31  | 1602.34       | 11027305   | 10.0000     |
| MDMA                   | 2.937 | 1971967 | 836.37   | 447.62        | 11027305   | 10.0000     |
| Meperidine             | 3.426 | 1053120 | 520.81   | 385.43        | 3870293    | 10.0000     |
| Meprobamate            | 3.613 | 173664  | 133.22   | 177.33        | 2743833    | 10.0000     |
| Methadone              | 4.208 | 1689354 | 917.94   | 333.86        | 711027     | 10.0000     |
| Methamphetamine        | 2.863 | 4289400 | 1515.79  | 414.63        | 11027305   | 10.0000     |
| Methocarbamol          | 3.503 | 148101  | 164.82   | 125.83        | 711027     | 10.0000     |
| Methylphenidate        | 3.349 | 4350288 | 1704.87  | 547.01        | 9282987    | 10.0000     |
| Metoprolol             | 3.285 | 349283  | 407.76   | 1110.81       | 3870293    | 10.0000     |
| Midazolam              | 4.360 | 200276  | 39977.82 | 261329.1<br>3 | 6656912    | 10.0000     |
| Mirtazapine            | 3.517 | 1333394 | 1683.68  | 1097.25       | 3870293    | 10.0000     |
| Mitragynine            | 3.940 | 135980  | 81103.32 | 28678.75      | 3870293    | 10.0000     |
| Morphine               | 2.113 | 74477   | 2878.01  | 200.59        | 69635      | 10.0000     |
| Norbuprenorphine       | 3.662 | 38968   | 42.60    | 4095.80       | 1201554    | 10.0000     |
| Nordiazepam            | 4.629 | 740438  | 588.55   | 1662.52       | 6656912    | 10.0000     |
| Norfentanyl            | 3.181 | 3509519 | 1179.29  | 484.64        | 15628286   | 10.0000     |
| Norhydrocodone         | 2.780 | 6643    | 2889.74  | 127.87        | 2944807    | 10.0000     |
| Norketamine            | 3.166 | 239677  | 408.25   | 7902.21       | 3724430    | 10.0000     |
| Normeperidine          | 3.443 | 1185914 | 17022.11 | 732.49        | 24029614   | 10.0000     |
| Noroxycodone           | 2.747 | 366649  | ∞        | 195.71        | 3724430    | 10.0000     |
| Nortriptyline          | 4.229 | 277188  | 1175.47  | 124.04        | 1867318    | 10.0000     |
| O-desmethyl-tramadol   | 2.781 | 3861231 | 2560.55  | 205.68        | 24029614   | 10.0000     |
| O-desmethylvenlafaxine | 3.117 | 691537  | 315.36   | 17353.86      | 3169814    | 10.0000     |
| Olanzapine             | 3.220 | 176229  | 56046.14 | 617.12        | 150698     | 10.0000     |
| Oxazepam               | 4.442 | 667993  | 870.76   | 143.13        | 4683506    | 10.0000     |

TS



# AM #25 Multi-Drug Screen. Results

| Name            | RT    | Resp.    | S/N      | S/N           | ISTD Resp. | Calc. Conc. |
|-----------------|-------|----------|----------|---------------|------------|-------------|
| Oxycodone       | 2.746 | 860220   | 549.36   | ∞             | 3724430    | 10.0000     |
| Oxymorphone     | 2.200 | 307423   | 60.12    | 355.30        | 2944807    | 10.0000     |
| Paroxetine      | 4.159 | 91488    | 189.22   | 1795.86       | 724089     | 10.0000     |
| Phenazepam      | 4.559 | 774422   | 33938.67 | 212231.2<br>4 | 6656912    | 10.0000     |
| Phencyclidine   | 3.734 | 2270678  | 13156.87 | 560.22        | 3870293    | 10.0000     |
| Phentermine     | 3.016 | 861670   | 825.55   | 10.34         | 9282987    | 10.0000     |
| Phenytoin       | 4.075 | 280943   | 429.90   | 196.45        | 150698     | 10.0000     |
| Primidone       | 3.413 | 3013436  | 2167.83  | 1061.70       | 150698     | 10.0000     |
| Promethazine    | 4.118 | 2209088  | 44135.60 | 361.27        | 24029614   | 10.0000     |
| Pseudoephedrine | 2.588 | 28919005 | 40404.35 | 35566.10      | 11027305   | 10.0000     |
| Quetiapine      | 4.064 | 1473897  | 1934.70  | 1571.74       | 12805372   | 10.0000     |
| Risperidone     | 3.816 | 2193581  | 10392.39 | 140.68        | 11914333   | 10.0000     |
| Sertraline      | 4.364 | 145751   | 76724.54 | 562.08        | 724089     | 10.0000     |
| Sufentanil      | 4.064 | 55870    | 1026.38  | 400.46        | 15628286   | 10.0000     |
| Tapentadol      | 3.305 | 2332531  | 1223.09  | 565.93        | 3724430    | 10.0000     |
| Temazepam       | 4.595 | 1450443  | 353.27   | 195.48        | 6656912    | 10.0000     |
| Topiramate      | 3.788 | 93401    | 71432.94 | 22419.37      | 68231      | 10.0000     |
| Tramadol        | 3.270 | 7344547  | ∞        | 40.88         | 24029614   | 10.0000     |
| Trazodone       | 3.909 | 1431252  | 1709.26  | 2064.26       | 5623916    | 10.0000     |
| Venlafaxine     | 3.639 | 3211021  | 1675.75  | 363.25        | 3169814    | 10.0000     |
| Xylazine        | 3.228 | 1217534  | 12242.44 | 130.99        | 3724430    | 10.0000     |
| Zaleplon        | 4.255 | 896430   | 715.75   | 1026.02       | 12805372   | 10.0000     |
| Zolpidem        | 3.636 | 2450720  | 6033.35  | 32784.50      | 12805372   | 10.0000     |
| Zopiclone       | 3.571 | 76554    | 26488.17 | 390.00        | 442748     | 10.0000     |

\*Mobile phases listed are incorrect. The correct mobile phases are:

Mobile Phase A: 10mM Amm Form in LCMS

Mobile Phase B: 0.1% Formic Acid in MeOH

11/20/2024 TS

TS

## AM# 26: Quantitation of THC and Metabolites in Blood and Urine by LC-MS/MS

Extraction Date: 10/01/2024

Plate lot#: 240513

Mobile phase A: 0.1% Formic Acid in LCMS Water

Blank Blood Lot: Lampire 24C52816

Column: UCT Selectra DA 100 x 2.1mm 3um

Analyst: Tamara Salazar

Plate Retest Date: 11/13/2024

Mobile phase B: 0.1% Formic acid in Acetonitrile

Blank Urine Lot:

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.

