




REVIEWED

By Brittany Wylie at 8:39 pm, Dec 02, 2023

Worklist: 6585

<u>LAB_CASE</u>	<u>ITEM</u>	<u>ITEM_TYPE</u>	<u>DESCRIPTION</u>	
C2023-2309	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2023-2470	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2023-2473	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2023-2475	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2023-2488	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2023-2489	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2023-2498	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2023-2514	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2023-2538	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2023-2580	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2023-2582	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2023-2586	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2023-2605	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2023-2609	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2023-2628	1	BLOOD	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2023-2655	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: 11/28/23

Analyst: Anne Nord

Plate lot#: 230712

Plate retest date: 1/12/2024

Mobile phase A: 10mM Ammonium Formate
0.5M Ammonium Hydroxide

Mobile phase B: 0.1% Formic Acid in MeOH
Ethyl Acetate LC 20% Methanol

Blank Blood Lot: 23J52629 **Blank Urine lot:** 8423

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.
- 2. 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: P31168J**
- 3. Pipette **250 µL of 0.5 M ammonium hydroxide** in wells of analytical plate.
- 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
- 7. Wait 5 minutes.
- 8. Add **900 µL ethyl acetate**.
- 9. Wait 5 minutes.
- 10. Apply positive pressure for approx. 10-15 seconds. *(12-15 PSI- Selector to the left)*.
- 11. Add **900 µL ethyl acetate**.
- 12. Wait 5 minutes.
- 13. Apply positive pressure for approx. 10-15 seconds. *(12-15 PSI- Selector to the left)*.
- 14. Remove plate containing eluate. add 50 ul 1% HCl in MeOH Place on SPE Dry and evaporate to dryness at approx. 35°C.
SPE Dry ID: 66819
- 15. Reconstitute in **100 µL 20% LC MeOH** in LC Water 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 5 or greater or 2-5 for discretionary range.
- 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: *Mikel Buffaloe- hands of the analyst.*

	1	2	3	4	5	6	7	8	9	10	11	12
A				2488-1	2628-1					2580-2		
B	cal 1			2489-1	2655-1					2605-1	2470-1	
C	internal urine control			2498-1	negative blood						2473-1	
D				2514-1	negative urine							
E					2538-1							internal urine control
F				2582-1	2309-1 SLE and injection plate							internal urine control
G			2309-1 mixing plate	2586-1								cal 1
H			2475-1	2609-2								cal 1

C2023-____-

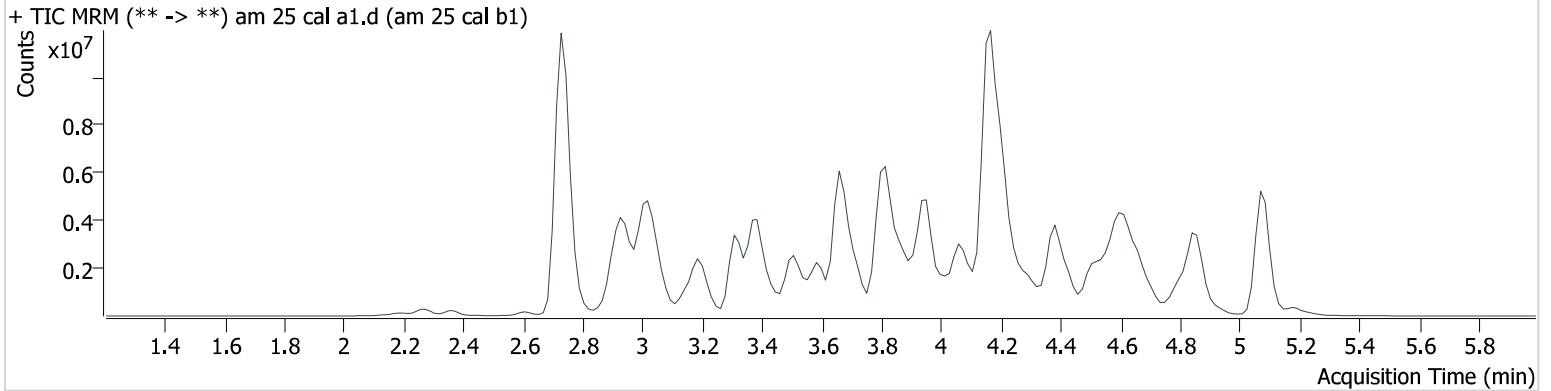
plate position 2

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2023\am 25-26\112823\QuantResults\mds.batch.bin
Calibration Last Update 11/29/2023 1:02:44 PM

Instrument 69679 **Data File** am 25 cal a1.d
Type Cal **Sample** am 25 cal b1
Acq. Method mds713.m **Operator** Anne Nord
Sample Position P2-B1 **Comment**
Injection Volume 2.5
Acq. Date-Time 11/28/2023 12:25:22 PM
Sample Info.

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
10-OH-Carbamazepine	3.882	406962	1795.0	44.1	474943	10.000
6-MAM	2.878	22991	20871.7	10592.3	888485	10.000
7-aminoclonazepam	3.602	142919	3345.5	1872.1	1108759	10.000
7-aminoflunitrazepam	3.833	451298	725.2	42611.0	1108759	10.000
9-Hydroxyrisperidone	3.948	2233655	2000609.3	44353.3	1108759	10.000
Acetyl Fentanyl	3.814	148446	28.0	19631.1	3469402	10.000
Acetyl Norfentanyl	2.902	101199	614.5	189.9	9243740	10.000
a-hydroxyalprazolam	4.705	50367	559186.6	13902.1	474943	10.000
alpha-hydroxymidazolam	4.658	526281	772.3	486.1	2673483	10.000
alpha-PHP	3.868	1389009	771.9	770.0	3416564	10.000
alpha-PVP	3.561	1611440	3662.5	5029.8	3416564	10.000
Alprazolam	4.784	740737	528.7	698.8	2673483	10.000
Amitriptyline	4.620	1012049	394.3	1385.9	3593533	10.000
Amphetamine	2.953	1062943	988.0	7914.1	3416564	10.000
Benzoylcegonine	3.478	20483	667.4	∞	76563	10.000
Bromazolam	4.871	251632	2053.6	6278.9	2673483	10.000
Brompheniramine	4.215	62432	12538.6	4036.9	4997079	10.000
Buprenorphine	4.132	2464	749.2	4603.1	1002149	10.000
Bupropion	3.837	1672888	1578.5	592.7	6986846	10.000
Carbamazepine	4.376	2808989	336.3	310.6	2433510	10.000
Carisoprodol	4.313	417932	291.4	118.5	2314681	10.000
Chlordiazepoxide	4.786	219756	2196.5	211.9	2673483	10.000
Chlorpheniramine	4.095	2845525	54119.0	28.6	4997079	10.000
Chlorpromazine	4.844	927391	3158.6	441508.2	3774723	10.000
Citalopram	4.260	1386720	205.0	894.0	30065096	10.000
Clomipramine	4.859	1062871	810.7	3758.4	1986851	10.000
Clonazepam	4.645	110161	576.2	17721.1	24144	10.000
Clonazolam	4.534	145467	35974.6	23158.8	474943	10.000
clozapine	4.382	1598445	944972.3	434741.8	7289208	10.000
Cocaethylene	3.876	1621586	534447.0	190783.6	10604391	10.000
Cocaine	3.662	2083143	2869.2	1565.9	10604391	10.000
Codeine	2.729	138086	1505.5	4034.0	2433510	10.000
Cyclobenzaprine	4.542	1668261	2558.7	67.8	3593533	10.000
Desipramine	4.589	2516622	18823.6	1871.5	3593533	10.000

AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Dextromethorphan	4.220	969043	173815.0	215978.7	4997079	10.000
Dextrorphan	3.450	1236995	768169.1	437.7	3416564	10.000
Diazepam	5.062	437767	295579.5	245003.4	2673483	10.000
Dihydrocodeine	2.697	428424	671.8	5098.4	2433510	10.000
Dimethyltryptamine	3.026	877571	∞	550.9	3416564	10.000
Diphenhydramine	4.175	5032482	1362.1	554.8	30065096	10.000
Doxepin	4.326	931866	251.4	35.8	7289208	10.000
Doxylamine	3.665	3383211	361.0	226.7	3416564	10.000
Duloxetine	4.540	54290	17821.3	166187.6	1986851	10.000
EDDP	4.218	126685	363.0	201.9	569225	10.000
Estazolam	4.710	1094183	681.2	726.8	2673483	10.000
Etizolam	4.765	54870	606.9	245438.1	2673483	10.000
Fentanyl	4.074	127244	99227.8	623.0	7916014	10.000
Flualprazolam	4.613	266055	43770.7	70862.1	2673483	10.000
Flunitrazepam	4.753	489079	220169.6	1335.5	474943	10.000
Fluorofentanyl	4.104	125943	73535.9	4668.2	7916014	10.000
Fluoxetine	4.523	1472754	561.3	111.0	1986851	10.000
Flurazepam	4.241	1285603	766.8	133137.3	1002149	10.000
Hydrocodone	2.973	397459	6672.5	232.6	2433510	10.000
Hydromorphone	2.367	420152	6315.1	571.7	86522	10.000
hydroxyzine	4.656	2221873	631166.1	826255.5	7289208	10.000
Imipramine	4.587	2877909	2244.7	674.3	3593533	10.000
Ketamine	3.406	1021603	3370.4	177.2	3680731	10.000
Lamotrigine	3.605	90522	172.5	262.8	3416564	10.000
Levamisole	2.918	708011	534105.5	212.2	10604391	10.000
Levetiracetam	2.616	175752	279.8	351.9	1108759	10.000
Lorazepam	4.598	13387	58.0	22.0	474943	10.000
Maprotiline	4.619	811479	276702.8	280.2	3593533	10.000
MDA	3.087	1173512	535.8	309.8	10167634	10.000
MDEA	3.317	1911574	626.7	7074.1	10167634	10.000
MDMA	3.148	1843435	1256338.2	490.4	10167634	10.000
Meperidine	3.667	918142	5288.3	113.7	86522	10.000
Meprobamate	3.731	151073	33976.4	251.1	2314681	10.000
Methadone	4.554	3042362	5503.6	120974.2	3469402	10.000
Methamphetamine	3.043	1297506	4990.6	∞	10167634	10.000
Methocarbamol	3.698	85474	1060.0	480.1	2314681	10.000
Methylphenidate	3.606	3377595	3169.6	757.7	5959079	10.000
Metoprolol	3.511	384017	7111.1	50154.2	3416564	10.000
Midazolam	4.475	247160	76545.9	81457.7	1108759	10.000
Mirtazapine	3.727	1021750	2382.4	1803.0	1002149	10.000
Mitragynine	4.256	185934	253.1	268000.4	7916014	10.000
Morphine	2.186	92466	59.2	1488.6	86522	10.000
Norbuprenorphine	3.918	34031	14954.2	8184.0	1002149	10.000
Nordiazepam	4.911	133532	128.0	337.6	2673483	10.000
Norfentanyl	3.391	1971052	769.8	355.0	9243740	10.000
Norhydrocodone	2.974	59376	337.4	394.4	2433510	10.000
norketamine	3.392	134783	117.4	405593.9	3680731	10.000
Normeperidine	3.699	1153827	990.0	1075.3	86522	10.000
Noroxycodone	2.942	378284	∞	378.0	2433510	10.000
Nortriptyline	4.637	914913	796326.6	227.9	1986851	10.000
O-desmethyl-tramadol	2.931	2590547	4006.8	495.7	3469402	10.000
O-Desmethylvenlafaxine	3.327	782253	271.1	10377.8	3469402	10.000
Olanzapine	3.200	638385	122856.2	90816.1	1986851	10.000
Oxazepam	4.726	69283	92.9	23.9	474943	10.000
Oxycodone	2.925	783027	421.4	58424.3	3680731	10.000
Oxymorphone	2.273	503561	568.3	236.4	86522	10.000
Paroxetine	4.551	220117	1011.7	44537.2	1986851	10.000
Phenazepam	4.841	196641	∞	34548.5	2673483	10.000
Phencyclidine	4.022	2281021	740.5	418.2	3469402	10.000
Phentermine	3.227	480352	∞	130.2	5959079	10.000



AM #25 Multi-Drug Screen Results

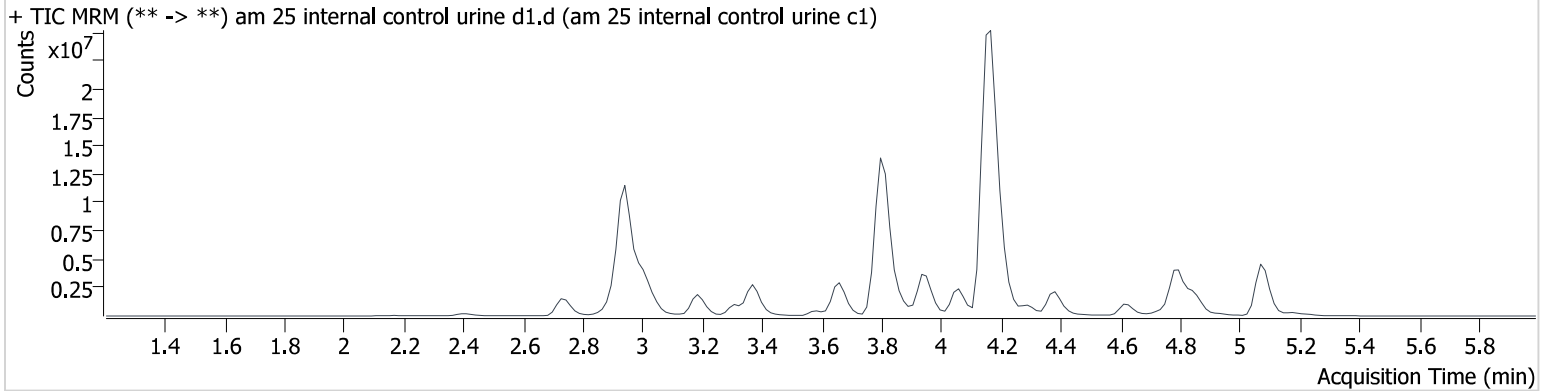
Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Phenytoin	4.268	61905	12809.8	17.2	24144	10.000
primidone	3.531	55873	17386.7	183.3	24144	10.000
Promethazine	4.495	2771132	1698.4	576.0	3593533	10.000
Pseudoephedrine	2.738	34279782	2128.6	12264.0	5959079	10.000
Quetiapine	4.425	2217465	3367.0	4938.8	4997079	10.000
Risperidone	4.117	2450856	1805.6	63630.3	4997079	10.000
Sertraline	4.816	404692	3868.4	849.5	1986851	10.000
Sufentanil	4.348	99711	13147.0	360.7	7916014	10.000
Tapentadol	3.531	1926891	3856.4	458.3	3680731	10.000
Temazepam	4.877	626971	401.4	52.3	2673483	10.000
Topiramate	3.936	5148	906.0	1275.8	29612	10.000
Tramadol	3.496	5599392	∞	144.0	888485	10.000
Trazodone	4.211	1576828	656238.8	287677.0	7208171	10.000
Venlafaxine	3.926	2757946	1098081.0	893.1	3469402	10.000
Xylazine	3.408	126807	79.2	1409.1	3469402	10.000
Zaleplon	4.509	474079	215569.1	184312.2	474943	10.000
Zolpidem	3.816	2397641	650315.6	706.3	11377795	10.000
Zopiclone	3.919	214776	1452.0	∞	1102207	10.000

