REVIEWED

By Amber Gerheart at 10:22 am, Oct 21, 2022

10/19/2022

Worklist: 6132

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION	
C2022-1961	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2022-2126		BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2022-2212		BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2022-2217		BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2022-2217	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2022-2220		BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2022-2239		BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2022-2244	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2022-2246		BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2022-2295		BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2022-2312		BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2022-2343		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: 10/18/22 Analyst: Anne Nord
Plate lot#: 220315 Plate retest date: 09/15/22

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: 22B52016-1 **Blank Urine lot:** blood only run **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: 390993**
☒ 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: *Ran external control blood for re-test.*
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Idaho State Police
Forensic Services

Request for Departure from an Analytical Method or Quality Standard

Deviation Number (assigned by QM): TOX-22-01

Date of Request: **2/3/2022**

Requestor/Discipline: Celena Shrum/Toxicology

Analytical Method/Quality Standard, Revision #: AM #25, AM #28, AM #29, Revision 13

Temporary or Permanent Deviation: Permanent

Scope of Deviation (record specific information, e.g. affected programs, evidence types, expected end date; etc): Deviation will remain in place until the change is made in the next method revision.

Deviation Request (Describe detailed instructions of the changes being made; include reference to specific section number(s) in the method manual): 4.1.4 (Place plate on shaking incubator at approximately 900 rpm for approximately 15 minutes) of AM #25, AM # 28, and AM #29 is being removed. The removal of this step was tested in the validation "Addition of Compounds/Modifications for the MDS" (approved on 2/2/2022) and it was determined that that step is not necessary and can be removed.

Technical Justification for Analytical Method Deviations: Refer to validation "Addition of Compounds/Modifications for the MDS" (approved on 2/2/2022)

Technical Review

☒ Departure approved
Comments:

☐ Departure Not Approved
Comments:

Approver: Rachel Cutler Date: 2/10/2022
Title: Laboratory Manager

Quality Review

Quality Approver: Jason Crowe
Title: Quality Manager
Date: 2/10/2022

Toxicology AM method 25/28 urine 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

	1	2	3	4	5	6	7	8	9	10	11	12
A					2220-1							
B	cal 1			negative blood	2239-1							
C				blood positive control	2244-2							
D				1961-2	2246-1							
E				2126-1	2295-1							
F				2212-1 mixing plate	2312-1							
G				2217-1	2343-1							
H				2217-2	2212-1 sle and injection plate							

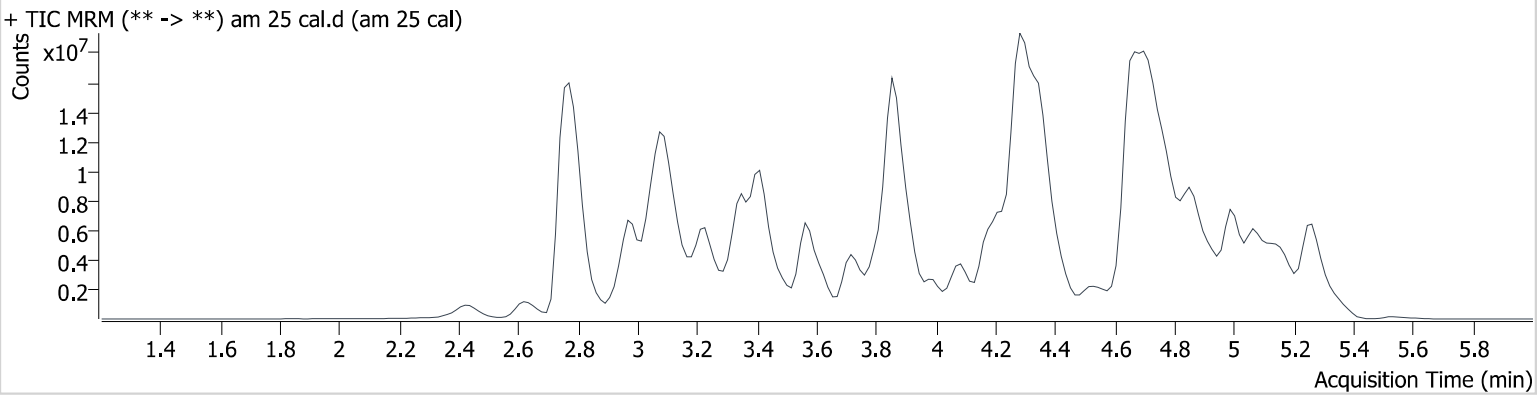
C2022-____-_ plate position 2

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2022\am 25-26\101822\QuantResults\mds.batch.bin
Calibration Last Update 10/19/2022 2:36:27 PM

Instrument	69679	**Data File**	am 25 cal.d
Type	Cal	**Sample**	am 25 cal
Acq. Method	mds713.m	**Operator**	Anne Nord
Sample Position	P2-B1	**Comment**	
Injection Volume	2.5		
Acq. Date-Time	10/18/2022 3:38:36 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
10-OH-Carbamazepine	3.878	2683506	2479.0	325.2	5928552	10.000
6-MAM	3.179	62660	244.2	379.3	1570464	10.000
7-aminoclonazepam	3.643	625319	268.4	240.8	2239538	10.000
7-aminoflunitrazepam	3.858	578547	1117.5	565.9	2239538	10.000
9-Hydroxyrisperidone	4.388	5970165	340.6	100.6	2239538	10.000
Acetyl Fentanyl	4.485	552856	137.9	38804.4	20210656	10.000
Acetyl Norfentanyl	2.930	298431	1190.3	138.2	20210656	10.000
a-hydroxyalprazolam	4.715	205464	∞	∞	2239538	10.000
alpha-hydroxymidazolam	4.775	2175056	295.3	501.6	2239538	10.000
alpha-PHP	4.186	3382098	1213.8	330.4	9476035	10.000
alpha-PVP	3.865	5021238	827.4	261.0	9476035	10.000
Alprazolam	4.794	2074980	602.2	443.9	5928552	10.000
Amitriptyline	4.844	1847294	1072.0	66.2	8381616	10.000
Amphetamine	2.995	3722979	2841.9	5001.6	9476035	10.000
Benzoylecgonine	3.474	212985	1564.5	46.0	369218	10.000
Brompheniramine	4.347	132867	379.8	20.8	61879504	10.000
Buprenorphine	5.545	22888	7628.1	96.3	603002	10.000
Bupropion	4.233	4534741	940.7	1142.2	17630946	10.000
Carbamazepine	4.371	7773913	1335.5	∞	86898	10.000
Carisoprodol	4.308	1359817	273459.9	178.2	4468336	10.000
Chlordiazepoxide	4.980	555948	191365.7	∞	11214733	10.000
Chlorpheniramine	4.229	7598514	∞	∞	7475463	10.000
Chlorpromazine	5.189	1929571	568174.3	878.6	7777721	10.000
Citalopram	4.361	3418641	535.3	273.8	7475463	10.000
Clomimpramine	5.144	2496405	3197.2	725.7	7475463	10.000
Clonazepam	4.640	718928	2082.4	152.7	11214733	10.000
Clonazolam	4.529	1258834	713.3	94819.0	11214733	10.000
clozapine	5.005	6747908	10843.7	948128.4	21615777	10.000
Cocaethylene	4.070	5261615	220.2	305606.1	29491656	10.000
Cocaine	3.872	6214345	857.5	4646.1	29491656	10.000
Codeine	3.136	468066	296.2	87.7	8022728	10.000
Cyclobenzaprine	4.737	3928944	2518.9	66.3	8381616	10.000
Desipramine	4.662	5731700	1274213.2	3253.6	8381616	10.000
Dextromethorphan	4.322	2674097	490.4	2274.9	13152260	10.000

AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Dextrorphan	3.508	2895955	236.4	290.9	13152260	10.000
Diazepam	5.057	1009836	764.3	1479.1	11214733	10.000
Dihydrocodeine	2.877	1332517	642.8	794.7	61879504	10.000
Diphenhydramine	4.293	10997521	∞	∞	61879504	10.000
Doxepin	4.536	2778111	551.6	153.4	21776208	10.000
Doxylamine	3.813	11509912	∞	∞	3723151	10.000
Duloxetine	4.596	59346	12738.3	1377.9	3181838	10.000
EDDP	4.259	365665	1164.9	33038.1	803722	10.000
Estazolam	4.704	4105236	1137.0	1472.2	11214733	10.000
Etizolam	4.774	213166	87401.3	1805.9	11214733	10.000
Fentanyl	4.729	402299	93.7	1191.8	20210656	10.000
Flualprazolam	4.608	930831	255844.3	486.7	11214733	10.000
Flunitrazepam	4.763	1394693	729.0	981.1	11214733	10.000
Fluoxetine	4.564	2649793	381.3	47692.0	3181838	10.000
Flurazepam	4.757	4207277	718960.2	178831.0	11214733	10.000
Hydrocodone	3.381	1497821	415.8	96.2	8022728	10.000
Hydromorphone	2.637	1176814	323.3	217.3	8022728	10.000
hydroxyzine	5.124	5158332	1303.8	1336.0	13152260	10.000
Imipramine	4.782	6954786	4079.8	∞	8381616	10.000
Ketamine	4.233	3452432	270.8	97.1	13152260	10.000
Lamotrigine	3.754	298866	207.4	407.4	7475463	10.000
Levamisole	3.313	3157688	6182.4	478.7	13152260	10.000
Levetiracetam	2.613	1247744	229.3	1668.4	7475463	10.000
Lorazepam	4.609	248690	7049.6	∞	11214733	10.000
Maprotiline	4.675	563406	96.9	39.6	8381616	10.000
MDA	3.115	2763110	1227.8	97.2	27105872	10.000
MDEA	3.359	5030145	7600.9	1209.7	27105872	10.000
MDMA	3.206	5422469	867.6	357.4	27105872	10.000
Meperidine	3.878	2921063	702.2	132.7	13152260	10.000
Meprobamate	3.727	614475	535.6	182.5	4468336	10.000
Methadone	4.641	7926645	854.4	382.0	803722	10.000
Methamphetamine	3.101	8306176	∞	4399.5	27105872	10.000
Methocarbamol	3.694	430994	729.3	308.0	61879504	10.000
Methylphenidate	3.725	11963755	12211.4	637.6	13152260	10.000
Metoprolol	3.554	848903	1912.3	2407.7	13152260	10.000
Midazolam	4.944	886108	210488.8	256590.7	11214733	10.000
Mirtazapine	4.738	3624857	1054.2	2354.5	13152260	10.000
Mitragynine	4.787	550016	87654.8	185039.3	13152260	10.000
Morphine	2.456	325780	184.0	1871.9	257888	10.000
Norbuprenorphine	4.004	52937	18843.1	9898.2	603002	10.000
Nordiazepam	4.906	645274	1389.5	2367.0	11214733	10.000
Norfentanyl	3.434	5494782	7426.4	348.9	25558294	10.000
Norhydrocodone	3.031	128208	67.4	197579.8	8022728	10.000
norketamine	4.218	619893	264.3	19096.2	13152260	10.000
Normeperidine	3.741	2725797	208.0	341.8	7475463	10.000
Noroxycodone	2.968	1595724	∞	681.9	11131943	10.000
Nortriptyline	4.708	1834701	253866.1	3649.2	8381616	10.000
O-desmethyl-tramadol	2.974	8423460	5175.8	76.9	7475463	10.000
o-Desmethylvenlafaxine	3.355	2173685	873.9	∞	7475463	10.000
Olanzapine	4.317	1517453	3379.2	400.9	86898	10.000
Oxazepam	4.720	1062890	∞	∞	5928552	10.000
Oxycodone	3.134	2874390	464.6	23.9	11131943	10.000
Oxymorphone	2.422	1623984	317.4	636.9	257888	10.000
Paroxetine	4.622	372569	330.4	41688.2	3181838	10.000
Pending dimethyltriptamine	3.084	2499181	∞	∞	27105872	10.000
Pending fluorofentanyl	4.789	413369	3892.3	795.7	20210656	10.000
Phenazepam	4.835	1134402	397006.5	231090.2	11214733	10.000
Phencyclidine	4.093	5650332	1313.6	462.2	13152260	10.000
Phentermine	3.254	1721272	∞	357.2	18276135	10.000

AM #25 Multi-Drug Screen Results

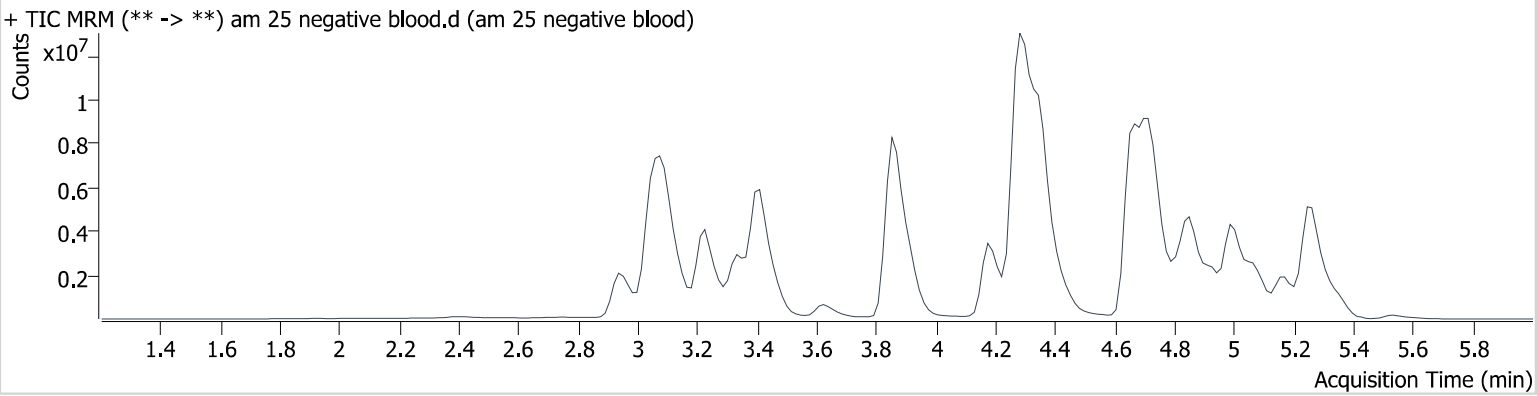
Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Phenytoin	4.247	145481	4245.7	123.5	86898	10.000
primidone	3.542	639867	693.8	144.0	8381616	10.000
Promethazine	4.889	8785522	2398.1	930.6	7475463	10.000
Pseudoephedrine	2.780	69524784	21894.6	7633.4	27105872	10.000
Quetiapine	5.079	6814685	2921.5	1412195.7	44851628	10.000
Risperidone	4.649	6724751	667.5	1082.5	847181	10.000
Sertraline	4.948	683938	∞	∞	3181838	10.000
Sufentanil	5.184	404410	88236.0	725.5	25558294	10.000
Tapentadol	3.588	5764405	5927.6	2384.6	8022728	10.000
Temazepam	4.872	2701998	1579.3	122.2	11214733	10.000
Topiramate	3.944	39106	6571.5	1602.2	157773	10.000
Tramadol	3.569	9240361	3393.0	135.6	7475463	10.000
Trazodone	5.278	4608509	1261.9	4644.2	21776208	10.000
Venlafaxine	3.998	7773007	1006.6	660.9	3181838	10.000
Zaleplon	4.504	1687772	8378.6	1206.9	44851628	10.000
Zolpidem	4.672	10069090	3234.8	1987.7	44851628	10.000
Zopiclone	4.742	795585	2633.3	∞	3723151	10.000