### Analytic:

- ☒ 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
- ☒ 2. Using a calibrated pipette, pipette 1000µL blood or 1000µL urine in wells of analytical (standards) plate. **Pipette ID: 42**
- ☐ 3. **Urine hydrolysis add 100 ul BG turbo, and 200 ul BG turbo buffer to the urine samples in wells of the analytical plate.**
- ☒ 4. Add **500µL of 0.1% formic acid in water** in the wells of the analytical plate.
- ☒ 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- ☒ 6. Transfer **700-800µL of blood+acid or urine+acid** mixture to corresponding wells of SLE+ plate.  
Amount transferred: **750 µL**
- ☒ 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 **2.25mL MTBE. (Add in 3 increments of 750uL)**
- ☒ 10. Wait 5 minutes.
- ☒ 11. Apply positive pressure for approx. 15 seconds. **(10-15 PSI- Selector to the left).**
- ☒ 12. Add **2.25mL Hexane. (Add in 3 increments of 750uL)**
- ☒ 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 100% MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

### Post-Analytic

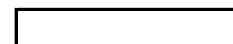
- ☒ 1. Create batch and process data.
- ☒ 2. Make any necessary integration changes, Curve weighting of Linear 1/x with  $r^2$  values  $\geq 0.98$  for each analyte
- ☒ 3. RT +/- 3% or 0.100 min, whichever is greater, +/- 20% Accuracy for greater than (+/- 30% for 10ng/ml or less).  
Ion ratios must be within +/- 20% of the averaged calibrators
- ☒ 4. Did all QCs pass for each analyte? (if not, describe in comments section)
- ☒ 5. Enter QCs into control charting.
- ☒ 6. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS: Reconstitution solvent was mistakenly not added to the wells containing case samples P2024-2891 and P2024-3014 during step 16 of the extraction. The reconstitution solvent was added to the proper wells and the samples were injected without issue.

THC-COOH: 5- 50 --calibrators 5, 6, and 7 dropped due to accuracy

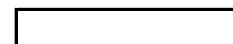
|   | 1           | 2            | 3            | 4            | 5            | 6           |
|---|-------------|--------------|--------------|--------------|--------------|-------------|
| A | IS + Cal. 1 | IS + QC_1    | M2024-3833-1 | P2024-2988-1 | P2024-3013-1 | IS + QC_1   |
| B | IS + Cal. 2 | Neg Blood    | M2024-3937-2 | P2024-2995-1 | P2024-3014-1 | IS + Cal. 7 |
| C | IS + Cal. 3 | M2024-3550-1 | P2024-2845-1 | P2024-2999-1 | P2024-3027-1 | IS + Cal. 6 |
| D | IS + Cal. 4 | M2024-3567-1 | P2024-2891-1 | P2024-3000-1 | P2024-3030-2 | IS + Cal. 5 |
| E | IS + Cal. 5 | M2024-3618-1 | P2024-2950-1 | P2024-3001-1 | P2024-3037-1 | IS + Cal. 4 |
| F | IS + Cal. 6 | M2024-3646-1 | P2024-2960-1 | P2024-3003-1 | P2024-3038-1 | IS + Cal. 3 |
| G | IS + Cal. 7 | M2024-3707-1 | P2024-2976-1 | P2024-3010-1 | P2024-3039-1 | IS + Cal. 2 |
| H | IS + QC_1   | M2024-3707-2 | P2024-2985-1 | P2024-3012-1 | IS + QC_1    | IS + Cal. 1 |

All wells to contain 100 µl of residual DMSO



|   | 1           | 2            | 3             | 4            | 5             | 6            |
|---|-------------|--------------|---------------|--------------|---------------|--------------|
| A | IS + Cal. 1 | IS + QC_1    | M2024-3833-1  | P2024-2988-1 | P2024-3013-1  | P2024-3014-1 |
| B | IS + Cal. 2 | Neg Blood    | M2024-3937-2  | P2024-2995-1 | P2024-3014-1* |              |
| C | IS + Cal. 3 | M2024-3550-1 | P2024-2845-1  | P2024-2999-1 | P2024-3027-1  |              |
| D | IS + Cal. 4 | M2024-3567-1 | P2024-2891-1* | P2024-3000-1 | P2024-3030-2  |              |
| E | IS + Cal. 5 | M2024-3618-1 | P2024-2950-1  | P2024-3001-1 | P2024-3037-1  |              |
| F | IS + Cal. 6 | M2024-3646-1 | P2024-2960-1  | P2024-3003-1 | P2024-3038-1  |              |
| G | IS + Cal. 7 | M2024-3707-1 | P2024-2976-1  | P2024-3010-1 | P2024-3039-1  |              |
| H | IS + QC_1   | M2024-3707-2 | P2024-2985-1  | P2024-3012-1 | P2024-2891-1  |              |

\*Samples moved during step 6 of the extraction due to clotting





# AM #26 Cannabinoids Screen Results

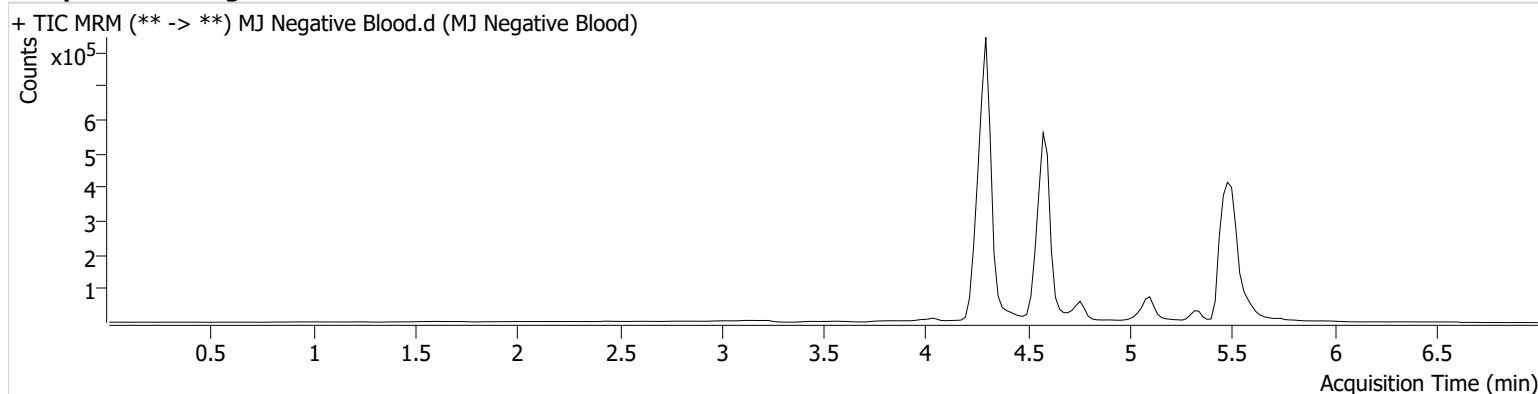
**Batch results** D:\MassHunter\Data\2024\AM 25 26\100124 AM 25 26 TS\QuantResults\AM 26.batch.bin  
**Calibration Last Update** 10/2/2024 8:02:46 AM