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2023\am 25-26\112823\QuantResults\mds.batch.bin
Calibration Last Update 11/29/2023 1:02:44 PM

Instrument	69679	Data File	am 25 internal control urine d1.d
Type	Sample	Sample	am 25 internal control urine c1
Acq. Method	mds713.m	Operator	Anne Nord
Sample Position	P2-C1	Comment	
Injection Volume	2.5		
Acq. Date-Time	11/28/2023 12:32:14 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.784	6345987	751.2	1758.2	2755280	83.128
Amphetamine	2.953	10129002	1003.5	2077.1	3342011	97.418
Codeine	2.729	1684434	1711.9	1246353.	2505432	118.482
Diphenhydramine	4.175	44910647	1114.6	1375.6	27083593	99.066
Zolpidem	3.800	26335889	9426.1	9103.1	10870704	114.965

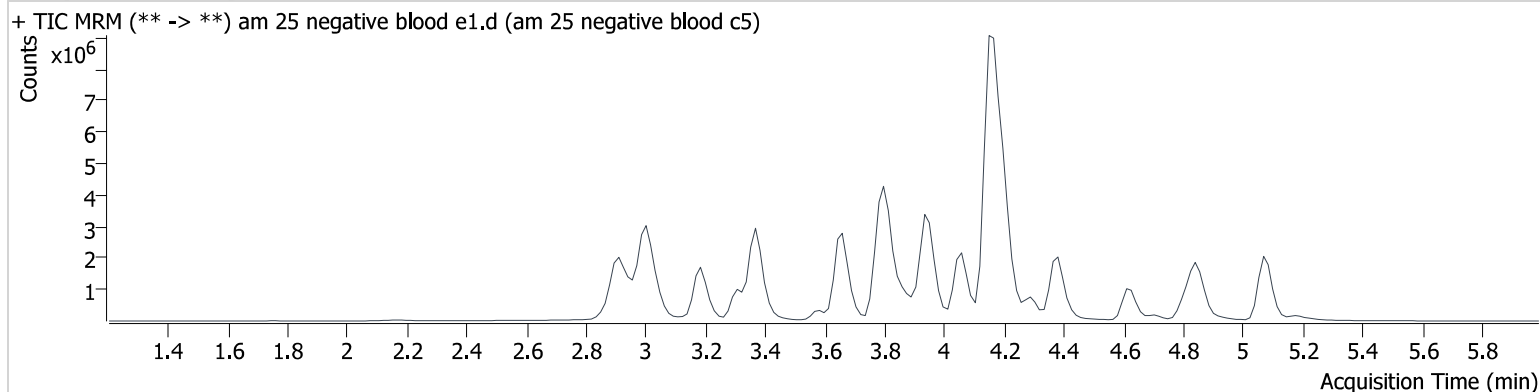
AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2023\am 25-26\112823\QuantResults\mds.batch.bin
Calibration Last Update 11/29/2023 1:02:44 PM

data file name was not updated in the worklist the sample name is correct.

Instrument	69679	Data File	am 25 negative blood e1.d
Type	Sample	Sample	am 25 negative blood c5
Acq. Method	mds713.m	Operator	Anne Nord
Sample Position	P2-C5	Comment	
Injection Volume	2.5		
Acq. Date-Time	11/28/2023 12:38:57 PM		
Sample Info.			

Sample Chromatogram

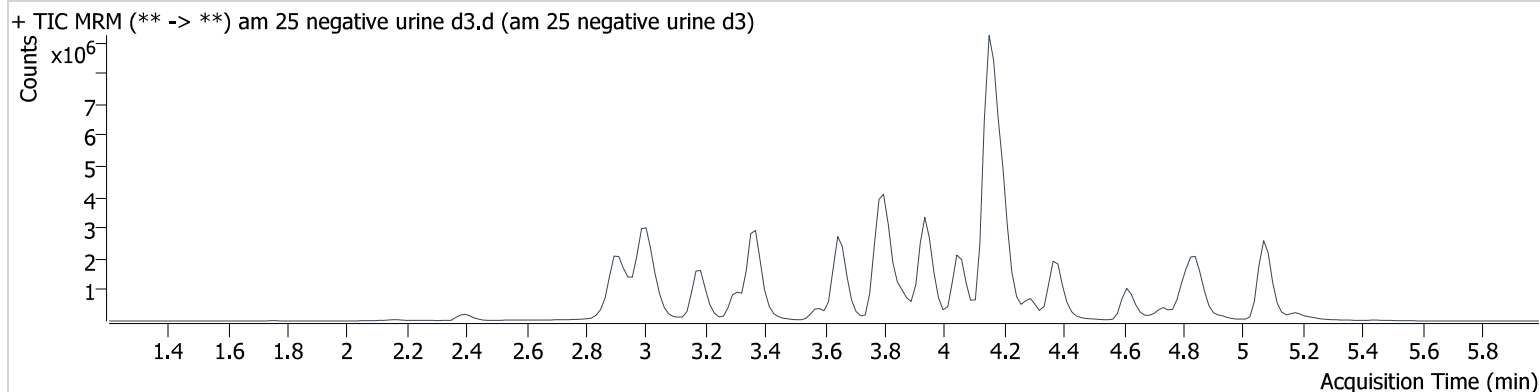


AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2023\am 25-26\112823\QuantResults\mds.batch.bin
Calibration Last Update 11/29/2023 1:02:44 PM

Instrument	69679	Data File	am 25 negative urine d3.d
Type	Sample	Sample	am 25 negative urine d3
Acq. Method	mds713.m	Operator	Anne Nord
Sample Position	P2-D5	Comment	
Injection Volume	2.5		
Acq. Date-Time	11/28/2023 2:06:10 PM		
Sample Info.			

Sample Chromatogram





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

Extraction Date: 11/28/23 Analyst: Anne Nord

Plate lot#: 230627 Plate retest date: 12/27/2023

Mobile phase A: 10mM Ammonium Formate
0.1% Formic Acid in Water

Mobile phase B: 0.1% Formic acid in MeOH
MTBE Hexane

Blank Blood Lot: 23J52629 **Urine Blank:** 8423

Column: Agilent Phenyl Hexyl (4.6x50mm: 2.7 um)

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.
- 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: I41142J** Pipette 1000 ul urine to analytical (standards) plate.
- 3. Place on shaking incubator at ambient temp., 900 rpm for 15 minutes.
- 4. Pipette **500 µL 0.1% formic acid in blood** wells **500 ul saturated phosphate buffer in urine** wells of analytical plate.
- 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
- 8. Wait 5 minutes.
- 9. Add **2.25 mL MTBE** (add in 3 increments of 750 µL).
- 10. Wait 5 minutes.
- 11. Apply positive pressure for approx. 10-15 seconds. **(12-15 PSI- Selector to the left)**.
- 12. Add **2.25 mL hexane** (add in 3 increments of 750 µL).
- 13. Wait 5 minutes.
- 14. Apply positive pressure for approx. 10-15 seconds. **(12-15 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: 66819
- 16. Reconstitute in **100 µL 100% LCMS MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