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2022\am 25-26\101822\QuantResults\mds.batch.bin
Calibration Last Update 10/19/2022 2:36:27 PM

Instrument	69679	**Data File**	am 25 negative blood.d
Type	Sample	**Sample**	am 25 negative blood
Acq. Method	mds713.m	**Operator**	Anne Nord
Sample Position	P2-B4	**Comment**	
Injection Volume	2.5		
Acq. Date-Time	10/18/2022 3:45:29 PM		
Sample Info.			

Sample Chromatogram

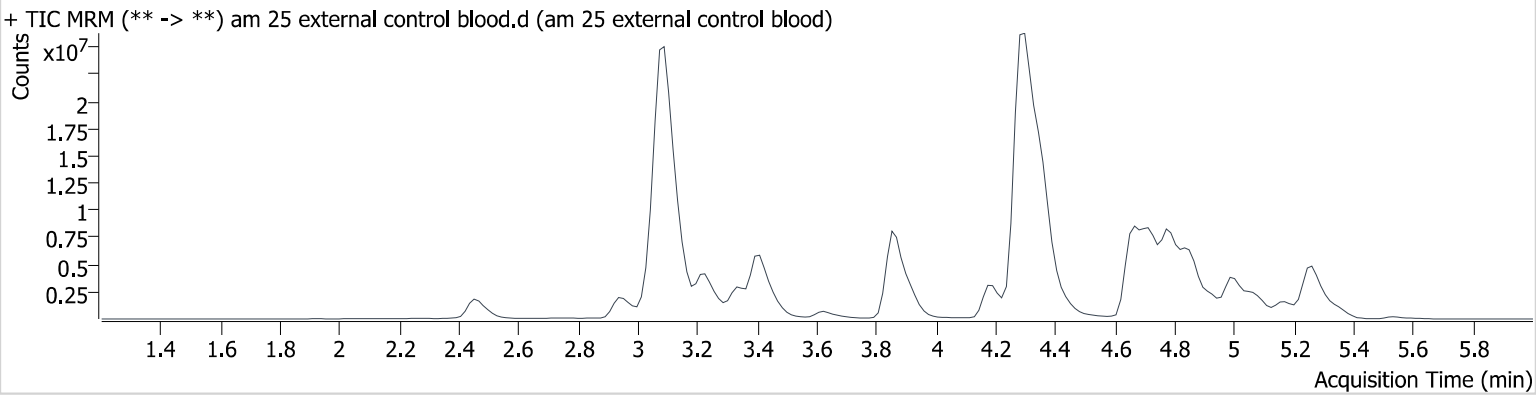


AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2022\am 25-26\101822\QuantResults\mds.batch.bin
Calibration Last Update 10/19/2022 2:36:27 PM

Instrument	69679	**Data File**	am 25 external control blood.d
Type	Sample	**Sample**	am 25 external control blood
Acq. Method	mds713.m	**Operator**	Anne Nord
Sample Position	P2-C4	**Comment**	
Injection Volume	2.5		
Acq. Date-Time	10/18/2022 3:52:21 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.794	14947828	5725.4	626.2	8804884	48.505
Diphenhydramine	4.308	62798967	∞	∞	51610150	68.465
Methamphetamine	3.101	45181961	∞	∞	22393154	65.843
Morphine	2.456	2356900	2384.8	842.8	248186	75.174

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

Extraction Date: 10/18/22 Analyst: Anne Nord

Plate lot#: 220309 Plate retest date: 9/09/22

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:** blood only
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 8**00 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: *ran external control in blood for re-test.*

Did not run sample C2022-2217-2 on am 26.

Toxicology AM method 27/26 external prep information

3/28/23 3/28/23

1.5 .75

working solution ~~15~~ ug/ml in meoh C-THC, THC-OH, ~~7.5~~ ug/ml THC

Stock solution 1mg/ml 7.5 ul each THC, 100 ug/ml 150 ul C-THC, 150 ul THC-OH in 9692.5 ul meOH
Ppd 9/27/22 Exp: 9/27/23 lot 92722 by AMN

Drug	lot	expiration
C-THC	FE04151901	6/1/2024
THC-OH	FE06152002	6/1/2025
THC	FE04222001	5/1/2025

AM 27/26 blood control 100 ul working solution in 9900 ul blood

ppd 9/27/22 exp 9/27/23 blood lot 22B52016-1	lot b92722	Concentration 7.5 ng/ml THC, 15 ng/ml C-THC, THC-OH	by amn

AM 27/26 urine control 400 ul working solution in 9600 ul urine **out of use**

ppd 9/27/22 Exp 9/27/23 neg urine lot 7722	lot u92722	Concentration 30 ng/ml THC, and 60 ng/ml C-THC, THC-OH	by amn	

	1	2	3	4	5	6
a	cal 1		2220-1			
b	cal 2	negative blood	2239-1			
c	cal 3	blood control external	2244-2			
d	cal 4	1961-2	2246-1			
e	Cal 5	2126-1	2295-1			
f	cal 6	2212-1 mixing plate	2312-1			
g	cal 7	2217-1	2343-1			
h	Internal control (blood)	2212-1 SLE and injection plate.				

Plate position 3

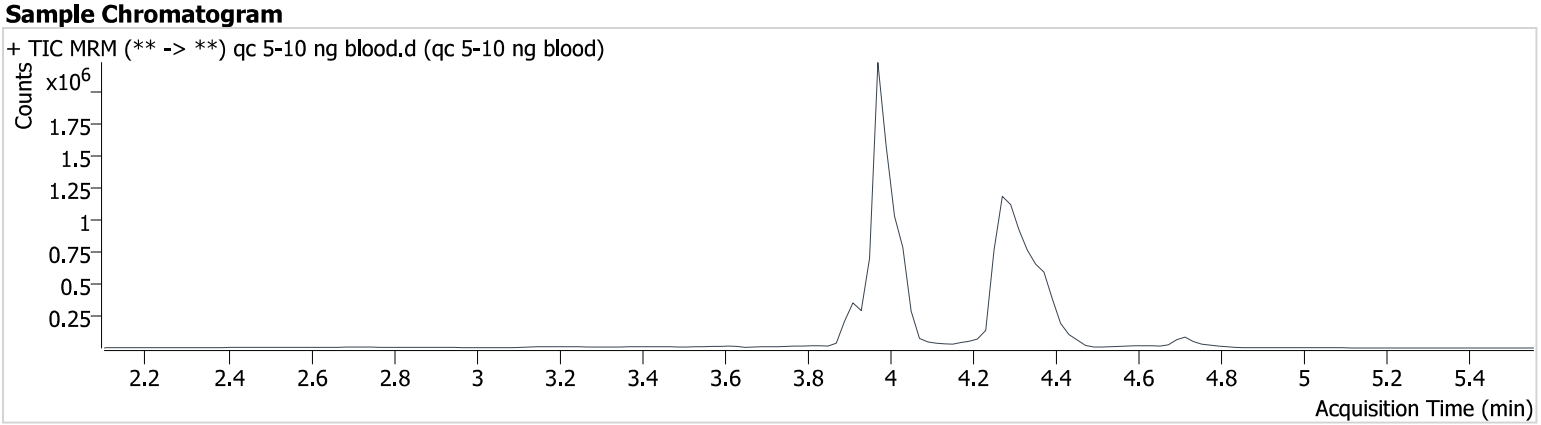
c2022-____-_

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\am 25-26\101822\QuantResults\cann.batch.bin
Calibration Last Update 10/19/2022 7:55:12 AM

Instrument	69679	**Data File**	qc 5-10 ng blood.d
Type	QC	**Sample**	qc 5-10 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	10/18/2022 6:28:13 PM		
Sample Info.			

