

**REVIEWED**

By Tamara Salazar at 11:57 am, Aug 14, 2020

8/12/2020








BW

**Worklist: 4425**

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>	
C2020-1484	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2020-1492	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2020-1495	10	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2020-1505	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2020-1507	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2020-1515	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2020-1516	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2020-1533	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2020-1543	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2020-1550	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2020-1553	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2020-1560	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2020-1568	1	AVK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2020-1572	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2020-1574	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2020-1574	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2020-1574	3	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2020-2504	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2020-2597	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2020-2601	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
M2020-2636	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	

**Worklist: 4425**

*BW*

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>	
P2020-1679	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-1680	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-1919	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-1935	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-1961	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-1976	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
P2020-1977	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	

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

BW

Extraction Date: 8/11/20

Analyst: Britany Wylie

Plate lot#: 200511

Plate Expiration: 11/11/2020

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

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

0.5M Ammonium Hydroxide

Ethyl Acetate

LC Methanol

**Blank Blood Lot:** 20G20792 **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 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

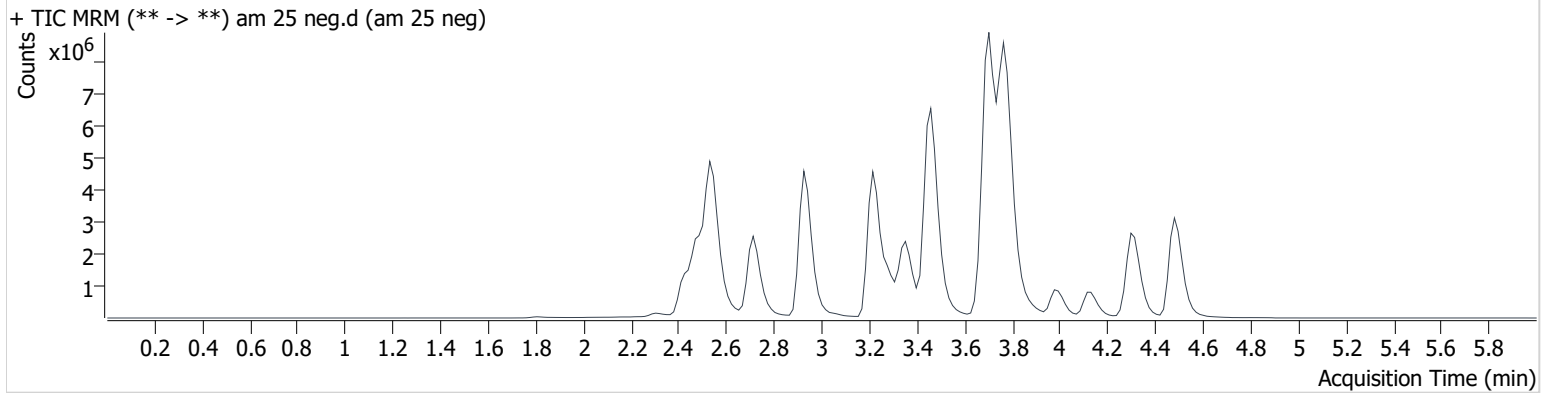
COMMENTS:

# AM #25 Multi-Drug Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 8-11-20\QuantResults\mds.batch.bin  
**Calibration Last Update** 8/11/2020 8:13:08 PM

<b>Instrument</b>	69679	<b>Data File</b>	am 25 neg.d
<b>Type</b>	Sample	<b>Sample</b>	am 25 neg
<b>Acq. Method</b>	MDS 5-27-20.m	<b>Operator</b>	Britany Wylie
<b>Sample Position</b>	P2-E1	<b>Comment</b>	
<b>Injection Volume</b>	2.5		
<b>Acq. Date-Time</b>	8/11/2020 3:10:58 PM		
<b>Sample Info.</b>			

## Sample Chromatogram

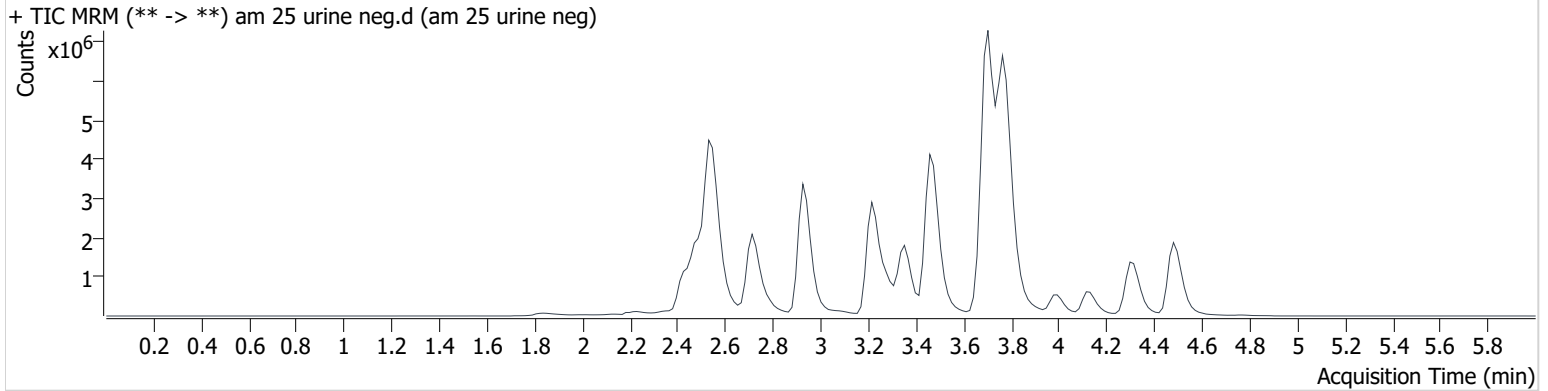


# AM #25 Multi-Drug Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 8-11-20\QuantResults\mds.batch.bin  
**Calibration Last Update** 8/11/2020 8:13:08 PM