**Instrument** Falco (069901)  
**Type** Sample  
**Acq. Method** AM 26 THC.m  
**Sample Position** P1-B2  
**Injection Volume** 10  
**Acq. Date-Time** 10/1/2024 1:12:27 PM  
**Sample Info.**

**Data File** MJ Negative Blood.d  
**Sample** MJ Negative Blood  
**Operator** Tamara Salazar  
**Comment**

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## Sample Chromatogram







# AM #26 Cannabinoids Screen Results

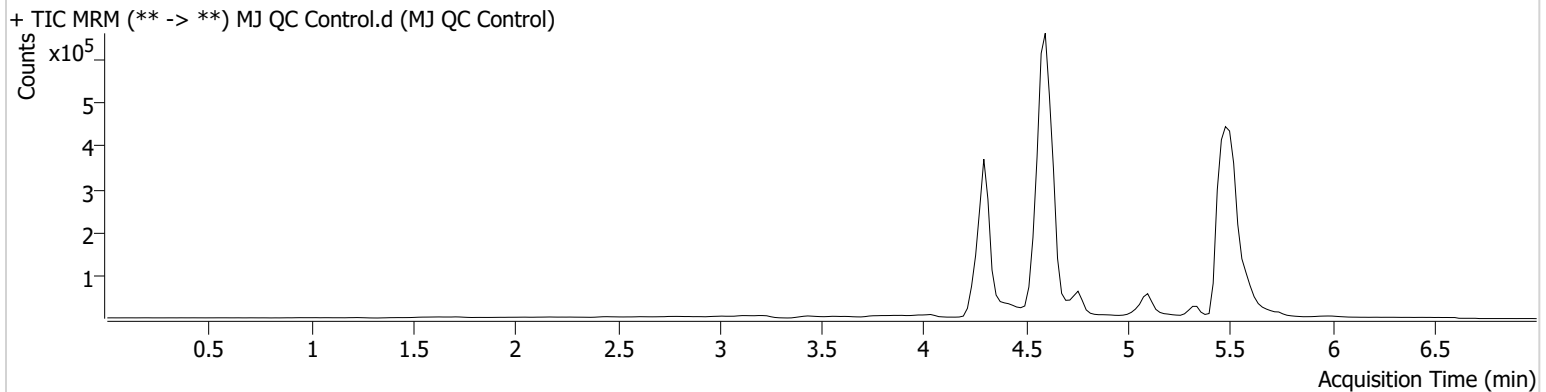
**Batch results** D:\MassHunter\Data\2024\AM 25 26\100124 AM 25 26 TS\QuantResults\AM 26.batch.bin  
**Calibration Last Update** 10/2/2024 8:02:46 AM

**Instrument** Falco (069901)  
**Type** QC  
**Acq. Method** AM 26 THC.m  
**Sample Position** P1-H1  
**Injection Volume** 10  
**Acq. Date-Time** 10/1/2024 12:57:18 PM  
**Sample Info.**

**Data File** MJ QC Control.d  
**Sample** MJ QC Control  
**Operator** Tamara Salazar  
**Comment**

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## Sample Chromatogram



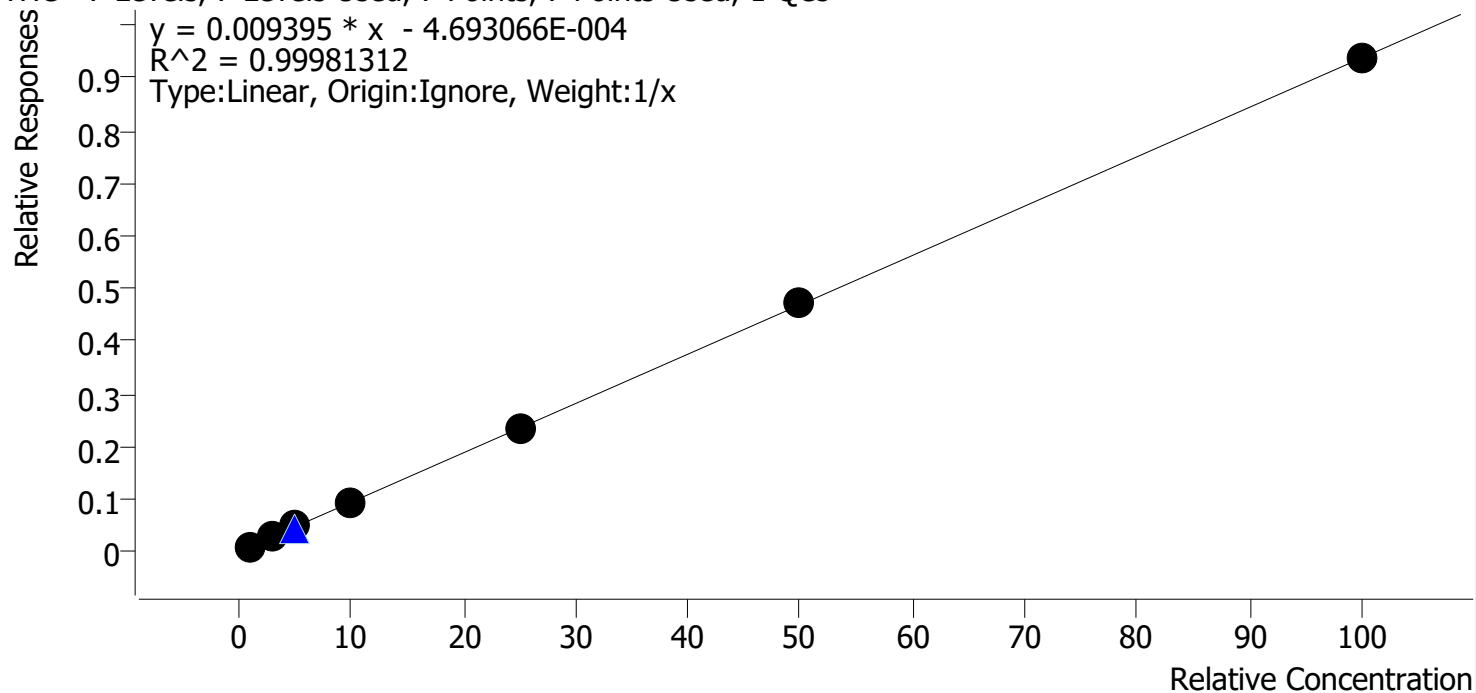
| Name     | RT    | Resp.  | ISTD Resp. | Final Conc. |
|----------|-------|--------|------------|-------------|
| THC      | 5.530 | 2154   | 53664      | 4.32 ng/ml  |
| THC-COOH | 4.616 | 520348 | 2106473    | 22.50 ng/ml |
| THC-OH   | 4.302 | 21039  | 1473899    | 6.21 ng/ml  |



