

*Byylee*

**Worklist: 5126**

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>	
C2021-1425	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2021-1488	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2021-1501	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2021-1515	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2021-1517	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2021-1523	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2021-1545	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2021-1549	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2021-1553	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2021-1579	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2021-1590	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2021-1679	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2021-1682	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2021-1687	3	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2021-1690	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2021-1710	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2021-1712	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2021-1714	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2021-1715	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

BWylie

Extraction Date: 7/23/2021

Analyst: Britany Wylie

Plate lot#: 210611

Plate Expiration: 12/11/2021

**Mobile phase A:** 10mM Amm Form

0.5M Ammonium Hydroxide

**Blank Blood Lot:** 20K20702

**LCMS-QQQ ID:** 69679

**Mobile phase B:** 0.1% Formic Acid in MeOH

Ethyl Acetate

LC Methanol

**Column:** Phenomenex Phenyl Hexyl (4.6x50mm, 2.6um)

## 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 50ul 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: *incorrect plate position for negative control stopped the injections. Corrected and restarted run. Acquisition for a few compounds was not performed due to being outside retention time window, acquisition method was adjusted and batch was reinjected and evaluated.* ~~Paroxetine not evaluated in this batch~~

BW

BWylee

Toxicology AM method 25/28 urine external control prep

working solution 10000 ng/ml in meoh diphendyramine, methamphetamine, alprazolam, methocarbamol, methylphenidate, morphine

Stock solution 1mg/ml 50 ul each in 4750 ul MeOH (Honeywell EA078-US)

ppd 6/25/21: Exp: 6/25/2022 lot 62522 by AMN

Drug	lot	expiration
Methamphetamine	FE03132001	7/1/2025
methocarbamol	FN01212005	1/1/2023
alprazolam	FE06102008	6/1/2025
Diphendyramine	FN02212011	3/1/2025
Morphine	FE03232010	4/1/2025

**AM 25/28 control 500 ul working solution (62522) in 4500 ul negative urine (1000ng/mL Expected concentration)**

ppd 6/25/21, exp 6/25/22 lot u62522 negative urine 5621 by AMN

**AM 25/28 Blood Control: 50ul working solution (41422) in 4950 ul neg blood (100ng/mL Expected concentration)**

ppp 6/25/21, exp 6/25/22 lot b62522 neg blood 21D52496 by AMN

AM 25  
7/22/21 WORKLIST

*BWylee*

	1	2	3	4	5	6	7	8	9	10	11	12
A	IS + Cal. 1	1515	1553	1714-2								
B		1517	1579	1715								
C	neg	1549	1590									
D	pc	1545	1679-2									
E		1690	1682									
F	1425	neg urine	1687-3									
G	1488	urine ctrl	1710									IS + Cal. 1
H	1501	1523	1712									IS + Cal. 1

All wells to contain 60 µl of residual DMSO

Case #: C2021-\_\_-

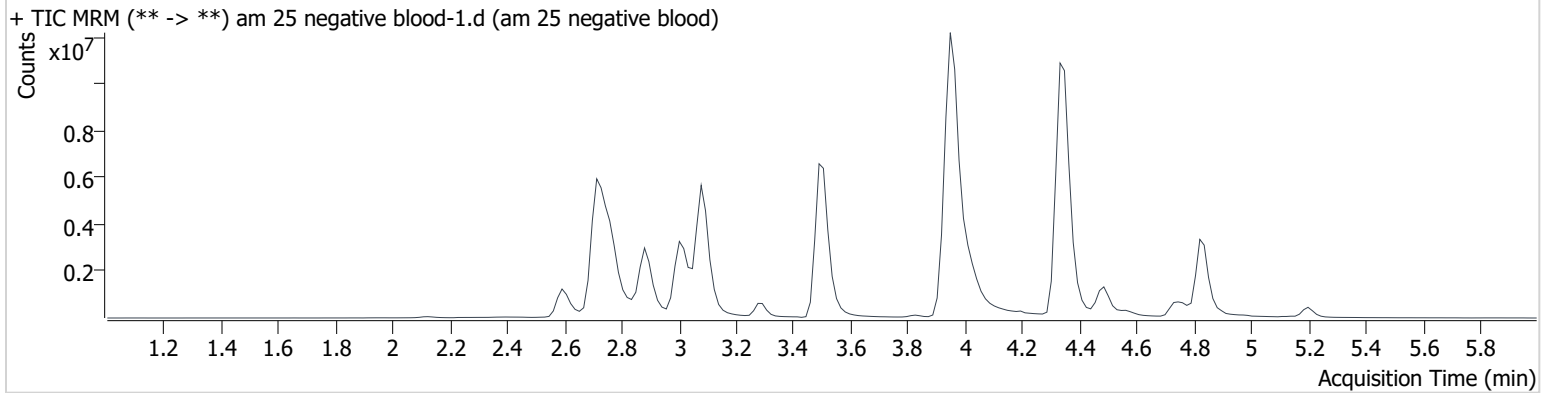
# AM #25 Multi-Drug Screen Results

*B. Wylie*

**Batch results** D:\MassHunter\Data\2021\am 25-26\072321r mds\QuantResults\mds reinject.batch.bin  
**Calibration Last Update** 7/27/2021 3:10:32 PM

<b>Instrument</b>	69679	<b>Data File</b>	am 25 negative blood-1.d
<b>Type</b>	Sample	<b>Sample</b>	am 25 negative blood
<b>Acq. Method</b>	mds713.m	<b>Operator</b>	Britany Wylie
<b>Sample Position</b>	P2-C1	<b>Comment</b>	
<b>Injection Volume</b>	2.5		
<b>Acq. Date-Time</b>	7/24/2021 1:36:19 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



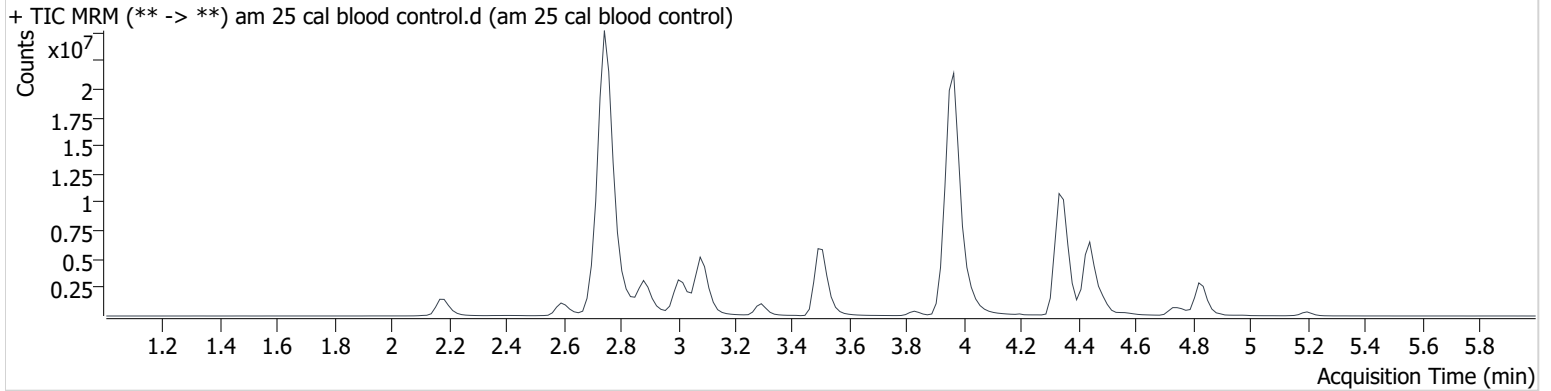
# AM #25 Multi-Drug Screen Results

*B. Wylie*

**Batch results** D:\MassHunter\Data\2021\am 25-26\072321r mds\QuantResults\mds reinject.batch.bin  
**Calibration Last Update** 7/27/2021 3:10:32 PM

<b>Instrument</b>	69679	<b>Data File</b>	am 25 cal blood control.d
<b>Type</b>	Sample	<b>Sample</b>	am 25 cal blood control
<b>Acq. Method</b>	mds713.m	<b>Operator</b>	Britany Wylie
<b>Sample Position</b>	P2-D1	<b>Comment</b>	
<b>Injection Volume</b>	2.5		
<b>Acq. Date-Time</b>	7/24/2021 1:43:01 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.446	10172300	4282964283170	14878.7	2001746	88.962
Diphenhydramine	3.975	29756178	531482.9	∞	27177135	85.857
Hydromorphone	2.187 <b>Low</b>	802459	∞		160348	15.431
Methamphetamine	2.755	32863503	86556.8	∞	17249337	64.066
Methocarbamol	3.301	732963	8603.3	7663.2	1988475	77.230
Morphine	2.173	1629782	16425.6	26553.2	160348	89.995

