Worklist: 63	41			REVIEWED By Britany Wylie at 11:34 am, Apr 19, 2023
LAB CASE	<u>ITEM</u>	ITEM TYPE	DESCRIPTION	
C2023-0689	1	BCK	AM 27 Blood THC Quant by LC-QQQ	
C2023-0759	1	ВСК	AM 27 Blood THC Quant by LC-QQQ	
C2023-0813	1	ВСК	AM 27 Blood THC Quant by LC-QQQ	
C2023-0822	1	UCK	AM 27 Urine Cannabinoids Confirmation by LC-QQQ	
C2023-0828	1	ВСК	AM 27 Blood THC Quant by LC-QQQ	

AM# 27: Quantitation of THC and Metabolites in Blood and Urine by LC-MS/MS

Extraction Date 4/18/23 Plate lot#: 230113 Analyst: <u>Anne Nord</u> Plate re-test: 7/13/23

Mobile phase A: 0.1% Formic Acid in LCMS Water MTBE LCMS Methanol Blank Blood Lot: 22B52016-1 Urine Blank: 12522 LCMS-QQQ ID: 69679

Mobile phase B: 0.1% Formic acid in Acetonitrile Hexane Column: UCT Selectra DA 100 x 2.1mm 3um

Pre-Analytic:

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

<u>Analytic:</u>

- \boxtimes 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
- Image: 2. Urine hydrolysis: add 1.5 ml urine to blank plate, add 250 ul 1N KOH mix and incubate at 40 degrees for 15 minutes.

Pipette 1000µL (calibrated pipette) blood or 1000µL hydrolyzed urine Pipette ID: K52558G in wells of analytical (standards) plate.

- \boxtimes 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- A. Pipette 500μL 0.1% formic acid in water blood sample, 500 ul saturated phosphate buffer in urine in wells of analytical plate.
- \boxtimes 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 8 6. Transfer **800μL of blood+acid** or urine acid 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: 66792
- \boxtimes 8. Wait 5 minutes.
- 9. Add 2.25mL MTBE. (Add in 3 increments of 750uL)
- \boxtimes 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)
- \boxtimes 13. Wait 5 minutes.
- ☑ 14. Apply positive pressure for approx. 15 seconds. (10-15 PSI- Selector to the left).
- I5. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C. SPE Dry ID: 66819
- Σ 16. Reconstitute in **100µL 100% MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

- \boxtimes 1. Create batch and process data.
- \boxtimes 2. Make any necessary integration changes, Curve weighting of Linear 1/x with r² values ≥ 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. SN > 10
- ☑ 4. Case sample response for THC 1ng/ml LOD 3ng/ml LOQ, OH-THC 3ng/mL LOD and LOQ, Carboxy-THC: 5 ng/mL (qualitative only). Samples with a THC or OH-THC response over 50 ng/mL will be reported out as greater than 50 ng/mL.
- ⊠ 5. Did all QCs pass for each analyte? (if not is it describe in comments section)
- Solution 6. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS: .

	1	2	3	4	5	6
а	cal 1	Internal control urine				
b	cal 2	negative blood				
с	cal 3	689-1				
d	cal 4	759-1				
e	Cal 5	813-1				
f	cal 6	828-1				
g	cal 7	negative urine				
h	Internal control (blood)	822-1				

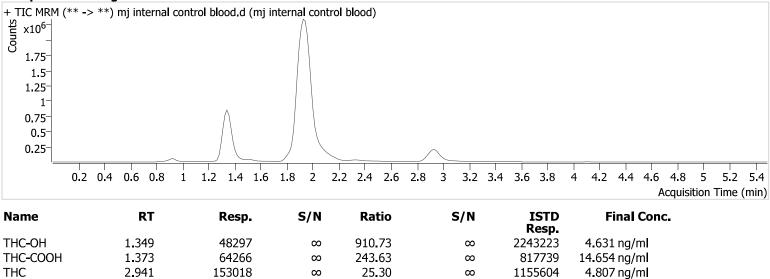
Plate position 3

c2023-0___-

Batch resultsD:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.binCalibration Last Update4/19/2023 7:46:23 AM

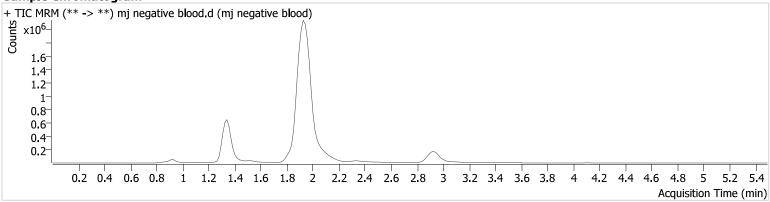
69679
QC
AM 27 THC quant.m
P3-H1
10
4/18/2023 4:50:58 PM