# AM #26 Cannabinoids Screen Calibration Curve Report

**Batch results** D:\MassHunter\Data\2024\AM 25 26\100124 AM 25 26 TS\QuantResults\AM 26.batch.bin  
**Last Cal. Update** 10/2/2024 8:02 AM  
**Analyst Name** ISP\Datastor  
**Analyte** THC **Internal Standard** THC-D3

THC - 7 Levels, 7 Levels Used, 7 Points, 7 Points Used, 1 QCs



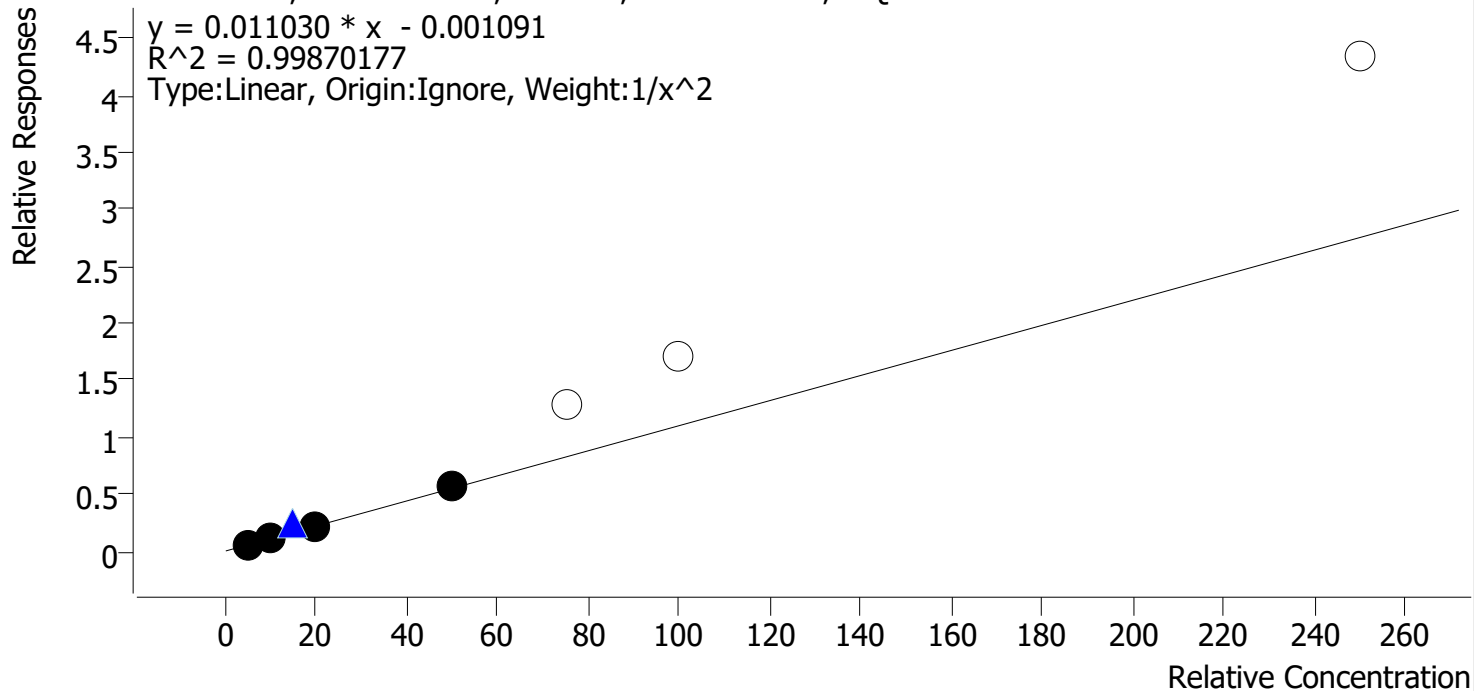
| Sample   | Level | Enabled | Expected Concentration | Final Concentration | Accuracy |
|----------|-------|---------|------------------------|---------------------|----------|
| MJ Cal 1 | 1     | ✓       | 1.0                    | 1.0                 | 98.0     |
| MJ Cal 2 | 2     | ✓       | 3.0                    | 3.1                 | 102.2    |
| MJ Cal 3 | 3     | ✓       | 5.0                    | 5.1                 | 103.0    |
| MJ Cal 4 | 4     | ✓       | 10.0                   | 9.7                 | 97.4     |
| MJ Cal 5 | 5     | ✓       | 25.0                   | 24.5                | 98.2     |
| MJ Cal 6 | 6     | ✓       | 50.0                   | 50.7                | 101.4    |
| MJ Cal 7 | 7     | ✓       | 100.0                  | 99.8                | 99.8     |



# AM #26 Cannabinoids Screen Calibration Curve Report

**Batch results** D:\MassHunter\Data\2024\AM 25 26\100124 AM 25 26 TS\QuantResults\AM 26.batch.bin  
**Last Cal. Update** 10/2/2024 8:02 AM  
**Analyst Name** ISP\Datastor  
**Analyte** THC-COOH **Internal Standard** THC-COOH-D9