<b>Instrument</b>	69679	<b>Data File</b>	am 25 urine neg.d
<b>Type</b>	Sample	<b>Sample</b>	am 25 urine neg
<b>Acq. Method</b>	MDS 5-27-20.m	<b>Operator</b>	Britany Wylie
<b>Sample Position</b>	P2-G4	<b>Comment</b>	
<b>Injection Volume</b>	2.5		
<b>Acq. Date-Time</b>	8/11/2020 6:24:44 PM		

### Sample Chromatogram



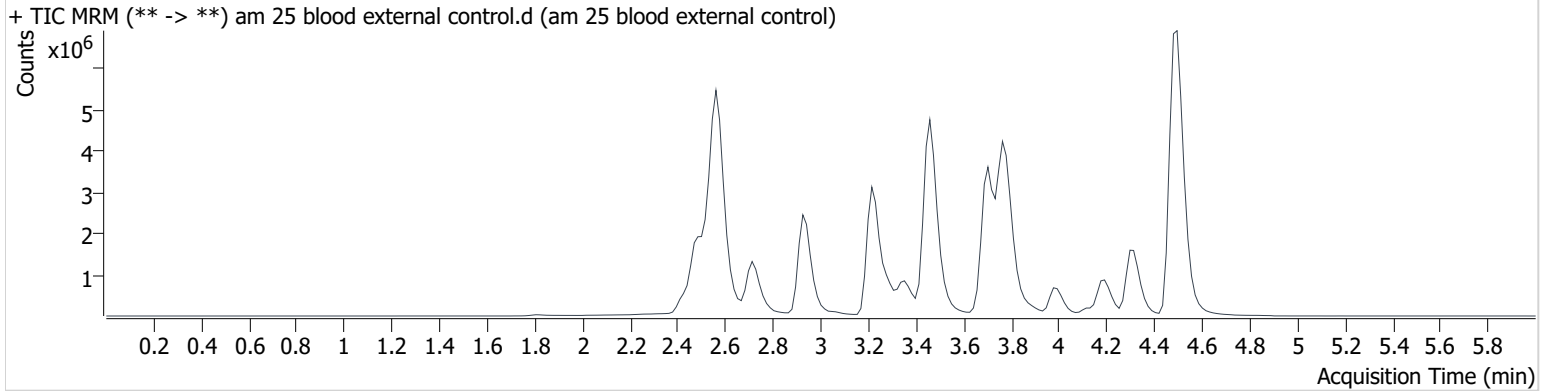
Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Methamphetamine	2.572	1666833	93.3	39.0	11491857	3.731 <32

# AM #25 Multi-Drug Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 8-11-20\QuantResults\mds.batch.bin  
**Calibration Last Update** 8/11/2020 8:13:08 PM

<b>Instrument</b>	69679	<b>Data File</b>	am 25 blood external control.d
<b>Type</b>	Sample	<b>Sample</b>	am 25 blood external control
<b>Acq. Method</b>	MDS 5-27-20.m	<b>Operator</b>	Britany Wylie
<b>Sample Position</b>	P2-D5	<b>Comment</b>	
<b>Injection Volume</b>	2.5		
<b>Acq. Date-Time</b>	8/11/2020 3:17:39 PM		
<b>Sample Info.</b>			

**Sample Chromatogram**



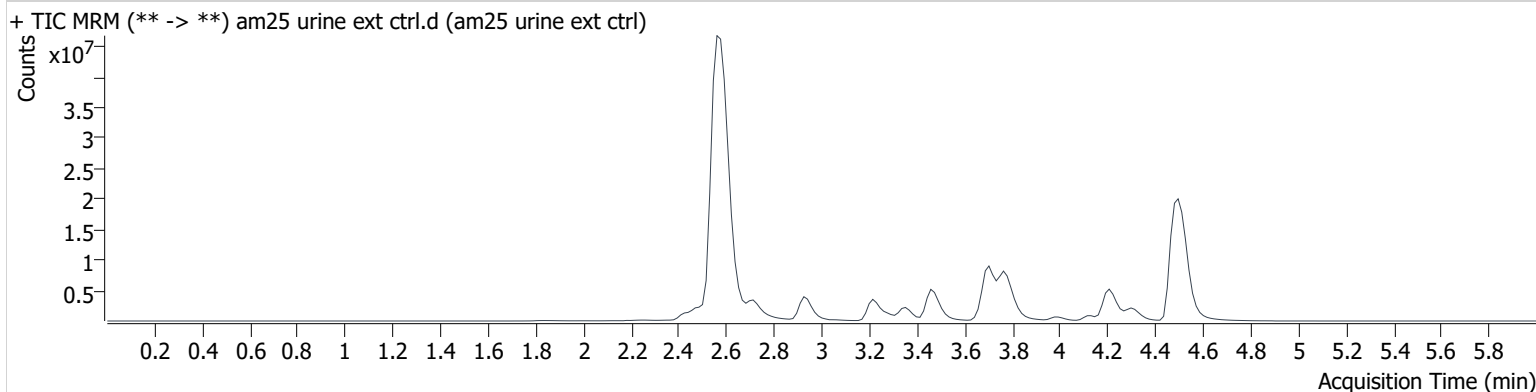
Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Methamphetamine	2.572	7475207	457.7	353.4	3769435	51.010
Midazolam	4.194	1741764	3139.8	4402.9	9050932	79.898
Temazepam	4.502	15700627	2223.8	378.6	9050932	97.000

# AM #25 Multi-Drug Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 8-11-20\QuantResults\mds.batch.bin  
**Calibration Last Update** 8/11/2020 8:13:08 PM