- 1. Create batch and process data.
- 2. 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.
- 3. Retention time within +/- 2% or +/-0.100 min whichever is greater of the average retention time of the calibrators.
- 4. Did all QCs pass for each analyte? Yes
- 5. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS: *Mikel Buffaloe hands of the analyst*

	1	2	3	4	5	6
a	cal 1	Internal control urine	2538-1	2473-1		
b	cal 2	negative blood	2582-1	2580-2		
c	cal 3	2309-1	2586-1	2605-1		
d	cal 4	2475-1	2609-2			
e	cal 5	2488-1	2628-1			
f	cal 6	2489-1	2655-1			
g	cal 7	2498-1	negative urine			
h	Internal control (blood)	2514-1	2470-1			

Plate position 3

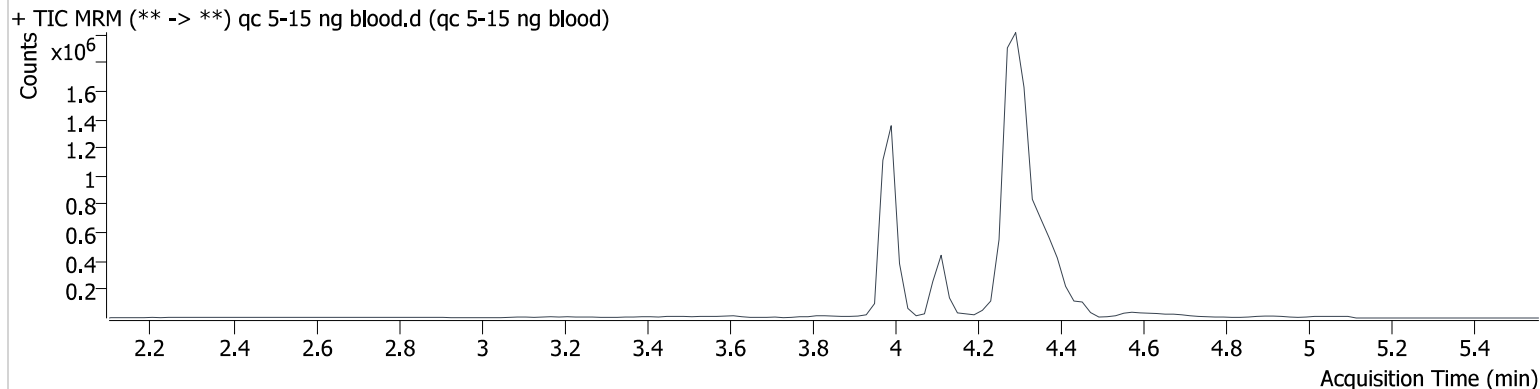
c2023-____-__

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\am 25-26\112823\QuantResults\cann.batch.bin
Calibration Last Update 11/29/2023 8:58:54 AM

Instrument	69679	Data File	qc 5-15 ng blood.d
Type	QC	Sample	qc 5-15 ng blood
Acq. Method	am 26 cann scr 5-5-20.m	Operator	Anne Nord
Sample Position	P3-H1	Comment	
Injection Volume	5		
Acq. Date-Time	11/28/2023 4:12:23 PM		
Sample Info.			

Sample Chromatogram



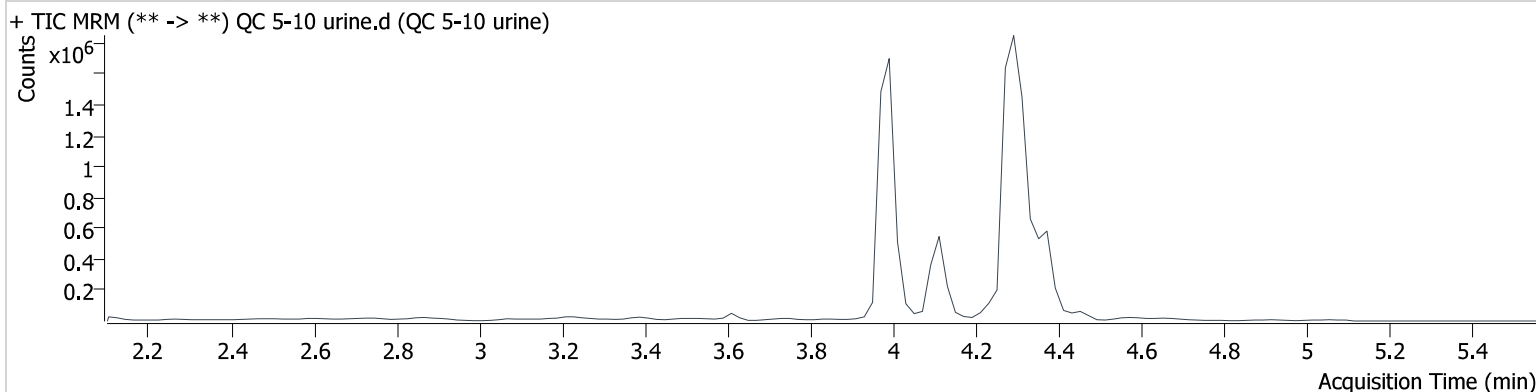
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.365	13823	431245	4.475 ng/ml
THC-COOH	4.113	109261	677104	18.154 ng/ml
THC-OH	3.999	24888	3280259	4.801 ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\am 25-26\112823\QuantResults\cann.batch.bin
Calibration Last Update 11/29/2023 8:58:54 AM

Instrument	69679	Data File	QC 5-10 urine.d
Type	Sample	Sample	QC 5-10 urine
Acq. Method	am 26 cann scr 5-5-20.m	Operator	Anne Nord
Sample Position	P3-A2	Comment	
Injection Volume	5		
Acq. Date-Time	11/28/2023 4:18:51 PM		
Sample Info.			

Sample Chromatogram



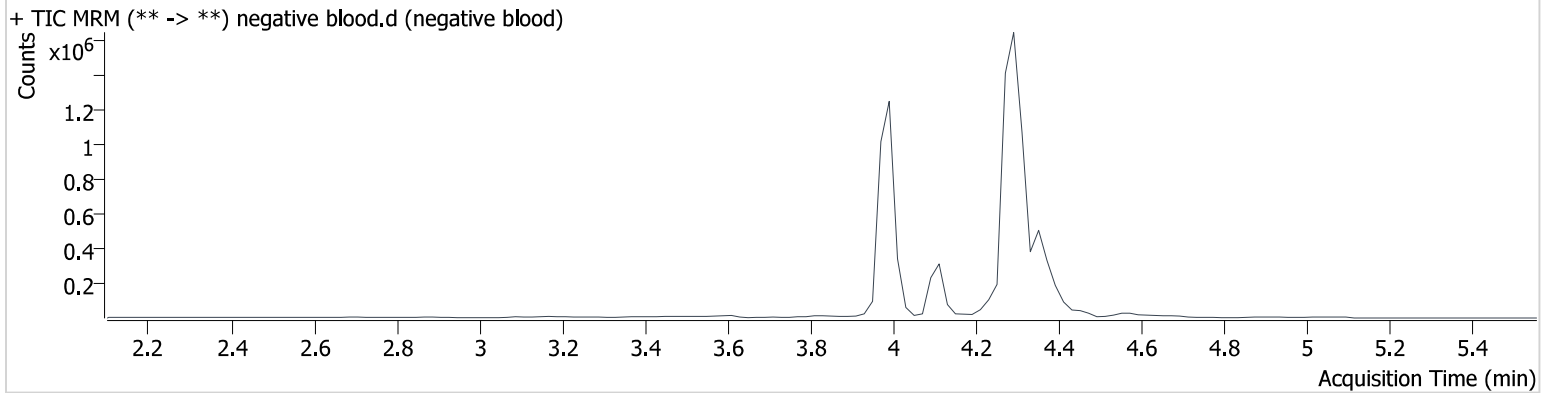
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.385	29281	818521	4.974 ng/ml
THC-COOH	4.113	174745	894850	22.570 ng/ml
THC-OH	3.999	31353	4339912	4.578 ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\am 25-26\112823\QuantResults\cann.batch.bin
Calibration Last Update 11/29/2023 8:58:54 AM

Instrument	69679	Data File	negative blood.d
Type	Sample	Sample	negative blood
Acq. Method	am 26 cann scr 5-5-20.m	Operator	Anne Nord
Sample Position	P3-B2	Comment	
Injection Volume	5		
Acq. Date-Time	11/28/2023 4:25:19 PM		
Sample Info.			