THC-COOH - 7 Levels, 4 Levels Used, 7 Points, 4 Points Used, 1 QCs



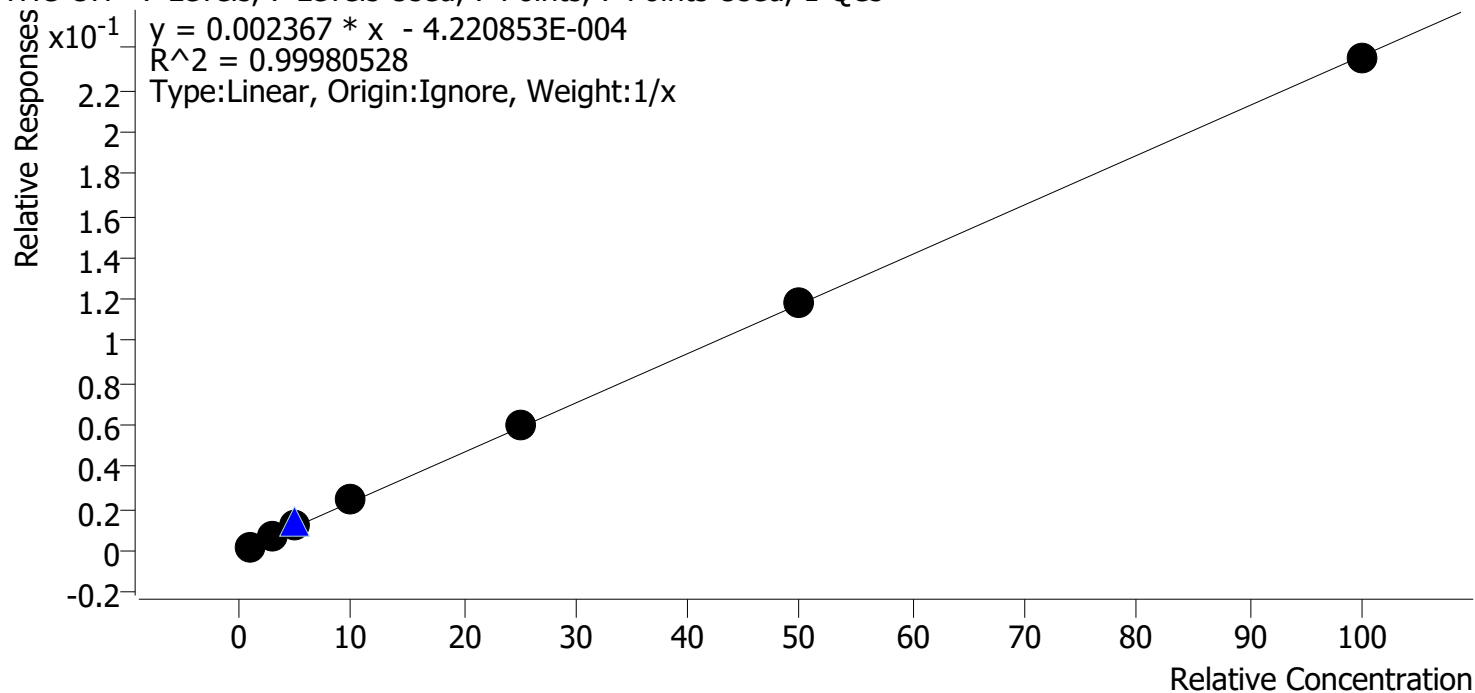
| Sample   | Level | Enabled | Expected Concentration | Final Concentration | Accuracy |
|----------|-------|---------|------------------------|---------------------|----------|
| MJ Cal 1 | 1     | ✓       | 5.0                    | 5.1                 | 101.5    |
| MJ Cal 2 | 2     | ✓       | 10.0                   | 9.7                 | 96.6     |
| MJ Cal 3 | 3     | ✓       | 20.0                   | 20.0                | 99.8     |
| MJ Cal 4 | 4     | ✓       | 50.0                   | 51.0                | 102.1    |
| MJ Cal 5 | 5     | ✗       | 75.0                   | 116.4               | 155.3    |
| MJ Cal 6 | 6     | ✗       | 100.0                  | 154.9               | 154.9    |
| MJ Cal 7 | 7     | ✗       | 250.0                  | 394.2               | 157.7    |



# AM #26 Cannabinoids Screen Calibration Curve Report

**Batch results** D:\MassHunter\Data\2024\AM 25 26\100124 AM 25 26 TS\QuantResults\AM 26.batch.bin  
**Last Cal. Update** 10/2/2024 8:02 AM  
**Analyst Name** ISP\Datastor  
**Analyte** THC-OH **Internal Standard** THC-OH-D3

THC-OH - 7 Levels, 7 Levels Used, 7 Points, 7 Points Used, 1 QCs



| Sample   | Level | Enabled | Expected Concentration | Final Concentration | Accuracy |
|----------|-------|---------|------------------------|---------------------|----------|
| MJ Cal 1 | 1     | ✓       | 1.0                    | 1.0                 | 100.9    |
| MJ Cal 2 | 2     | ✓       | 3.0                    | 2.8                 | 94.0     |
| MJ Cal 3 | 3     | ✓       | 5.0                    | 5.1                 | 101.1    |
| MJ Cal 4 | 4     | ✓       | 10.0                   | 10.3                | 102.7    |
| MJ Cal 5 | 5     | ✓       | 25.0                   | 25.5                | 102.0    |
| MJ Cal 6 | 6     | ✓       | 50.0                   | 49.9                | 99.8     |
| MJ Cal 7 | 7     | ✓       | 100.0                  | 99.5                | 99.5     |



# AM #26 Cannabinoids Screen Results

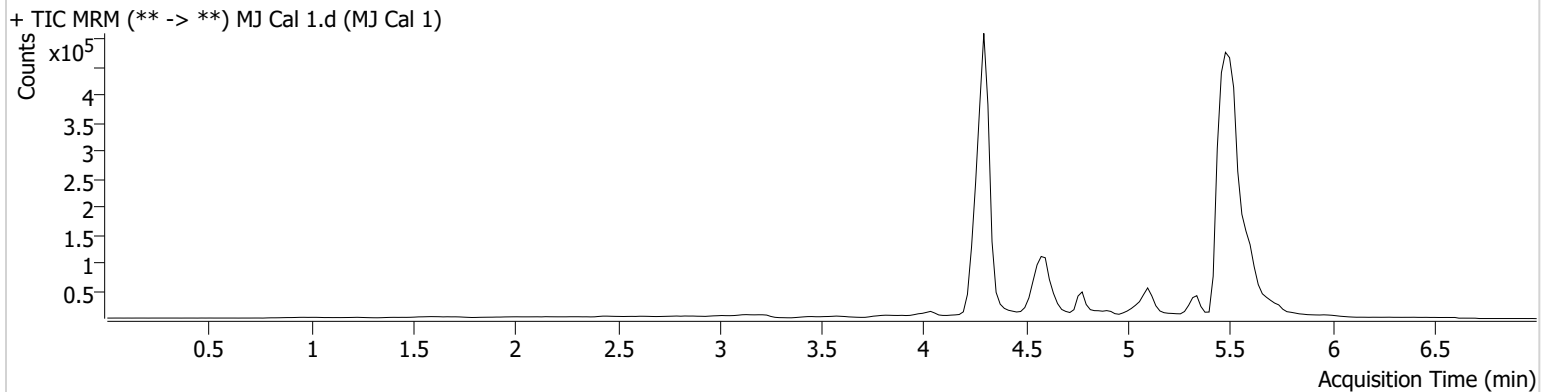
**Batch results** D:\MassHunter\Data\2024\AM 25 26\100124 AM 25 26 TS\QuantResults\AM 26.batch.bin  
**Calibration Last Update** 10/2/2024 8:02:46 AM