<b>Instrument</b>	69679	<b>Data File</b>	am25 urine ext ctrl.d
<b>Type</b>	Sample	<b>Sample</b>	am25 urine ext ctrl
<b>Acq. Method</b>	MDS 5-27-20.m	<b>Operator</b>	Britany Wylie
<b>Sample Position</b>	P2-H4	<b>Comment</b>	BW
<b>Injection Volume</b>	2.5		
<b>Acq. Date-Time</b>	8/11/2020 6:31:25 PM		

## Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Methamphetamine	2.587	76553482	13917.0	881.9	11408997	172.593
Midazolam	4.209	11082922	5302.1	4224.6	8105894	567.665
Temazepam	4.502	65032142	∞	∞	8105894	448.615

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 (562020) in 4950 ul neg blood (100ng/mL Expected concentration)**

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

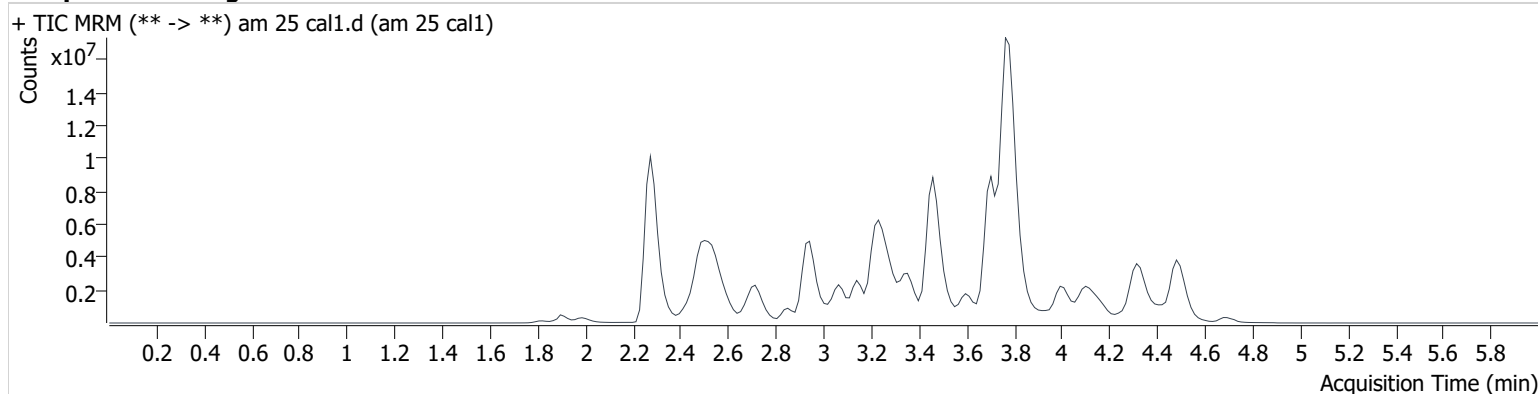


# AM #25 Multi-Drug Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 8-11-20\QuantResults\mds.batch.bin  
**Calibration Last Update** 8/11/2020 8:13:08 PM

<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 5-27-20.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>	8/11/2020 3:24:20 PM		

**Sample Chromatogram**



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
6-MAM	2.468	25578	399.4	490.1	628422	10.000
7-aminoclonazepam	3.310	678425	160.6	176.2	2855611	10.000
7-aminoflunitrazepam	3.538	1030589	886.5	752.0	2855611	10.000
Acetyl Fentanyl	3.444	130033	122.8	481.4	13084775	10.000
Acetyl Norfentanyl	2.491	134905	121.2	152.3	13084775	10.000
a-hydroxyalprazolam	4.331	104746	41900.5	23441.1	2855611	10.000
alpha-hydroxymidazolam	4.315	846474	336.1	988.3	2855611	10.000
alpha-PHP	3.452	1416870	1156.4	227.8	2585612	10.000
alpha-PVP	3.148	2011067	852.3	416.8	2585612	10.000
Alprazolam	4.440	1043019	262.9	623.6	9871229	10.000
Amitriptyline	4.125	346826	254.6	179.3	1614818	10.000
Amphetamine	2.467	1111174	27116.3	532.9	2585612	10.000
Benzoylcegonine	3.080	402823	247.6	146.4	176690	10.000
Brompheniramine	3.720	39593	115.9	17.7	26030084	10.000
Buprenorphine	3.776	132171	39397.8	6667.5	579414	10.000
Bupropion	3.376	1503885	812.0	717.2	5117431	10.000
Carbamazepine	4.020	3199044	∞	1645.6	197250	10.000
Carisoprodol	4.003	503670	183.4	115.5	2724965	10.000
Chlordiazepoxide	4.411	379948	104.1	505.0	9871229	10.000
Chlorpheniramine	3.617	7276	29.4	15510.9	26030084	10.000
Citalopram	3.765	1027050	217.3	323.5	26030084	10.000
Clomipramine	4.332	479972	346.6	332.0	26030084	10.000
Clonazepam	4.256	827616	900.8	233.3	9871229	10.000
Clonazolam	4.176	591150	203700.7	1300.7	9871229	10.000
Cocaehtylene	3.445	2479770	1246.6	6445.9	2585612	10.000
Cocaine	3.217	2791194	830.7	2075.3	15519747	10.000
Codeine	2.350	172272	4112.4	2514.8	4581244	10.000
Cyclobenzaprine	4.048	615995	942.4	54.0	1614818	10.000
Desipramine	4.095	811127	801.9	266.5	1614818	10.000
Dextromethorphan	3.756	719232	182.3	1568.9	3582445	10.000
Dextrorphan	3.022	1282120	546.9	405.6	3582445	10.000
Diazepam	4.703	616230	279.8	443.0	9871229	10.000
Dihydrocodeine	2.303	481521	437.4	1068.4	4581244	10.000
Diphenhydramine	3.711	3510250	6900.3	319.9	26030084	10.000

# AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Doxepin	3.846	548705	626.9	42.2	1053955	10.000
Doxylamine	3.266	4788691	672.4	13878.3	3582445	10.000
EDDP	3.785	3755251	546.4	793177.4	2125380	10.000
Estazolam	4.351	2325015	797.3	623.4	9871229	10.000
Etizolam	4.466	103520	35544.7	203558.6	9871229	10.000
Fentanyl	3.688	72221	72.1	18214.6	4469264	10.000
Flualprazolam	4.300	432525	1074.6	121675.4	9871229	10.000
Flunitrazepam	4.393	1190965	522.9	146846.9	9871229	10.000
Fluoxetine	4.059	412379	2096.3	13.4	1053955	10.000
Flurazepam	3.808	1363624	1339.4	86270.5	9871229	10.000
Hydrocodone	2.546	740666	343.6	599.5	4581244	10.000
Hydromorphone	1.991	590615	264.0	6533.4	94961	10.000
Imipramine	4.092	1169574	422.5	364.3	1614818	10.000
Ketamine	2.962	1639678	2253.6	118.6	7168264	10.000
Lamotrigine	3.145	131389	3603.7	87.9	26030084	10.000
Levamisole	2.507	1525972	276.9	599.7	15519747	10.000
Levetireacetam	2.282	702035	937.4	332.4	26030084	10.000
Lorazepam	4.240	258236	∞	76.0	9871229	10.000
Maprotiline	4.125	227090	50.1	205.3	1614818	10.000
MDA	2.599	1196356	365.4	326.9	4698743	10.000
MDEA	2.858	2079479	448.4	614.0	4698743	10.000
MDMA	2.690	2298394	2568.3	478.4	4698743	10.000
Meperidine	3.237	1202921	1209.9	430.7	3582445	10.000
Meprobamate	3.394	255437	853.6	73.0	2724965	10.000
Methadone	4.104	2253810	1197.4	397.4	2125380	10.000
Methamphetamine	2.572	1826739	201.4	50.6	4698743	10.000
Methocarbamol	3.300	236314	60.2	86.7	2125380	10.000
Methylphenidate	3.147	4786895	1718.5	616.3	5828899	10.000
Metoprolol	3.082	229333	2200.1	∞	3582445	10.000
Midazolam	4.194	237756	1175.9	2144.7	9871229	10.000
Mirtazapine	3.343	1075823	533.5	809.1	3582445	10.000
Mitragynine	3.838	79340	21957.4	185.2	3582445	10.000
Morphine	1.825	97586	∞	649.3	94961	10.000
Norbuprenorphine	3.518	16876	4676.5	5732.2	579414	10.000
Nordiazepam	4.522	578884	1093.0	830.0	9871229	10.000
Norfentanyl	2.948	2486338	668.2	1048.6	13084775	10.000
Norhydrocodone	2.533	28052	68.5	21.0	94961	10.000
norketamine	2.934	256711	177.3	832.3	7168264	10.000
Normeperidine	3.255	977762	427.1	362.3	26030084	10.000
Noroxycodone	2.485	610053	240.8	387.8	7168264	10.000
Nortriptyline	4.141	309857	1417.4	77.1	1614818	10.000
O-desmethyl-tramadol	2.504	3636450	3630.4	220.8	26030084	10.000
Olanzapine	2.971	569520	89.4	26.6	197250	10.000
Oxazepam	4.321	1090356	190.1	34.5	6961186	10.000
Oxycodone	2.499	1602505	854.2	232.2	7168264	10.000
Oxymorphone	1.896	719913	340.0	7888.5	94961	10.000
Paroxetine	4.070	50401	84.5	38.1	1053955	10.000
Phenazepam	4.480	1180780	17438.6	4037.1	9871229	10.000
Phencyclidine	3.605	2235335	479.0	439.0	3582445	10.000
Phentermine	2.739	512638	28.8	7.4	5828899	10.000
Phenytoin	3.912	374288	4365.3	125.6	197250	10.000
Promethazine	3.999	1321784	821.1	272.6	26030084	10.000
Pseudoephedrine	2.283	31333816	1581.2	934.8	4698743	10.000
Quetiapine	3.946	849154	445.6	128207.8	22336133	10.000
Sertraline	4.288	202162	178176.6	73.4	1053955	10.000
Sufentanil	3.961	54491	35.7	27.8	13084775	10.000
Tapentadol	3.088	2017523	698.7	1026.0	7168264	10.000
Temazepam	4.502	1765324	564.0	51.0	9871229	10.000
Tramadol	3.068	4568983	516.2	22.7	26030084	10.000
Trazodone	3.794	1609819	4781.3	3356.0	8138292	10.000

BW

# AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Venlafaxine	3.464	2775897	644.1	115.1	1053955	10.000
Zaleplon	4.167	1106142	965.7	272.9	22336133	10.000
Zolpidem	3.476	4174135	1760948.9	1617.7	22336133	10.000
Zopiclone	3.396	135890	210.1	334.9	685630	10.000

**AM# 26: THC and Metabolites Screen in Blood by LC-MS/MS**Extraction Date: 8/11/2020Analyst: Britany Wylie

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.
- 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

