

GA

REVIEWED

By Britany Wylie at 3:09 pm, Aug 27, 2020

Worklist: 4461

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>	
C2020-1612	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2020-1641	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2020-1644	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2020-1644	2	BLOOD	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2020-1644	3	BLOOD	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2020-1648	4	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2020-1660	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2020-1665	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2020-1667	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2020-1669	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2020-1670	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2020-1681	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	

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

Extraction Date: 8/26/20     Analyst: Anne Nord  
Plate lot#: 200511     Plate Expiration: 11/11/2020

**Mobile phase A:** 10mM Amm Form  
0.5M Ammonium Hydroxide

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

**Blank Blood Lot:** 20A52255   **Blank Urine lot:** 73020   **Column:** Phenomenex Phenyl Hexyl (4.6x50mm, 2.6um)  
**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: 1926134**
- 3. Place on shaking incubator at ambient temp., 900 rpm for 15 minutes.
- 4. Pipette 250 µL of 0.5 M ammonium hydroxide in wells of analytical plate.
- 5. Place on shaking incubator at ambient temp., 900 rpm for 15 minutes.
- 6. Transfer 300 µL of blood or urine+base 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 900 µL ethyl acetate.
- 10. Wait 5 minutes.
- 11. Apply positive pressure for approx. 10-15 seconds. *(12-15 PSI- Selector to the left).*
- 12. Add 900 µL ethyl acetate.
- 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. **Urine samples add 50 ul 1% HCl in MeOH** Place on SPE Dry and evaporate to dryness at approx. 35°C.  
*SPE Dry ID: 66819*
- 16. 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:

Toxicology AM method 25/28 urine external control prep  
working solution 10000 ng/ml in meoh methamphetamine, temazepam, midazolam  
Stock solution 1mg/ml 50 ul each in 4850 ul MeOH (fisher 195629)

ppd 8/6/20: Exp: 4/1/2021 lot 4121                      by baw

Drug	lot	expiration
Methamphetamine	FE08101708	10/1/2022
midazolam	FE01221602	4/1/2021
temazepam	FE04261601	5/1/2021

**AM 25/28 control 500 ul working solution (4121) in 4500 ul negative urine (1000ng/mL Expected concentration)**

ppd 8/6/20, exp 4/1/2021 lot u4121                      negative urine 73020                      by AMN

**AM 25/28 Blood Control: 50ul working solution (4121) in 4950 ul neg blood (100ng/mL Expected concentration)**

ppp 8/6/20, exp 4/1/21 lot b4121                      neg blood 20G20792                      by AMN

A

	1	2	3	4	5	6	7	8	9	10	11	12
A	Cal 1	1644-3	1667-1									
B	Cal 1	1665-1	1670-2									
C	Cal 2	1669-1	1681-1									
D	Cal 2	blood control	urine control									
E	neg blood	neg urine										Cal 2
F	1641-2	1612-1										Cal 2
G	1644-1	1648-4										Cal 1
H	1644-2	1660-1										Cal 1

All wells to contain 60 µl of residual DMSO

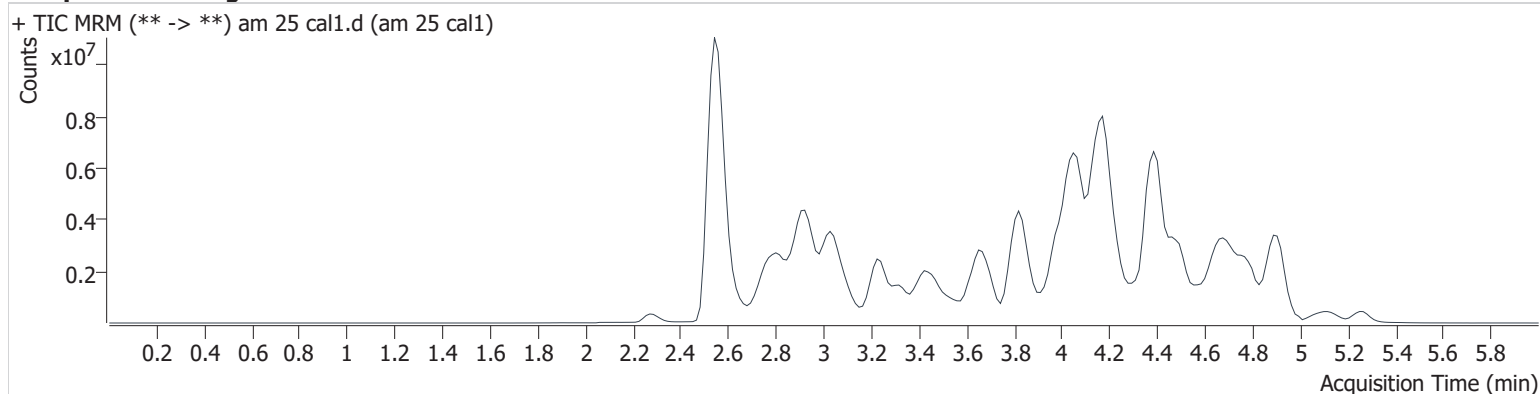
C2020-

# AM #25 Multi-Drug Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 082620\QuantResults\mds.batch.bin  
**Calibration Last Update** 8/27/2020 10:25:23 AM

<b>Instrument</b>	69679	<b>Data File</b>	am 25 cal1.d
<b>Type</b>	Cal	<b>Sample</b>	am 25 cal1
<b>Acq. Method</b>	mds 826.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P2-A1	<b>Comment</b>	
<b>Injection Volume</b>	2.5		
<b>Acq. Date-Time</b>	8/26/2020 11:58:01 AM		

## Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
6-MAM	3.421	20049	61.0	22.0	533676	10.000
7-aminoclonazepam	3.335	752235	426.5	325.0	3028629	10.000
7-aminoflunitrazepam	3.548	1244795	1809.7	785.2	3028629	10.000
Acetyl Fentanyl	4.495	137943	48.2	37.6	4171134	10.000
Acetyl Norfentanyl	2.775	41262	114.1	32.0	4171134	10.000
a-hydroxyalprazolam	4.310	100387	105.3	29511.0	3028629	10.000
alpha-hydroxymidazolam	4.432	756917	147.9	671.1	3028629	10.000
alpha-PHP	4.228	1444764	167.7	170.5	4951540	10.000
alpha-PVP	3.968	2227152	1621.8	1297.0	4951540	10.000
Alprazolam	4.436	642437	15407.8	138.2	5582538	10.000
Amitriptyline	4.792	709638	44.2	146.2	4059377	10.000
Amphetamine	2.796	1976625	285.8	429.6	4951540	10.000
Benzoylcegonine	3.074	410992	152.0	64.9	181231	10.000
Brompheniramine	4.250	54810	21.0	6.7	22846188	10.000
Buprenorphine	5.266	351354	977.3	10311.9	1584365	10.000
Bupropion	4.213	1691562	550.7	429.8	6659352	10.000
Carbamazepine	4.013	2796214	∞	11928.9	43412	10.000
Carisoprodol	3.996	506215	305.0	80.1	3209709	10.000
Chlordiazepoxide	4.575	316084	587.2	5.2	5582538	10.000
Chlorpheniramine	4.117	2777631	1003.3	1485.7	22846188	10.000
Citalopram	4.203	1326490	168.9	125.7	22846188	10.000
Clomipramine	5.119	1801844	323.7	238.1	22846188	10.000
Clonazepam	4.265	97949	7149.6	2361.1	5582538	10.000
Clonazolam	4.170	207668	69699.1	23608.6	5582538	10.000
Cocaethylene	4.005	2079444	670257.6	2502.4	14839213	10.000
Cocaine	3.852	3018979	1060.1	505.1	14839213	10.000
Codeine	3.423	138841	476.3	483.7	2575673	10.000
Cyclobenzaprine	4.656	796082	361.1	14.6	4059377	10.000
Desipramine	4.519	1412566	1434.4	282.2	4059377	10.000
Dextromethorphan	4.302	268915	39.6	111.3	1340662	10.000
Dextrorphan	3.490	317195	53.7	507.9	1340662	10.000
Diazepam	4.714	478136	122288.3	260.6	5582538	10.000
Dihydrocodeine	3.102	242316	130.5	21.4	2575673	10.000
Diphenhydramine	4.196	3422250	367.7	220.4	22846188	10.000



# AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Doxepin	4.501	1001771	88.0	43.0	11074452	10.000
Doxylamine	3.687	4204087	397.8	156.7	1340662	10.000
EDDP	4.070	1427958	1566.6	119185.0	748671	10.000
Estazolam	4.345	1468504	357.8	169.2	5582538	10.000
Etizolam	4.478	155698	40476.4	180387.5	5582538	10.000
Fentanyl	4.678	143373	14.3	360.7	10518565	10.000
Flualprazolam	4.294	265095	256.3	784.8	5582538	10.000
Flunitrazepam	4.388	408062	230.7	1157.1	5582538	10.000
Fluoxetine	4.374	827329	324.1	129.6	3118930	10.000
Flurazepam	4.660	875601	10631.0	39099.3	5582538	10.000
Hydrocodone	3.668	357525	39.3	131.2	2575673	10.000
Hydromorphone	3.014	251253	135.8	51.2	28457	10.000
Imipramine	4.715	2650202	949.5	2972.7	4059377	10.000
Ketamine	4.136	1987939	1828.1	32.9	3500986	10.000
Lamotrigine	3.413	171192	111.2	472.3	22846188	10.000
Levamisole	3.510	1347300	4504.4	149.2	14839213	10.000
Levetireacetam	2.280	529485	325.4	624.9	22846188	10.000
Lorazepam	4.249	71838	1141.2	114.2	5582538	10.000
Maprotiline	4.792	330666	∞	∞	4059377	10.000
MDA	2.959	1235550	296.7	881.1	12397823	10.000
MDEA	3.233	2120860	1796.2	708.8	12397823	10.000
MDMA	3.097	2338016	160.2	121.9	12397823	10.000
Meperidine	3.905	688276	145.0	56.7	1340662	10.000
Meprobamate	3.386	189936	370.2	69.7	3209709	10.000
Methadone	4.451	1098143	564.3	293.6	748671	10.000
Methamphetamine	2.947	6752585	∞	140.2	12397823	10.000
Methocarbamol	3.307	161951	255.7	188.8	748671	10.000
Methylphenidate	3.646	6027394	2049.0	9636.4	11253965	10.000
Metoprolol	3.397	463724	150.5	136.2	1340662	10.000
Midazolam	4.633	306044	69050.7	38767.6	5582538	10.000
Mirtazapine	4.610	2028311	932.6	1471.4	1340662	10.000
Mitragynine	4.704	148254	507.4	67554.9	1340662	10.000
Morphine	2.773	56665	∞	131.8	28457	10.000
Norbuprenorphine	4.031	27928	4623.6	225.5	1584365	10.000
Nordiazepam	4.534	527525	108372.8	355.9	5582538	10.000
Norfentanyl	3.247	828847	153.5	70.3	4171134	10.000
Norhydrocodone	3.014	79548	316.2	6.1	2575673	10.000
norketamine	3.999	220702	135.2	2142.3	3500986	10.000
Normeperidine	3.600	183851	54.1	61.5	22846188	10.000
Noroxycodone	2.860	210603	46.0	91.7	3500986	10.000
Nortriptyline	4.565	317661	43792.1	34.9	4059377	10.000
O-desmethyl-tramadol	2.834	5095731	3636.7	133.6	22846188	10.000
Olanzapine	4.312	321834	153.4	58.6	43412	10.000
Oxazepam	4.330	228188	127.7	111.1	1951821	10.000
Oxycodone	3.300	469421	130.7	124.6	3500986	10.000
Oxymorphone	2.588	350507	62.8	1402.4	28457	10.000
Paroxetine	4.571	43628	11.7	4.4 <b>Low</b>	3118930	10.000
Phenazepam	4.477	592685	391.6	97353.4	5582538	10.000
Phencyclidine	3.982	2527815	221.5	146.3	1340662	10.000
Phentermine	3.053	35959	7.6	∞	11253965	10.000
Phenytoin	3.904	71928	20867.6	26.4	43412	10.000
Promethazine	4.850	2627554	458.2	307.5	22846188	10.000
Pseudoephedrine	2.551	47164880	9612.8	10237.6	12397823	10.000
Quetiapine	4.737	1581856	6255.7	515611.5	22193024	10.000
Sertraline	4.803	593692	99.7	1256.9	3118930	10.000
Sufentanil	4.993	90703	26797.2	51.4	4171134	10.000
Tapentadol	3.417	2894617	541.4	109.6	3500986	10.000
Temazepam	4.514	1141326	382.6	96.8	5582538	10.000
Tramadol	3.459	5417188	1049.5	27.6	22846188	10.000
Trazodone	4.919	2423294	2664.2	5582.4	11074452	10.000

# AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Venlafaxine	3.824	3731781	977.3	265.1	3118930	10.000
Zaleplon	4.160	388076	293.3	122.3	22193024	10.000
Zolpidem	4.405	3180523	1234076.8	129214.3	22193024	10.000
Zopiclone	4.399	177007	41900.2	48078.8	875685	10.000

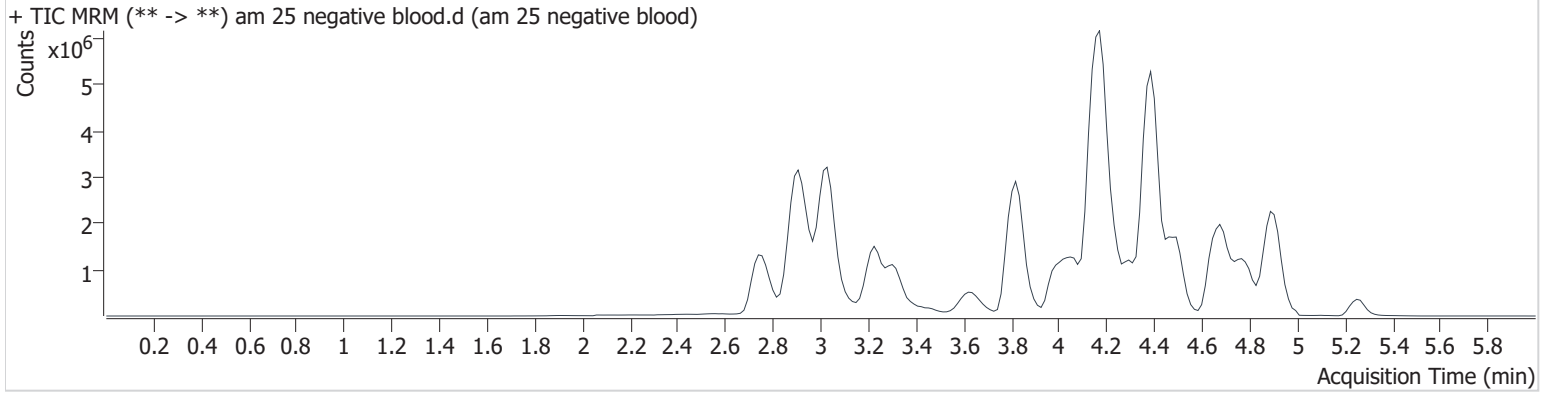
OA

# AM #25 Multi-Drug Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 082620\QuantResults\mds.batch.bin  
**Calibration Last Update** 8/27/2020 10:25:23 AM

<b>Instrument</b>	69679	<b>Data File</b>	am 25 negative blood.d
<b>Type</b>	Sample	<b>Sample</b>	am 25 negative blood
<b>Acq. Method</b>	mds 826.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P2-E1	<b>Comment</b>	
<b>Injection Volume</b>	2.5		
<b>Acq. Date-Time</b>	8/26/2020 12:04:40 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