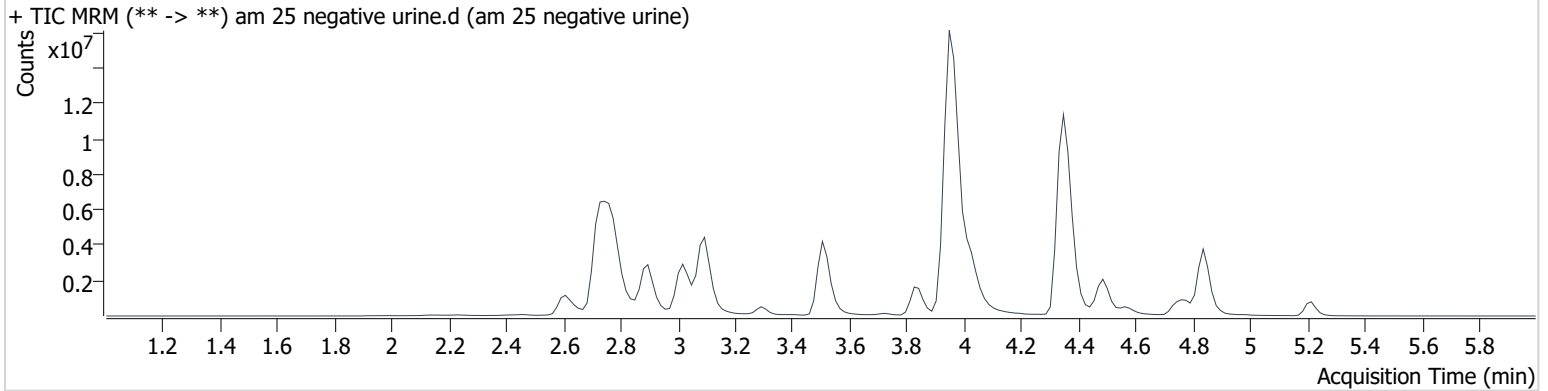
# AM #25 Multi-Drug Screen Results

BWylie

**Batch results** D:\MassHunter\Data\2021\am 25-26\072321r mds\QuantResults\mds reinject.batch.bin  
**Calibration Last Update** 7/27/2021 3:10:32 PM

<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>	mds713.m	<b>Operator</b>	Britany Wylie
<b>Sample Position</b>	P2-F2	<b>Comment</b>	
<b>Injection Volume</b>	2.5		
<b>Acq. Date-Time</b>	7/24/2021 2:49:59 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Amphetamine	2.650	177268	∞	818.5	3553728	1.220
Brompheniramine	4.106 <b>High</b>	3378	68.5	∞	39636844	0.846
Methamphetamine	2.771	5006206	∞	∞	17733585	9.493
Oxazepam	4.449 <b>High</b>	10481	∞	61.4	209630	2.720

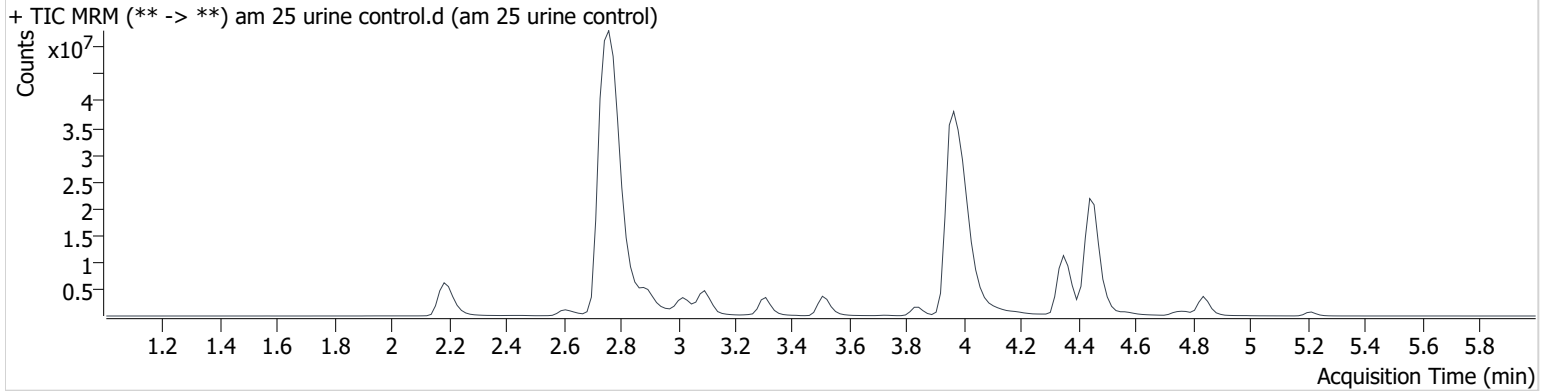
# AM #25 Multi-Drug Screen Results

*B. Wylie*

**Batch results** D:\MassHunter\Data\2021\am 25-26\072321r mds\QuantResults\mds reinject.batch.bin  
**Calibration Last Update** 7/27/2021 3:10:32 PM

<b>Instrument</b>	69679	<b>Data File</b>	am 25 urine control.d
<b>Type</b>	Sample	<b>Sample</b>	am 25 urine control
<b>Acq. Method</b>	mds713.m	<b>Operator</b>	Britany Wylie
<b>Sample Position</b>	P2-G2	<b>Comment</b>	
<b>Injection Volume</b>	2.5		
<b>Acq. Date-Time</b>	7/24/2021 2:56:44 PM		

**Sample Chromatogram**



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.446	39642166	∞	49150.6	1807259	384.000
Amphetamine	2.650	283376	∞	639.4	3399636	2.039
Brompheniramine	4.091 <b>High</b>	3132	∞	43.8	29736012	1.046
Diphenhydramine	3.990	91868323	95927.3	80543.0	29736012	242.263
Fentanyl	4.381	3886	5.8		10713930	0.240
Hydromorphone	2.187 <b>Low</b>	3714442	∞	∞	104506	109.595
Methamphetamine	2.771	84079149	∞	2080873.2	14041754	201.350
Methocarbamol	3.316	5043859	∞	30179.7	1590363	664.497
Morphine	2.188	7708275	127104.0	160886.2	104506	653.082
Norbuprenorphine	3.733	848	5371.3		104506	2.748
Oxazepam	4.310	8380	7.3	329.6	201642	2.261
Paroxetine	4.104 <b>Low</b>	5098	63.8	6.1	988033	0.800



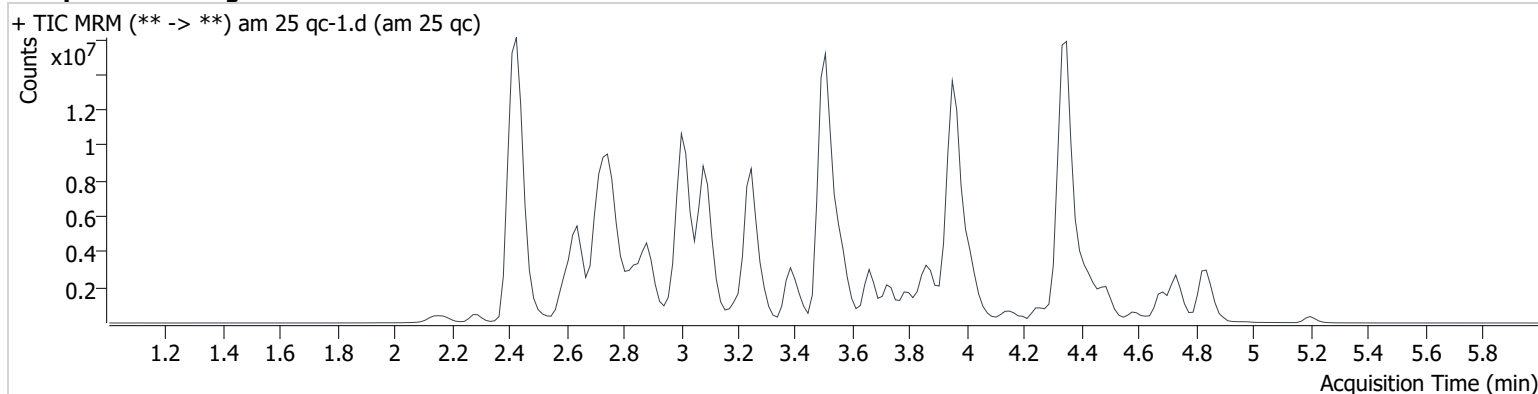
# AM #25 Multi-Drug Screen Results

*B. Wylie*

**Batch results** D:\MassHunter\Data\2021\am 25-26\072321r mds\QuantResults\mds reinject.batch.bin  
**Calibration Last Update** 7/27/2021 3:10:32 PM