Data File Sample Operator Comment mj internal control blood.d mj internal control blood Anne Nord



Batch resultsD:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.binCalibration Last Update4/19/2023 7:46:23 AM

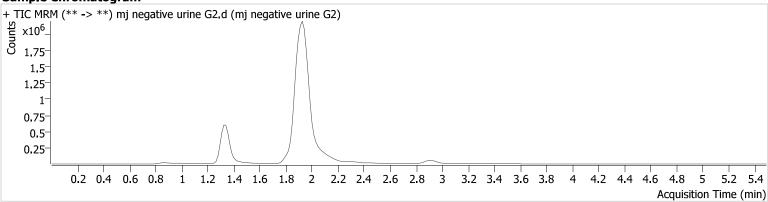
Data File Sample Operator Comment mj negative blood.d mj negative blood Anne Nord



D:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.bin **Batch results** Calibration Last Update 4/19/2023 7:46:23 AM

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Туре	Sample
Acq. Method	AM 27 THC quant.m
Sample Position	P3 - G2
Injection Volume	10
Acq. Date-Time	4/18/2023 5:56:53
Sample Info.	

m ΡM Data File Sample Operator Comment mj negative urine G2.d mj negative urine G2 Anne Nord



Data File

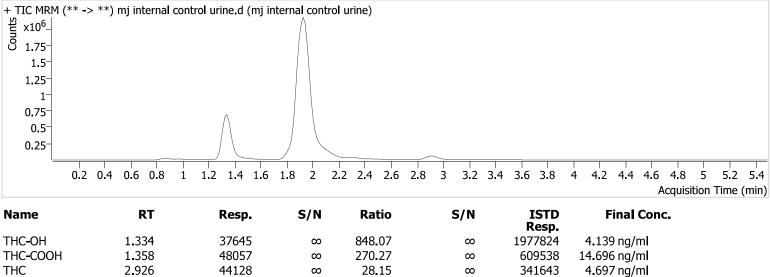
Operator

Comment

Sample

Batch resultsD:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.binCalibration Last Update4/19/2023 7:46:23 AM

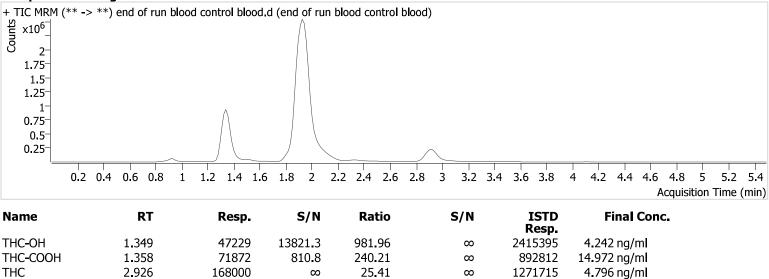
mj internal control urine.d mj internal control urine Anne Nord

