

Worklist: 6337

REVIEWED

By Britany Wylie at 11:39 am, Apr 19, 2023

LAB CASE	<u>ITEM</u>	ITEM TYPE	DESCRIPTION
C2023-0689	1	ВСК	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2023-0695	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
C2023-0705	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2023-0751	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
C2023-0759	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2023-0760	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2023-0760	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2023-0761	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2023-0761	2	ВСК	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2023-0761	3	ВСК	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2023-0761	4	ВСК	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2023-0771	1	ВСК	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2023-0796	1	ВСК	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2023-0803	2	ВСК	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2023-0813	1	ВСК	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ
C2023-0822	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ
C2023-0828	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: 4/17/23 Analyst: Anne Nord

Plate lot#: 220805 Plate retest date: 02/05/23

Mobile phase A:10mM Ammonium FormateMobile phase B:0.1% Formic Acid in MeOH0.5M Ammonium HydroxideEthyl AcetateLC 20% Methanol

Blank Blood Lot: 22B52016-1 Blank Urine lot: 12522 Column: Agilent Phenyl Hexyl (4.6x50mm, 2.7um)

LCMS-QQQ ID: 69679

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.
- Urine hydrolysis pipette: 250 ul urine in blank well, add 40 ul BG Turbo, add 100 ul 500 mm sodium phosphate buffer mix for at least five minutes ambient temperature.
 Pipette 250 μL blood (calibrated pipette) or 250 ul urine in wells of analytical (standards) plate. Pipette ID: 390993
- △ 4. Place on shaking incubator at ambient temp., 900 rpm for 15 minutes.
- ⊠ 5. Transfer 300 μL of blood or urine+base mixture to corresponding wells of SLE+ plate.
- △ 6. 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 7. Wait 5 minutes.
- ⊠ 8. Add 900 μL ethyl acetate.
- \boxtimes 9. Wait 5 minutes.
- ⊠ 10. Apply positive pressure for approx. 10-15 seconds. (12-15 PSI- Selector to the left).
- \boxtimes 11. Add 900 µL ethyl acetate.
- \boxtimes 12. Wait 5 minutes.
- □ 13. Apply positive pressure for approx. 10-15 seconds. (12-15 PSI- Selector to the left).

Post-Analytic

- ☑ 1. Open quantitation software and create a new quantitation batch.

- ☑ 4. Did all QCs pass for each analyte? (If no is it described in comments?)
- ⊠ 5. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS: External controls run for plate re-test.

4/17/23 The run was started, after the calibrator was injected, I looked at the data and the peak shape was poor for many compounds. I changed the column and started the run over.

Olanzapine not evaluated due to poor chromatography in calibrator.

	1	2	3	4	5	6	7	8	9	10	11	12
А					760-1	803-2			822-1			
В					760-2	813-1			695-1			
С					761-1	828-1						
D				negative blood	761-2							
Е				external blood	761-3				751-1			
F				689-1	761-4							
G				705-1	771-1				external control urine			
Н				759-1	796-1				negative urine			cal 1

C2023-___-

plate position 2



Toxicology AM method 25/28 external control prep

working solution 10000 ng/ml in meoh diphendydramine, methamphetamine, alprazolam, , morphine Stock solution 1mg/ml 50 ul each in 4800 ul MeOH (VWR 21050767)

ppd 7/7/22: Exp: 7/7/23 lot 7722 by AMN

Drug	lot	expiration
Methamphetamine	FE03132001	7/1/2025
alprazolam	FE06102008	6/1/2025
Diphendydramine	FN02212011	3/1/2025
Morphine	FE03232010	4/1/2025

AM 25/28 control 500 ul working solution (7722) in 4500 ul negative urine (1000ng/mL Expected concentration)

ppd 7/7/22, exp 7/7/23 lot u7722 negative urine 21522 by AMN

AM 25/28 Blood Control: 50ul working solution (7722) in 4950 ul neg blood (100ng/mL Expected concentration)

ppp 7/7/22, exp 7/7/23 lot b7722 neg blood 22B52016-3 by AMN



Batch results D:\MassHunter\Data\2023\am 25-26\041723\QuantResults\mds.batch.bin

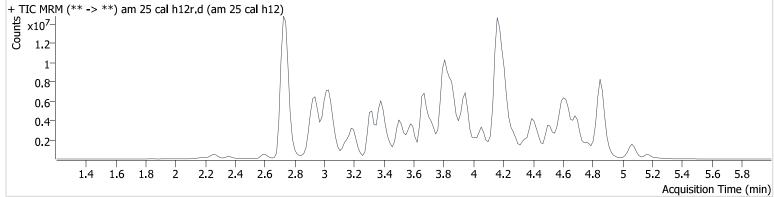
Calibration Last Update 4/18/2023 12:54:05 PM

Instrument69679TypeCalAcq. Methodmds713.mSample PositionP2-H12Injection Volume2.5

Acq. Date-Time 4/17/2023 12:16:49 PM

Sample Info.