<b>Instrument</b>	69679	<b>Data File</b>	am 25 qc-1.d
<b>Type</b>	Cal	<b>Sample</b>	am 25 qc
<b>Acq. Method</b>	mds713.m	<b>Operator</b>	Britany Wylie
<b>Sample Position</b>	P2-A1	<b>Comment</b>	
<b>Injection Volume</b>	2.5		
<b>Acq. Date-Time</b>	7/24/2021 1:29:37 PM		

## Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
6-MAM	2.879	25265	53733.1	30112.3	938305	10.000
7-aminoclonazepam	3.297	231734	33627.3	1471299.9	1855889	10.000
7-aminoflunitrazepam	3.525	1883420	16206866.0	∞	1855889	10.000
Acetyl Fentanyl	4.136	110349	93011.7	∞	19174460	10.000
Acetyl Norfentanyl	2.614	245221	3839.8	1029.1	19174460	10.000
a-hydroxyalprazolam	4.336	38782	18938.7	∞	1855889	10.000
alpha-hydroxymidazolam	4.427	417389	∞	177305.3	1855889	10.000
alpha-PHP	3.883	1721102	36262.1	4175.3	4542224	10.000
alpha-PVP	3.579	3791953	∞	4254.8	4542224	10.000
Alprazolam	4.446	1521248	2041.2	13257.7	2663144	10.000
Amitriptyline	4.496	104118	357.8	3931.2	544798	10.000
Amphetamine	2.635	1857051	∞	7778.9	4542224	10.000
Benzoylcegonine	3.081	951129	∞	3127.9	350768	10.000
Brompheniramine	3.983	29654	∞	21436.5	29447866	10.000
Buprenorphine	5.214	163529	∞	119390.9	805955	10.000
Bupropion	3.884	184235	186418.8	278.1	857733	10.000
Carbamazepine	4.023	2966456	8888.3	4736.3	34589	10.000
Carisoprodol	4.021	360658	4492.3	245.9	1887998	10.000
Chlordiazepoxide	4.585	216597	1367908575510	334.4	2663144	10.000
Chlorpheniramine	3.880	2833533	21149.2	248.0	29447866	10.000
Citalopram	3.982	1186881	2915.7	392499.3	29447866	10.000
Clomipramine	4.764	90824	4875.8	5105605306152	9251427	10.000
Clonazepam	4.260	101923	315701.2	214527.3	2663144	10.000
Clonazolam	4.164	325276	589486.3	644615.4	2663144	10.000
Cocaehtylene	3.722	4104686	∞	∞	29447866	10.000
Cocaine	3.524	4782022	11808.9	5774.9	25382481	10.000
Codeine	2.836	272268	16842.2	13669.4	198721	10.000
Cyclobenzaprine	4.373	246959	153861.0	51.9	544798	10.000
Desipramine	4.405	127505	171278.5	193.4	544798	10.000
Dextromethorphan	4.035	505191	5527.6	717339.3	2653289	10.000
Dextrorphan	3.207	2272097	31853.0	12182.3	2653289	10.000
Diazepam	4.708	334842	1863.9	∞	2663144	10.000

am 25 qc

# AM #25 Multi-Drug Screen Results

*Byylee*

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Dihydrocodeine	2.592	919075	∞	5966.9	2041109	10.000
Diphenhydramine	3.975	3755345	114429.6	6537.6	29447866	10.000
Doxepin	4.172	343126	2934.3	999.0	7357984	10.000
Doxylamine	3.511	9504174	8425348.7	34537.6	2653289	10.000
EDDP	3.941	859452	3132321.0	3366.2	2041109	10.000
Estazolam	4.341	1004670	1327.0	∞	2663144	10.000
Etizolam	4.457	198518	1046327176387 4600.0	∞	2663144	10.000
Fentanyl	4.381	32877	∞	23475.5	2172539	10.000
Flualprazolam	4.289	744642	∞	473453.7	2663144	10.000
Flunitrazepam	4.384	494125	394434.5	∞	2663144	10.000
Fluoxetine	4.246	52626	∞	4256.2	101817	10.000
Flurazepam	4.409	1300775	13788243.7	13020.2	2663144	10.000
Hydrocodone	3.080	801668	∞	728.7	5085703	10.000
Hydromorphone	2.384	644475	29326.5	2287.8	198721	10.000
Imipramine	4.434	567173	1096944.4	595.0	544798	10.000
Ketamine	3.854	3690763	118192.9	∞	10163110	10.000
Lamotrigine	3.391	187913	1604.7	∞	29447866	10.000
Levamisole	2.997	3253547	1002146.9	∞	2653289	10.000
Levetireacetam	2.299	551987	3072.8	2253.8	9251427	10.000
Lorazepam	4.260	14366	10.5	22.8	2663144	10.000
Maprotiline	4.496	55856	131.1	∞	544798	10.000
MDA	2.753	834476	3788.4	9621547551846. 4	23279274	10.000
MDEA	3.012	3270196	∞	18107.6	23279274	10.000
MDMA	2.845	3830851	41376.5	8502.2	23279274	10.000
Meperidine	3.576	2154263	6980.0	∞	2653289	10.000
Meprobamate	3.411	99674	24455.8	109.9	1887998	10.000
Methadone	4.322	1409937	1535.2	5347.1	2041109	10.000
Methamphetamine	2.755	6922852	∞	3690.6	23279274	10.000
Methocarbamol	3.301	97418	∞	∞	2041109	10.000
Methylphenidate	3.393	7056583	54602.4	20682.6	10163110	10.000
Metoprolol	3.237	503137	∞	261873.8	2653289	10.000
Midazolam	4.626	252039	∞	∞	2663144	10.000
Mirtazapine	4.405	1507688	34153.2	∞	2653289	10.000
Mitragynine	4.393	102356	130593.2	2851759.3	2653289	10.000
Morphine	2.173	224436	1033.4	4744.5	198721	10.000
Norbuprenorphine	3.718	5869	14729.6	35121.4	198721	10.000
Nordiazepam	4.543	84062	466352.3	103397.2	2663144	10.000
Norfentanyl	3.102	3769929	12684.3	3168.4	19174460	10.000
Norhydrocodone	2.686	33167	79.1	∞	5085703	10.000
norketamine	3.870	220446	967.5	25862.8	10163110	10.000
Normeperidine	3.424	904060	6034.0	1767.5	29447866	10.000
Noroxycodone	2.608	761621	8183.2	1822.9	9594032	10.000
Nortriptyline	4.360	48403	140820.9	∞	544798	10.000
O-desmethyl-tramadol	2.643	8965222	∞	625.1	29447866	10.000
Olanzapine	3.969	7100	12175.4	54.3	34589	10.000
Oxazepam	4.325	44262	172.3	70.4	240796	10.000
Oxycodone	2.804	2126033	∞	∞	9594032	10.000
Oxymorphone	2.138	524834	∞	∞	198721	10.000
Paroxetine	4.289	6565	56.1	∞	101817	10.000
Phenazepam	4.472	135350	120082.4	383805.2	2663144	10.000
Phencyclidine	3.807	2776890	6961.3	138216.8	2653289	10.000
Phentermine	2.922	22507	∞	1218975102305 47.0	10163110	10.000
Phenytoin	3.914	66688	1522970478546 4100.0	426.5	34589	10.000
Promethazine	4.495	567843	∞	800.9	29447866	10.000
Pseudoephedrine	2.435	49035902	∞	∞	23279274	10.000
Quetiapine	4.668	2254394	2008853.5	∞	36553867	10.000
Sertraline	4.569	19808	996.4	717.1	101817	10.000

# AM #25 Multi-Drug Screen Results

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Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Sufentanil	4.836	22570	15515.8	∞	19174460	10.000
Tapentadol	3.257	5101074	∞	27830.2	2041109	10.000
Temazepam	4.509	478394	918132.8	2731.1	2663144	10.000
Tramadol	3.253	9767054	∞	297.9	29447866	10.000
Trazodone	4.852	1477638	34074.0	∞	7357984	10.000
Venlafaxine	3.664	6349593	7731828.9	2173.8	101817	10.000
Zaleplon	4.139	540404	880005.7	∞	36553867	10.000
Zolpidem	4.355	9755086	201575965.6	49328.0	36553867	10.000
Zopiclone	4.332	38810	44796.1	19280.1	232346	10.000