Sample Chromatogram



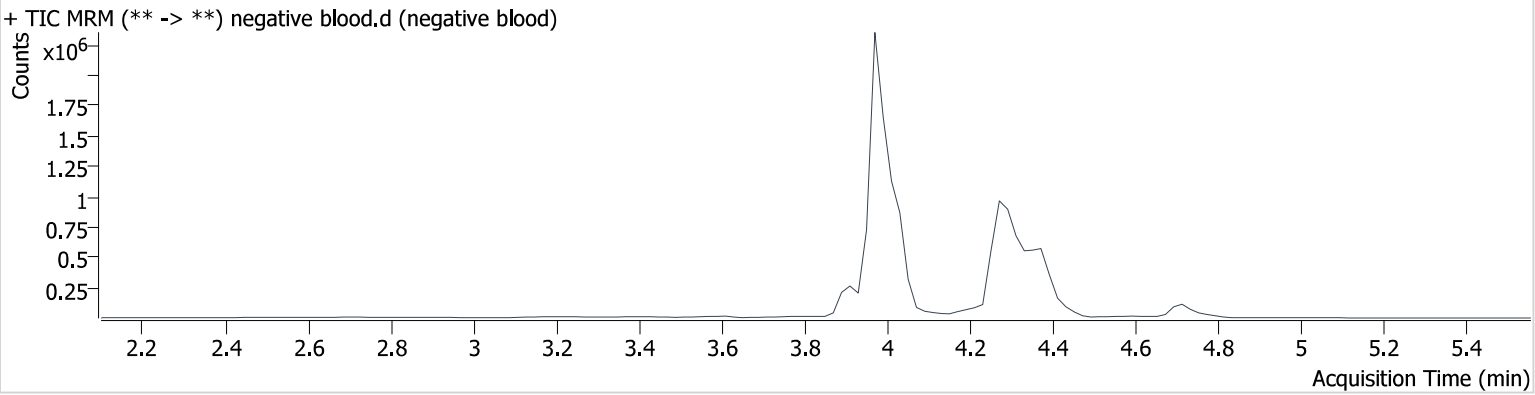
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.385	41477	1085936	4.889 ng/ml
THC-COOH	3.912	157614	893958	14.437 ng/ml
THC-OH	3.979	52100	7183590	4.612 ng/ml

AM #26 Cannabinoids Screen Results

Batch results	D:\MassHunter\Data\2022\am 25-26\101822\QuantResults\cann.batch.bin
Calibration Last Update	10/19/2022 7:55:12 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	10/18/2022 6:34:50 PM		
Sample Info.			

Sample Chromatogram

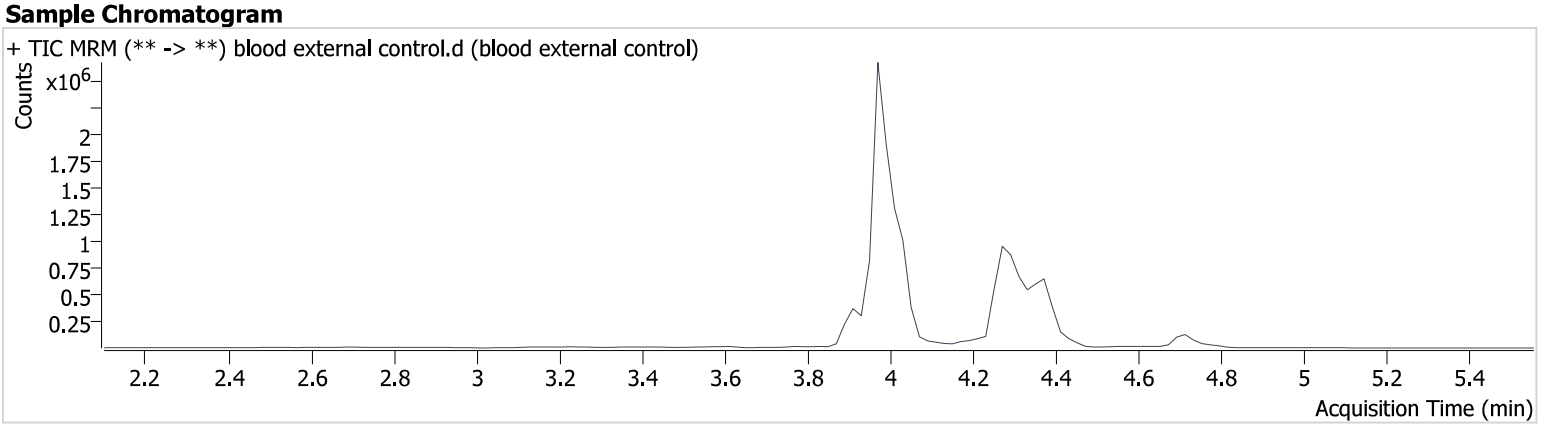


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\am 25-26\101822\QuantResults\cann.batch.bin
Calibration Last Update 10/19/2022 7:55:12 AM

Instrument	69679	**Data File**	blood external control.d
Type	Sample	**Sample**	blood external control
Acq. Method	am 26 cann scr 5-5-20.m	**Operator**	Anne Nord
Sample Position	P3-C2	**Comment**	
Injection Volume	5		
Acq. Date-Time	10/18/2022 6:41:28 PM		
Sample Info.			