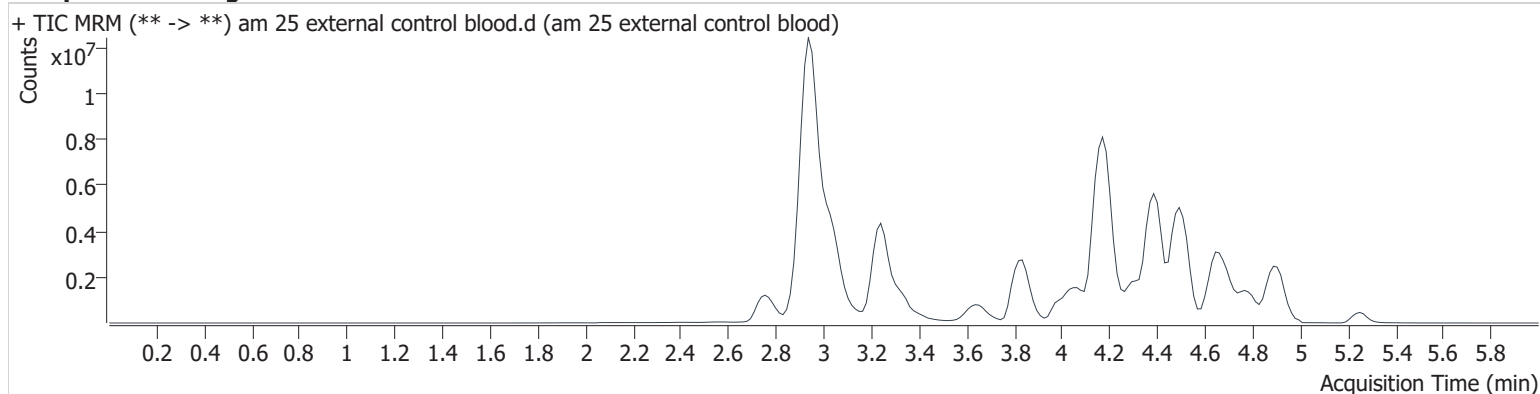


# AM #25 Multi-Drug Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 082620\QuantResults\mds.batch.bin  
**Calibration Last Update** 8/27/2020 10:25:23 AM

<b>Instrument</b>	69679	<b>Data File</b>	am 25 external control blood.d
<b>Type</b>	Sample	<b>Sample</b>	am 25 external control blood
<b>Acq. Method</b>	mds 826.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P2-D2	<b>Comment</b>	
<b>Injection Volume</b>	2.5		
<b>Acq. Date-Time</b>	8/26/2020 12:51:34 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Methamphetamine	2.947	28736846	13060.0	8695.2	12850928	41.056
Midazolam	4.633	3321939	698385.6	715207.9	6375191	95.049
Temazepam	4.499	14520255	1667.0	386.8	6375191	111.405

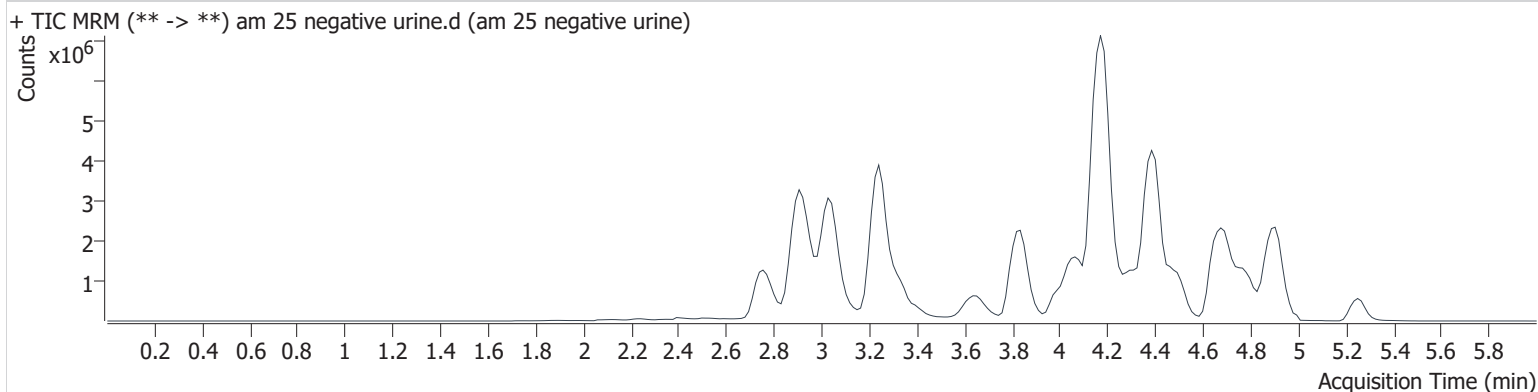
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# AM #25 Multi-Drug Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 082620\QuantResults\mds.batch.bin  
**Calibration Last Update** 8/27/2020 10:25:23 AM

<b>Instrument</b>	69679	<b>Data File</b>	am 25 negative urine.d
<b>Type</b>	Sample	<b>Sample</b>	am 25 negative urine
<b>Acq. Method</b>	mds 826.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P2-E2	<b>Comment</b>	
<b>Injection Volume</b>	2.5		
<b>Acq. Date-Time</b>	8/26/2020 12:58:14 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



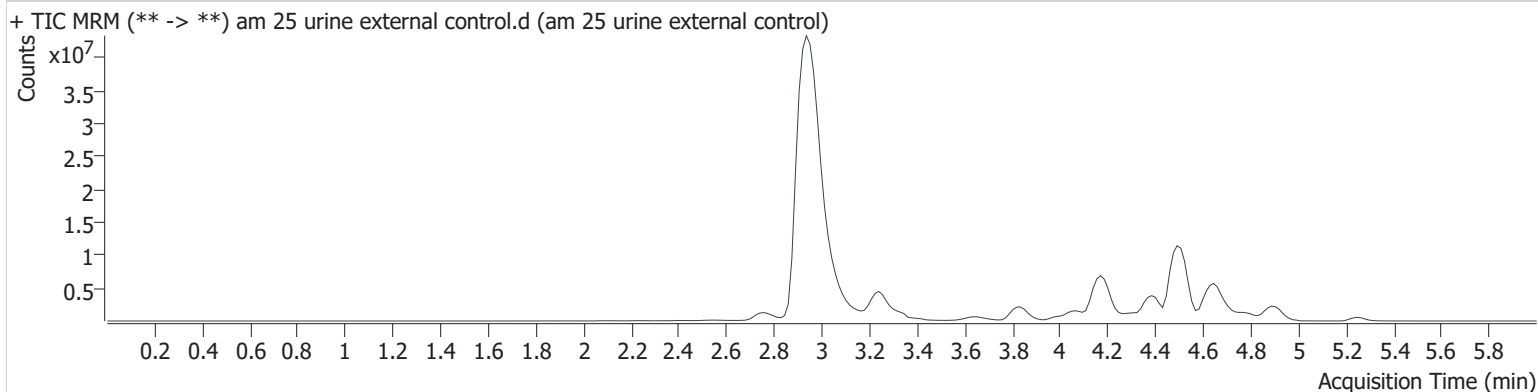
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# AM #25 Multi-Drug Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 082620\QuantResults\mds.batch.bin  
**Calibration Last Update** 8/27/2020 10:25:23 AM

<b>Instrument</b>	69679	<b>Data File</b>	am 25 urine external control.d
<b>Type</b>	Sample	<b>Sample</b>	am 25 urine external control
<b>Acq. Method</b>	mds 826.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P2-D3	<b>Comment</b>	
<b>Injection Volume</b>	2.5		
<b>Acq. Date-Time</b>	8/26/2020 2:54:28 PM		

**Sample Chromatogram**



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Methamphetamine	2.969	106174104	∞	∞	11925640	163.460
Midazolam	4.633	11693598	2208989.3	2650216.3	3541090	602.365
Temazepam	4.499	44157325	16374.7	1991.2	3541090	609.941



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

Extraction Date: 8/26/20 Analyst: Anne Nord

Plate lot#: 200303

Plate Expiration: 09-03-2020

**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:** 20G20792 **Urine Blank:** 73020 **Column:** Phenomenex Phenyl Hexyl (4.6x50mm: 2.6 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: K52558g  
Pipette 1000 ul urine to analytical (standards) plate.
- 3. Place on shaking incubator at ambient temp., 900 rpm for 15 minutes. Shaker ID: 66759
- 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:

# Toxicology AM method 27/26 external prep information A

working solution 1 ug/ml in meoh C-THC, THC-OH, 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 8/26/20 Exp: 7/1/21 lot 82620 by AMN

Drug	lot	expiration
C-THC	FE01061702	3/1/2022
THC-OH	FE07221601	7/1/2021
THC	FE01041701	3/1/2022

**AM 27/26 blood control 100 ul working solution lot ( ) in 9900 ul blood lot ( )**

		Concentration 7.5 ng/ml THC, 15 ng/ml C-THC, THC-OH	
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**AM 27/26 urine control 400 ul working solution lot (82620) in 9600 ul urine lot (73020)**