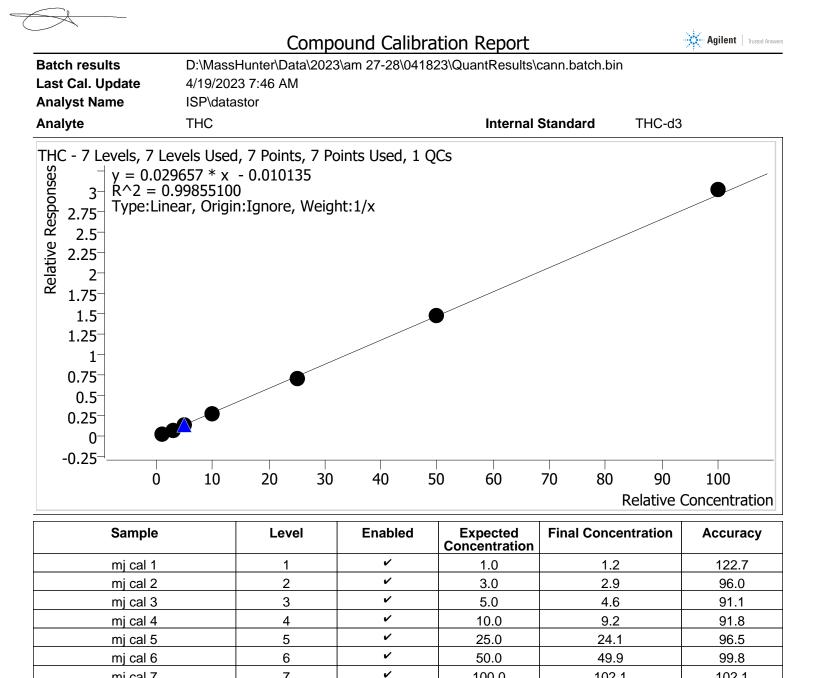


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Instrument	69679
Type	Sample
Acq. Method	AM 27 THC quant.m
Sample Position	P3-H1
Injection Volume	10
Acq. Date-Time	4/18/2023 6:23:16 PM
Sample Info.	4/18/2023 0:23:10 PM

Data File Sample Operator Comment end of run blood control blood.d end of run blood control blood Anne Nord





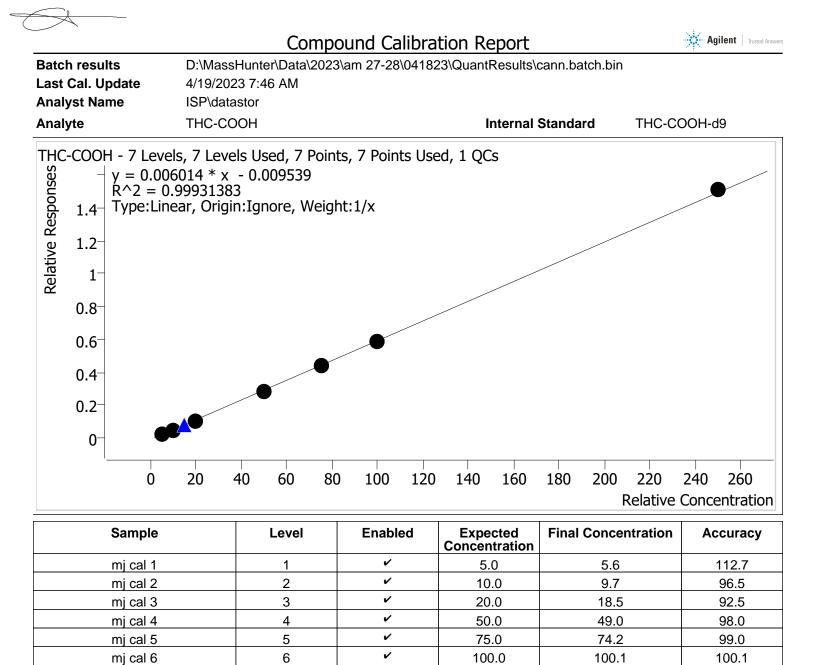
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102.1

100.0

102.1



r

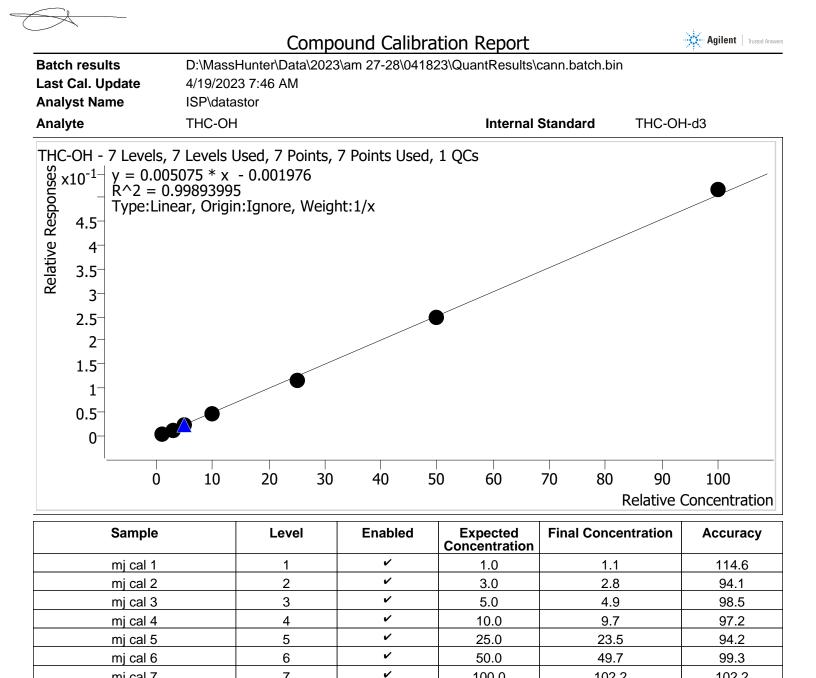
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252.9