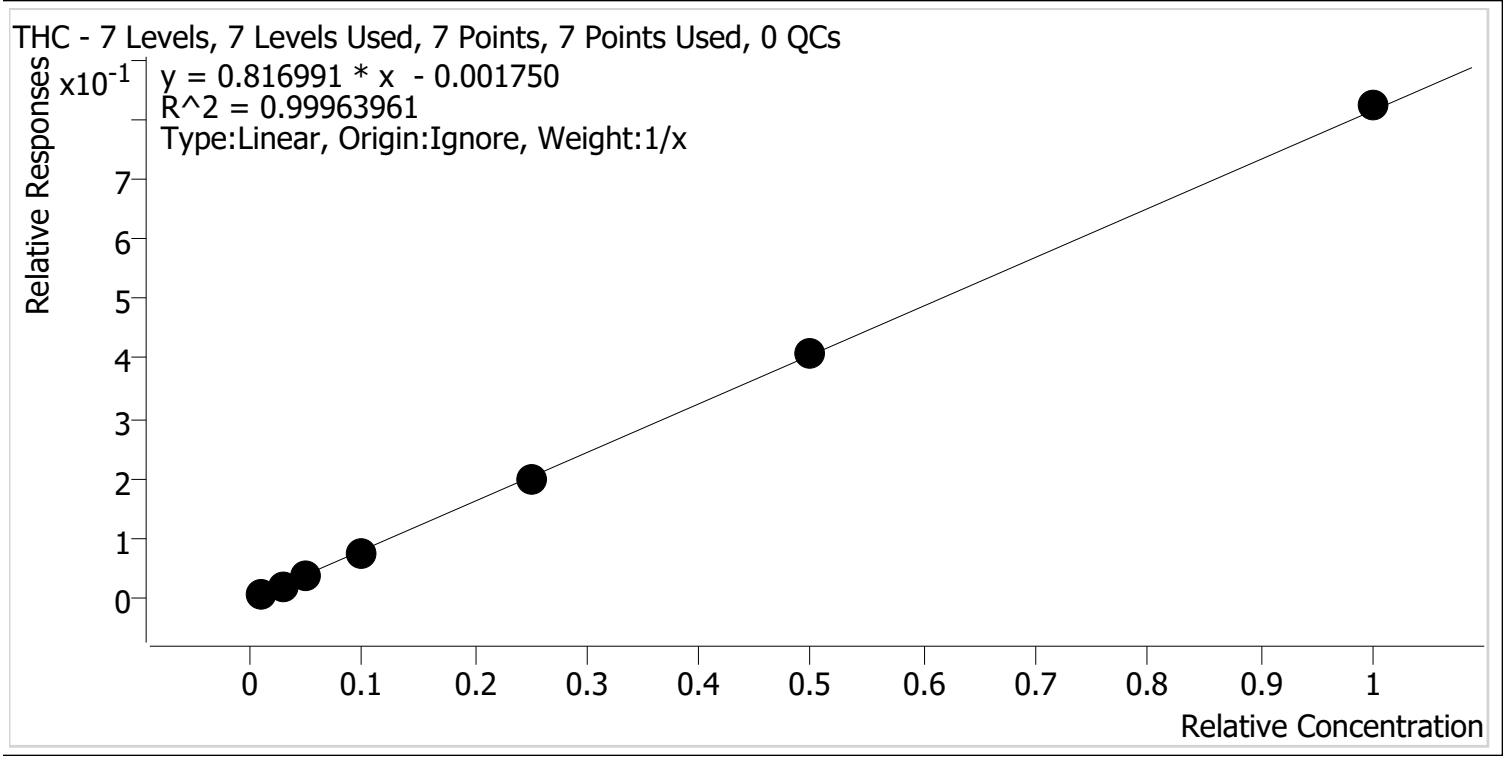
Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.385	111063	1525321	9.127 ng/ml
THC-COOH	3.912	159894	976150	13.357 ng/ml
THC-OH	3.979	183318	7850710	14.473 ng/ml

Compound Calibration Report

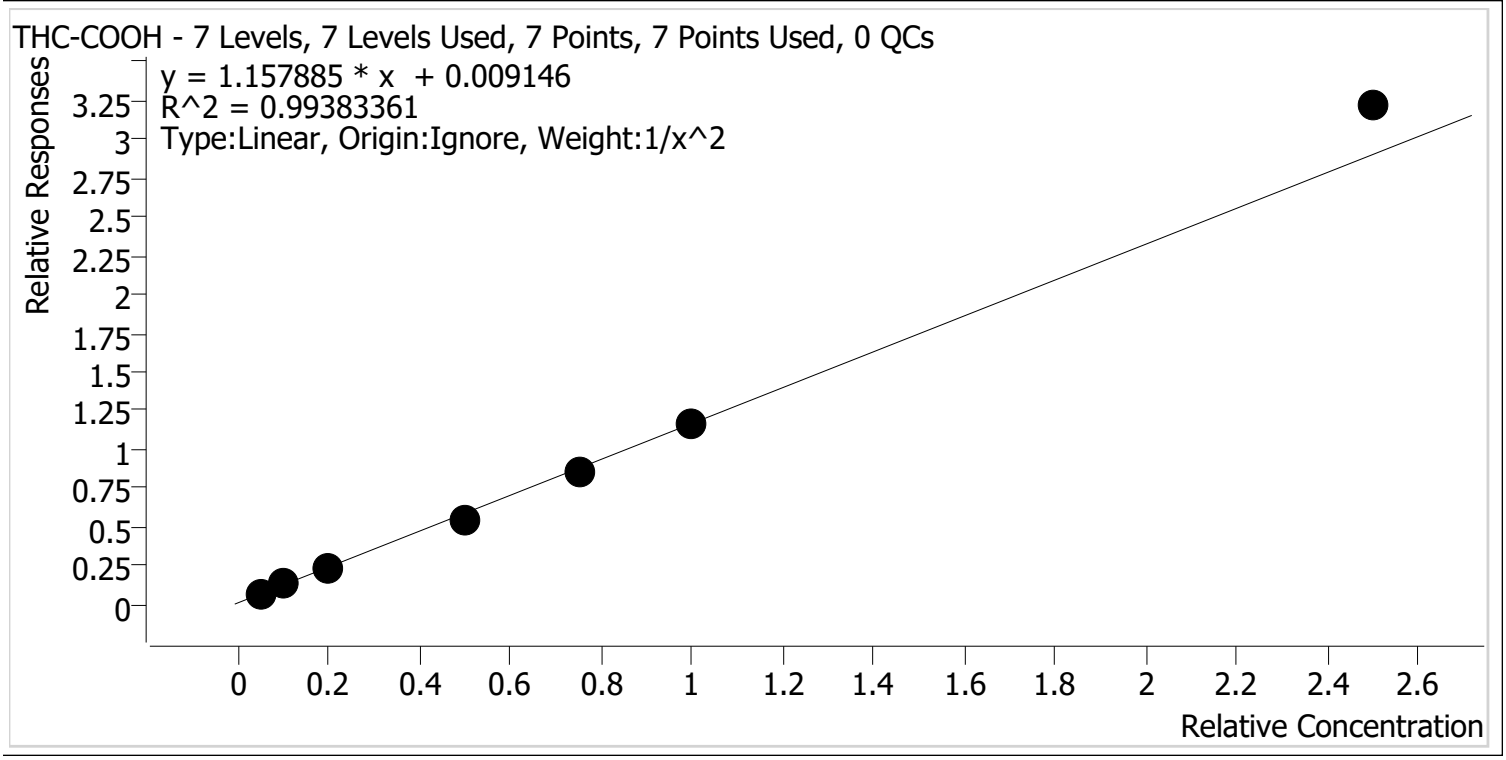
Batch results	D:\MassHunter\Data\2022\am 25-26\101822\QuantResults\cann.batch.bin
Last Cal. Update	10/19/2022 7:55 AM
Analyst Name	ISP\datastor
Analyte	THC
Internal Standard	THC-d3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✔	1.0	1.1	112.1
cal 2	2	✔	3.0	2.9	95.2
cal 3	3	✔	5.0	4.9	97.7
cal 4	4	✔	10.0	9.6	95.8
cal 5	5	✔	25.0	24.6	98.3
cal-6	6	✔	50.0	50.0	100.0
cal-7	7	✔	100.0	101.0	101.0