Data File Sample Operator Comment am 25 cal h12r.d am 25 cal h12 Anne Nord



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
10-OH-Carbamazepine	3.863	1660224	7054.4	133.1	4718687	10.000
6-MAM	2.876	22452	49.6	54.5	575728	10.000
7-aminoclonazepam	3 . 583	353431	249.6	580.0	1761136	10.000
7-aminoflunitrazepam	3.828	584332	411.5	105.6	1761136	10.000
9-Hydroxyrisperidone	3.943	323 4 652	1463.8	29783.0	1761136	10.000
Acetyl Fentanyl	3.808	214575	171.4	62026.8	7872669	10.000
Acetyl Norfentanyl	2.899	194315	1225.7	534.7	12029641	10.000
a-hydroxyalprazolam	4.701	186118	∞	∞	4718687	10.000
alpha-hydroxymidazolam	4.638	782037	633.0	544.8	9034035	10.000
alpha-PHP	3.863	1923500	1709.6	648.5	3880434	10.000
alpha-PVP	3.572	2554587	1028.2	466.1	3880434	10.000
Alprazolam	4.780	1415918	575.1	2703.9	9034035	10.000
Amitriptyline	4.630	1380049	769.9	324.8	4442611	10.000
Amphetamine	2.949	2264147	2321.7	1966.3	3880434	10.000
Benzoylecgonine	3.459	112004	1156.1	22.0	177099	10.000
Brompheniramine	4.240	64201	41.5	10223.6	5907339	10.000
Buprenorphine	4.127	35920	15364.2	270.7	1352383	10.000
Bupropion	3.833	2194095	2506.7	916.8	8455556	10.000
Carbamazepine	4.357	3749506	∞	610.4	2423532	10.000
Carisoprodol	4.293	494191	3788.6	153.5	2018450	10.000
Chlordiazepoxide	4.781	395551	611.5	128.7	9034035	10.000
Chlorpheniramine	4.121	3177141	2669.5	∞	5907339	10.000
Chlorpromazine	4.854	1598338	692407.1	1082.9	7734467	10.000
Citalopram	4.270	1712752	663.7	696.4	35546773	10.000
Clomimpramine	4.870	1591171	2194.6	741.6	2466229	10.000
Clonazepam	4.640	466259	357.3	75971.4	39945	10.000
Clonazolam	4.514	629891	157930.3	197701.3	4718687	10.000
clozapine	4.393	2808514	44533.3	709222.7	7620239	10.000
Cocaethylene	3.886	2726041	448.1	1321.2	14556258	10.000
Cocaine	3.657	3284400	689.5	481.1	14556258	10.000
Codeine	2.741	160350	318.2	285.8	2423532	10.000
Cyclobenzaprine	4.553	1952518	1324.8	60.9	4442611	10.000
Desipramine	4.600	3043893	1522.7	1002.6	4442611	10.000
Dextromethorphan	4.215	1308776	1406.3	30784.6	5907339	10.000