7

mj cal 7

101.1



7

mj cal 7

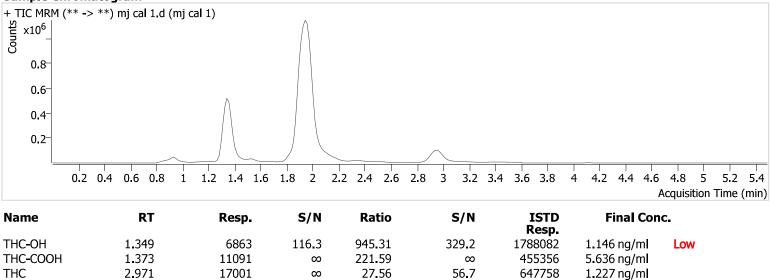
102.2

100.0

102.2

Batch resultsD:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.binCalibration Last Update4/19/2023 7:46:23 AM

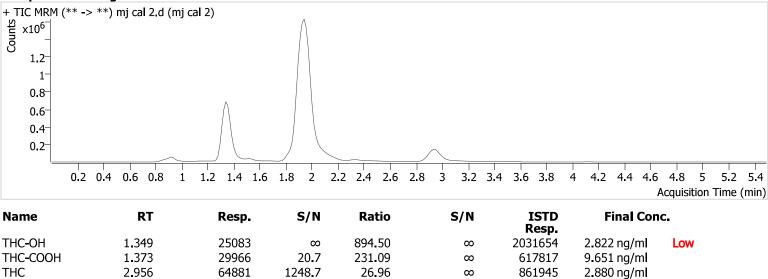
Data File Sample Operator Comment mj cal 1.d mj cal 1 Anne Nord



Batch resultsD:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.binCalibration Last Update4/19/2023 7:46:23 AM

Instrument Type Acq. Method Sample Position Injection Volume Acq. Date-Time	69679 Cal AM 27 THC quant.m P3-B1 10 4/18/2023 4:11:27 PM
Acq. Date-Time Sample Info.	4/18/2023 4:11:27 PM

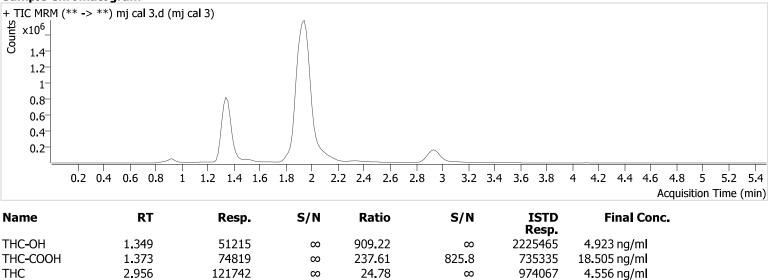
Data File Sample Operator Comment mj cal 2.d mj cal 2 Anne Nord



Batch resultsD:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.binCalibration Last Update4/19/2023 7:46:23 AM

Instrument Type Acq. Method Sample Position Injection Volume	69679 Cal AM 27 THC quant.m P3-C1 10 4/18/2023 4:18:03 PM
Acq. Date-Time Sample Info.	4/18/2023 4:18:03 PM

Data File Sample Operator Comment mj cal 3.d mj cal 3 Anne Nord



mj cal 4.d

Anne Nord

mj cal 4

Data File

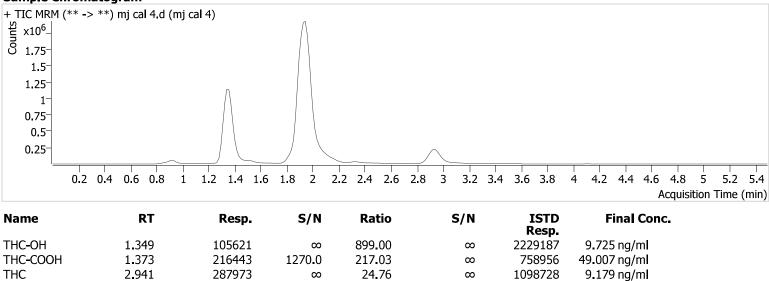
Operator

Comment

Sample

Batch resultsD:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.binCalibration Last Update4/19/2023 7:46:23 AM