Compound Calibration Report

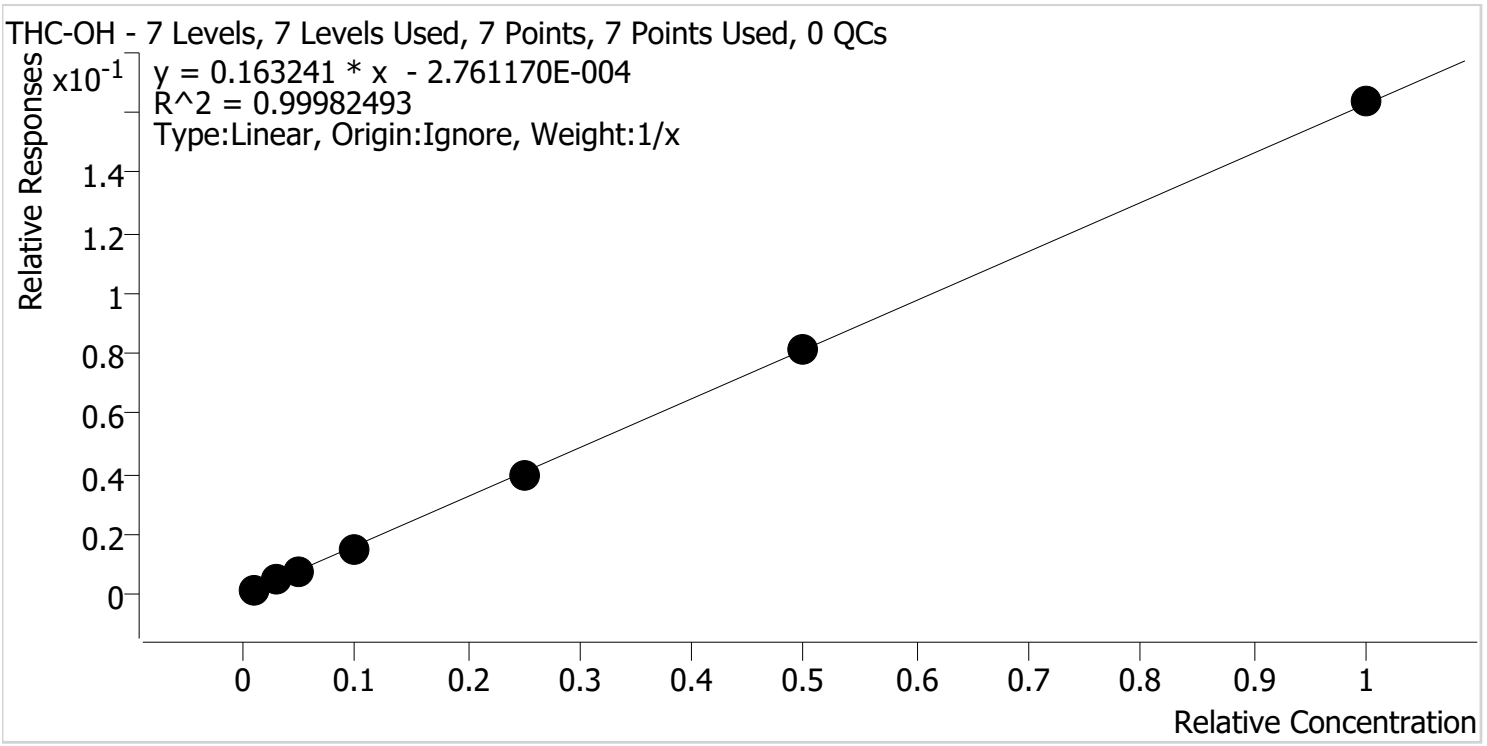
Batch results	D:\MassHunter\Data\2022\am 25-26\101822\QuantResults\cann.batch.bin
Last Cal. Update	10/19/2022 7:55 AM
Analyst Name	ISP\datastor
Analyte	THC-COOH
Internal Standard	THC-COOH-d9



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✔	5.0	5.0	100.4
cal 2	2	✔	10.0	10.4	104.3
cal 3	3	✔	20.0	18.4	91.8
cal 4	4	✔	50.0	46.7	93.4
cal 5	5	✔	75.0	73.8	98.4
cal-6	6	✔	100.0	100.8	100.8
cal-7	7	✔	250.0	277.2	110.9

Compound Calibration Report

Batch results	D:\MassHunter\Data\2022\am 25-26\101822\QuantResults\cann.batch.bin
Last Cal. Update	10/19/2022 7:55 AM
Analyst Name	ISP\datastor
Analyte	THC-OH
Internal Standard	THC-OH-d3



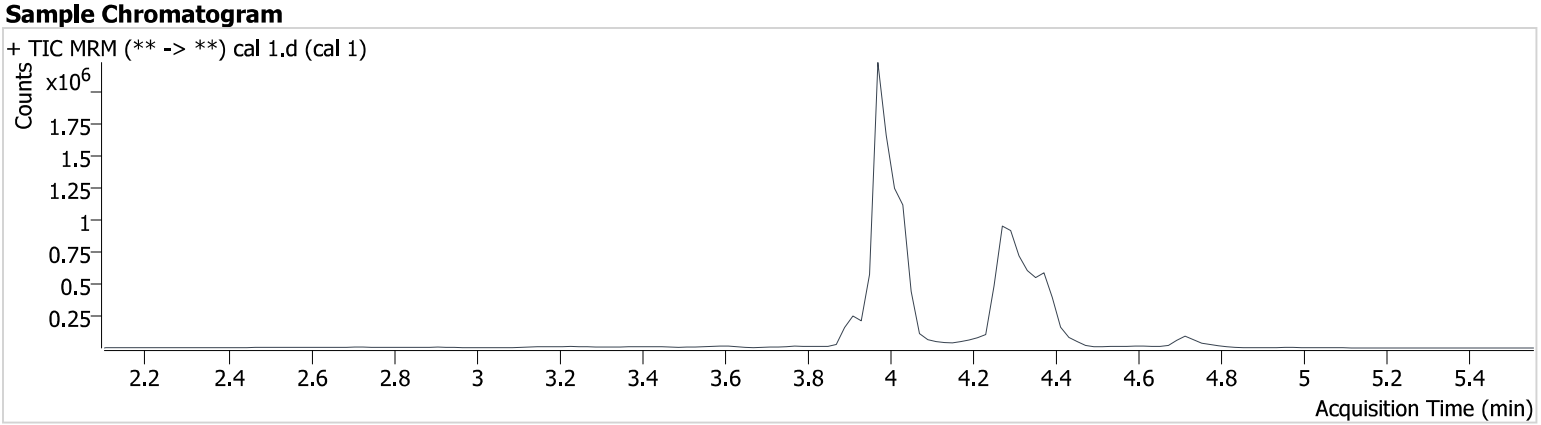
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✔	1.0	1.1	105.8
cal 2	2	✔	3.0	3.0	99.8
cal 3	3	✔	5.0	4.9	98.8
cal 4	4	✔	10.0	9.6	96.1
cal 5	5	✔	25.0	24.6	98.6
cal-6	6	✔	50.0	50.3	100.6
cal-7	7	✔	100.0	100.5	100.5

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\am 25-26\101822\QuantResults\cann.batch.bin
Calibration Last Update 10/19/2022 7:55:12 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	10/18/2022 5:41:52 PM		
Sample Info.			