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AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Dextrorphan	3.447	1595026	528.4	276.7	3880434	10.000
Diazepam	5.042	743889	1220.8	10405.4	9034035	10.000
Dihydrocodeine	2.695	599077	622.2	669.5	2423532	10.000
Dimethyltriptamine	3.023	1245948	1766.5	1087.0	3880434	10.000
Diphenhydramine	4.170	5573601	3453.4	495.9	35546773	10.000
Doxepin ,	4.337	1283117	737.1	157.7	7620239	10.000
Doxy l amine	3.737	4705729	2223.8	2107.9	3880434	10.000
Duloxetine	4.551	40286	402.7	242.2	2466229	10.000
EDDP	4.214	1095451	710.7	724.7	1792436	10.000
Estazolam	4.690	2174265	725.3	1243.8	9034035	10.000
Etizolam	4.760	52271	12330.3	97263.8	9034035	10.000
Fentanyl	4.069	197881	294.6	1066.0	8420644	10.000
Flualprazolam	4.608	549585	2448.4	453.7	9034035	10.000
Flunitrazepam	4.748	1437436	4387.0	219163.9	4718687	10.000
Fluorofentanyl	4.099	173029	1264.1	471.8	8420644	10.000
Fluoxetine	4.519	1803418	1738.7	62004.3	2466229	10.000
Flurazepam	4.252	1396533	1505.9	449.6	1352383	10.000
Hydrocodone	2.969	501212	90.8	44.4	2423532	10.000
Hydromorphone	2.364	433300	997.3	319.2	96918	10.000
hydroxyzine	4.667	2262595	5776.6	93442.5	7620239	10.000
Imipramine	4.598	4419447	1623.0	284.4	4442611	10.000
Ketamine	3.418	1864024	2043.6	140.9	4620925	10.000
Lamotrigine	3.601	156420	108.8	104.8	3880434	10.000
Levamisole	2.915	1278450	2442.6	64.1	14556258	10.000
Levetiracetam	2.598	558018	735.5	2926.1	1761136	10.000
Lorazepam	4.594	175227	495.7	105.5	4718687	10.000
Maprotiline	4 . 630	877243	712.3	154 . 3	4442611	10.000
MDA	3.084	1514940	2680.5	527 . 8	13723959	10.000
MDEA	3.313	3064208	757 . 6	711.6	13723959	10.000
MDMA	3.160	3044713	855 . 0	1143.8	13723959	10.000
	3.100 3.678	1440399	423.3	418.8	96918	10.000
Meperidine Meprehamate		435295	2964.0	137.8		10.000
Meprobamate	3.727		975 . 9	770 . 8	2018450	10.000
Methadone Methamphetamine	4.564 3.055	3830489 6251113		//U.8 ∞	7872669 13723959	10.000
Methamphetamine Methocarbamol	3.679		∞ 2202.7	722 . 4	2018450	
		309024	2302.7			10.000
Methylphenidate	3.602	5471279	1599.5	820.9	8360213	10.000
Metoprolol	3.523	534151	440.2	29237.3	3880434	10.000
Midazolam	4.470	353251	3142.2	1298.7	1761136	10.000
Mirtazapine	3.738	1564769	1121.3	1188.1	1352383	10.000
Mitragynine	4.251	232225	416.4	1827.4	8420644	10.000
Morphine	2.183	117408	∞ 12410 F	∞ 1.403€.6	96918	10.000
Norbuprenorphine	3.913	29745	12418.5	14036.6	1352383	10.000
Nordiazepam	4.907	584433	925.6	17959.3	9034035	10.000
Norfentanyl	3.403	2880859	7242.0	421.0	12029641	10.000
Norhydrocodone	2.970	35775	126.5	80.2	2423532	10.000
norketamine	3.403	410146	182.4	29833.8	4620925	10.000
Normeperidine	3.710	1636861	589.1	340.6	96918	10.000
Noroxycodone	2.938	514419	264.2	231.9	2423532	10.000
Nortriptyline	4.647	1359708	507.1	391.6	2466229	10.000
O-desmethyl-tramadol	2.929	4641759	4072.2	96.7	4038763	10.000
O-Desmethylvenlafaxine	3.324	1265551	607.4	767.8	4038763	10.000
Olanzapine	3.471	435643	∞ 	6.1	2466229	10.000
Oxazepam	4.721	1064445	1138.9	181.9	4718687	10.000
Oxycodone	2.937	1161742	303.7	784.8	4620925	10.000
Oxymorphone	2.256	744466	419.3	263.2	96918	10.000
Paroxetine	4.561	88255	406.4	12866.6	2466229	10.000
Phenazepam	4.821	777241	2449.6	1685.4	9034035	10.000
Phencyclidine	4.017	2764736	1630.1	667.4	4038763	10.000
Phentermine	3.223	921 44 5	∞	∞	8360213	10.000
Phenytoin	4.248	102898	7589.9	20.0	39945	10.000



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
primidone	3.527	119268	34916.5	43.2	39945	10.000
Promethazine	4.506	4854136	3689.1	837.2	4442611	10.000
Pseudoephedrine	2.735	45462573	65750.4	22841.3	13723959	10.000
Quetiapine	4.436	2477882	3003.0	809.5	5907339	10.000
Risperidone	4.128	3002651	824.4	355.4	5907339	10.000
Sertraline	4.826	602323	988.6	2320.8	2466229	10.000
Sufentanil	4.344	156650	18660.6	426.8	8420644	10.000
Tapentadol	3.527	3205966	910.1	3118.8	4620925	10.000
Temazepam	4.858	2097661	637.2	18.9	9034035	10.000
Topiramate	3.914	19484	6927.0	5249.2	65184	10.000
Tramadol	3.508	4518209	1084.6	104.3	575728	10.000
Trazodone	4.206	1958414	1512.1	443.6	7872669	10.000
Ven l afaxine	3.921	4288356	361.2	1038.2	4038763	10.000
Zaleplon	4.504	915038	385182.5	2671.7	4718687	10.000
Zolpidem	3.810	3835493	2709.9	634.7	19057258	10.000
Zopiclone	3.913	273435	295.0	∞	1343730	10.000



Batch results D:\MassHunter\Data\2023\am 25-26\041723\QuantResults\mds.batch.bin

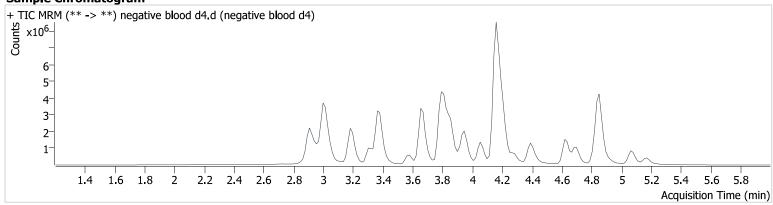
Calibration Last Update 4/18/2023 12:54:05 PM

Instrument69679TypeSampleAcq. Methodmds713.mSample PositionP2-D4Injection Volume2.5

Acq. Date-Time 4/17/2023 12:23:42 PM

Sample Info.