Sample Chromatogram



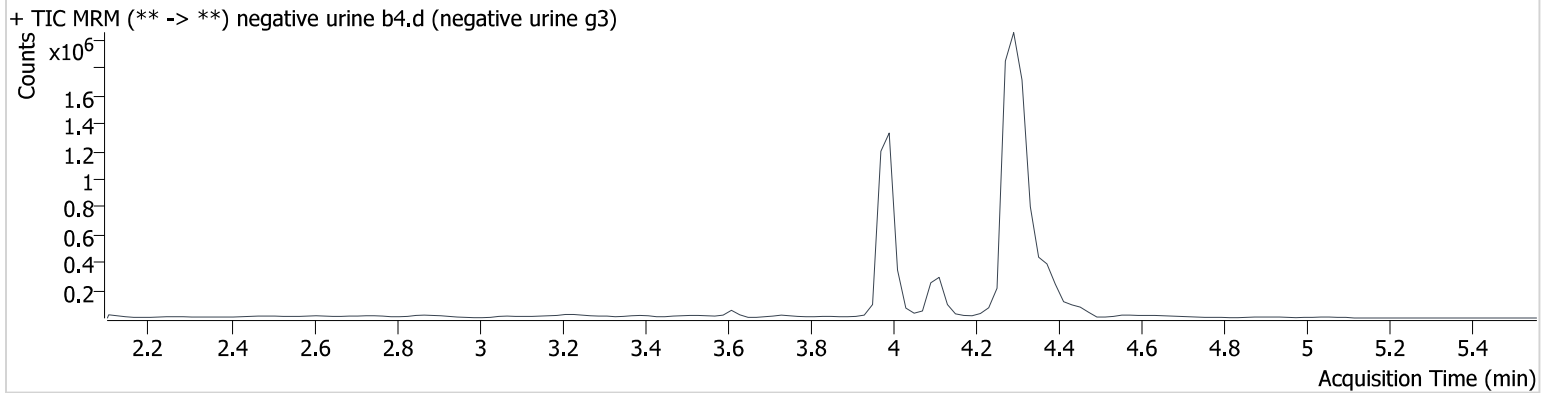


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\am 25-26\112823\QuantResults\cann.batch.bin
Calibration Last Update 11/29/2023 8:58:54 AM data file name was not updated in the worklist the sample name is correct.

Instrument	69679	Data File	negative urine b4.d
Type	Sample	Sample	negative urine g3
Acq. Method	am 26 cann scr 5-5-20.m	Operator	Anne Nord
Sample Position	P3-G3	Comment	
Injection Volume	5		
Acq. Date-Time	11/28/2023 5:49:27 PM		
Sample Info.			

Sample Chromatogram

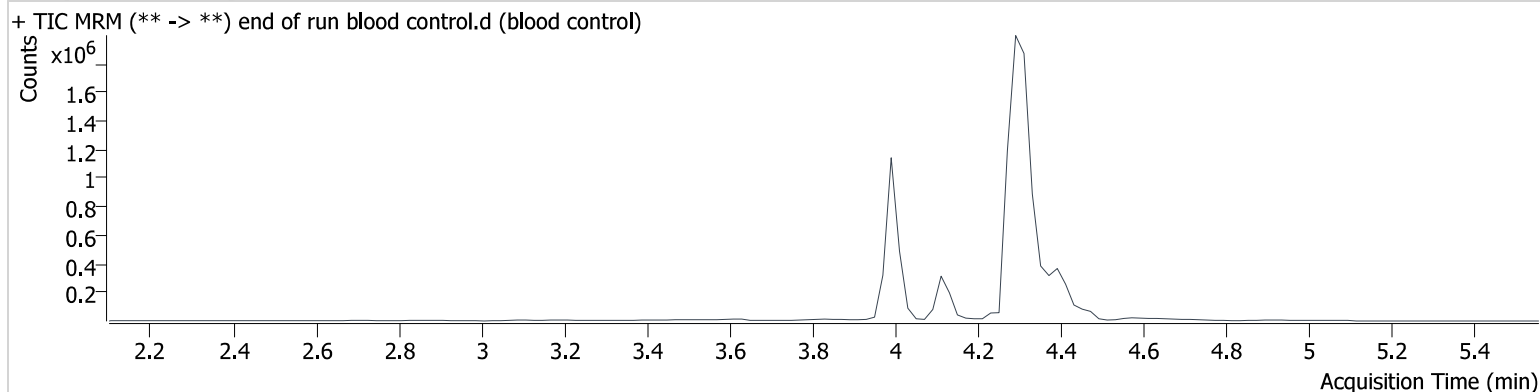


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\am 25-26\112823\QuantResults\cann.batch.bin
Calibration Last Update 11/29/2023 8:58:54 AM

Instrument	69679	Data File	end of run blood control.d
Type	Sample	Sample	blood control
Acq. Method	am 26 cann scr 5-5-20.m	Operator	Anne Nord
Sample Position	P3-H1	Comment	
Injection Volume	5		
Acq. Date-Time	11/29/2023 8:44:41 AM		
Sample Info.			