**out of use**

ppd 8/26/20 Exp 7/1/21	lot u82620	Concentration 30 ng/ml THC, and 60 ng/ml C-THC, THC-OH	by amn	

GA

	1	2	3	4	5	6
a	cal 100 ng	neg blood	1612-1			QC 1
b	cal 50 ng	1641-2	1648-4			cal 100 ng
c	cal 25 ng	1644-1	1660-1			cal 50 ng
d	cal 10ng	1644-2	1667-1			cal 25 ng
e	cal 5 ng	1644-3	1670-2			cal 10ng
f	cal 3 ng	1665-1	1681-1			cal 5 ng
g	cal 1ng	1669-1	urine control			cal 3 ng
h	QC 1	neg urine				cal 1ng

c2020-

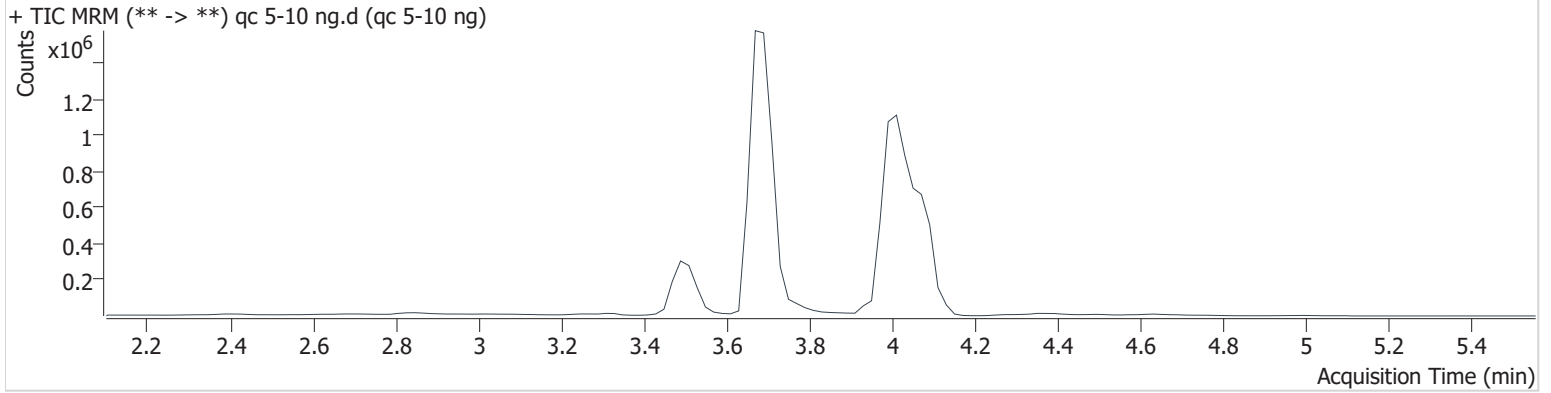
GA

# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 082620\QuantResults\cann.batch.bin  
**Calibration Last Update** 8/27/2020 7:17:49 AM

<b>Instrument</b>	69679	<b>Data File</b>	qc 5-10 ng.d
<b>Type</b>	QC	<b>Sample</b>	qc 5-10 ng
<b>Acq. Method</b>	am 26 cann scr 5-5-20.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P3-H1	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	8/26/2020 4:21:03 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.084	61439	1619524	4.345 ng/ml
THC-COOH	3.509	273323	761011	14.529 ng/ml
THC-OH	3.679	58807	5714613	4.590 ng/ml

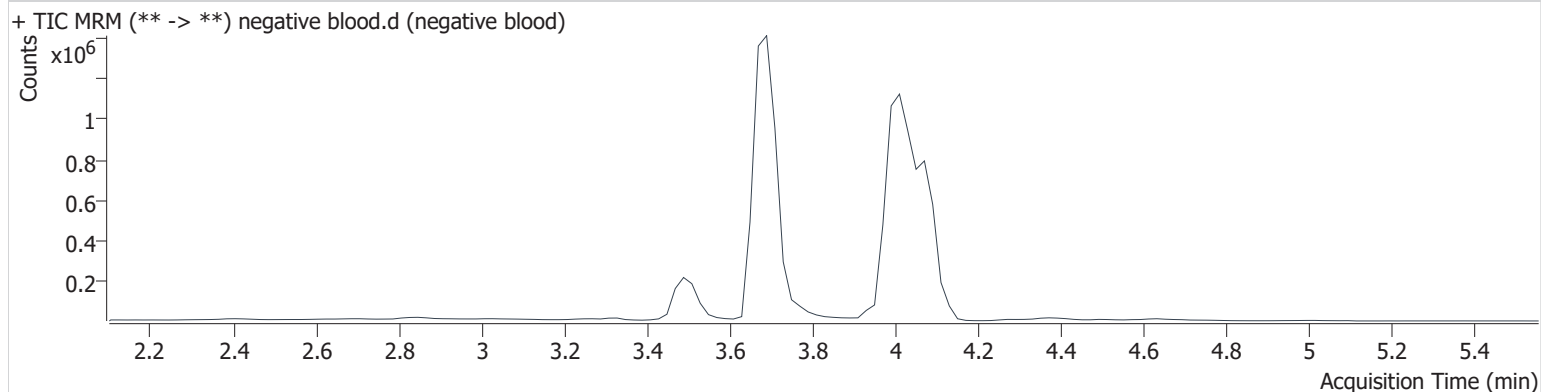
GA

# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 082620\QuantResults\cann.batch.bin  
**Calibration Last Update** 8/27/2020 7:17:49 AM

<b>Instrument</b>	69679	<b>Data File</b>	negative blood.d
<b>Type</b>	Sample	<b>Sample</b>	negative blood
<b>Acq. Method</b>	am 26 cann scr 5-5-20.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P3-A2	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	8/26/2020 4:27:40 PM		
<b>Sample Info.</b>			

## Sample Chromatogram





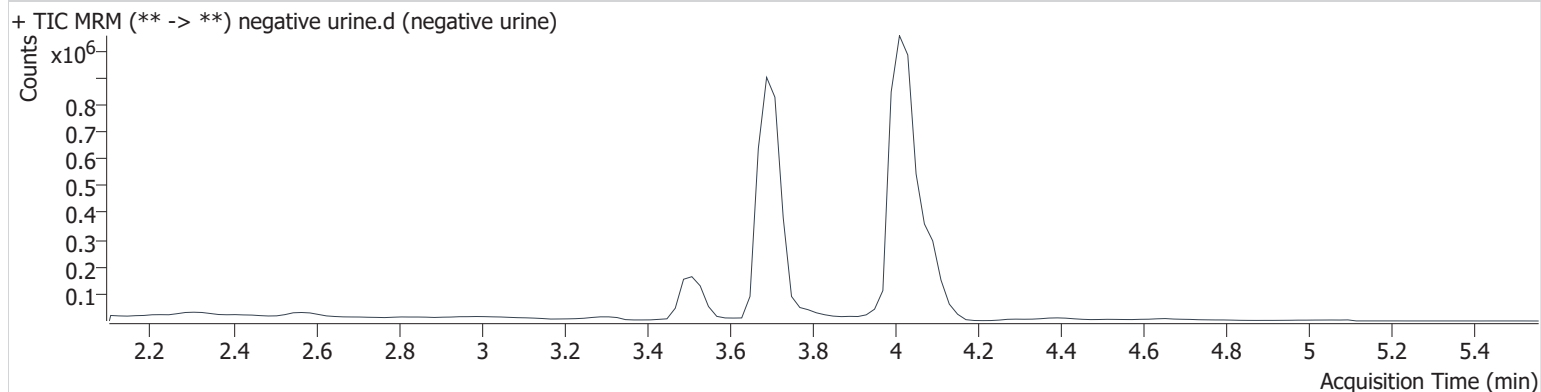
A

# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 082620\QuantResults\cann.batch.bin  
**Calibration Last Update** 8/27/2020 7:17:49 AM

<b>Instrument</b>	69679	<b>Data File</b>	negative urine.d
<b>Type</b>	Sample	<b>Sample</b>	negative urine
<b>Acq. Method</b>	am 26 cann scr 5-5-20.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P3-H2	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	8/26/2020 5:13:58 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