Sample Chromatogram



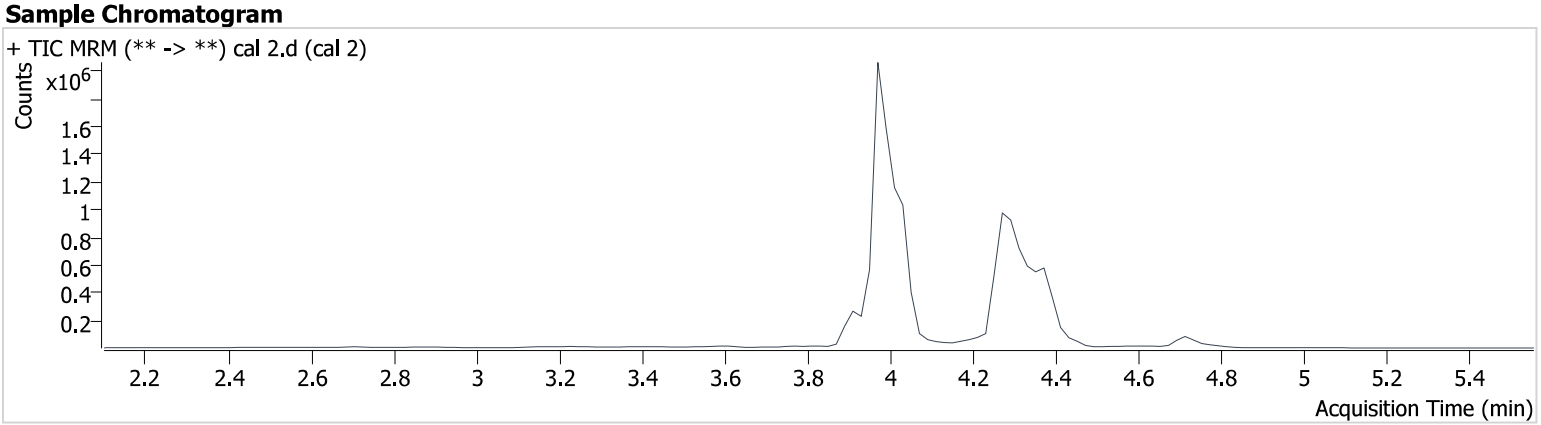
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.385	10008	1351328	1.121 ng/ml **Low**
THC-COOH	3.912	55108	819296	5.019 ng/ml **Low**
THC-OH	3.979	12413	8552099	1.058 ng/ml **Low**

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\am 25-26\101822\QuantResults\cann.batch.bin
Calibration Last Update 10/19/2022 7:55:12 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	10/18/2022 5:48:32 PM		
Sample Info.			

Sample Chromatogram



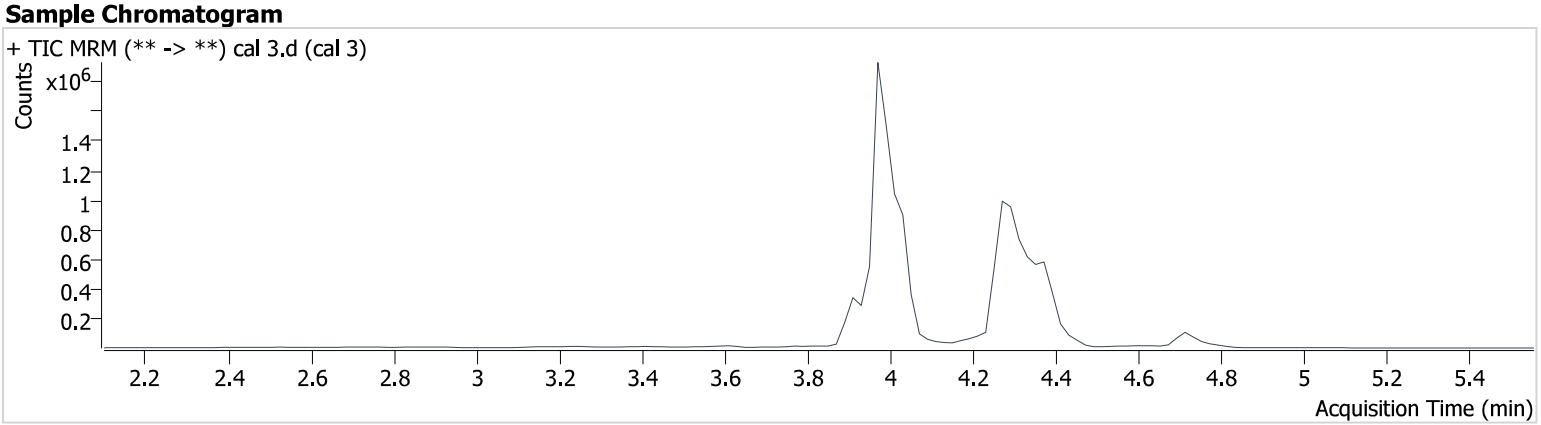
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.385	27543	1276814	2.855 ng/ml **Low**
THC-COOH	3.912	103975	800103	10.433 ng/ml
THC-OH	3.979	35605	7725149	2.993 ng/ml **Low**

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\am 25-26\101822\QuantResults\cann.batch.bin
Calibration Last Update 10/19/2022 7:55:12 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	10/18/2022 5:55:10 PM		
Sample Info.			

Sample Chromatogram



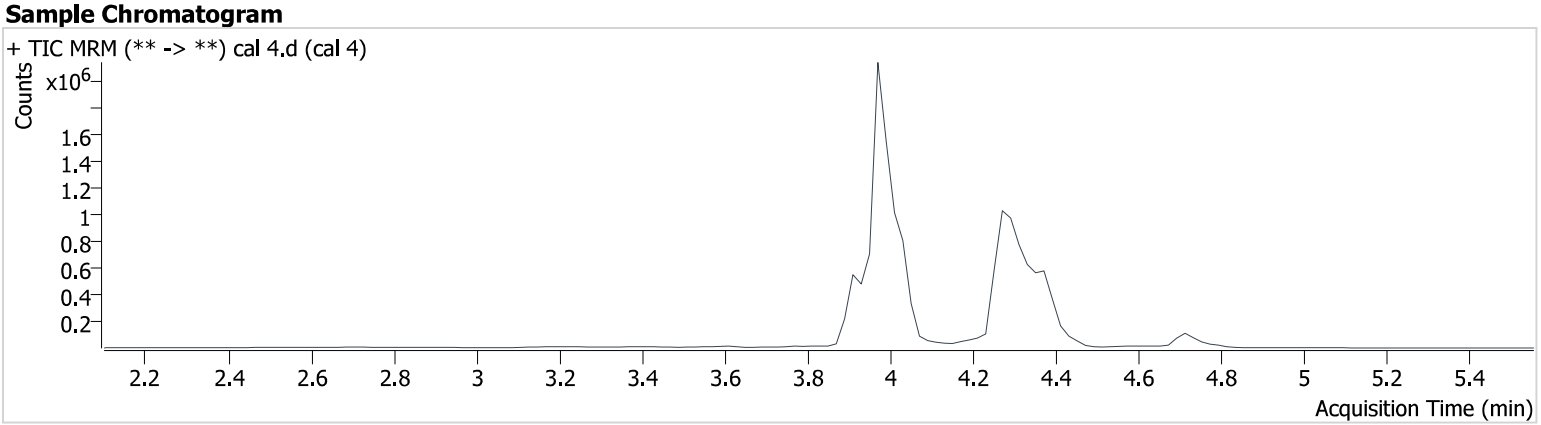
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.385	49031	1284313	4.887 ng/ml
THC-COOH	3.912	179065	807294	18.367 ng/ml
THC-OH	3.979	53044	6813163	4.939 ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\am 25-26\101822\QuantResults\cann.batch.bin
Calibration Last Update 10/19/2022 7:55:12 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	10/18/2022 6:01:47 PM		
Sample Info.			