59679 Cal AM 27 THC quant.m P3-D1 L0 4/18/2023 4:24:39 PM
1/10/2023 1121.35 111



mj cal 5.d

Anne Nord

mj cal 5

Data File

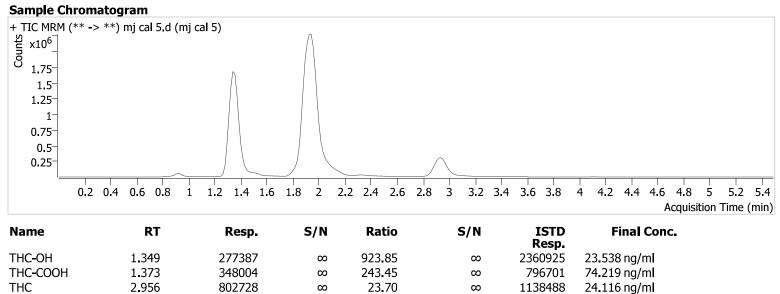
Operator

Comment

Sample

D:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.bin **Batch results** Calibration Last Update 4/19/2023 7:46:23 AM

Instrument	69679
Type	Cal
Acq. Method	AM 27 THC quant.m
Sample Position	P3-E1
Injection Volume	10
Acq. Date-Time Sample Info.	4/18/2023 4:31:15 PM



mj cal 6.d

Anne Nord

mj cal 6

Data File

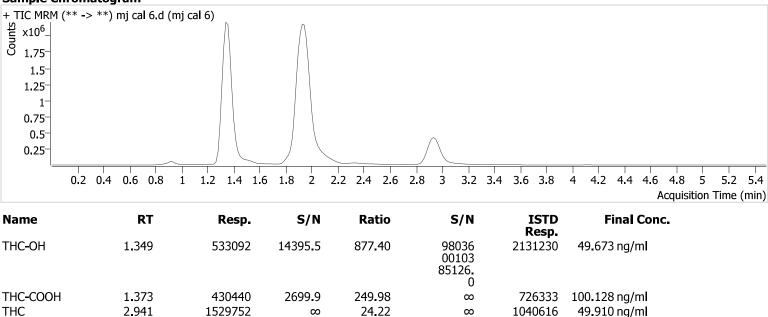
Operator

Comment

Sample

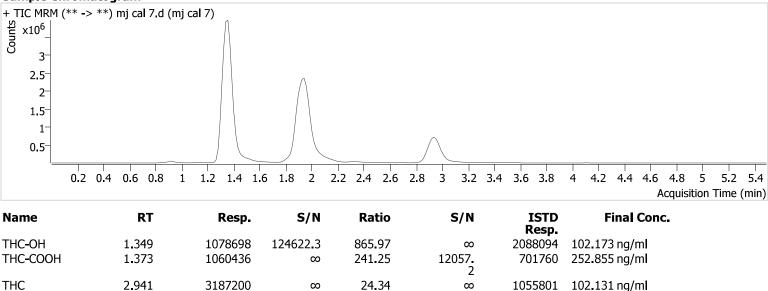
Batch resultsD:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.binCalibration Last Update4/19/2023 7:46:23 AM

Instrument	69679
Type	Cal
Acq. Method	AM 27 THC quant.m
Sample Position	P3-F1
Injection Volume	10
Acq. Date-Time	4/18/2023 4:37:49 PM
Acq. Date-Time Sample Info.	4/18/2023 4:37:49 PM



Batch resultsD:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.binCalibration Last Update4/19/2023 7:46:23 AM

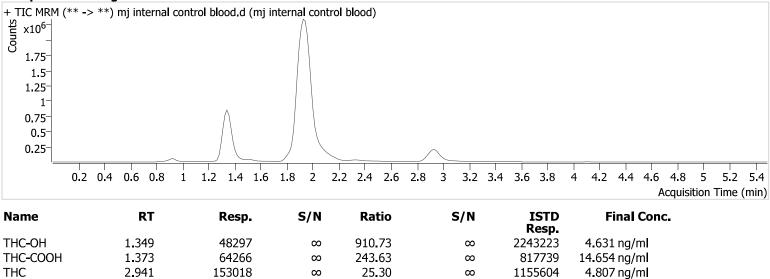
Data File Sample Operator Comment mj cal 7.d mj cal 7 Anne Nord



Batch resultsD:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.binCalibration Last Update4/19/2023 7:46:23 AM