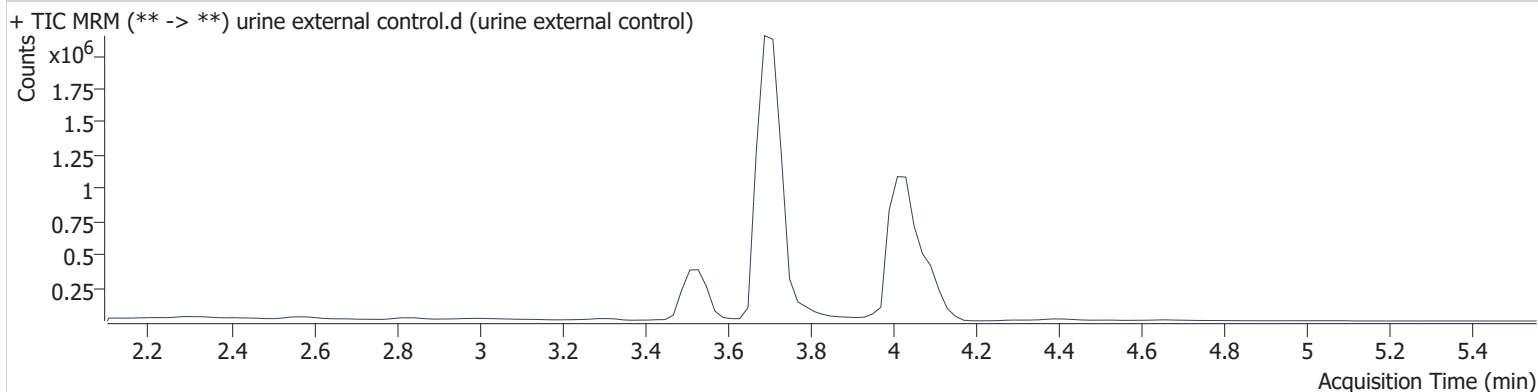
GA

# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 082620\QuantResults\cann.batch.bin  
**Calibration Last Update** 8/27/2020 7:17:49 AM

<b>Instrument</b>	69679	<b>Data File</b>	urine external control.d
<b>Type</b>	Sample	<b>Sample</b>	urine external control
<b>Acq. Method</b>	am 26 cann scr 5-5-20.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P3-G3	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	8/26/2020 6:00:18 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



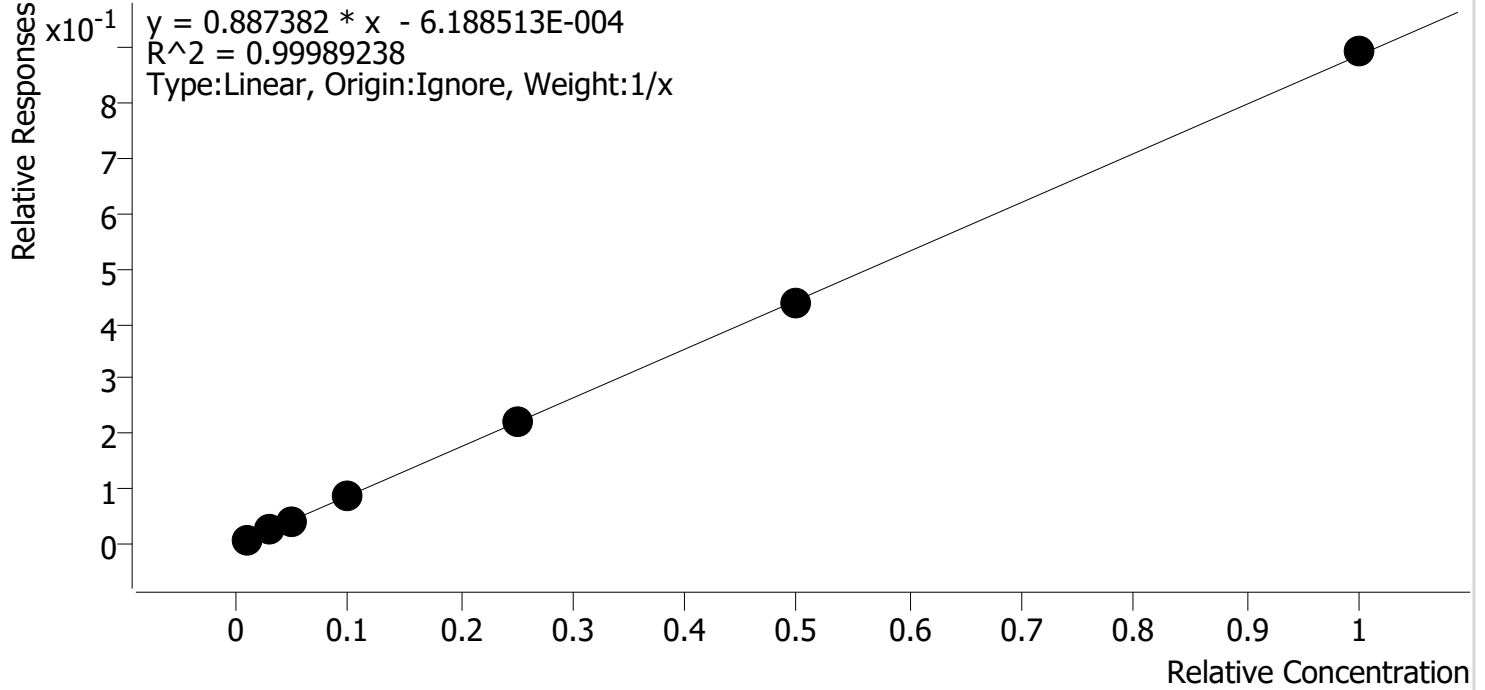
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.104	134274	832535	18.245 ng/ml
THC-COOH	3.529	640993	675317	42.255 ng/ml
THC-OH	3.699	495343	4565559	47.512 ng/ml

# Compound Calibration Report



**Batch results**      D:\MassHunter\Data\2020 Data\am 25-26 082620\QuantResults\cann.batch.bin  
**Last Cal. Update**      8/27/2020 7:17 AM  
**Analyst Name**      ISP\datastor  
**Analyte**      THC      **Internal Standard**      THC-d3