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

*B. Wylie*

Extraction Date: 7/23/2021

Analyst: Britany Wylie

Plate lot#: 210412

Plate Expiration: 10-12-2021

**Mobile phase A:** 10mM Ammonium Formate

**Mobile phase B:** 0.1% Formic acid in MeOH

0.1% Formic Acid in Water

MTBE

Hexane

1N KOH Saturated Phosphate Buffer

**Blank Blood Lot:** 20K20702

**Neg Urine Lot:** 5621

**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.
- 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 1 ng/mL or greater for THC, 3 ng/mL or greater for THC-OH, and/or 5 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: *THC-OH curve limited: 3-100; THC-OH not evaluated in Urine samples.*

# Toxicology AM method 27/26 external prep information

*BWylee*

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 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	
--	--	--	--

## AM 27/26 urine control 400 ul working solution lot (82620) in 9600 ul urine

out of use

ppd 8/26/20 Exp 7/1/21 neg urine lot 73020	lot u82620	Concentration 30 ng/ml THC, and 60 ng/ml C-THC, THC-OH	by amn	10/4/2020
ppd 10/5/20 Exp 7/1/21 neg urine lot 10120	lot 10520	Concentration 30 ng/ml THC, and 60 ng/ml C-THC, THC-OH	by amn	1/12/2021
ppd 1/13/21 Exp 7/1/21 neg urine lot 10120	lot 11321	Concentration 30 ng/ml THC, and 60 ng/ml C-THC, THC-OH	by amn	3/28/2021
ppd 3/29/21 Exp 7/1/21 neg urine lot 2121	lot 32921	Concentration 30 ng/ml THC, and 60 ng/ml C-THC, THC-OH	by amn	5/27/2021
ppd 5/28/21 Exp 7/1/21 neg urine lot 5621	lot 52821	Concentration 30 ng/ml THC, and 60 ng/ml C-THC, THC-OH	by amn	

NOTE: Hydroxy THC not evaluated in urine samples due to expiration date of 7/1/2021

*BW*

am 26  
7/22/21 WORKLIST

*BWylee*

	1	2	3	4	5	6
A	IS + Cal. 1	neg blood	1690-1	1682-1		IS + QC_1
B	IS + Cal. 2	1425-1	neg urine	1687-3		IS + Cal. 7
C	IS + Cal. 3	1488-1	urine ctrl	1710-1		IS + Cal. 6
D	IS + Cal. 4	1501-1 (did not flow through SLE)	1523-1	1712-1		IS + Cal. 5
E	IS + Cal. 5	1515-1	1553-1	1714-2		IS + Cal. 4
F	IS + Cal. 6	1517-1	1579-1	1715-1		IS + Cal. 3
G	IS + Cal. 7	1549-1	1590-1	1501-1r		IS + Cal. 2
H	IS + QC_1	1545-1	1679-2			IS + Cal. 1

All wells to contain 100 µl of residual DMSO

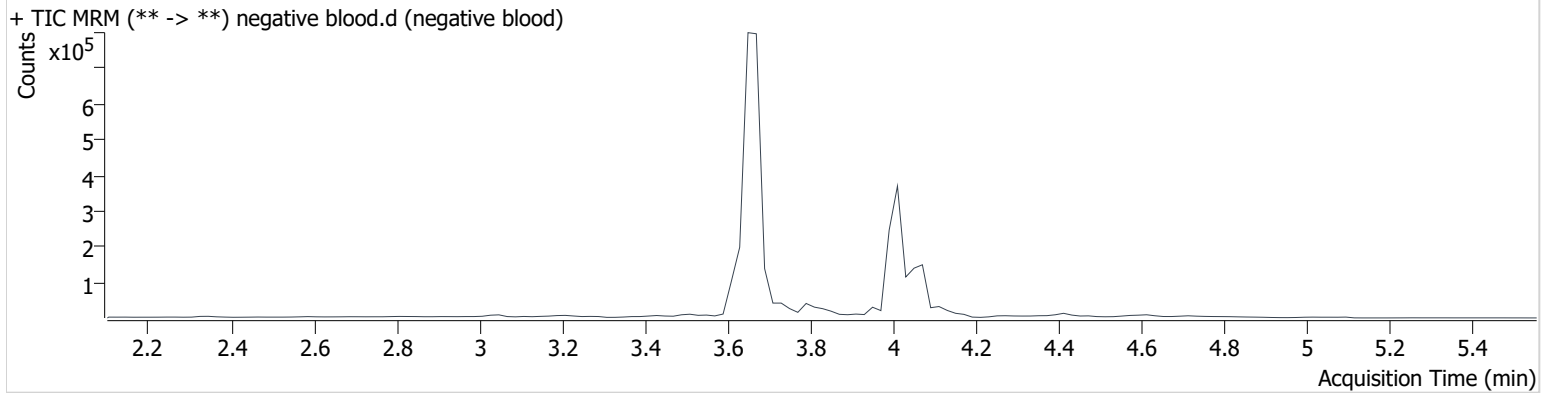
Case #: C2021- \_\_\_\_

# AM #26 Cannabinoids Screen Results *BWylie*

**Batch results** D:\MassHunter\Data\2021\am 25-26\072321\QuantResults\cann scr.batch.bin  
**Calibration Last Update** 7/24/2021 11:33:21 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>	Britany Wylie
<b>Sample Position</b>	P3-A2	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	7/24/2021 3:47:34 AM		
<b>Sample Info.</b>			

## Sample Chromatogram



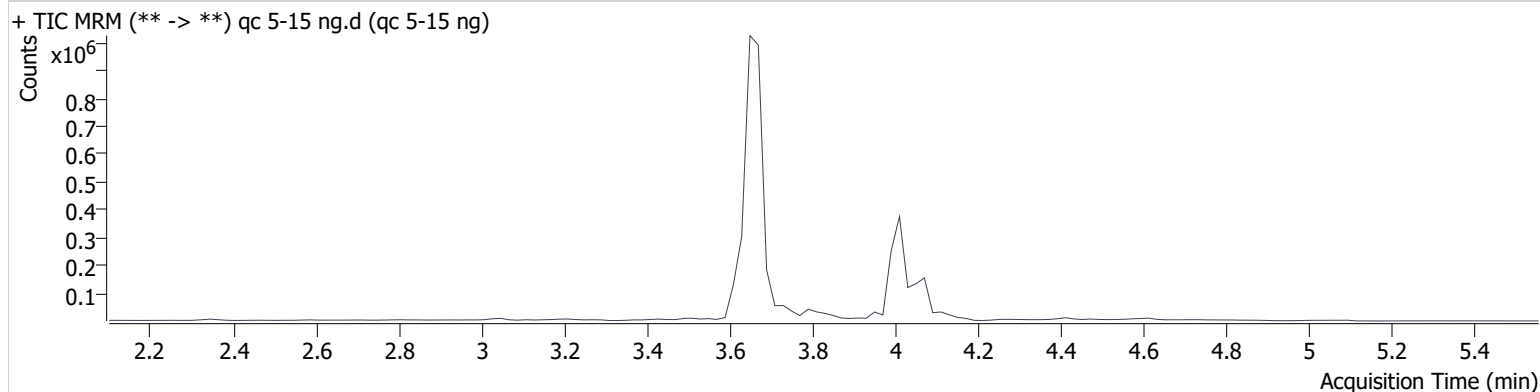
# AM #26 Cannabinoids Screen Results *BWylie*

**Batch results** D:\MassHunter\Data\2021\am 25-26\072321\QuantResults\cann scr.batch.bin  
**Calibration Last Update** 7/24/2021 11:33:21 AM

<b>Instrument</b>	69679	<b>Data File</b>	qc 5-15 ng.d
<b>Type</b>	QC	<b>Sample</b>	qc 5-15 ng
<b>Acq. Method</b>	am 26 cann scr 5-5-20.m	<b>Operator</b>	Britany Wylie
<b>Sample Position</b>	P3-H1	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	7/24/2021 3:40:56 AM		

**Sample Info.**

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.084	12125	286465	4.366 ng/ml
THC-COOH	3.632	80169	420039	15.140 ng/ml
THC-OH	3.679	19450	2454687	4.735 ng/ml