Data File Sample Operator Comment negative blood d4.d negative blood d4 Anne Nord





Batch results D:\MassHunter\Data\2023\am 25-26\041723\QuantResults\mds.batch.bin

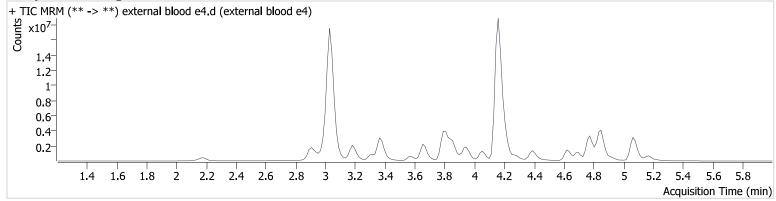
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Instrument69679TypeSampleAcq. Methodmds713.mSample PositionP2-E4Injection Volume2.5

Acq. Date-Time 4/17/2023 12:30:25 PM

Sample Info.

Data File Sample Operator Comment external blood e4.d external blood e4 Anne Nord



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.780	5267790	1197.7	1053.1	6016864	55.860
Diphenhydramine	4.170	26895069	2967.5	3608.6	23498188	72.997
Methamphetamine	3.040	24656657	∞	∞	9990897	54.182
Morphine	2.183	518170	∞	∞	57674	74.165



Batch results D:\MassHunter\Data\2023\am 25-26\041723\QuantResults\mds.batch.bin

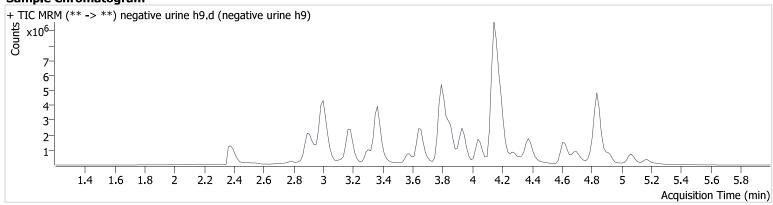
Calibration Last Update 4/18/2023 12:54:05 PM

Instrument69679TypeSampleAcq. Methodmds713.mSample PositionP2-H9Injection Volume2.5

Acq. Date-Time 4/17/2023 2:57:58 PM

Sample Info.

Data File Sample Operator Comment negative urine h9.d negative urine h9 Anne Nord





Batch results D:\MassHunter\Data\2023\am 25-26\041723\QuantResults\mds.batch.bin

Calibration Last Update 4/18/2023 12:54:05 PM

Instrument69679TypeSampleAcq. Methodmds713.mSample PositionP2-G9Injection Volume2.5

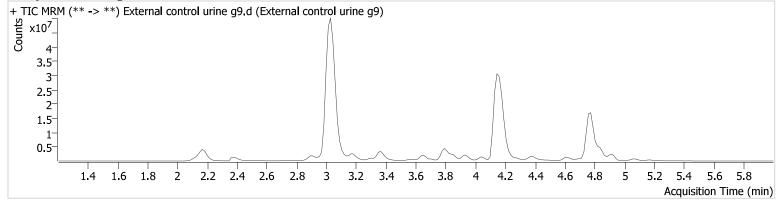
Acq. Date-Time 4/17/2023 2:51:16 PM

Sample Info.

Data File Sample Operator Comment

External control urine g9.d External control urine g9

Anne Nord



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.780	31007941	3457.2	2854.8	5248252	376.966
Diphenhydramine	4.170	71083739	896.2	5374.5	15585054	290.888
Methamphetamine	3.040	71596446	∞	∞	7768939	202.326
Morphine	2.168	5682532	∞	∞	76508	613.112



AM# 26: THC and Metabolites Screen in Blood by LC-MS/MS

Extraction Date: <u>4/17/23</u> Analyst: <u>Anne Nord</u>

Plate lot#: 230113 Plate retest date: 7/13/23

Mobile phase A: 10mM Ammonium Formate Mobile phase B: 0.1% Formic acid in MeOH

0.1% Formic Acid in Water MTBE Hexane

Blank Blood Lot: 22B52016-1 **Urine Blank:** 12522 **Column**: Agilent Phenyl Hexyl (4.6x50mm: 2.7 um)

LCMS-QQQ ID: 69679

Pre-Analytic:

- □ I. 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: add 1.5 ml urine to blank plate, add 250 ul 1N KOH mix and incubate at 40 degrees for 15 minutes.