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

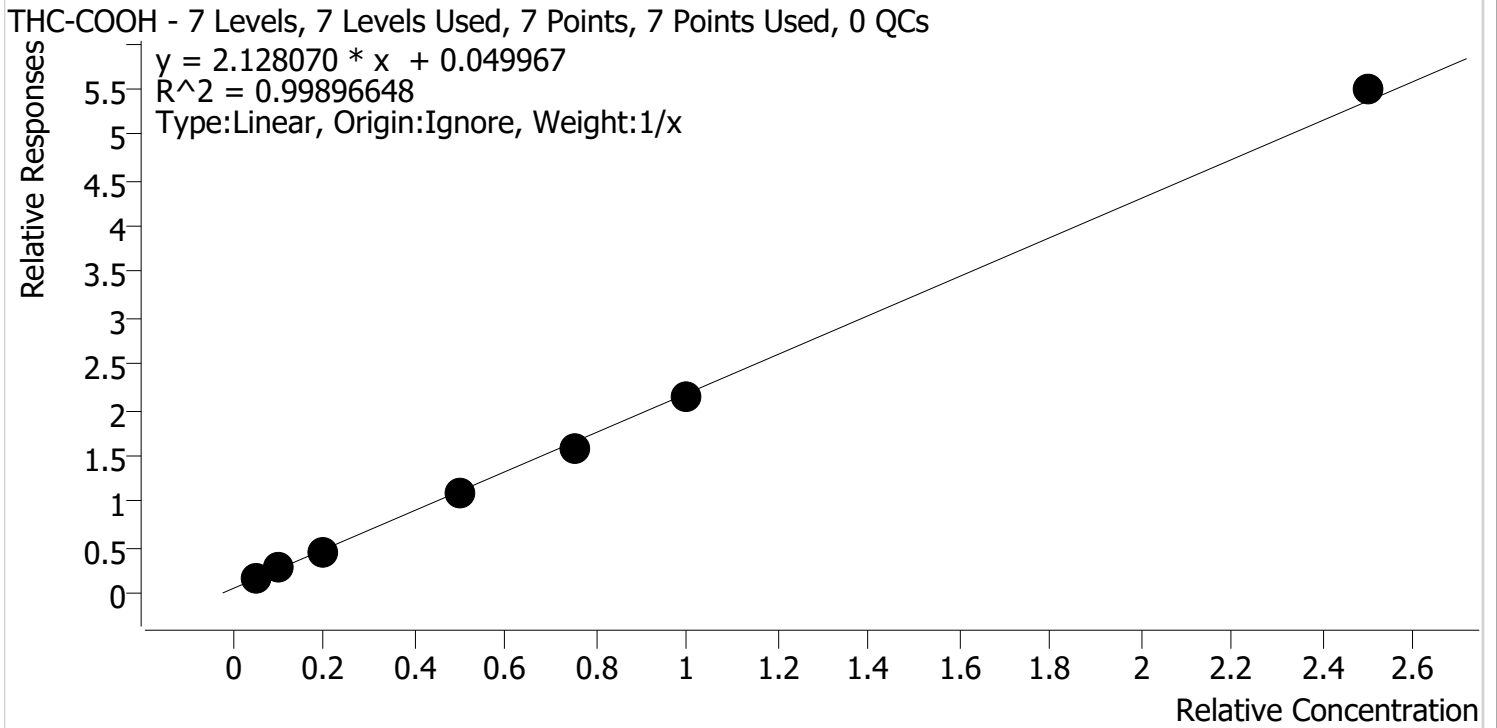


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
check std 1ng	1	✓	1.0	1.1	105.4
cal 2	2	✓	3.0	2.9	96.9
cal 3	3	✓	5.0	5.0	99.1
cal 4	4	✓	10.0	9.9	99.4
cal 5	5	✓	25.0	24.9	99.5
cal-6	6	✓	50.0	49.5	99.0
cal-7	7	✓	100.0	100.8	100.8

# Compound Calibration Report



**Batch results**          D:\MassHunter\Data\2020 Data\am 25-26 082620\QuantResults\cann.batch.bin  
**Last Cal. Update**      8/27/2020 7:17 AM  
**Analyst Name**          ISP\datastor  
**Analyte**                  THC-COOH    Internal Standard                  THC-COOH-d9



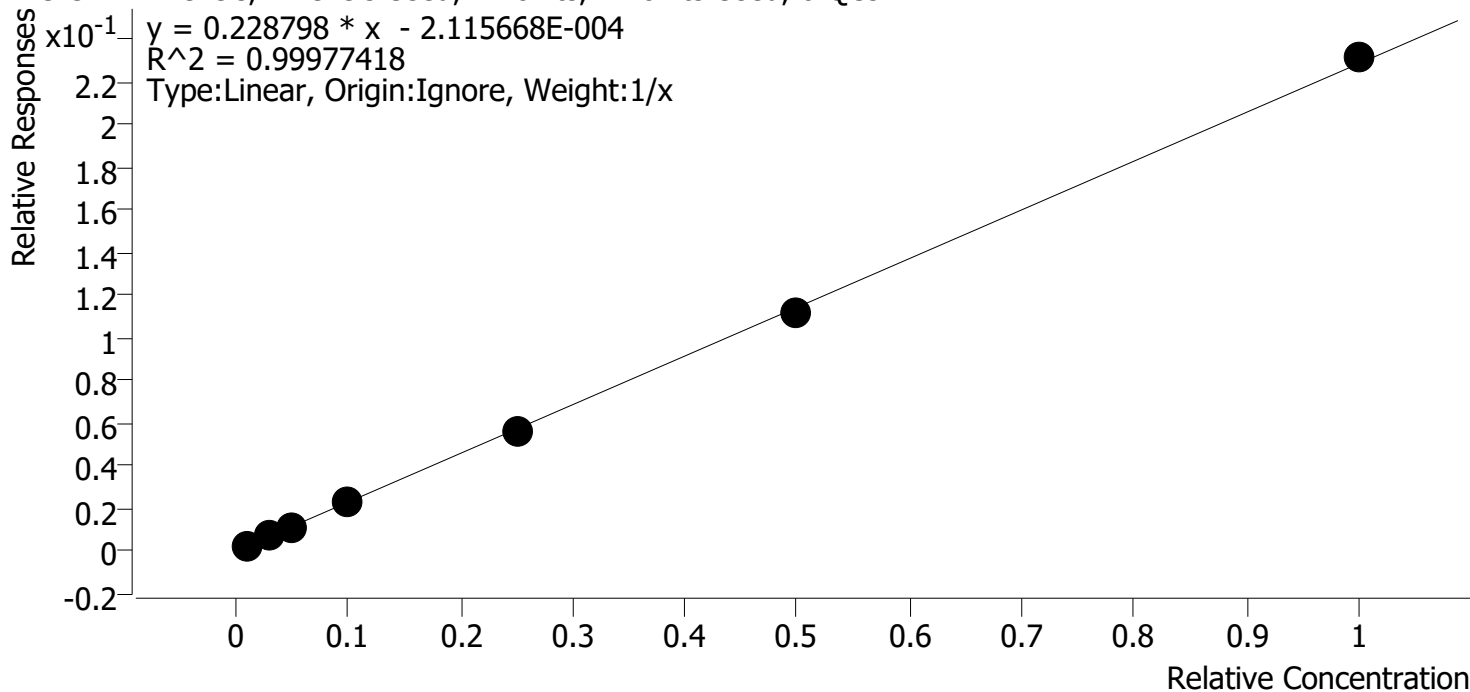
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
check std 1ng	1	✓	5.0	5.5	109.8
cal 2	2	✓	10.0	10.0	100.1
cal 3	3	✓	20.0	18.8	93.9
cal 4	4	✓	50.0	49.8	99.7
cal 5	5	✓	75.0	72.5	96.6
cal-6	6	✓	100.0	97.6	97.6
cal-7	7	✓	250.0	255.8	102.3

# Compound Calibration Report



<b>Batch results</b>	D:\MassHunter\Data\2020 Data\am 25-26 082620\QuantResults\cann.batch.bin		
<b>Last Cal. Update</b>	8/27/2020 7:17 AM		
<b>Analyst Name</b>	ISP\datastor		
<b>Analyte</b>	THC-OH	<b>Internal Standard</b>	THC-OH-d3

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



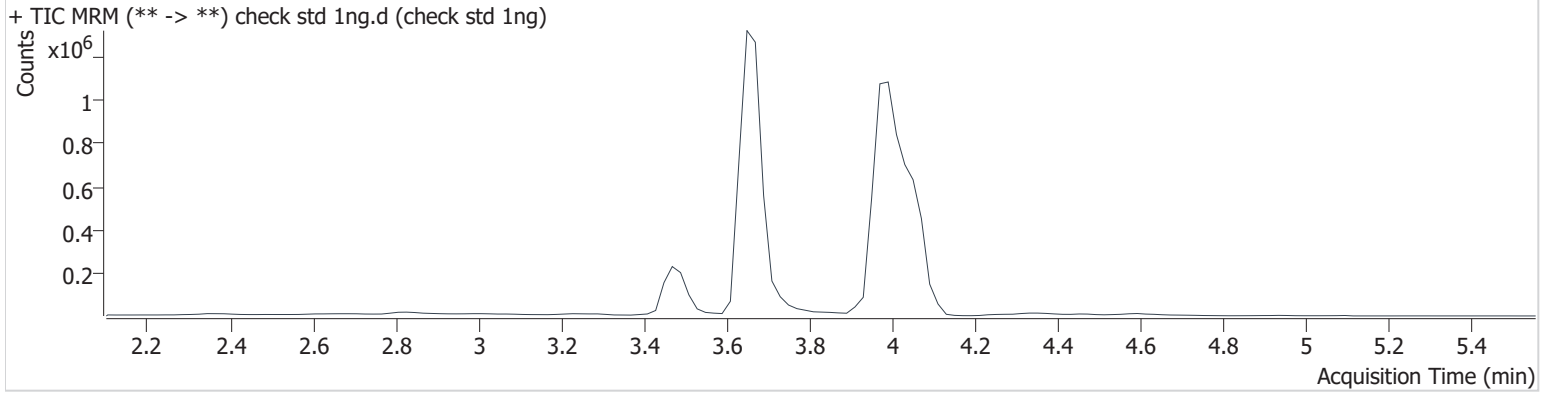
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
check std 1ng	1	✓	1.0	1.1	105.8
cal 2	2	✓	3.0	2.9	97.9
cal 3	3	✓	5.0	4.9	98.1
cal 4	4	✓	10.0	10.0	99.5
cal 5	5	✓	25.0	24.8	99.2
cal-6	6	✓	50.0	49.1	98.3
cal-7	7	✓	100.0	101.2	101.2

# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 082620\QuantResults\cann.batch.bin  
**Calibration Last Update** 8/27/2020 7:17:49 AM

<b>Instrument</b>	69679	<b>Data File</b>	check std 1ng.d
<b>Type</b>	Cal	<b>Sample</b>	check std 1ng
<b>Acq. Method</b>	am 26 cann scr 5-5-20.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P3-A1	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	8/26/2020 3:28:12 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.064	13604	1557932	1.054 ng/ml <b>Low</b>
THC-COOH	3.489	116925	700910	5.491 ng/ml <b>Low</b>
THC-OH	3.658	10954	4959928	1.058 ng/ml <b>Low</b>

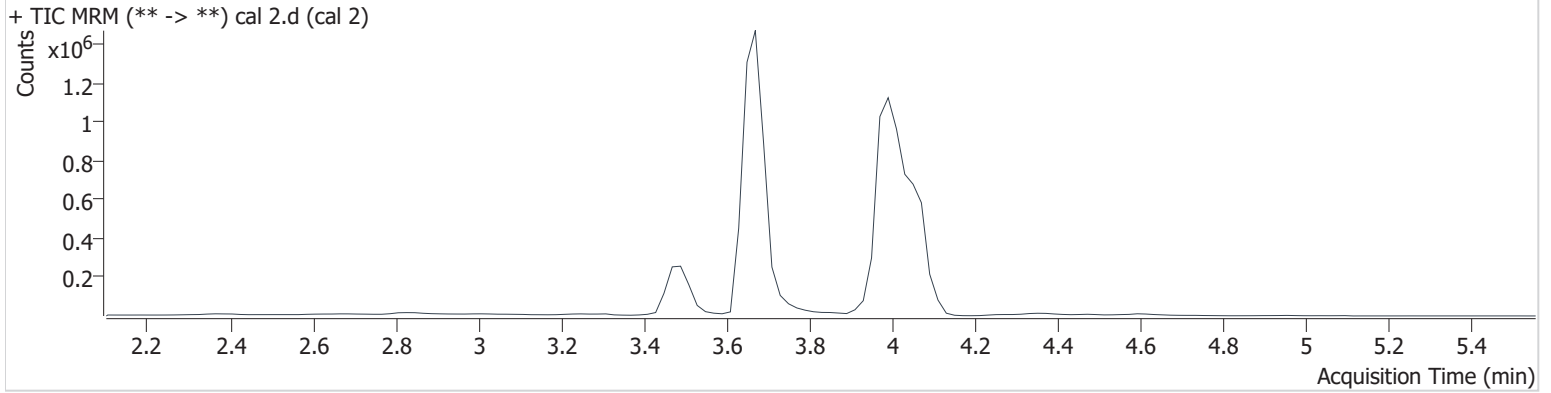
# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 082620\QuantResults\cann.batch.bin  
**Calibration Last Update** 8/27/2020 7:17:49 AM

<b>Instrument</b>	69679	<b>Data File</b>	cal 2.d
<b>Type</b>	Cal	<b>Sample</b>	cal 2
<b>Acq. Method</b>	am 26 cann scr 5-5-20.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P3-B1	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	8/26/2020 3:34:51 PM		

**Sample Info.**

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.064	41065	1631405	2.906 ng/ml <b>Low</b>
THC-COOH	3.489	193691	736768	10.006 ng/ml
THC-OH	3.679	33718	5182162	2.936 ng/ml <b>Low</b>

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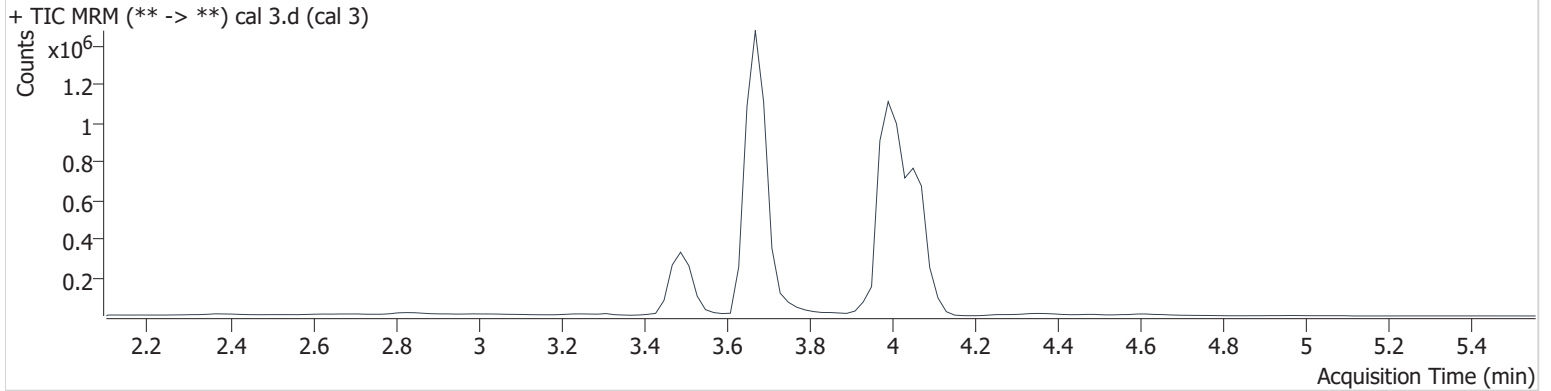
# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 082620\QuantResults\cann.batch.bin  
**Calibration Last Update** 8/27/2020 7:17:49 AM

<b>Instrument</b>	69679	<b>Data File</b>	cal 3.d
<b>Type</b>	Cal	<b>Sample</b>	cal 3
<b>Acq. Method</b>	am 26 cann scr 5-5-20.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P3-C1	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	8/26/2020 3:41:28 PM		

**Sample Info.**

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.084	75877	1750852	4.953 ng/ml
THC-COOH	3.489	328569	730811	18.779 ng/ml
THC-OH	3.679	53739	4879719	4.906 ng/ml



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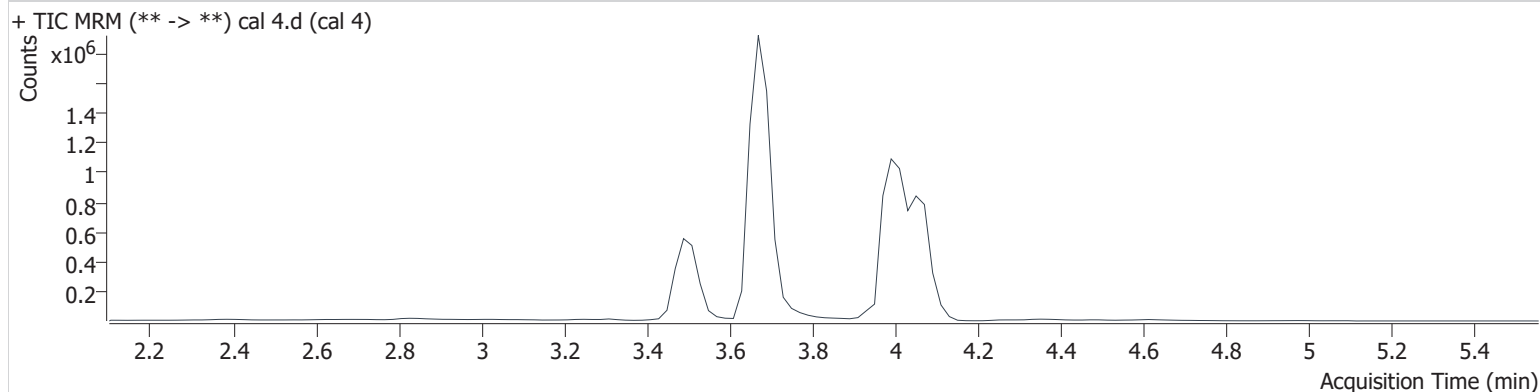
# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 082620\QuantResults\cann.batch.bin  
**Calibration Last Update** 8/27/2020 7:17:49 AM