Sample Chromatogram

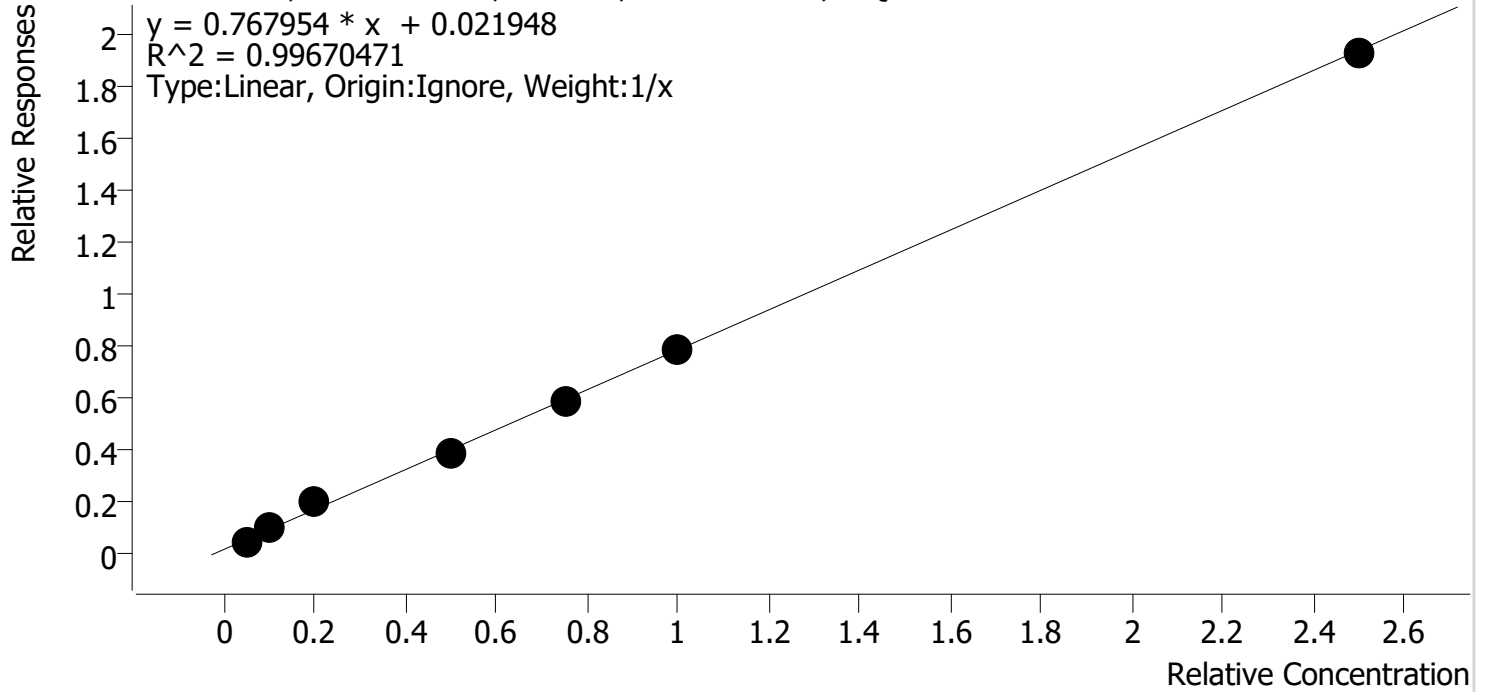


Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.385	9130	147915	8.461 ng/ml
THC-COOH	4.113	89247	486665	21.022 ng/ml
THC-OH	3.999	16530	2242778	4.668 ng/ml

Compound Calibration Report

Batch results D:\MassHunter\Data\2023\am 25-26\112823\QuantResults\cann.batch.bin
Last Cal. Update 11/29/2023 8:58 AM
Analyst Name ISP\datastor
Analyte THC-COOH **Internal Standard** THC-COOH-d9

THC-COOH - 7 Levels, 7 Levels Used, 7 Points, 7 Points Used, 0 QCs



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	5.0	3.8	75.7
cal 2	2	✓	10.0	11.0	110.4
cal 3	3	✓	20.0	23.8	119.1
cal 4	4	✓	50.0	47.5	94.9
cal 5	5	✓	75.0	74.9	99.9
cal-6	6	✓	100.0	100.6	100.6
cal-7	7	✓	250.0	248.3	99.3

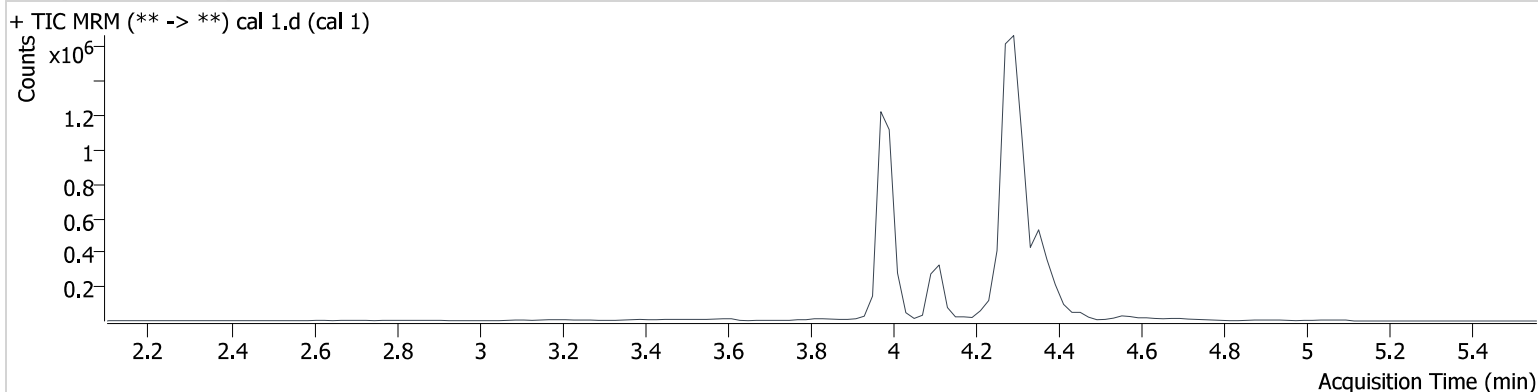


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\am 25-26\112823\QuantResults\cann.batch.bin
Calibration Last Update 11/29/2023 8:58:54 AM

Instrument	69679	Data File	cal 1.d
Type	Cal	Sample	cal 1
Acq. Method	am 26 cann scr 5-5-20.m	Operator	Anne Nord
Sample Position	P3-A1	Comment	
Injection Volume	5		
Acq. Date-Time	11/28/2023 3:26:56 PM		
Sample Info.			

Sample Chromatogram



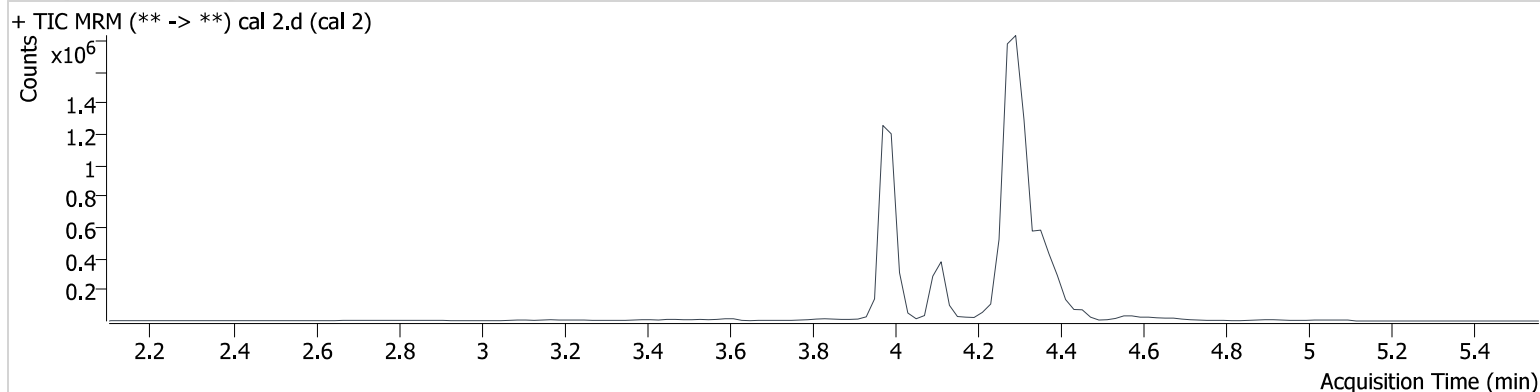
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.365	4113	605126	1.081 ng/ml Low
THC-COOH	4.113	36329	712083	3.785 ng/ml Low
THC-OH	3.999	4992	3206999	1.100 ng/ml Low

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\am 25-26\112823\QuantResults\cann.batch.bin
Calibration Last Update 11/29/2023 8:58:54 AM

Instrument	69679	Data File	cal 2.d
Type	Cal	Sample	cal 2
Acq. Method	am 26 cann scr 5-5-20.m	Operator	Anne Nord
Sample Position	P3-B1	Comment	
Injection Volume	5		
Acq. Date-Time	11/28/2023 3:33:34 PM		
Sample Info.			