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

- ☑ 3. Place on shaking incubator at ambient temp., 900 rpm for 15 minutes.
- ∑ 5. Place on shaking incubator at ambient temp., 900 rpm for 15 minutes.
- 🗵 6. Transfer 800 μL 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.
- \boxtimes 9. Add **2.25 mL MTBE** (add in 3 increments of 750 μ L).
- \boxtimes 10. Wait 5 minutes.
- ⊠ 11. Apply positive pressure for approx. 10-15 seconds. (12-15 PSI- Selector to the left).
- \boxtimes 12. Add **2.25 mL hexane** (add in 3 increments of 750 μ L).
- \boxtimes 13. Wait 5 minutes.
- △ 14. Apply positive pressure for approx. 10-15 seconds. (12-15 PSI- Selector to the left).
- 🗵 16. Reconstitute in 100 μL 100% LCMS MeOH and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

- □ Z. Calculated sample concentration of 3 ng/mL or greater for THC and THC-OH, a calculated sample concentration of 10 ng/mL or greater for Carboxy-THC.
- \boxtimes 3. Retention time within +/- 2% or +/-0.100 min whichever is greater of the average retention time of the calibrators.
- □ A. Did all QCs pass for each analyte? Yes
- ⊠ 5. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS:

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	1	2	3	4	5	6
а	cal 1	Internal control urine	761-2	negative urine		
b	cal 2	negative blood	761-3	695-1		
С	cal 3	689-1	761-4	751-1		
d	cal 4	705-1	771-1	822-1		
е	Cal 5	759-1	796-1	828-1 SLE and injection plate		
f	cal 6	760-1	813-1			
g	cal 7	760-2	803-2			
h	Internal control (blood)	761-1	828-1 mixing plate			

Plate position 3

c2023-0___-_



Batch results D:\MassHunter\Data\2023\am 25-26\041723\QuantResults\cann.batch.bin

Calibration Last Update 4/18/2023 8:31:54 AM

P3-H1

Instrument 69679 **Type** QC

am 26 cann scr 5-5-20.m

Sample Position Injection Volume Acq. Date-Time

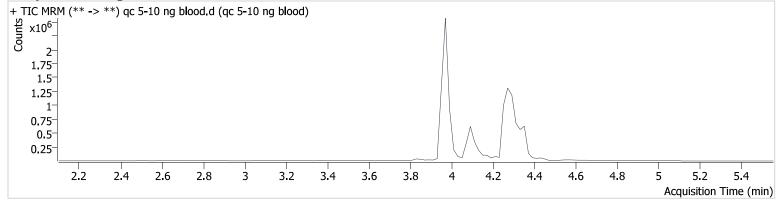
5 4/17/2023 4:10:42 PM

Sample Info.

Acq. Method

Data File Sample Operator Comment

qc 5-10 ng blood.d qc 5-10 ng blood Anne Nord



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4. 365	35411	942302	5.115 ng/ml
THC-COOH	4.093	184209	1357112	17.020 ng/ml
THC-OH	3 . 979	54782	5497465	4.488 ng/ml



Batch results D:\MassHunter\Data\2023\am 25-26\041723\QuantResults\cann.batch.bin

Calibration Last Update 4/18/2023 8:31:54 AM

Instrument 69679 **Type** Sample

Acq. Method am 26 cann scr 5-5-20.m **Sample Position** P3-B2

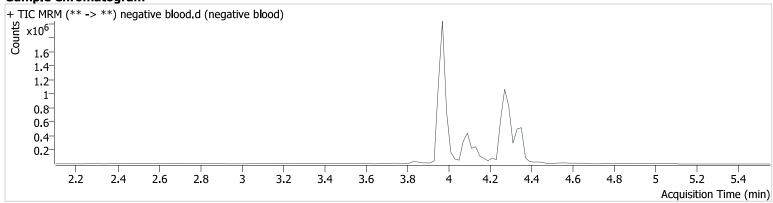
Injection Volume 5

Acq. Date-Time 4/17/2023 4:23:39 PM

Sample Info.

Data File Sample Operator Comment

negative blood.d negative blood Anne Nord





Batch results D:\MassHunter\Data\2023\am 25-26\041723\QuantResults\cann.batch.bin

Calibration Last Update 4/18/2023 8:31:54 AM

Instrument 69679 **Type** Sample

Acq. Method am 26 cann scr 5-5-20.m **Sample Position** P3-A2

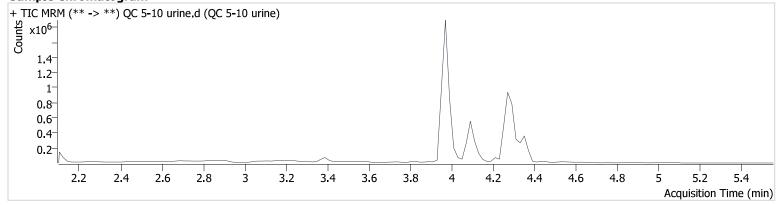
Sample Position P3-A **Injection Volume** 5

Acq. Date-Time 4/17/2023 4:17:11 PM

Sample Info.