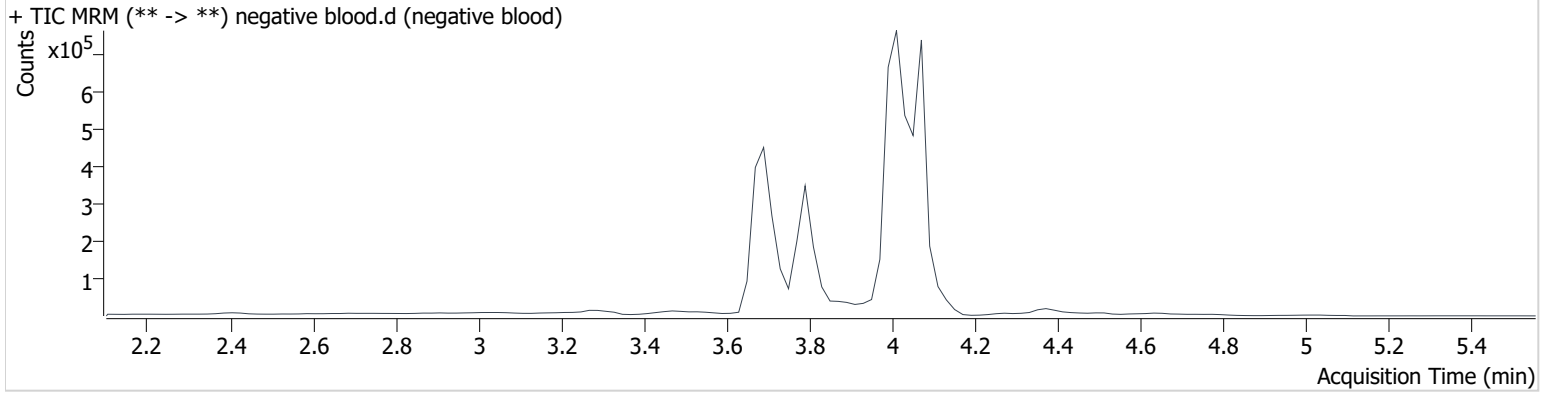
COMMENTS:

# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 8-11-20\QuantResults\cann scr.batch.bin  
**Calibration Last Update** 8/12/2020 6:28:09 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>	8/11/2020 8:51:02 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



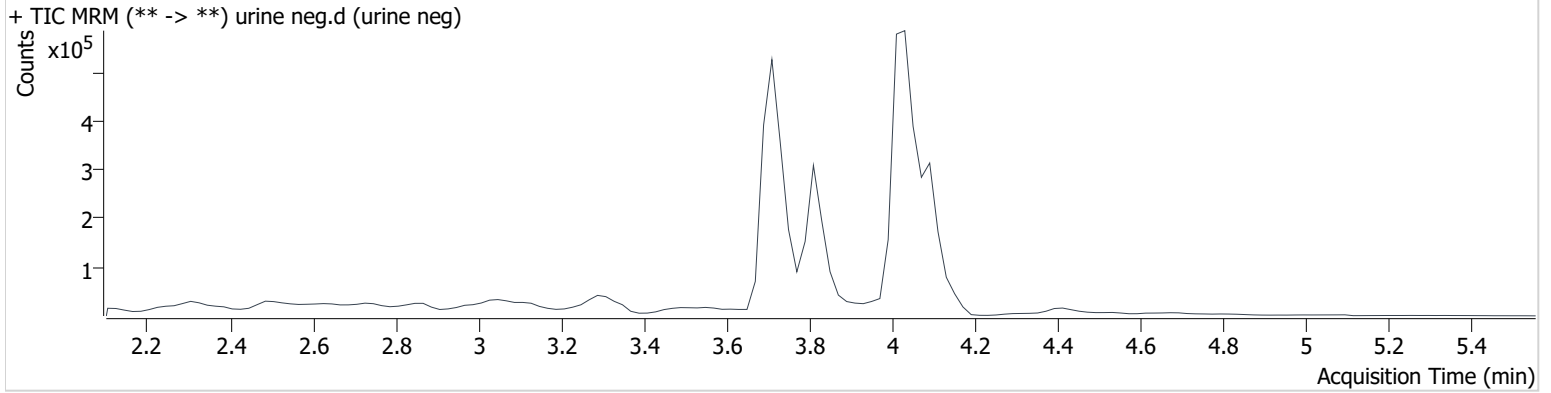
# AM #26 Cannabinoids Screen Results

BW

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 8-11-20\QuantResults\cann scr.batch.bin  
**Calibration Last Update** 8/12/2020 6:28:09 AM

<b>Instrument</b>	69679	<b>Data File</b>	urine neg.d
<b>Type</b>	Sample	<b>Sample</b>	urine neg
<b>Acq. Method</b>	am 26 cann scr 5-5-20.m	<b>Operator</b>	Britany Wylie
<b>Sample Position</b>	P3-C5	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	8/11/2020 11:43:01 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	3.924 <b>Low</b>	3820	611043	0.870 ng/ml <b>Low</b>