Sample Chromatogram



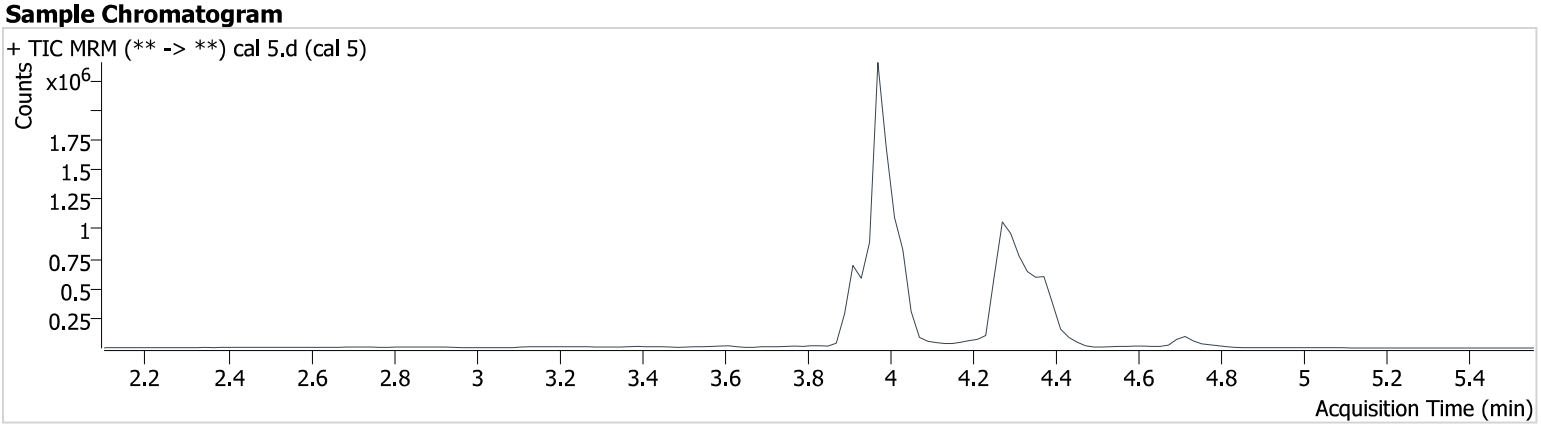
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.385	90066	1177433	9.577 ng/ml
THC-COOH	3.912	442950	805163	46.722 ng/ml
THC-OH	3.979	98266	6379355	9.605 ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\am 25-26\101822\QuantResults\cann.batch.bin
Calibration Last Update 10/19/2022 7:55:12 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	10/18/2022 6:08:23 PM		
Sample Info.			

Sample Chromatogram



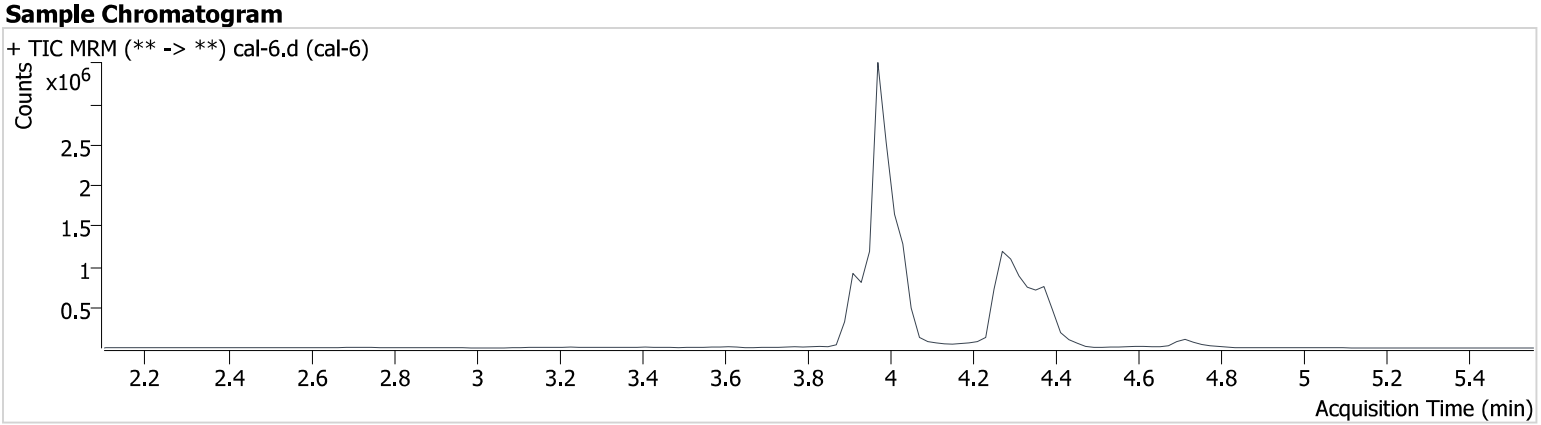
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.385	212558	1068249	24.569 ng/ml
THC-COOH	3.912	669366	775261	73.778 ng/ml
THC-OH	3.979	231276	5790174	24.638 ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\am 25-26\101822\QuantResults\cann.batch.bin
Calibration Last Update 10/19/2022 7:55:12 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	10/18/2022 6:14:59 PM		
Sample Info.			

Sample Chromatogram



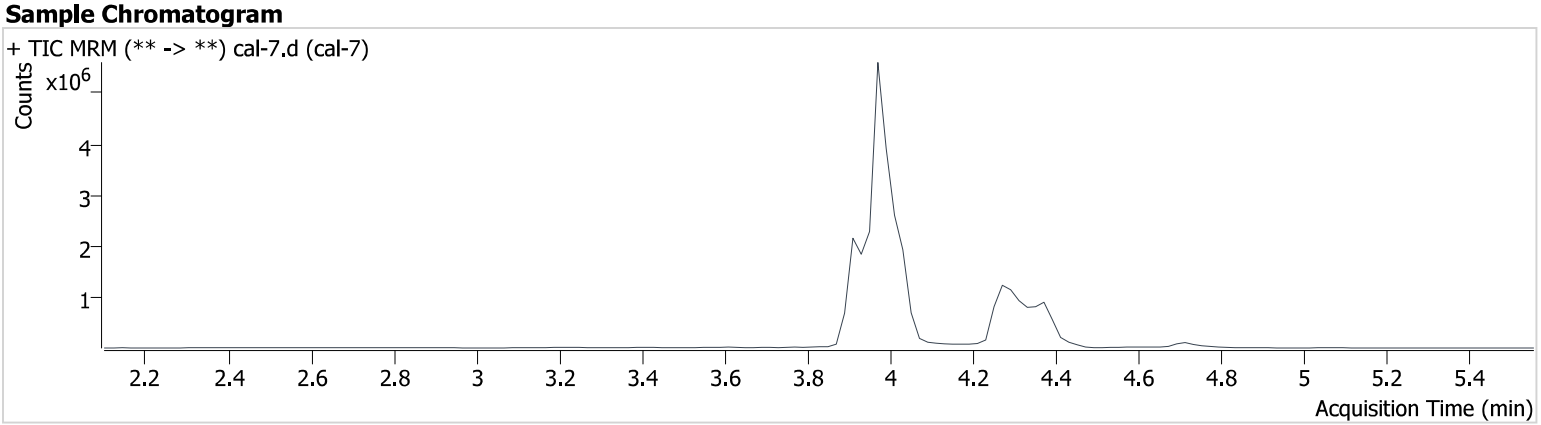
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.385	435327	1070561	49.987 ng/ml
THC-COOH	3.912	959861	816354	100.756 ng/ml
THC-OH	3.979	558382	6826698	50.275 ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2022\am 25-26\101822\QuantResults\cann.batch.bin
Calibration Last Update 10/19/2022 7:55:12 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	10/18/2022 6:21:37 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.385	770151	935276	101.005 ng/ml
THC-COOH	3.912	2790639	866993	277.196 ng/ml
THC-OH	3.979	1197760	7313739	100.492 ng/ml