Data File Sample Operator Comment

QC 5-10 urine.d QC 5-10 urine Anne Nord



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.345	16274	635487	3 . 547 ng/ml
THC-COOH	4.093	165873	1020368	20.496 ng/ml
THC-OH	3.979	42247	4235137	4.493 ng/ml



Batch resultsCalibration Last Update

D:\MassHunter\Data\2023\am 25-26\041723\QuantResults\cann.batch.bin
4/18/2023 8:31:54 AM

Instrument
Type
Acq. Method

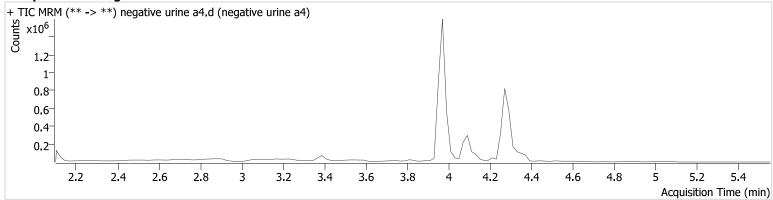
69679 Sample

am 26 cann scr 5-5-20.m

Sample Position Injection Volume Acq. Date-Time

Sample Info.

P3-A4 5 4/17/2023 5:54:15 PM Data File Sample Operator Comment negative urine a4.d negative urine a4 Anne Nord





Compound Calibration Report

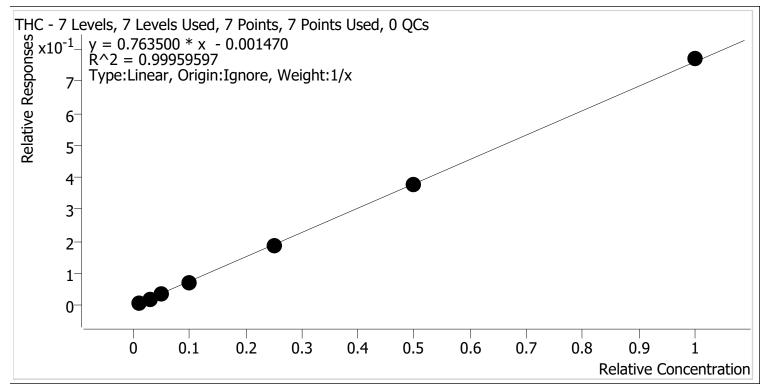


Batch results D:\MassHunter\Data\2023\am 25-26\041723\QuantResults\cann.batch.bin

Last Cal. Update 4/18/2023 8:31 AM

Analyst Name ISP\datastor

Analyte THC Internal Standard THC-d3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	V	1.0	1.1	112.4
cal 2	2	V	3.0	2.9	96.0
cal 3	3	~	5.0	4.8	96.8
cal 4	4	V	10.0	9.6	95.6
cal 5	5	V	25.0	24.6	98.5
cal-6	6	~	50.0	49.7	99.5
cal-7	7	V	100.0	101.2	101.2



Compound Calibration Report

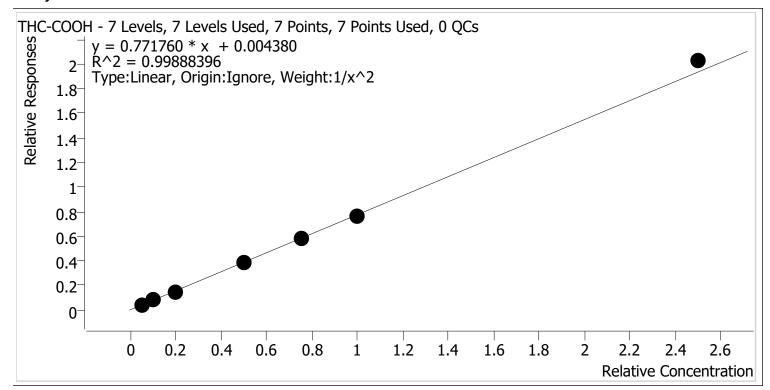


D:\MassHunter\Data\2023\am 25-26\041723\QuantResults\cann.batch.bin **Batch results**

Last Cal. Update 4/18/2023 8:31 AM

Analyst Name ISP\datastor

Analyte THC-COOH Internal Standard THC-COOH-d9



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	V	5.0	5.0	100.8
cal 2	2	V	10.0	10.0	100.2
cal 3	3	V	20.0	19.2	96.1
cal 4	4	V	50.0	50.5	101.1
cal 5	5	V	75.0	74.6	99.4
cal-6	6	V	100.0	97.6	97.6
cal-7	7	V	250.0	261.8	104.7