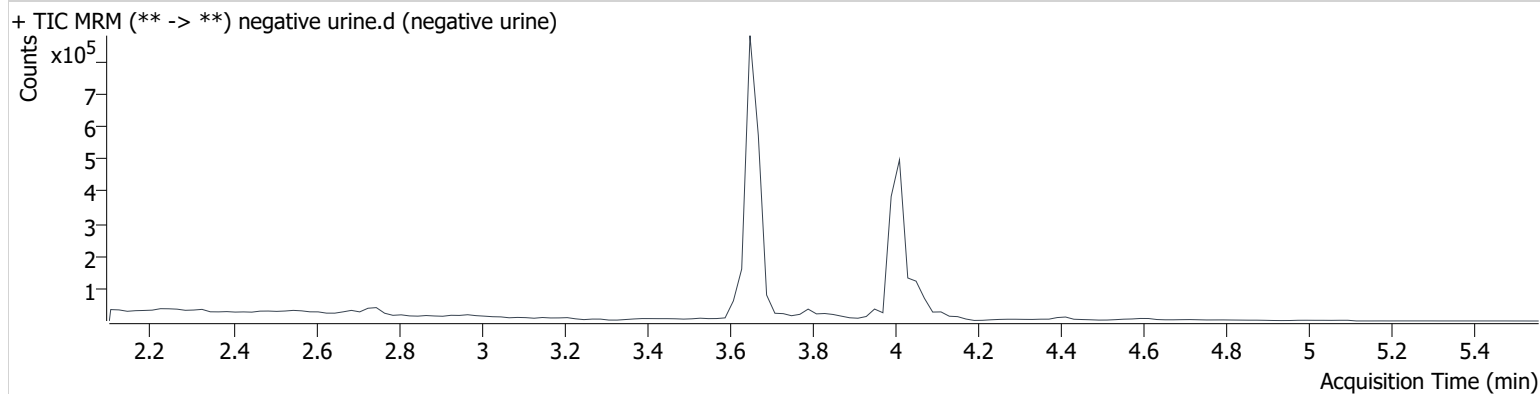


# AM #26 Cannabinoids Screen Results *BWylie*

**Batch results** D:\MassHunter\Data\2021\am 25-26\072321\QuantResults\cann scr.batch.bin  
**Calibration Last Update** 7/24/2021 11:33:21 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>	Britany Wylie
<b>Sample Position</b>	P3-B3	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	7/24/2021 4:40:22 AM		
<b>Sample Info.</b>			

## Sample Chromatogram



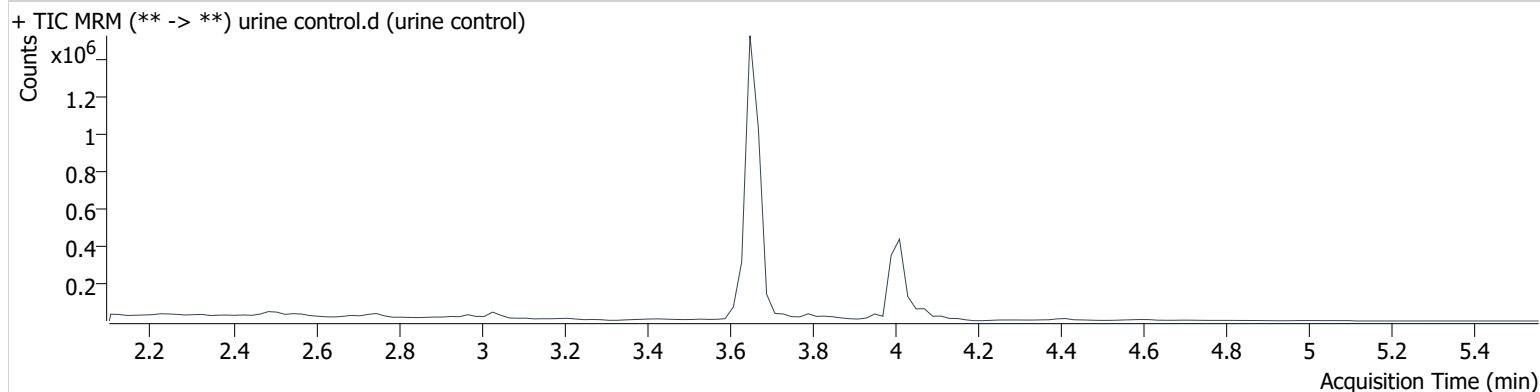
# AM #26 Cannabinoids Screen Results *BWylie*

**Batch results** D:\MassHunter\Data\2021\am 25-26\072321\QuantResults\cann scr.batch.bin  
**Calibration Last Update** 7/24/2021 11:33:21 AM

<b>Instrument</b>	69679	<b>Data File</b>	urine control.d
<b>Type</b>	Sample	<b>Sample</b>	urine control
<b>Acq. Method</b>	am 26 cann scr 5-5-20.m	<b>Operator</b>	Britany Wylie
<b>Sample Position</b>	P3-C3	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	7/24/2021 4:46:58 AM		

**Sample Info.**

## Sample Chromatogram



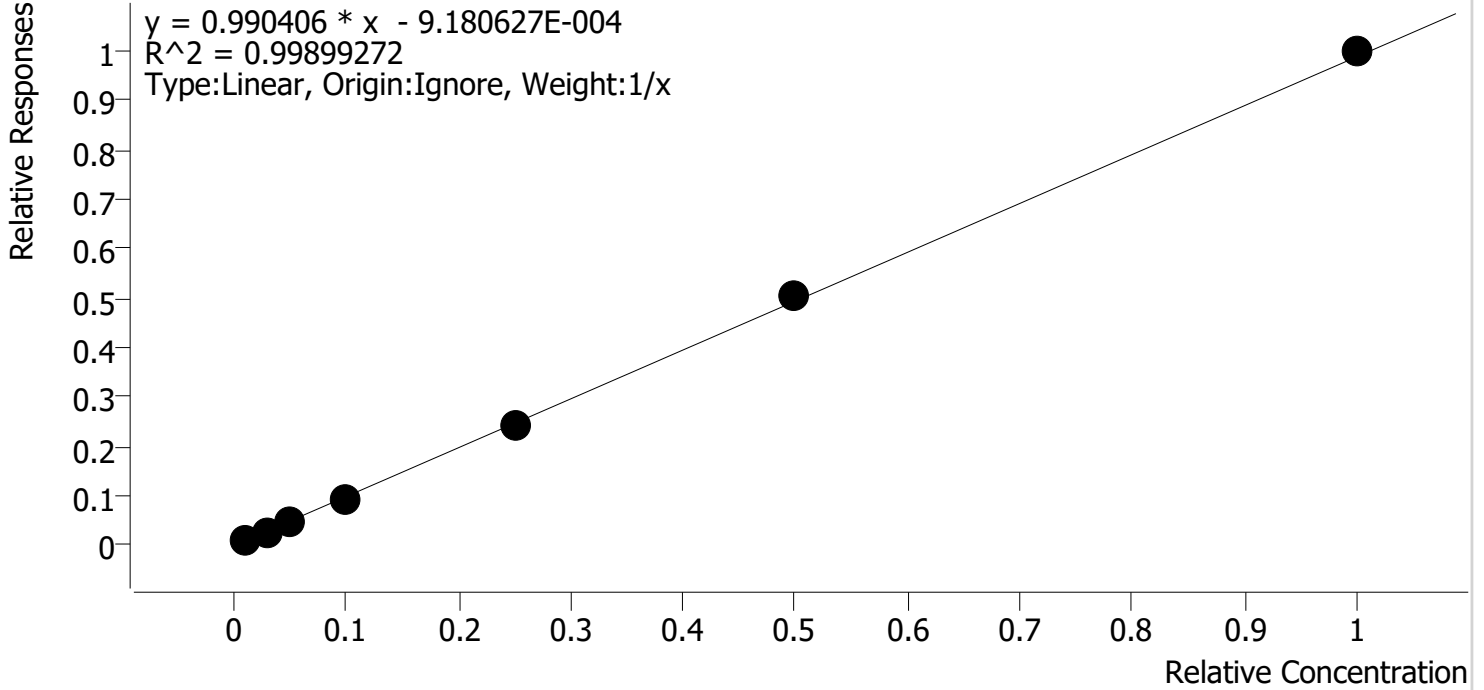
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.064	13656	90721	15.291 ng/ml
THC-COOH	3.632	124321	250962	39.900 ng/ml
THC-OH	3.658	127346	2043407	36.004 ng/ml

# Compound Calibration Report

Byelee

**Batch results** D:\MassHunter\Data\2021\am 25-26\072321\QuantResults\cann scr.batch.bin  
**Last Cal. Update** 7/24/2021 11:33 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
cal 1	1	✓	1.0	1.2	118.5
cal 2	2	✓	3.0	2.9	96.7
cal 3	3	✓	5.0	4.7	93.2
cal 4	4	✓	10.0	9.2	91.9
cal 5	5	✓	25.0	24.3	97.2
cal-6	6	✓	50.0	50.7	101.5
cal-7	7	✓	100.0	101.0	101.0