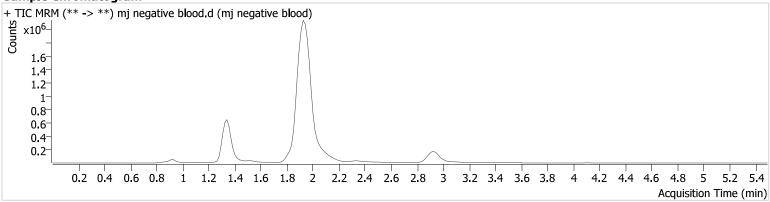
69679
QC
AM 27 THC quant.m
P3-H1
10
4/18/2023 4:50:58 PM

Data File Sample Operator Comment mj internal control blood.d mj internal control blood Anne Nord



Batch resultsD:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.binCalibration Last Update4/19/2023 7:46:23 AM

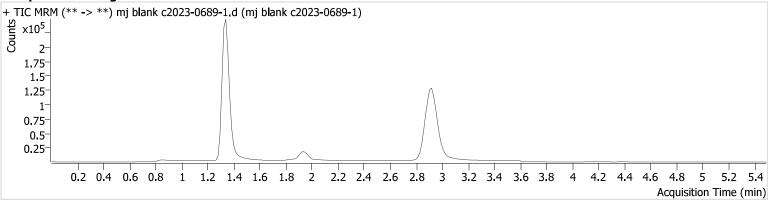
Data File Sample Operator Comment mj negative blood.d mj negative blood Anne Nord



Batch resultsD:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.binCalibration Last Update4/19/2023 7:46:23 AM

Instrument Type Acq. Method	69679 Sample AM 27 THC quant.m
Sample Position	Vial 4
Injection Volume	10
Acq. Date-Time	4/18/2023 5:04:10 PM
Sample Info.	

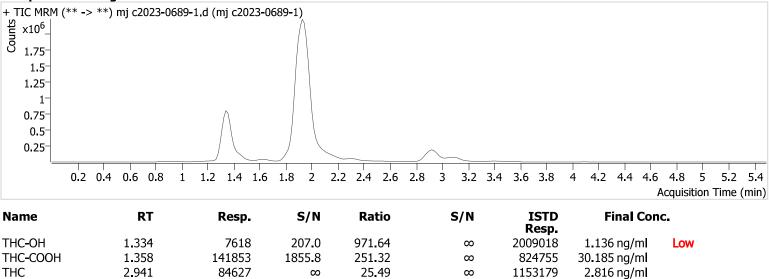
Data File Sample Operator Comment mj blank c2023-0689-1.d mj blank c2023-0689-1 Anne Nord



Batch resultsD:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.binCalibration Last Update4/19/2023 7:46:23 AM

69679 Sample AM 27 THC quant.m P3-C2 10 4/18/2023 5:10:46 PM

Data File Sample Operator Comment mj c2023-0689-1.d mj c2023-0689-1 Anne Nord



Data File

Operator

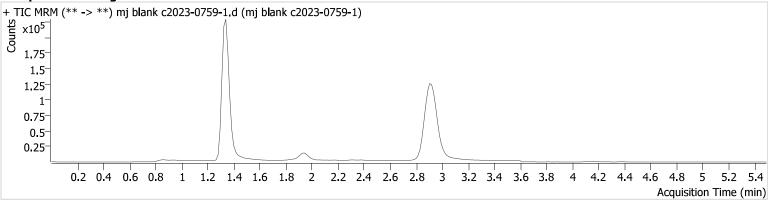
Comment

Sample

D:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.bin **Batch results** Calibration Last Update 4/19/2023 7:46:23 AM

Instrument	69679
Туре	Sample
Acq. Method	AM 27 THC quan
Sample Position	Vial 4
Injection Volume	10
Acq. Date-Time	4/18/2023 5:17:
Sample Info.	

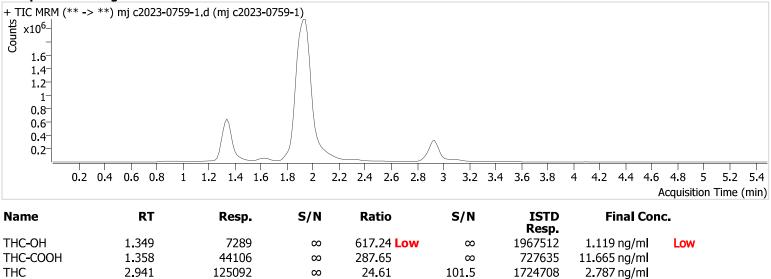
nt.m 22 PM mj blank c2023-0759-1.d mj blank c2023-0759-1 Anne Nord