Compound Calibration Report

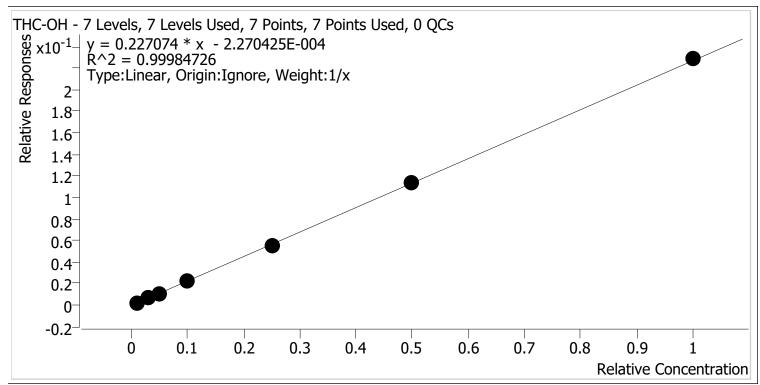


D:\MassHunter\Data\2023\am 25-26\041723\QuantResults\cann.batch.bin **Batch results**

Last Cal. Update 4/18/2023 8:31 AM

Analyst Name ISP\datastor

Analyte THC-OH **Internal Standard** THC-OH-d3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	~	1.0	1.1	107.1
cal 2	2	~	3.0	3.0	98.7
cal 3	3	~	5.0	4.9	97.4
cal 4	4	~	10.0	9.7	97.3
cal 5	5	~	25.0	24.7	98.8
cal-6	6	~	50.0	49.9	99.8
cal-7	7	~	100.0	100.7	100.7



Batch results D:\MassHunter\Data\2023\am 25-26\041723\QuantResults\cann.batch.bin

Calibration Last Update 4/18/2023 8:31:54 AM

Instrument 69679 **Type** Cal

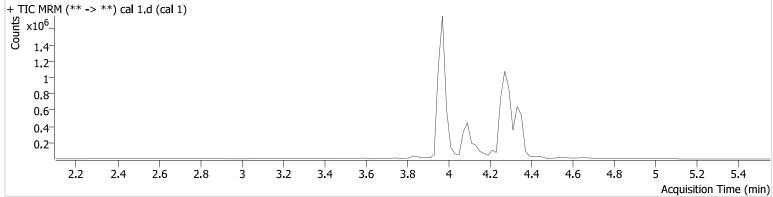
Acq. Method am 26 cann scr 5-5-20.m

Sample Position P3-A1 **Injection Volume** 5

Acq. Date-Time 4/17/2023 3:25:14 PM

Sample Info.

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



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.345	9050	1272825	1.124 ng/ml Low
THC-COOH	4.093	52452	1211884	5.041 ng/ml Low
THC-OH	3 . 979	9230	4185274	1.071 ng/ml Low



Batch results D:\MassHunter\Data\2023\am 25-26\041723\QuantResults\cann.batch.bin

Calibration Last Update 4/18/2023 8:31:54 AM

Instrument 69679 **Type** Cal

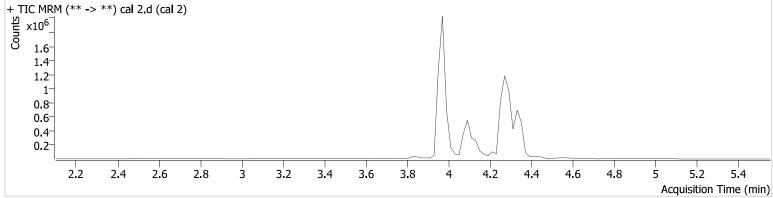
Acq. Method am 26 cann scr 5-5-20.m

Sample Position P3-B1 **Injection Volume** 5

4/17/2023 3:31:54 PM

Acq. Date-Time Sample Info.

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



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.345	25206	1228169	2.880 ng/ml Low
THC-COOH	4.093	118995	1455980	10.022 ng/ml
THC-OH	3 . 979	30094	4630297	2.962 ng/ml Low



Batch results D:\MassHunter\Data\2023\am 25-26\041723\QuantResults\cann.batch.bin

Calibration Last Update 4/18/2023 8:31:54 AM

Instrument 69679 **Type** Cal

Acq. Method am 26 cann scr 5-5-20.m **Sample Position** P3-C1

5

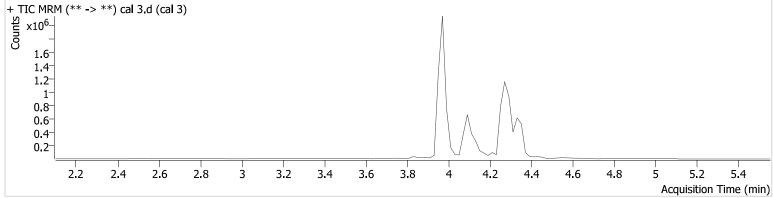
Sample Position Injection Volume Acq. Date-Time

e 4/17/2023 3:38:22 PM

Sample Info.