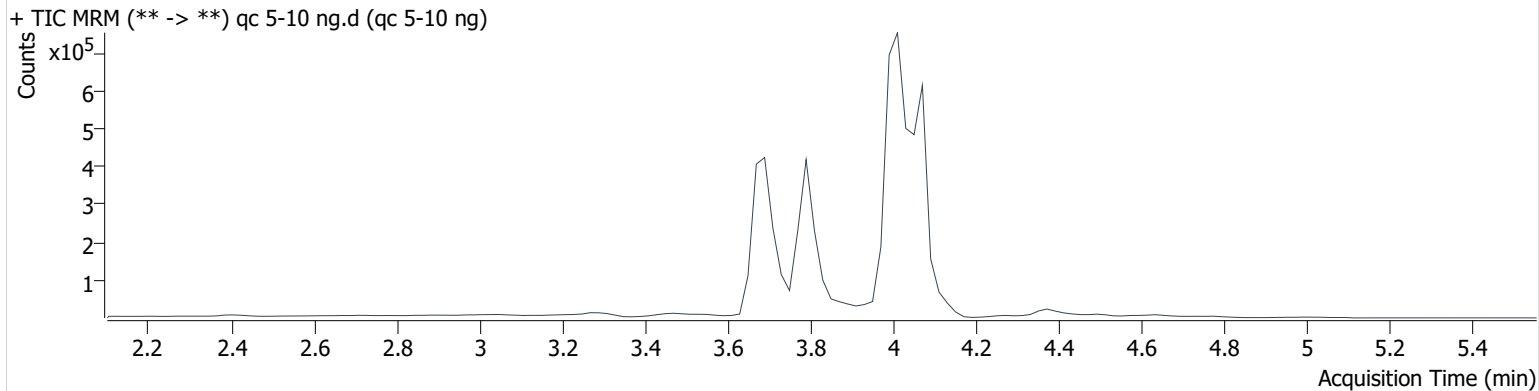
BW

# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 8-11-20\QuantResults\cann scr.batch.bin  
**Calibration Last Update** 8/12/2020 6:28:09 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 5-15 blood internal control
<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>	BW 8/12/20
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	8/11/2020 8:44:24 PM		

## Sample Chromatogram



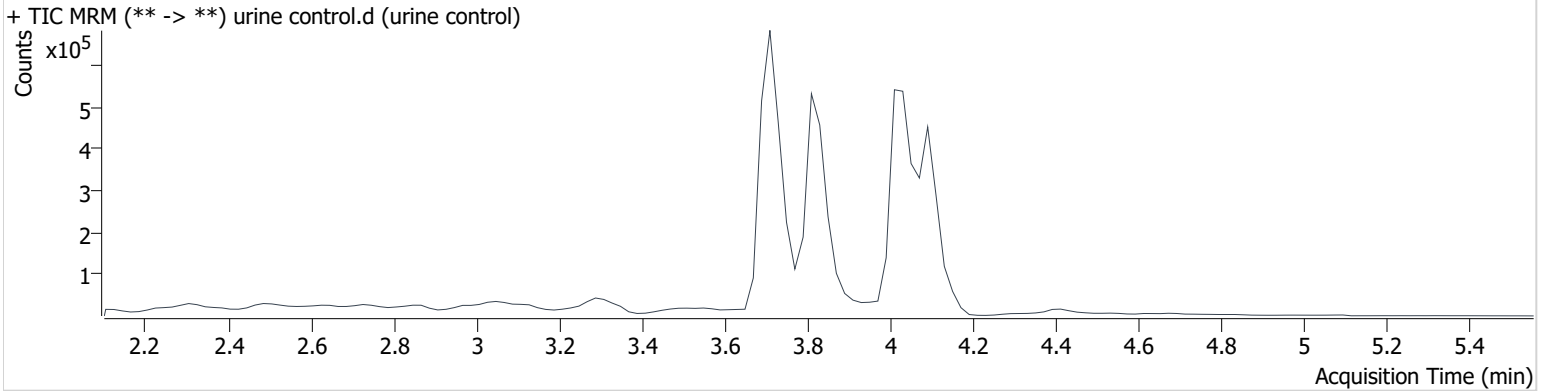
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.084	36883	1109865	4.287 ng/ml
THC-COOH	3.792	139588	804829	15.360 ng/ml
THC-OH	3.699	13400	1525009	4.318 ng/ml

# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 8-11-20\QuantResults\cann scr.batch.bin  
**Calibration Last Update** 8/12/2020 6:28:09 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-D5	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	8/11/2020 11:49:39 PM		
<b>Sample Info.</b>			

### Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.104	115936	936236	15.760 ng/ml
THC-COOH	3.832	368382	771427	41.548 ng/ml
THC-OH	3.719	69749	1998229	17.313 ng/ml



# Toxicology AM method 27/26 external prep information

BW

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, 75 ul THC-OH in 9767.5 ul meOH

Ppd 2/13/20 Exp: 8/13/20 lot 21320 by AMN

Drug	lot	expiration
C-THC	FE07171501	9/1/2020
THC-OH	<del>FE07721601</del>	7/1/2021
THC	FE001041701	3/1/2022