Batch resultsD:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.binCalibration Last Update4/19/2023 7:46:23 AM

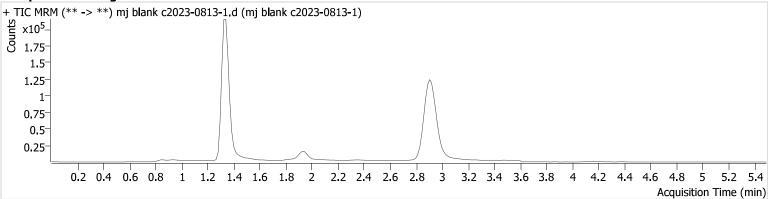
69679 Sample AM 27 THC quant.m P3-D2 10 4/18/2023 5:23:58 PM
1/10/2020 0120100 111

Data File Sample Operator Comment mj c2023-0759-1.d mj c2023-0759-1 Anne Nord



Batch resultsD:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.binCalibration Last Update4/19/2023 7:46:23 AM

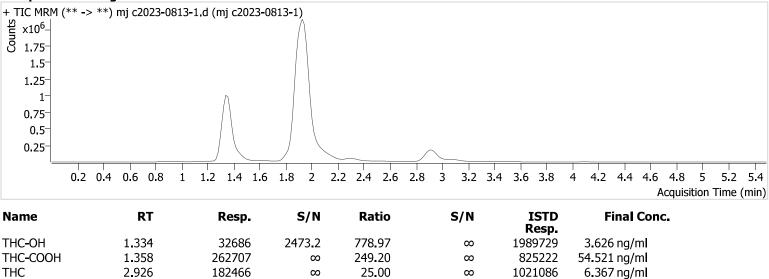
Data File Sample Operator Comment mj blank c2023-0813-1.d mj blank c2023-0813-1 Anne Nord



Batch resultsD:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.binCalibration Last Update4/19/2023 7:46:23 AM

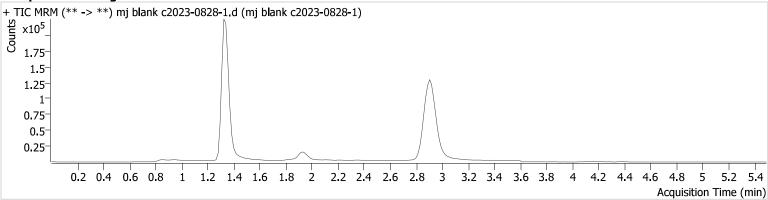
Instrument	69679
Type	Sample
Acq. Method	AM 27 THC quant.m
Sample Position	P3-E2
Injection Volume	10
Acq. Date-Time	4/18/2023 5:37:08 PM
Sample Info.	4/16/2023 5:37:06 PM

Data File Sample Operator Comment mj c2023-0813-1.d mj c2023-0813-1 Anne Nord



Batch resultsD:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.binCalibration Last Update4/19/2023 7:46:23 AM

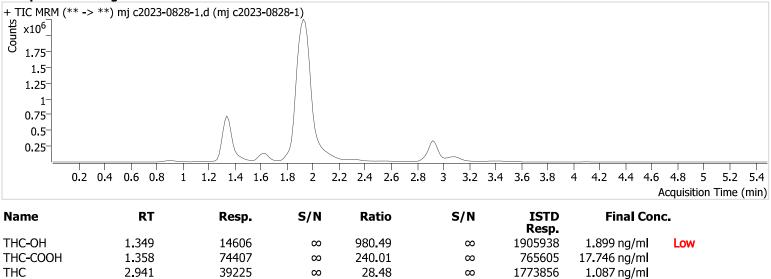
Data File Sample at.m Operator Comment mj blank c2023-0828-1.d mj blank c2023-0828-1 Anne Nord



Batch resultsD:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.binCalibration Last Update4/19/2023 7:46:23 AM

Instrument	69679
Type	Sample
Acq. Method	AM 27 THC quant.m
Sample Position	P3-F2
Injection Volume	10
Acq. Date-Time	4/18/2023 5:50:18 PM
Sample Info.	4/10/2023 3.30.10114