Sample Chromatogram



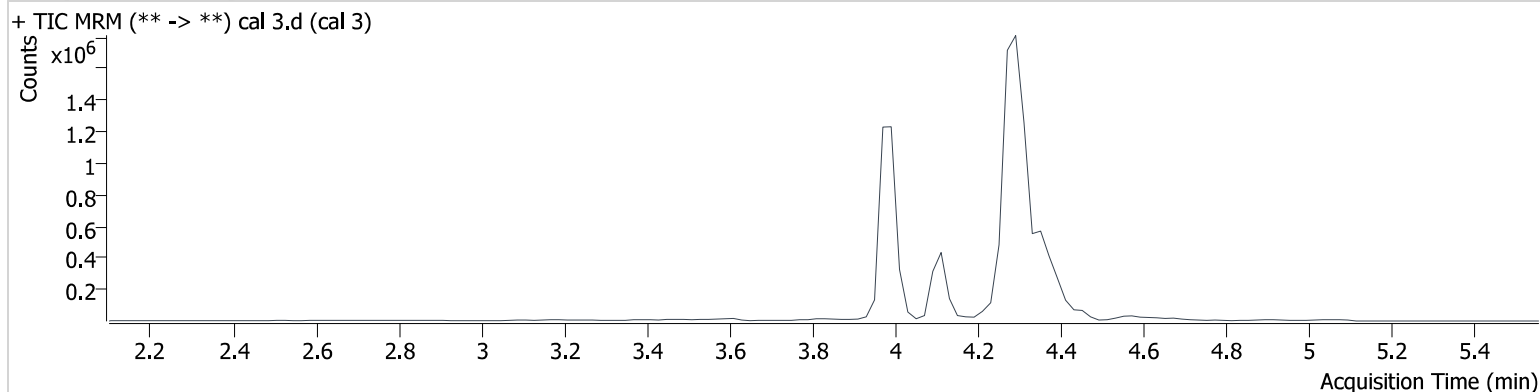
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.365	11041	526580	2.985 ng/ml Low
THC-COOH	4.113	72744	681751	11.036 ng/ml
THC-OH	3.999	14813	3288697	2.909 ng/ml Low

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\am 25-26\112823\QuantResults\cann.batch.bin
Calibration Last Update 11/29/2023 8:58:54 AM

Instrument	69679	Data File	cal 3.d
Type	Cal	Sample	cal 3
Acq. Method	am 26 cann scr 5-5-20.m	Operator	Anne Nord
Sample Position	P3-C1	Comment	
Injection Volume	5		
Acq. Date-Time	11/28/2023 3:40:02 PM		
Sample Info.			

Sample Chromatogram



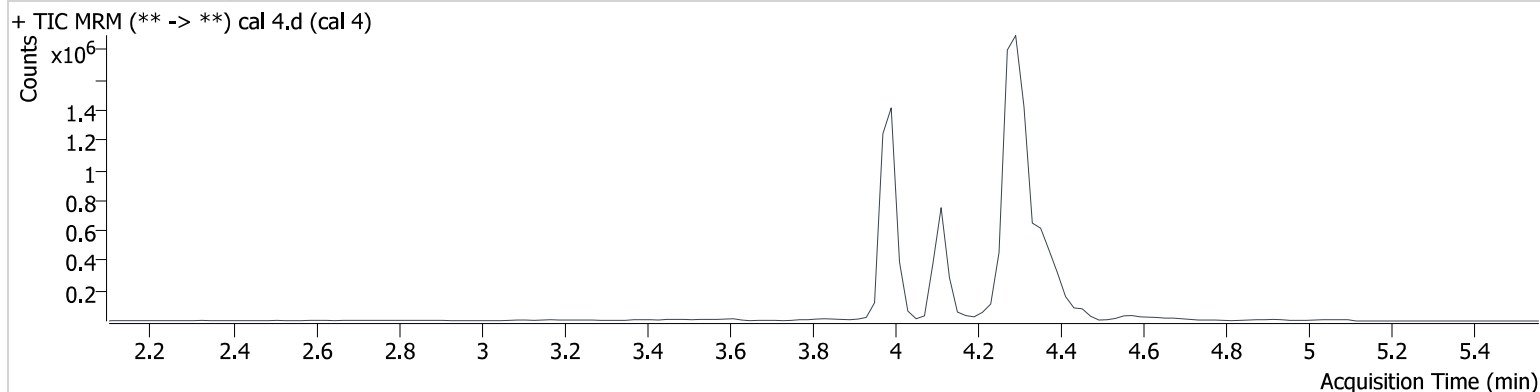
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.365	18621	523046	4.951 ng/ml
THC-COOH	4.113	144421	704681	23.829 ng/ml
THC-OH	3.999	24661	3212317	4.856 ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\am 25-26\112823\QuantResults\cann.batch.bin
Calibration Last Update 11/29/2023 8:58:54 AM

Instrument	69679	Data File	cal 4.d
Type	Cal	Sample	cal 4
Acq. Method	am 26 cann scr 5-5-20.m	Operator	Anne Nord
Sample Position	P3-D1	Comment	
Injection Volume	5		
Acq. Date-Time	11/28/2023 3:46:30 PM		
Sample Info.			

Sample Chromatogram



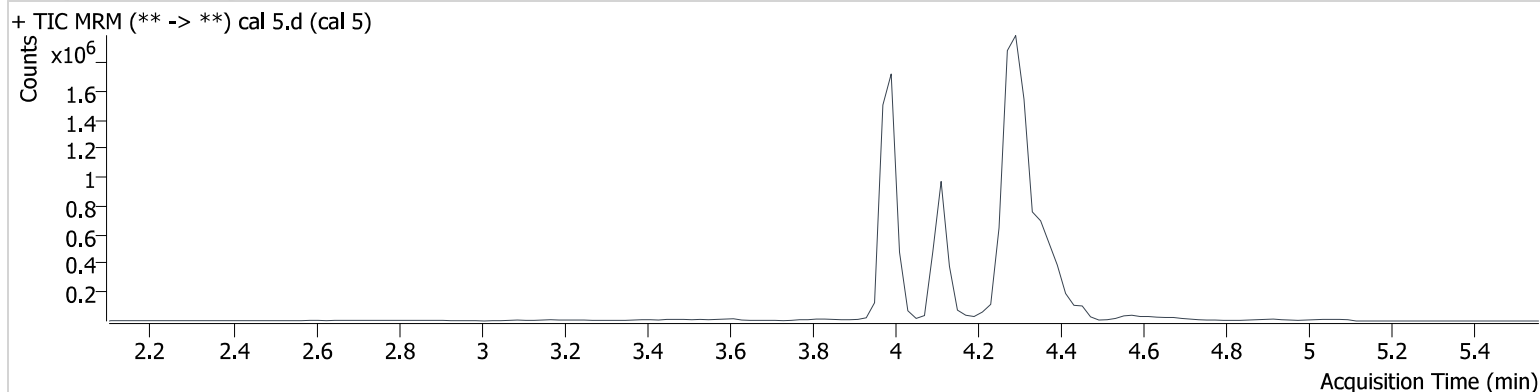
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.365	34481	495434	9.519 ng/ml
THC-COOH	4.133	269125	696293	47.472 ng/ml
THC-OH	3.999	50370	3275900	9.581 ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\am 25-26\112823\QuantResults\cann.batch.bin
Calibration Last Update 11/29/2023 8:58:54 AM

Instrument	69679	Data File	cal 5.d
Type	Cal	Sample	cal 5
Acq. Method	am 26 cann scr 5-5-20.m	Operator	Anne Nord
Sample Position	P3-E1	Comment	
Injection Volume	5		
Acq. Date-Time	11/28/2023 3:52:58 PM		
Sample Info.			