# Compound Calibration Report

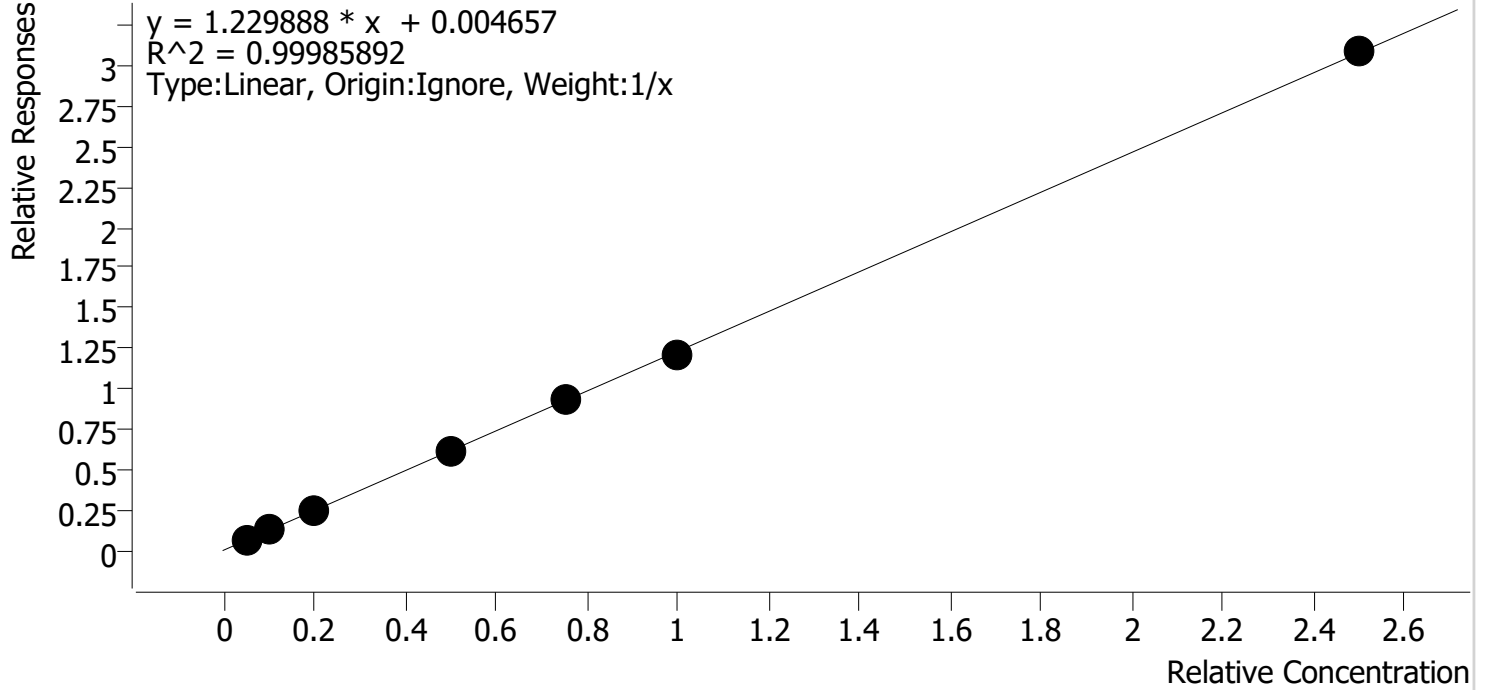
*Byylee*

**Batch results** D:\MassHunter\Data\2021\am 25-26\072321\QuantResults\cann scr.batch.bin  
**Last Cal. Update** 7/24/2021 11:33 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



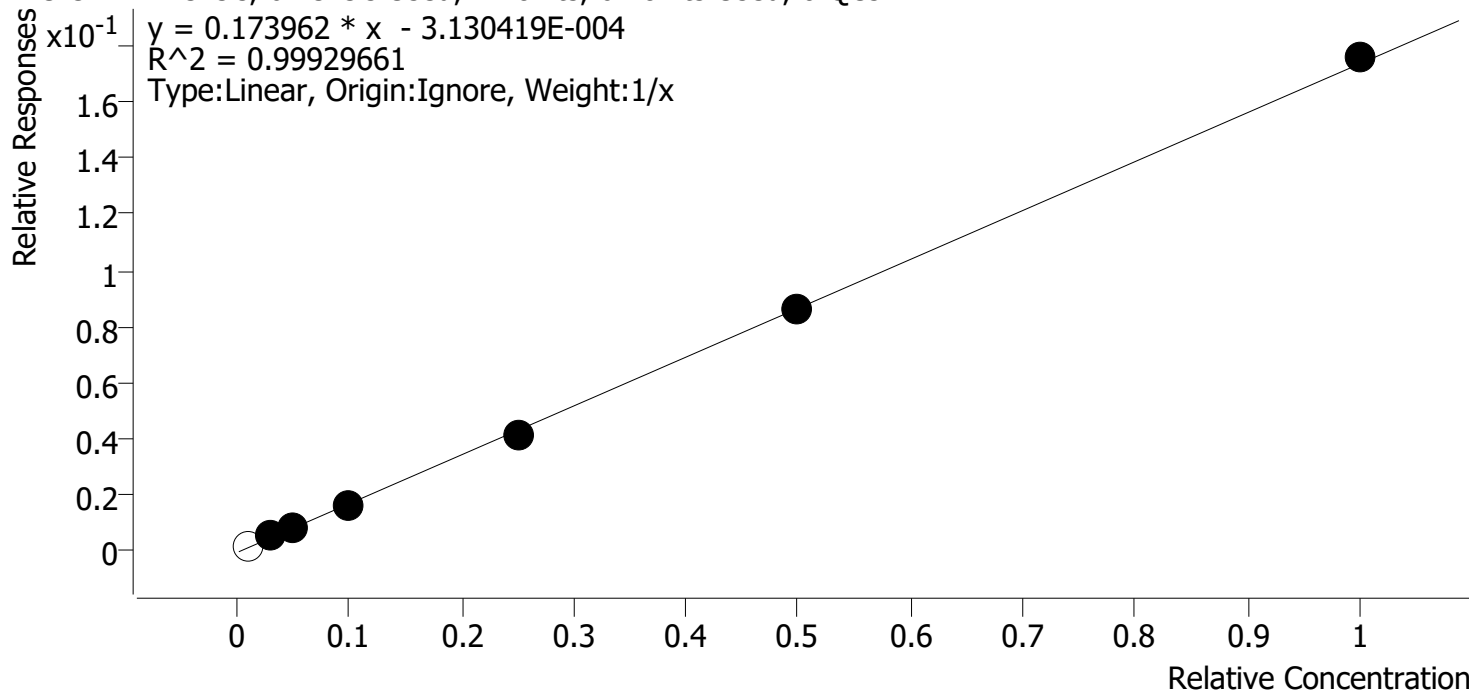
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	5.0	5.1	102.4
cal 2	2	✓	10.0	9.9	99.3
cal 3	3	✓	20.0	19.5	97.5
cal 4	4	✓	50.0	50.4	100.8
cal 5	5	✓	75.0	75.9	101.3
cal-6	6	✓	100.0	98.5	98.5
cal-7	7	✓	250.0	250.6	100.2

# Compound Calibration Report

*Byylee*

**Batch results** D:\MassHunter\Data\2021\am 25-26\072321\QuantResults\cann scr.batch.bin  
**Last Cal. Update** 7/24/2021 11:33 AM  
**Analyst Name** ISP\datastor  
**Analyte** THC-OH **Internal Standard** THC-OH-d3

THC-OH - 7 Levels, 6 Levels Used, 7 Points, 6 Points Used, 0 QCs



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	x	1.0	1.4	142.1
cal 2	2	✓	3.0	3.2	107.9
cal 3	3	✓	5.0	4.9	98.9
cal 4	4	✓	10.0	9.6	96.3
cal 5	5	✓	25.0	23.9	95.5
cal-6	6	✓	50.0	50.1	100.2
cal-7	7	✓	100.0	101.2	101.2