THC-OH Lot # FE07221601  
*BW* 8-14-20

**AM 27/26 blood control 100 ul working solution lot (91319) in 9900 ul blood lot (20A52255) Out of use**

ppd 02/13/20 Exp 08/13/20	lot b81320	Concentration 7.5 ng/ml THC, THC-OH and 15 ng/ml C-THC	by AMN	
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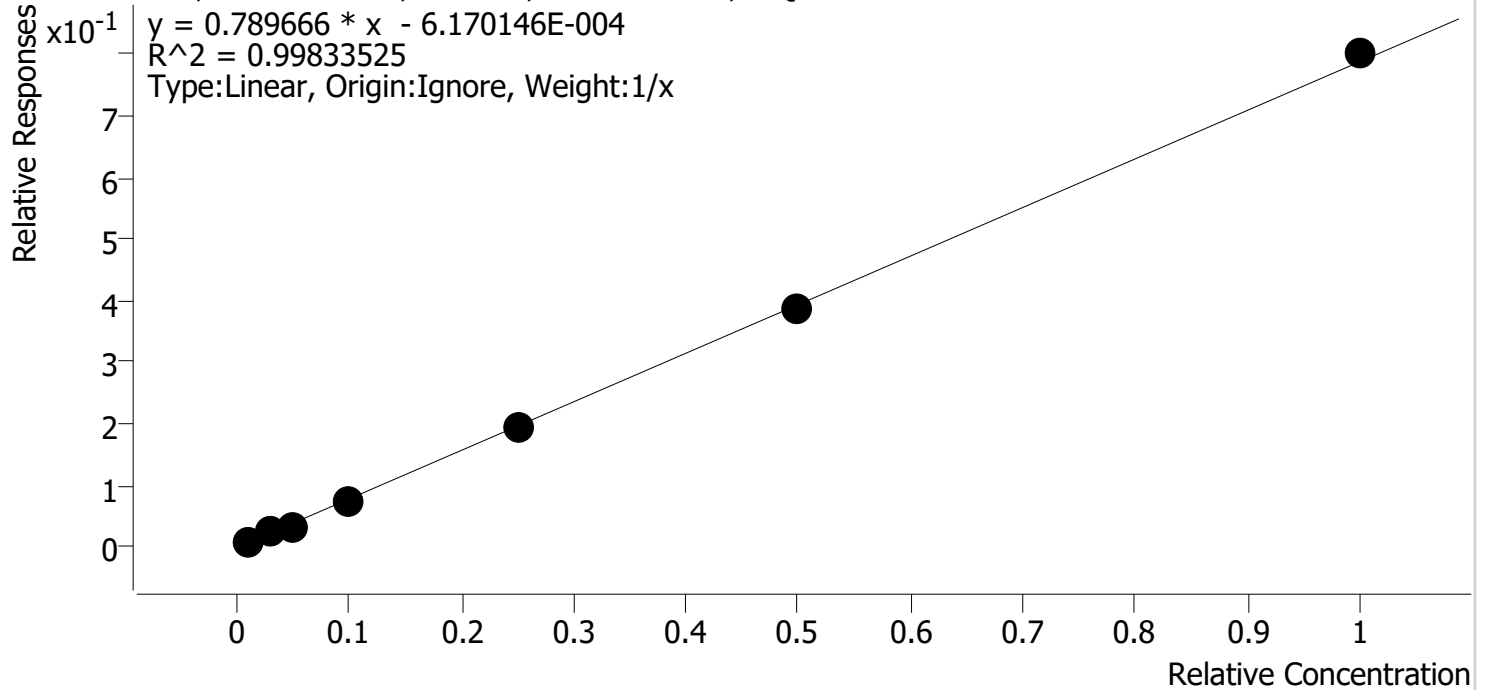
**AM 27/26 urine control 400 ul working solution lot (21320) in 9600 ul urine lot (6920) out of use**

ppd 4/17/20 Exp 9120	lot u101720	Concentration 30 ng/ml THC, THC-OH and 60 ng/ml C-THC	by BAW	6/8/2020
ppd 6/9/20 exp 8/13/20	lot 6920	Concentration 30 ng/ml THC, THC-OH and 60 ng/ml C-THC	by amn	7/15/2020
ppd 2.5mL 7/17/20 one time use	lot 71720	Concentration 30 ng/ml THC, THC-OH and 60 ng/ml C-THC	by baw	7/17/2020
ppd 7/30/20 exp 8/13/20 (urine lot 73020)	lot u81320	Concentration 30 ng/ml THC, THC-OH and 60 ng/ml C-THC	by amn	

# Compound Calibration Report

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 8-11-20\QuantResults\cann scr.batch.bin  
**Last Cal. Update** 8/12/2020 6:28 AM  
**Analyst Name** ISP\datastor  
**Analyte** THC **Internal Standard** THC-d3