Sample Chromatogram



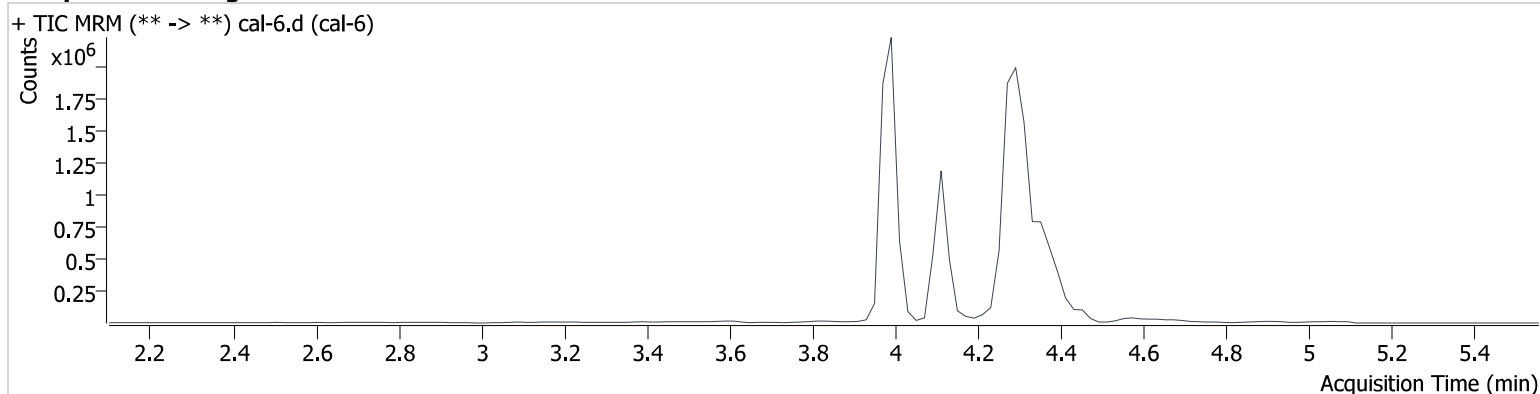
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.365	79559	444222	24.231 ng/ml
THC-COOH	4.093	416860	698015	74.908 ng/ml
THC-OH	3.999	133718	3324377	24.830 ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\am 25-26\112823\QuantResults\cann.batch.bin
Calibration Last Update 11/29/2023 8:58:54 AM

Instrument	69679	Data File	cal-6.d
Type	Cal	Sample	cal-6
Acq. Method	am 26 cann scr 5-5-20.m	Operator	Anne Nord
Sample Position	P3-F1	Comment	
Injection Volume	5		
Acq. Date-Time	11/28/2023 3:59:27 PM		
Sample Info.			

Sample Chromatogram



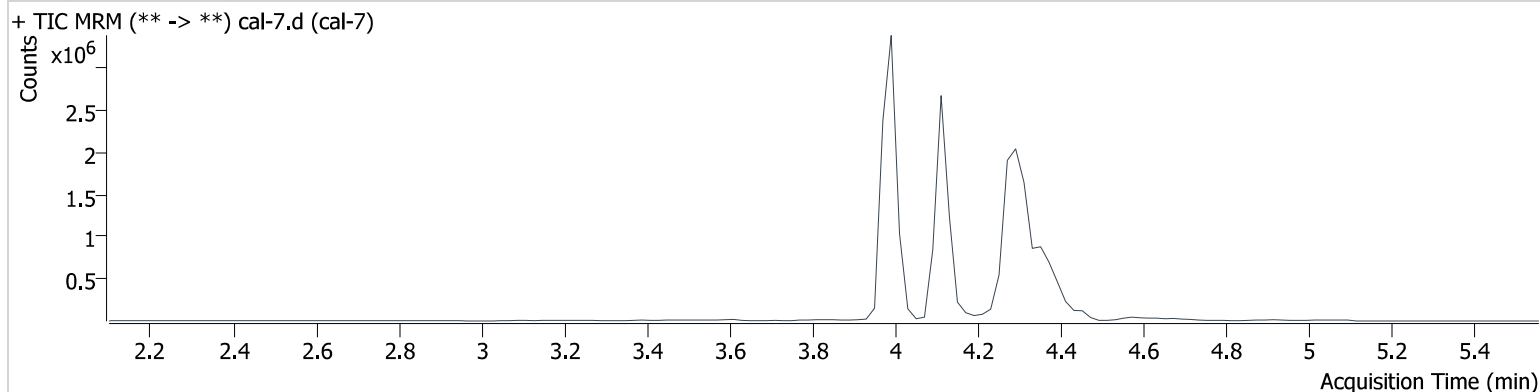
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.365	177294	478105	49.990 ng/ml
THC-COOH	4.133	537943	676917	100.624 ng/ml
THC-OH	3.999	271370	3334533	50.088 ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2023\am 25-26\112823\QuantResults\cann.batch.bin
Calibration Last Update 11/29/2023 8:58:54 AM

Instrument	69679	Data File	cal-7.d
Type	Cal	Sample	cal-7
Acq. Method	am 26 cann scr 5-5-20.m	Operator	Anne Nord
Sample Position	P3-G1	Comment	
Injection Volume	5		
Acq. Date-Time	11/28/2023 4:05:55 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.365	318809	423776	101.243 ng/ml
THC-COOH	4.133	1322789	685694	248.345 ng/ml
THC-OH	3.999	543823	3321072	100.637 ng/ml



Request for Departure from an Analytical Method or Quality Standard

Deviation Number (assigned by QM): ISP Dev QUAL-23-02

Date of Request: 8/8/23

Requestor/Discipline: Anne Nord / Quality manual

Analytical Method/Quality Standard, Revision #: Quality manual Revision 9
16.2.5c.2.6 Training in the use and understanding of analytical methods shall include the analysis of training samples. The trainee may, under the direct observation of a competent analyst, handle case samples, but the trainer will make all conclusions and must be present and observe all aspects of the work (the trainee works as the hands of the trainer). All evidence in the “hands of the trainer” process will be checked out by the trainer and the chain of custody shall be maintained in the name of the trainer/trained analyst. Probative samples may be independently handled by the trainee if the evidence can be analyzed without changing it (e.g. comparison of latent prints or bullets). Examination reports shall be based solely on examinations performed by or directly observed by approved analysts. The report will be issued by the trainer/trained analyst. **The analytical notes will clearly indicate the samples handled by the trainee.** In the case of controlled substances, if an additional training sample is taken it will be stored in a secure locked location (either a drug locker or the controlled substance cabinet)

Temporary or Permanent Deviation: Permanent until the next version of the quality manual is released and analytical notes can be defined.

Scope of Deviation (record specific information, e.g. affected programs, evidence types, expected end date; etc): Documentation for hands of the trainer, in case records.

Deviation Request (Describe detailed instructions of the changes being made; include reference to specific section number(s) in the method manual):

The quality manual currently requires that documentation that the trainee handled samples will be in the “analytical notes” the manual does not further define what is meant by analytical notes. I am requesting to document this in the case notes that are attached in ILIMS or if there is batch data associated with the analysis it may be documented in the central batch data.

Technical Justification for Analytical Method Deviations: The batch data and the notes packet are both part of the case record. They both provide a path to clear documentation of what the trainee handled or did.



Technical Review

Departure approved
Comments:

Departure Not Approved
Comments:

Approver:
Title:

Date:

Quality Review

Quality Approver: Corinna Owsley
Title: Acting Quality Manager
Date: 8-8-23