**Instrument** Falco (069901)  
**Type** Cal  
**Acq. Method** AM 26 THC.m  
**Sample Position** P1-A1  
**Injection Volume** 10  
**Acq. Date-Time** 10/1/2024 12:04:11 PM  
**Sample Info.**

**Data File** MJ Cal 1.d  
**Sample** MJ Cal 1  
**Operator** Tamara Salazar  
**Comment**

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## Sample Chromatogram



| Name     | RT    | Resp. | ISTD Resp. | Final Conc.           |
|----------|-------|-------|------------|-----------------------|
| THC      | 5.530 | 918   | 105004     | 0.98 ng/ml <b>Low</b> |
| THC-COOH | 4.616 | 27924 | 508534     | 5.08 ng/ml            |
| THC-OH   | 4.322 | 4281  | 2177655    | 1.01 ng/ml <b>Low</b> |



# AM #26 Cannabinoids Screen Results

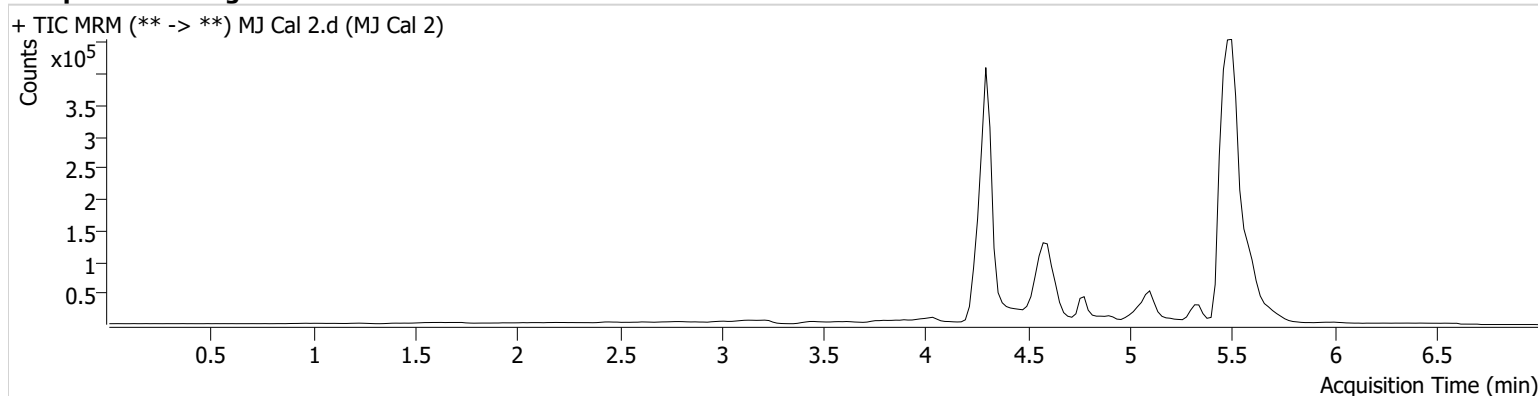
**Batch results** D:\MassHunter\Data\2024\AM 25 26\100124 AM 25 26 TS\QuantResults\AM 26.batch.bin  
**Calibration Last Update** 10/2/2024 8:02:46 AM

**Instrument** Falco (069901)  
**Type** Cal  
**Acq. Method** AM 26 THC.m  
**Sample Position** P1-B1  
**Injection Volume** 10  
**Acq. Date-Time** 10/1/2024 12:11:54 PM  
**Sample Info.**

**Data File** MJ Cal 2.d  
**Sample** MJ Cal 2  
**Operator** Tamara Salazar  
**Comment**

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## Sample Chromatogram



| Name     | RT    | Resp. | ISTD Resp. | Final Conc.           |
|----------|-------|-------|------------|-----------------------|
| THC      | 5.530 | 4295  | 151545     | 3.07 ng/ml            |
| THC-COOH | 4.616 | 57871 | 548756     | 9.66 ng/ml            |
| THC-OH   | 4.322 | 10509 | 1680250    | 2.82 ng/ml <b>Low</b> |



# AM #26 Cannabinoids Screen Results

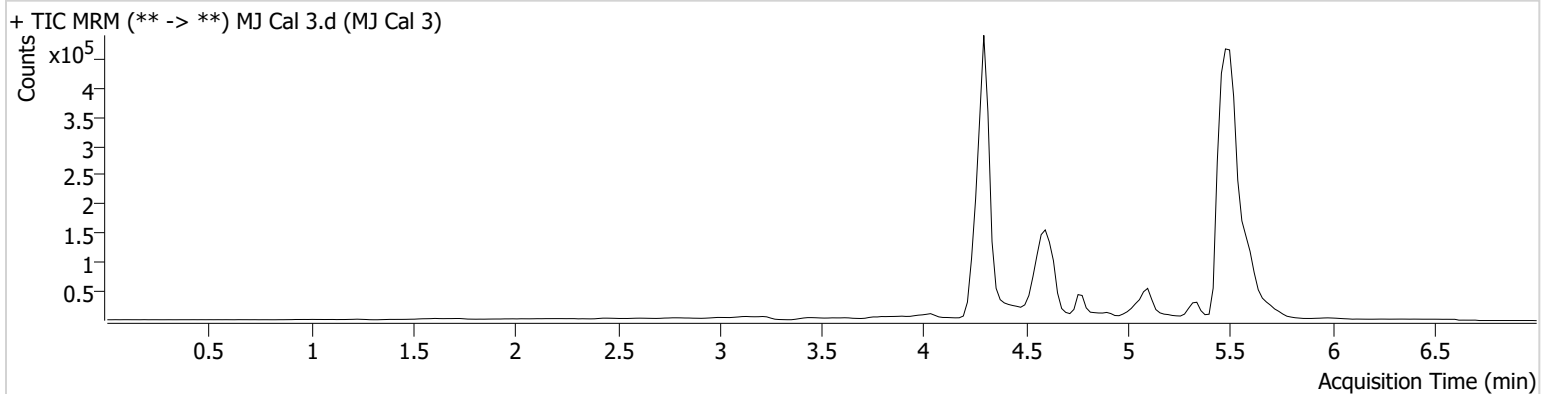
**Batch results** D:\MassHunter\Data\2024\AM 25 26\100124 AM 25 26 TS\QuantResults\AM 26.batch.bin  
**Calibration Last Update** 10/2/2024 8:02:46 AM