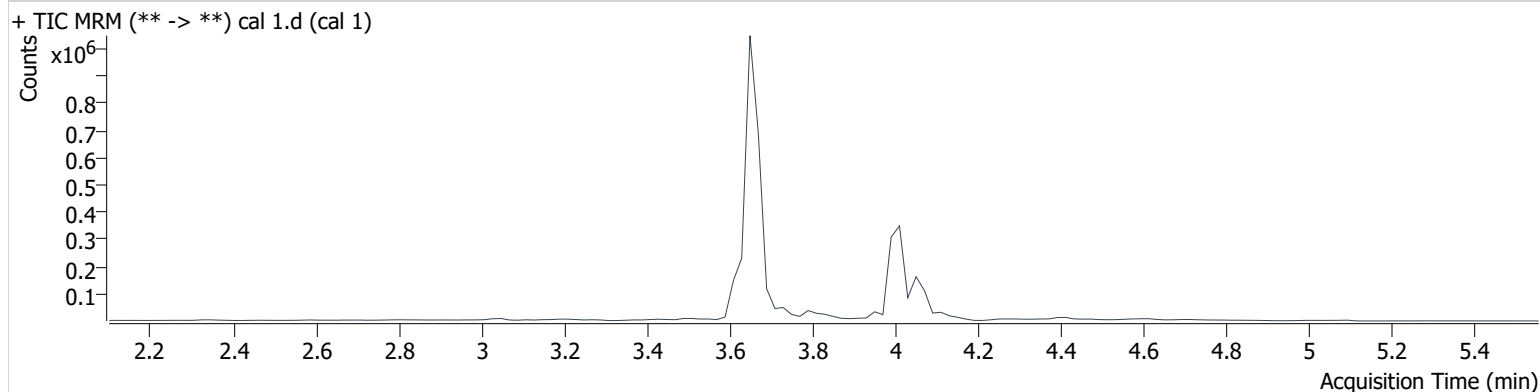
# AM #26 Cannabinoids Screen Results *BWylie*

**Batch results** D:\MassHunter\Data\2021\am 25-26\072321\QuantResults\cann scr.batch.bin  
**Calibration Last Update** 7/24/2021 11:33:21 AM

<b>Instrument</b>	69679	<b>Data File</b>	cal 1.d
<b>Type</b>	Cal	<b>Sample</b>	cal 1
<b>Acq. Method</b>	am 26 cann scr 5-5-20.m	<b>Operator</b>	Britany Wylie
<b>Sample Position</b>	P3-A1	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	7/24/2021 2:48:13 AM		

**Sample Info.**

## Sample Chromatogram



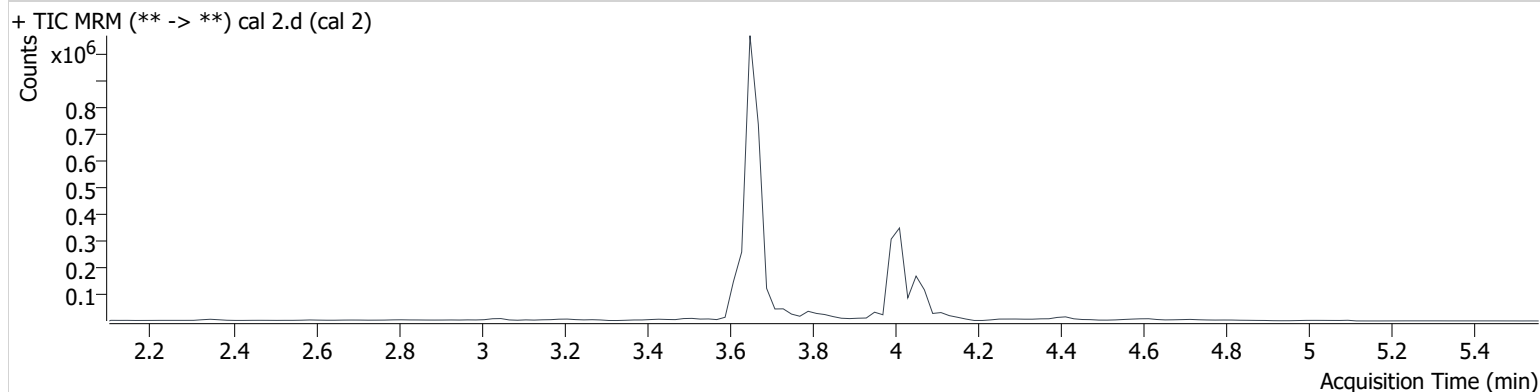
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	4.064	3020	279246	1.185 ng/ml	Low
THC-COOH	3.632	26734	395425	5.119 ng/ml	Low
THC-OH	3.658	4873	2257595	1.421 ng/ml	Low

# AM #26 Cannabinoids Screen Results *BWylie*

**Batch results** D:\MassHunter\Data\2021\am 25-26\072321\QuantResults\cann scr.batch.bin  
**Calibration Last Update** 7/24/2021 11:33:21 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>	Britany Wylie
<b>Sample Position</b>	P3-B1	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	7/24/2021 2:54:50 AM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	4.064	7935	285193	2.902 ng/ml	Low
THC-COOH	3.632	50181	395742	9.931 ng/ml	Low
THC-OH	3.658	11989	2253567	3.238 ng/ml	

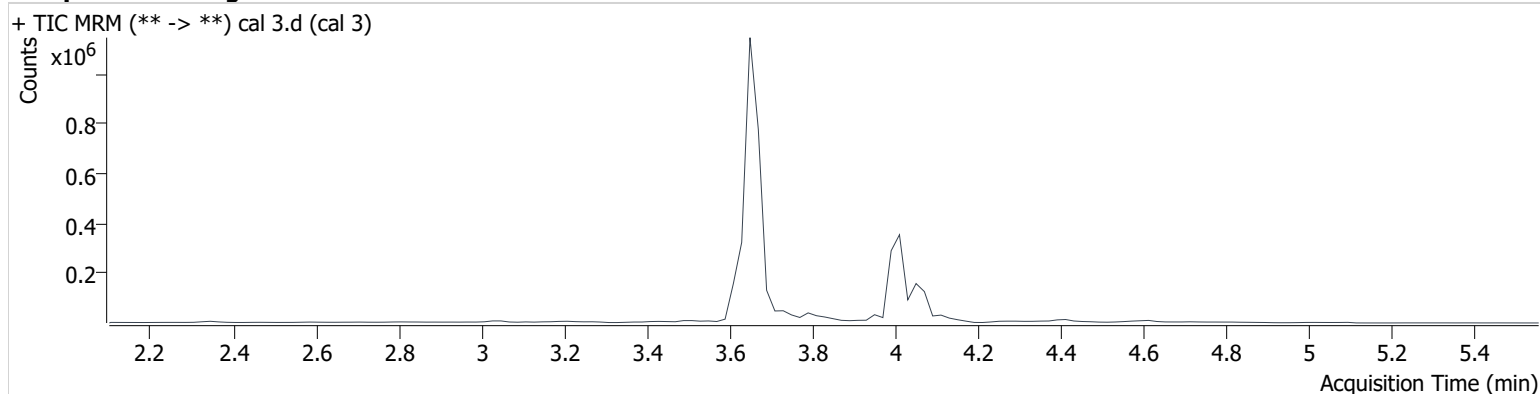
# AM #26 Cannabinoids Screen Results *BWylie*

**Batch results** D:\MassHunter\Data\2021\am 25-26\072321\QuantResults\cann scr.batch.bin  
**Calibration Last Update** 7/24/2021 11:33:21 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>	Britany Wylie
<b>Sample Position</b>	P3-C1	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	7/24/2021 3:01:26 AM		

**Sample Info.**

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.064	12782	282500	4.661 ng/ml
THC-COOH	3.632	99587	407137	19.510 ng/ml
THC-OH	3.658	19020	2294698	4.945 ng/ml



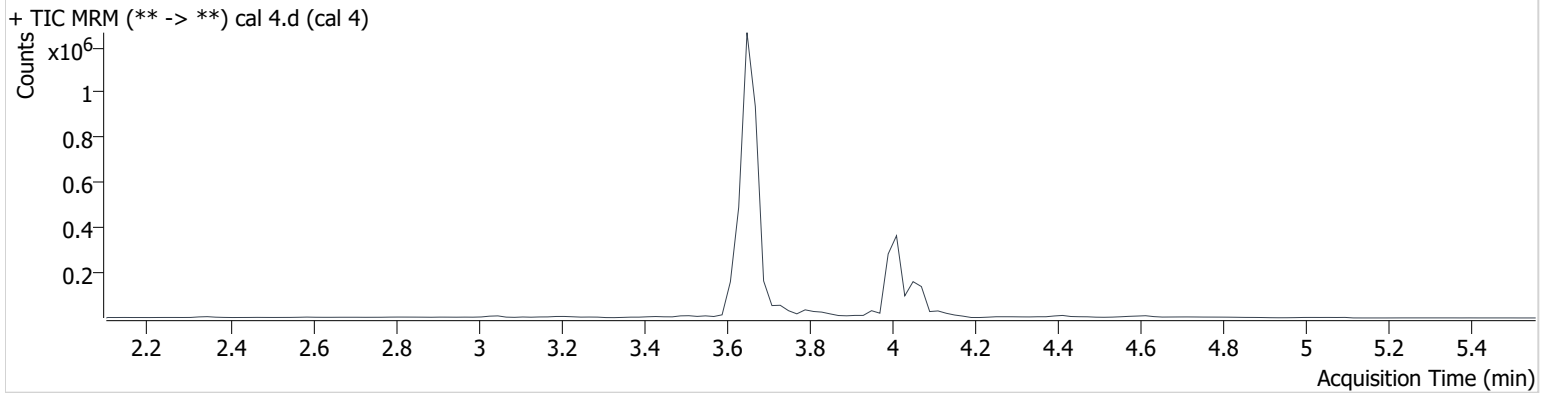
# AM #26 Cannabinoids Screen Results *BWylie*