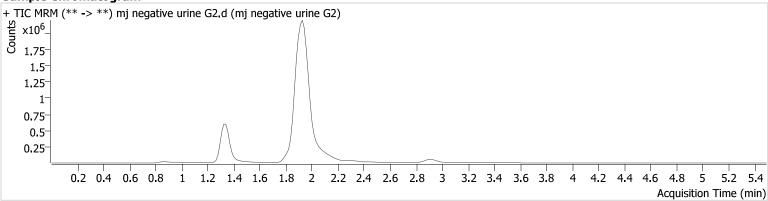
Data File Sample Operator Comment mj c2023-0828-1.d mj c2023-0828-1 Anne Nord



D:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.bin **Batch results** Calibration Last Update 4/19/2023 7:46:23 AM

Instrument	69679
Туре	Sample
Acq. Method	AM 27 THC quant.m
Sample Position	P3 - G2
Injection Volume	10
Acq. Date-Time	4/18/2023 5:56:53
Sample Info.	

m ΡM Data File Sample Operator Comment mj negative urine G2.d mj negative urine G2 Anne Nord



Data File

Operator

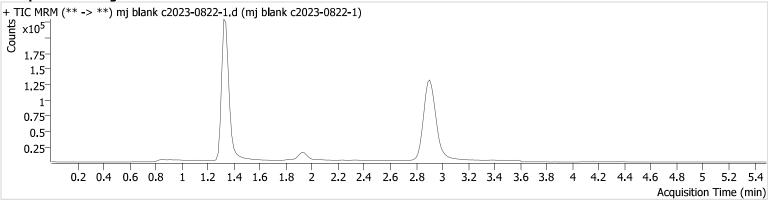
Comment

Sample

D:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.bin **Batch results** Calibration Last Update 4/19/2023 7:46:23 AM

Instrument	69679
Туре	Sample
Acq. Method	AM 27 THC quant.
Sample Position	Vial 4
Injection Volume	10
Acq. Date-Time	4/18/2023 6:03:29
Sample Info.	

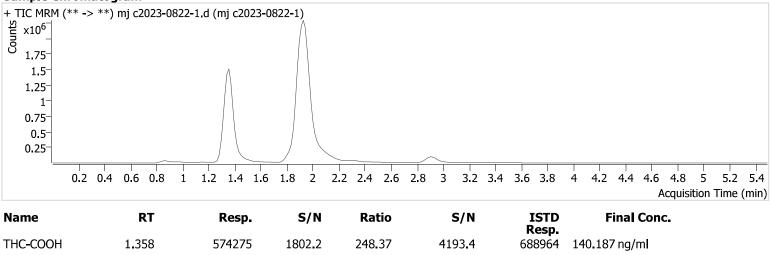
m 9 PM mj blank c2023-0822-1.d mj blank c2023-0822-1 Anne Nord



Batch resultsD:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.binCalibration Last Update4/19/2023 7:46:23 AM

Instrument	69679
Type	Sample
Acq. Method	AM 27 THC quant.m
Sample Position	P3-H2
Injection Volume	10
Acq. Date-Time	4/18/2023 6:10:05 PM
Acq. Date-Time Sample Info.	4/18/2023 6:10:05 PM

Data File Sample Operator Comment mj c2023-0822-1.d mj c2023-0822-1 Anne Nord



Data File

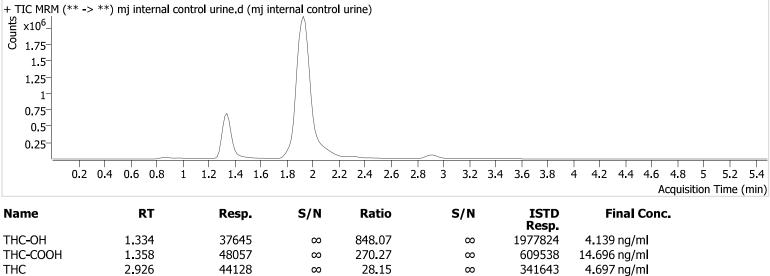
Operator

Comment

Sample

Batch resultsD:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.binCalibration Last Update4/19/2023 7:46:23 AM

mj internal control urine.d mj internal control urine Anne Nord



Batch resultsD:\MassHunter\Data\2023\am 27-28\041823\QuantResults\cann.batch.binCalibration Last Update4/19/2023 7:46:23 AM

Instrument	69679
Type	Sample
Acq. Method	AM 27 THC quant.m
Sample Position	P3-H1
Injection Volume	10
Acq. Date-Time	4/18/2023 6:23:16 PM
Sample Info.	4/18/2023 0:23:10 PM

Data File Sample Operator Comment end of run blood control blood.d end of run blood control blood Anne Nord