Data File Sample Operator Comment

cal 3.d cal 3 Anne Nord



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4 . 365	40533	1142095	4.841 ng/ml
THC-COOH	4.093	229239	1500654	19.226 ng/ml
THC-OH	3 . 979	50504	4660878	4.872 ng/ml



Batch results D:\MassHunter\Data\2023\am 25-26\041723\QuantResults\cann.batch.bin

Calibration Last Update 4/18/2023 8:31:54 AM

Instrument 69679 **Type** Cal

Acq. Method am 26 cann scr 5-5-20.m Sample Position P3-D1

5

Sample Position
Injection Volume

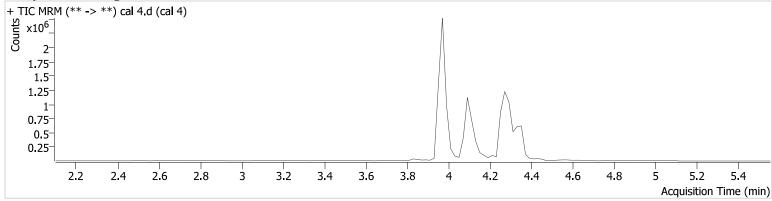
Acq. Date-Time 4/17/2023 3:44:50 PM

Sample Info.

Data File Sample Operator Comment

cal 4.d cal 4 Anne Nord

Sample Chromatogram



Final Conc. **RT** ISTD Resp. Name Resp. THC 4.365 79465 1111546 9.556 ng/ml THC-COOH 50.536 ng/ml 4.093 633199 1605484 THC-OH 3.979 109878 5024457 9.731 ng/ml



Batch results D:\MassHunter\Data\2023\am 25-26\041723\QuantResults\cann.batch.bin

Calibration Last Update 4/18/2023 8:31:54 AM

Instrument 69679 **Type** Cal

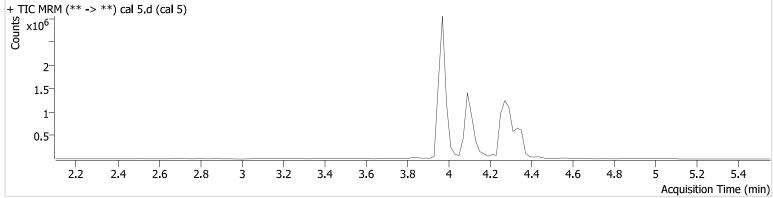
Acq. Method am 26 cann scr 5-5-20.m **Sample Position** P3-E1

Injection Volume 5

Acq. Date-Time 4/17/2023 3:51:18 PM

Sample Info.

Data File Sample Operator Comment cal 5.d cal 5 Anne Nord



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.365	180151	965375	24.634 ng/ml
THC-COOH	4.093	912237	1572946	74.579 ng/ml
THC-OH	3 . 979	276864	4954542	24.709 ng/ml



Batch results D:\MassHunter\Data\2023\am 25-26\041723\QuantResults\cann.batch.bin

Calibration Last Update 4/18/2023 8:31:54 AM

Instrument69679TypeCalAcq. Methodam 26

am 26 cann scr 5-5-20.m P3-F1

Sample Position Injection Volume Acq. Date-Time

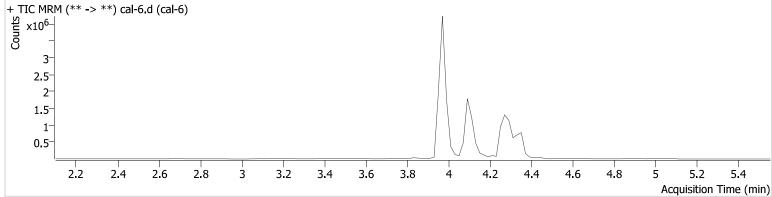
5 4/17/2023 3:57:46 PM

Sample Info.

Data File Sample Operator Comment

cal-6.d cal-6 Anne Nord

Sample Chromatogram



RT ISTD Resp. Final Conc. Name Resp. THC 4.365 997343 49.734 ng/ml 377241 THC-COOH 1250887 1650875 4.093 97.612 ng/ml THC-OH 3.979 578401 5114179 49.906 ng/ml



Batch results D:\MassHunter\Data\2023\am 25-26\041723\QuantResults\cann.batch.bin

Calibration Last Update 4/18/2023 8:31:54 AM

Instrument69679TypeCalAcq. Methodam 26

am 26 cann scr 5-5-20.m

Sample Position Injection Volume Acq. Date-Time P3-G1

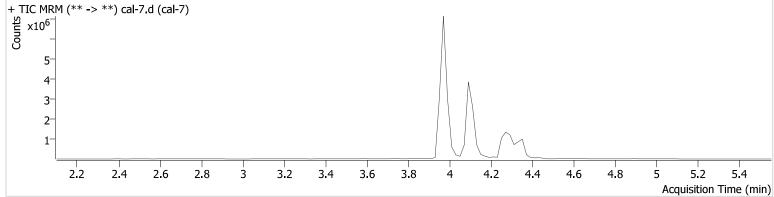
5 4/17/20

4/17/2023 4:04:14 PM

Sample Info.

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

Sample Chromatogram



Name **RT** ISTD Resp. Final Conc. Resp. THC 4.365 714974 926816 101.231 ng/ml THC-COOH 3088962 1525646 261.780 ng/ml 4.093 THC-OH 3.979 1288140 5636218 100.749 ng/ml