<b>Instrument</b>	69679	<b>Data File</b>	cal 4.d
<b>Type</b>	Cal	<b>Sample</b>	cal 4
<b>Acq. Method</b>	am 26 cann scr 5-5-20.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P3-D1	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	8/26/2020 3:48:05 PM		

**Sample Info.**

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.084	164853	1882303	9.939 ng/ml
THC-COOH	3.509	883110	795268	49.833 ng/ml
THC-OH	3.679	130312	5776578	9.952 ng/ml

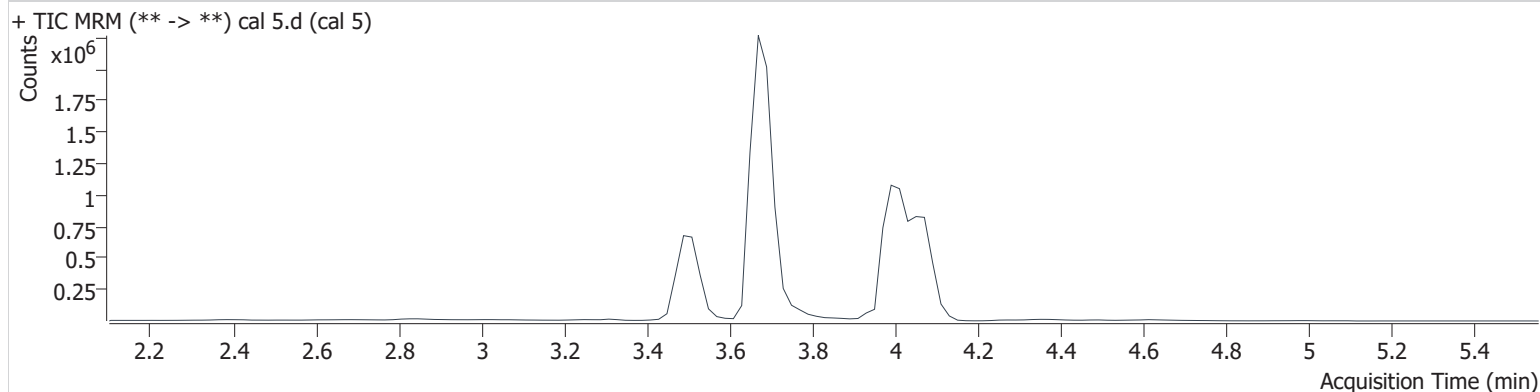
GA

# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 082620\QuantResults\cann.batch.bin  
**Calibration Last Update** 8/27/2020 7:17:49 AM

<b>Instrument</b>	69679	<b>Data File</b>	cal 5.d
<b>Type</b>	Cal	<b>Sample</b>	cal 5
<b>Acq. Method</b>	am 26 cann scr 5-5-20.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P3-E1	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	8/26/2020 3:54:42 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.084	375022	1703680	24.876 ng/ml
THC-COOH	3.509	1230204	772815	72.454 ng/ml
THC-OH	3.679	318706	5635503	24.810 ng/ml

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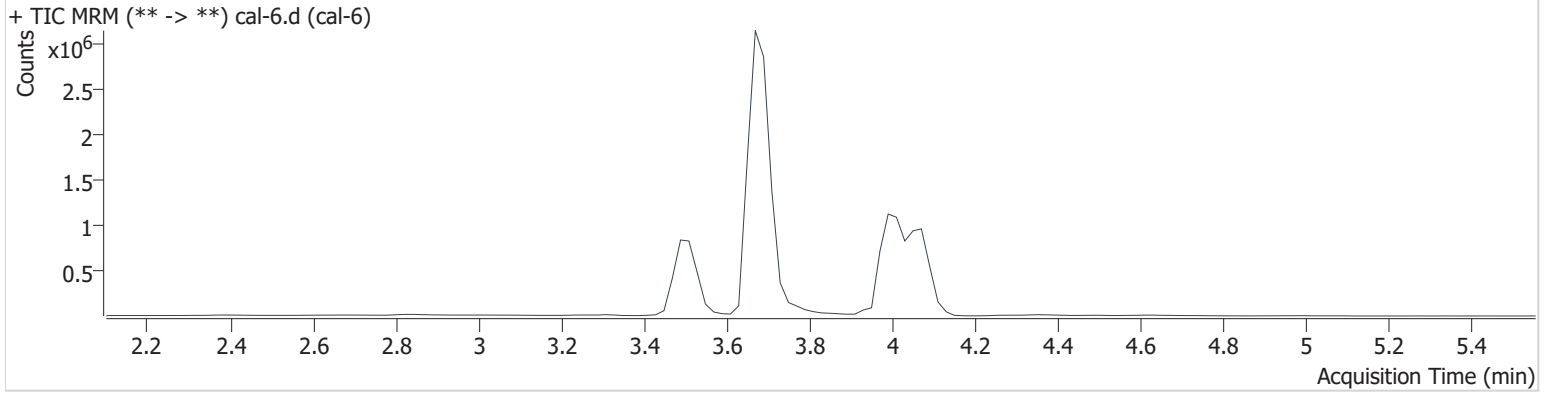
# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 082620\QuantResults\cann.batch.bin  
**Calibration Last Update** 8/27/2020 7:17:49 AM

<b>Instrument</b>	69679	<b>Data File</b>	cal-6.d
<b>Type</b>	Cal	<b>Sample</b>	cal-6
<b>Acq. Method</b>	am 26 cann scr 5-5-20.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P3-F1	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	8/26/2020 4:01:19 PM		

**Sample Info.**

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.084	738157	1682461	49.511 ng/ml
THC-COOH	3.509	1615139	759078	97.638 ng/ml
THC-OH	3.679	652450	5814131	49.139 ng/ml

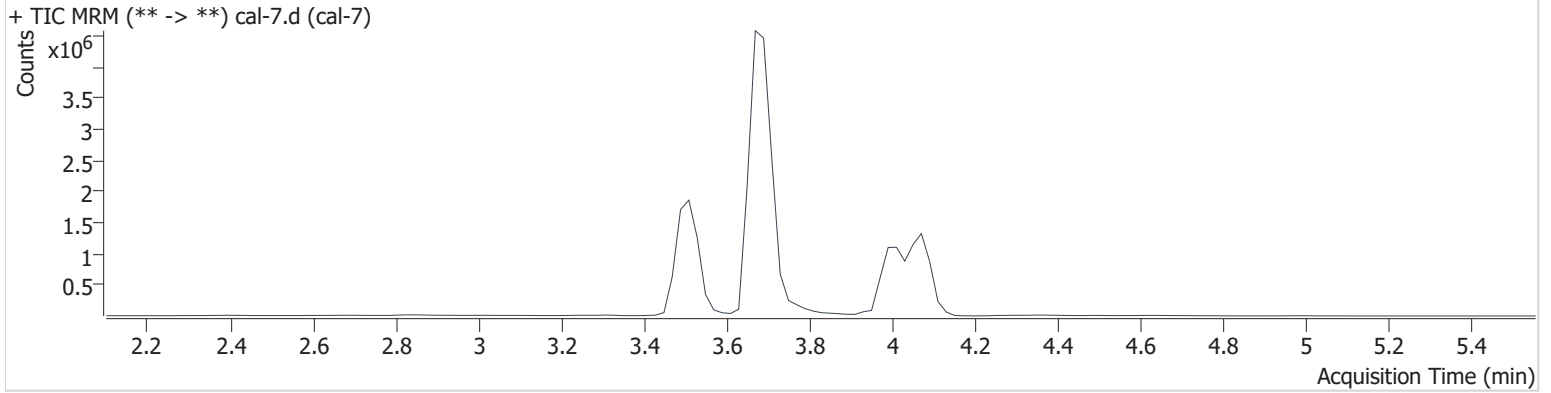
GA

# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 082620\QuantResults\cann.batch.bin  
**Calibration Last Update** 8/27/2020 7:17:49 AM

<b>Instrument</b>	69679	<b>Data File</b>	cal-7.d
<b>Type</b>	Cal	<b>Sample</b>	cal-7
<b>Acq. Method</b>	am 26 cann scr 5-5-20.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P3-G1	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	8/26/2020 4:07:55 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.084	1541054	1724724	100.760 ng/ml
THC-COOH	3.509	4153366	756044	255.799 ng/ml
THC-OH	3.679	1309650	5661411	101.199 ng/ml