**Instrument** Falco (069901)  
**Type** Cal  
**Acq. Method** AM 26 THC.m  
**Sample Position** P1-C1  
**Injection Volume** 10  
**Acq. Date-Time** 10/1/2024 12:19:28 PM  
**Sample Info.**

**Data File** MJ Cal 3.d  
**Sample** MJ Cal 3  
**Operator** Tamara Salazar  
**Comment**

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## Sample Chromatogram



| Name     | RT    | Resp.  | ISTD Resp. | Final Conc. |
|----------|-------|--------|------------|-------------|
| THC      | 5.530 | 6124   | 127829     | 5.15 ng/ml  |
| THC-COOH | 4.616 | 120864 | 551971     | 19.95 ng/ml |
| THC-OH   | 4.322 | 22021  | 1907703    | 5.06 ng/ml  |



# AM #26 Cannabinoids Screen Results

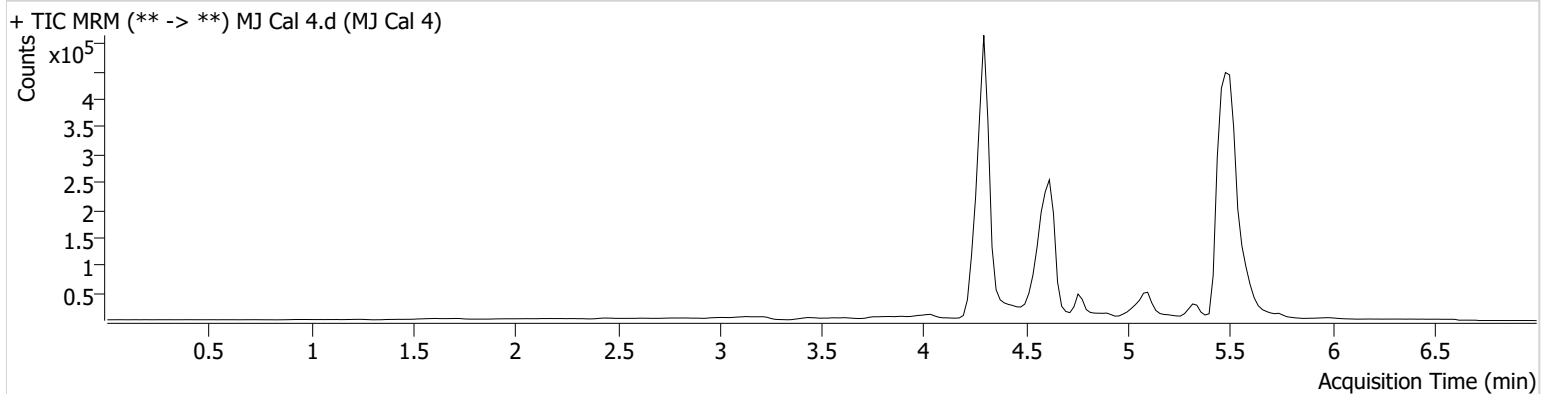
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**Calibration Last Update** 10/2/2024 8:02:46 AM

**Instrument** Falco (069901)  
**Type** Cal  
**Acq. Method** AM 26 THC.m  
**Sample Position** P1-D1  
**Injection Volume** 10  
**Acq. Date-Time** 10/1/2024 12:27:02 PM  
**Sample Info.**

**Data File** MJ Cal 4.d  
**Sample** MJ Cal 4  
**Operator** Tamara Salazar  
**Comment**

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## Sample Chromatogram



| Name     | RT    | Resp.  | ISTD Resp. | Final Conc. |
|----------|-------|--------|------------|-------------|
| THC      | 5.530 | 8859   | 97348      | 9.74 ng/ml  |
| THC-COOH | 4.616 | 307378 | 547034     | 51.04 ng/ml |
| THC-OH   | 4.302 | 44397  | 1859490    | 10.27 ng/ml |





# AM #26 Cannabinoids Screen Results

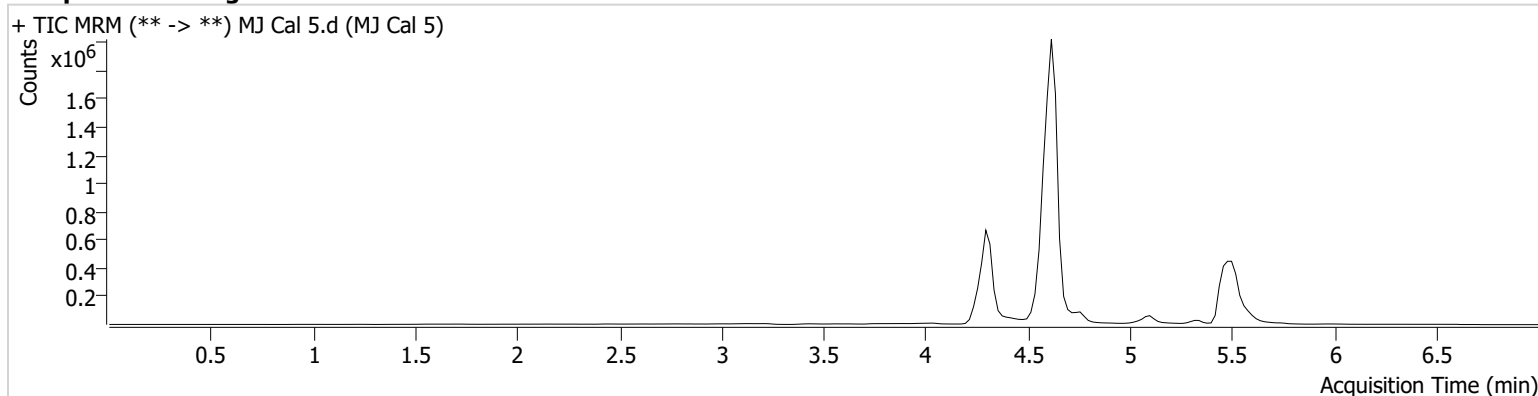
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**Calibration Last Update** 10/2/2024 8:02:46 AM

**Instrument** Falco (069901)  
**Type** Cal  
**Acq. Method** AM 26 THC.m  
**Sample Position** P1-E1  
**Injection Volume** 10  
**Acq. Date-Time** 10/1/2024 12:34:36 PM  
**Sample Info.**