**Batch results** D:\MassHunter\Data\2021\am 25-26\072321\QuantResults\cann scr.batch.bin  
**Calibration Last Update** 7/24/2021 11:33:21 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>	Britany Wylie
<b>Sample Position</b>	P3-D1	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	7/24/2021 3:08:02 AM		

**Sample Info.**

## Sample Chromatogram



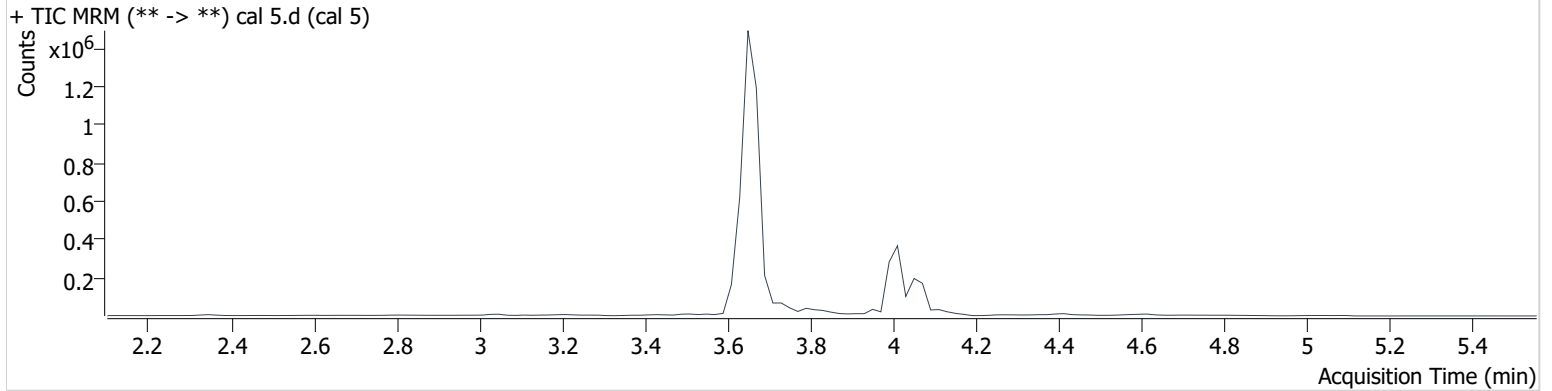
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.064	25589	284073	9.188 ng/ml
THC-COOH	3.632	251214	402376	50.384 ng/ml
THC-OH	3.658	38193	2323440	9.629 ng/ml

# AM #26 Cannabinoids Screen Results *BWylie*

**Batch results** D:\MassHunter\Data\2021\am 25-26\072321\QuantResults\cann scr.batch.bin  
**Calibration Last Update** 7/24/2021 11:33:21 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>	Britany Wylie
<b>Sample Position</b>	P3-E1	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	7/24/2021 3:14:38 AM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.064	73651	307109	24.307 ng/ml
THC-COOH	3.632	370940	395164	75.945 ng/ml
THC-OH	3.658	99426	2412702	23.869 ng/ml

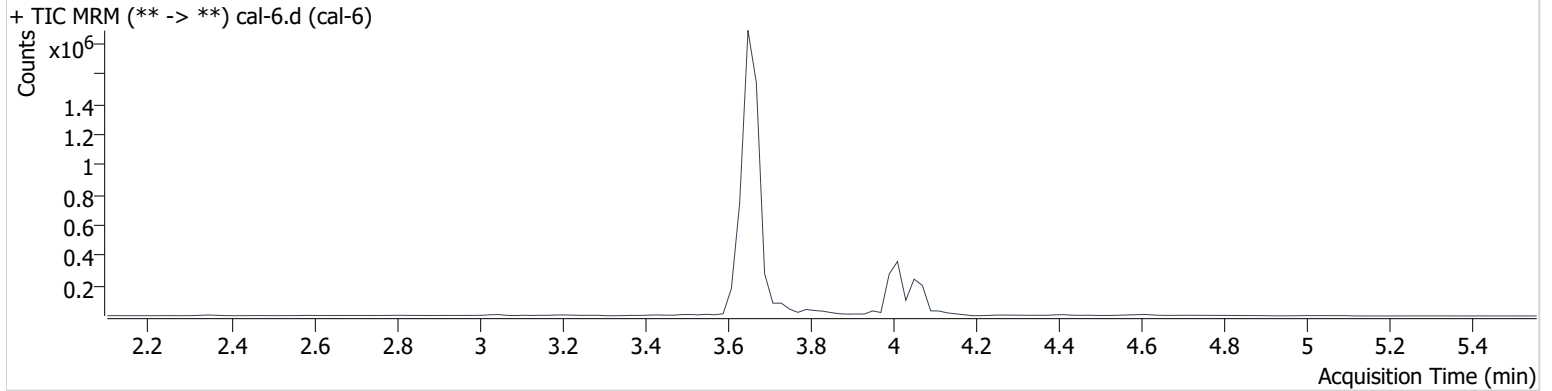
# AM #26 Cannabinoids Screen Results *BWylie*

**Batch results** D:\MassHunter\Data\2021\am 25-26\072321\QuantResults\cann scr.batch.bin  
**Calibration Last Update** 7/24/2021 11:33:21 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>	Britany Wylie
<b>Sample Position</b>	P3-F1	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	7/24/2021 3:21:14 AM		

**Sample Info.**

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.064	152862	304803	50.730 ng/ml
THC-COOH	3.632	487751	401124	98.489 ng/ml
THC-OH	3.658	201394	2319749	50.086 ng/ml

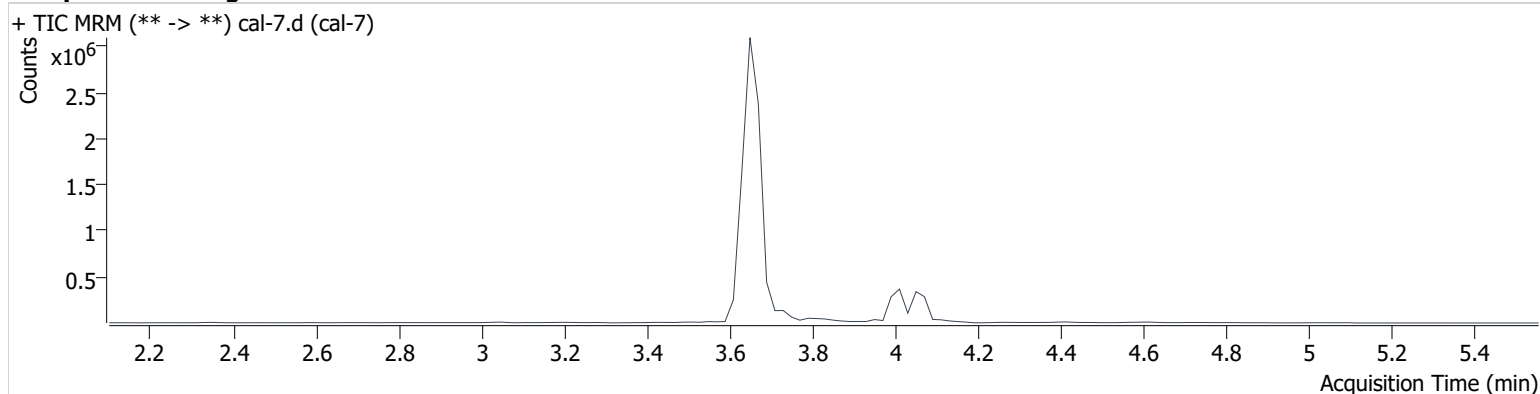
# AM #26 Cannabinoids Screen Results *BWylie*

**Batch results** D:\MassHunter\Data\2021\am 25-26\072321\QuantResults\cann scr.batch.bin  
**Calibration Last Update** 7/24/2021 11:33:21 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>	Britany Wylie
<b>Sample Position</b>	P3-G1	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	7/24/2021 3:27:50 AM		

**Sample Info.**

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.064	319792	319898	101.028 ng/ml
THC-COOH	3.632	1243787	402908	250.622 ng/ml
THC-OH	3.658	417851	2376923	101.234 ng/ml