**Data File** MJ Cal 5.d  
**Sample** MJ Cal 5  
**Operator** Tamara Salazar  
**Comment**

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## Sample Chromatogram



| Name     | RT    | Resp.   | ISTD Resp. | Final Conc.  |
|----------|-------|---------|------------|--------------|
| THC      | 5.530 | 22031   | 95715      | 24.55 ng/ml  |
| THC-COOH | 4.616 | 2865025 | 2232602    | 116.45 ng/ml |
| THC-OH   | 4.322 | 122770  | 2047882    | 25.51 ng/ml  |



# AM #26 Cannabinoids Screen Results

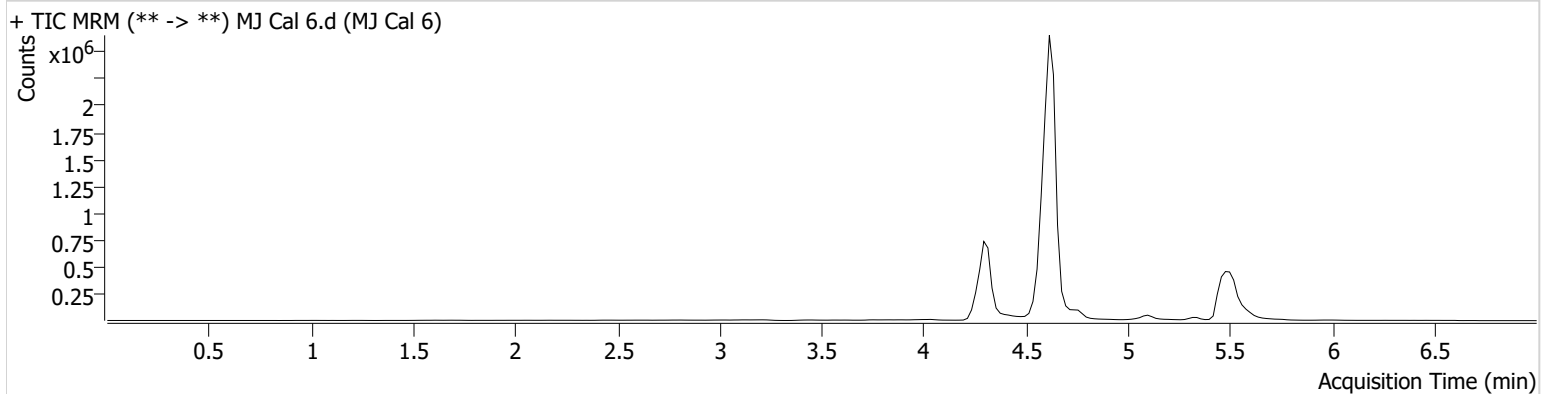
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**Calibration Last Update** 10/2/2024 8:02:46 AM

**Instrument** Falco (069901)  
**Type** Cal  
**Acq. Method** AM 26 THC.m  
**Sample Position** P1-F1  
**Injection Volume** 10  
**Acq. Date-Time** 10/1/2024 12:42:10 PM  
**Sample Info.**

**Data File** MJ Cal 6.d  
**Sample** MJ Cal 6  
**Operator** Tamara Salazar  
**Comment**

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## Sample Chromatogram



| Name     | RT    | Resp.   | ISTD Resp. | Final Conc.  |
|----------|-------|---------|------------|--------------|
| THC      | 5.530 | 36593   | 76930      | 50.68 ng/ml  |
| THC-COOH | 4.616 | 3809153 | 2230543    | 154.93 ng/ml |
| THC-OH   | 4.322 | 203058  | 1726178    | 49.88 ng/ml  |



# AM #26 Cannabinoids Screen Results

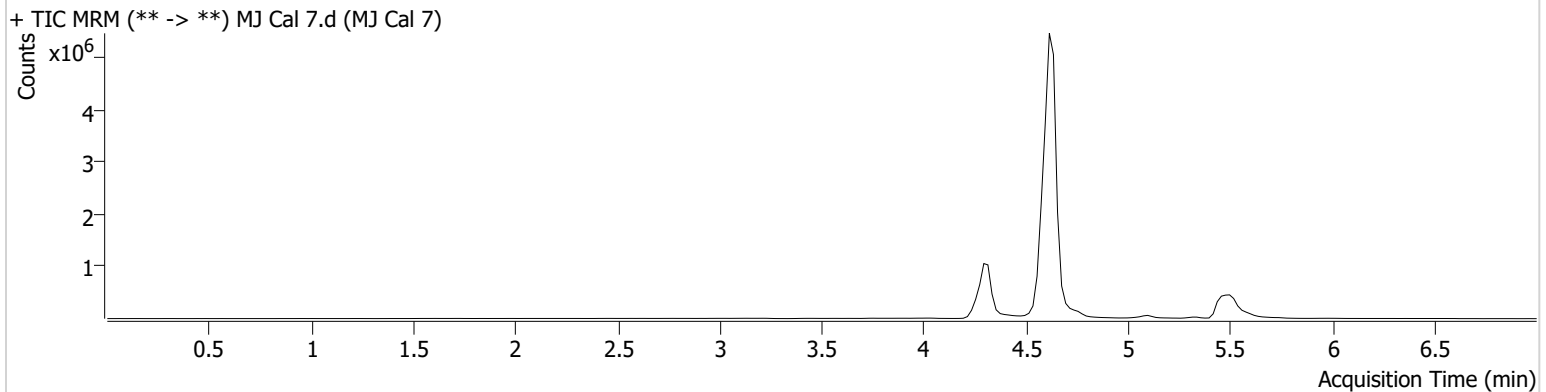
**Batch results** D:\MassHunter\Data\2024\AM 25 26\100124 AM 25 26 TS\QuantResults\AM 26.batch.bin  
**Calibration Last Update** 10/2/2024 8:02:46 AM

**Instrument** Falco (069901)  
**Type** Cal  
**Acq. Method** AM 26 THC.m  
**Sample Position** P1-G1  
**Injection Volume** 10  
**Acq. Date-Time** 10/1/2024 12:49:44 PM  
**Sample Info.**

**Data File** MJ Cal 7.d  
**Sample** MJ Cal 7  
**Operator** Tamara Salazar  
**Comment**

Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

## Sample Chromatogram



| Name     | RT    | Resp.   | ISTD Resp. | Final Conc.  |
|----------|-------|---------|------------|--------------|
| THC      | 5.530 | 48501   | 51735      | 99.84 ng/ml  |
| THC-COOH | 4.616 | 8862257 | 2038946    | 394.18 ng/ml |
| THC-OH   | 4.322 | 405011  | 1723888    | 99.45 ng/ml  |