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

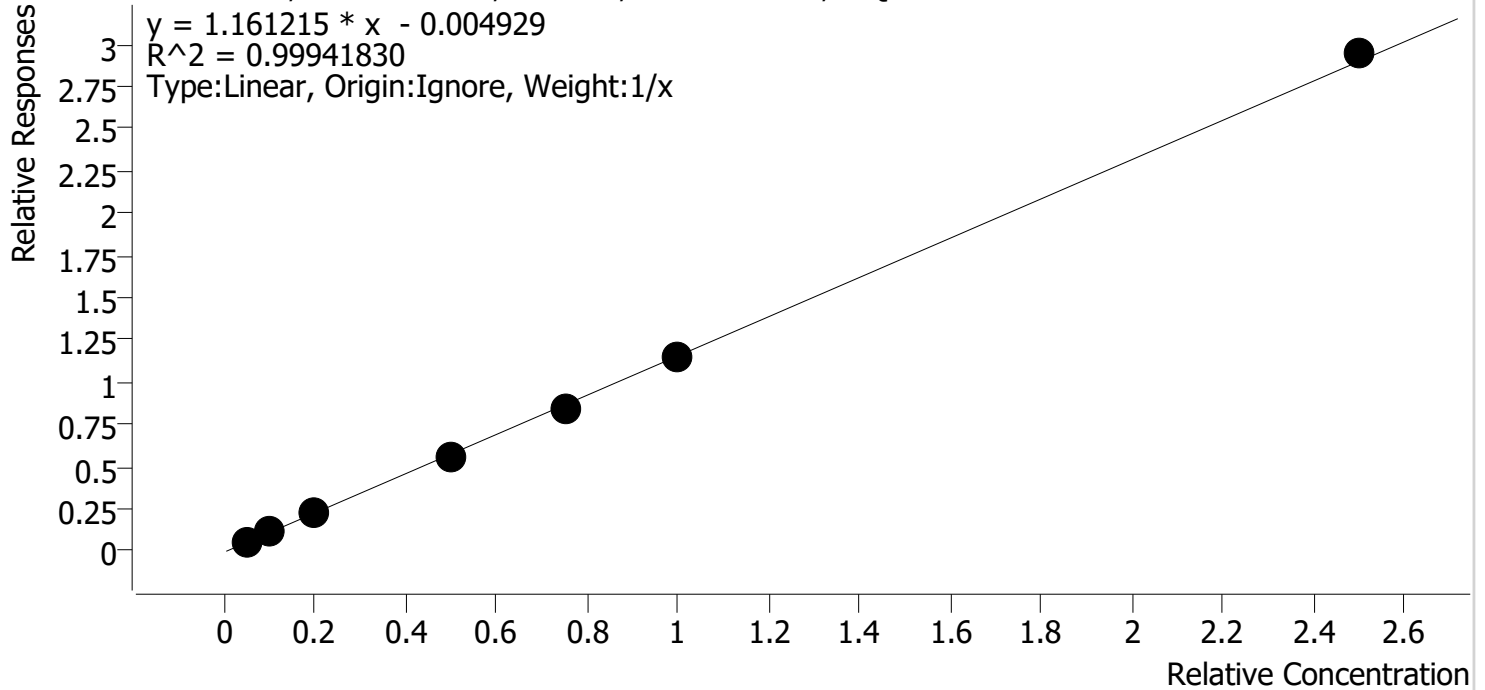


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
check std 1ng	1	✓	1.0	1.2	119.5
cal 2	2	✓	3.0	3.1	101.9
cal 3	3	✓	5.0	4.0	80.3
cal 4	4	✓	10.0	9.8	98.1
cal 5	5	✓	25.0	25.0	100.1
cal-6	6	✓	50.0	49.3	98.5
cal-7	7	✓	100.0	101.6	101.6

# Compound Calibration Report

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 8-11-20\QuantResults\cann scr.batch.bin  
**Last Cal. Update** 8/12/2020 6:28 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

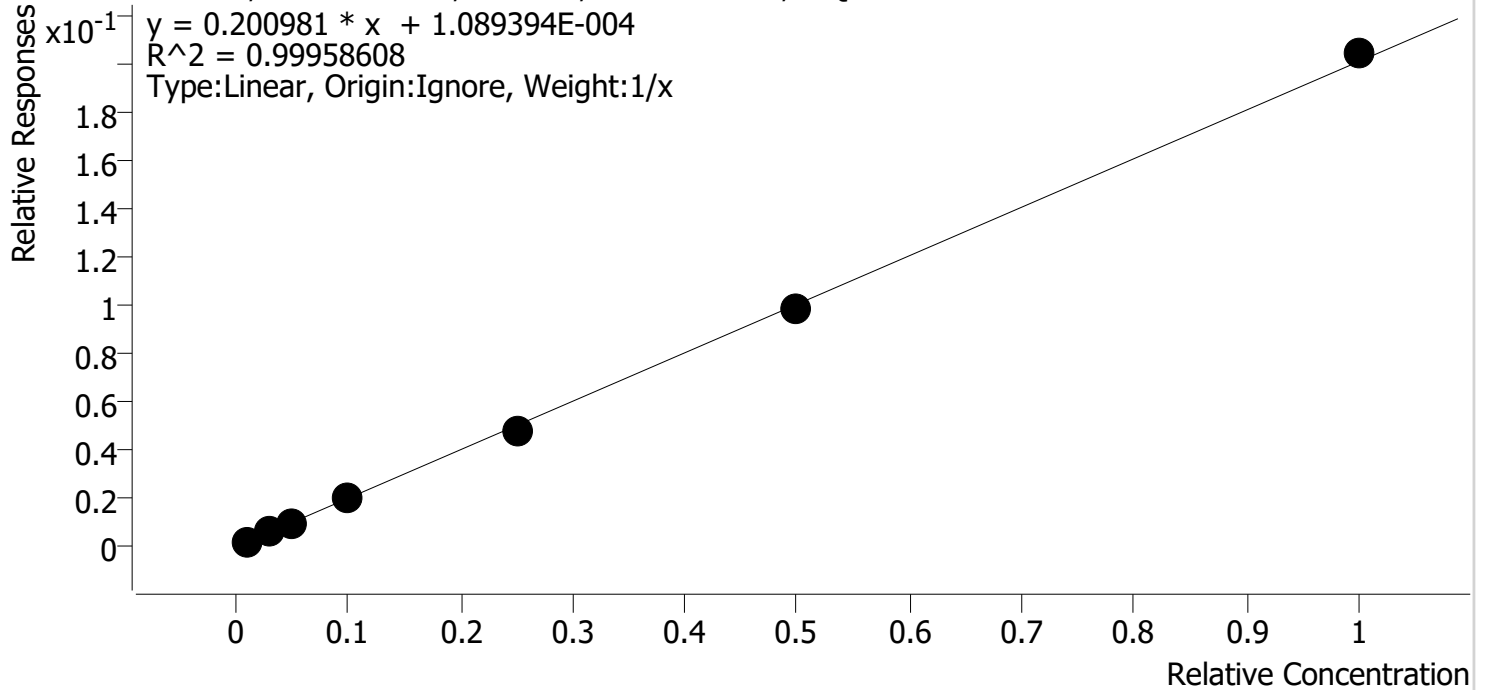


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
check std 1ng	1	✓	5.0	5.3	106.1
cal 2	2	✓	10.0	9.8	98.5
cal 3	3	✓	20.0	20.2	101.0
cal 4	4	✓	50.0	47.7	95.4
cal 5	5	✓	75.0	73.4	97.8
cal-6	6	✓	100.0	99.6	99.6
cal-7	7	✓	250.0	253.9	101.6

# Compound Calibration Report

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 8-11-20\QuantResults\cann scr.batch.bin  
**Last Cal. Update** 8/12/2020 6:28 AM  
**Analyst Name** ISP\datastor  
**Analyte** THC-OH **Internal Standard** 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	105.9
cal 2	2	✓	3.0	3.0	99.0
cal 3	3	✓	5.0	4.9	99.0
cal 4	4	✓	10.0	9.9	99.3
cal 5	5	✓	25.0	24.1	96.6
cal-6	6	✓	50.0	49.4	98.7
cal-7	7	✓	100.0	101.6	101.6

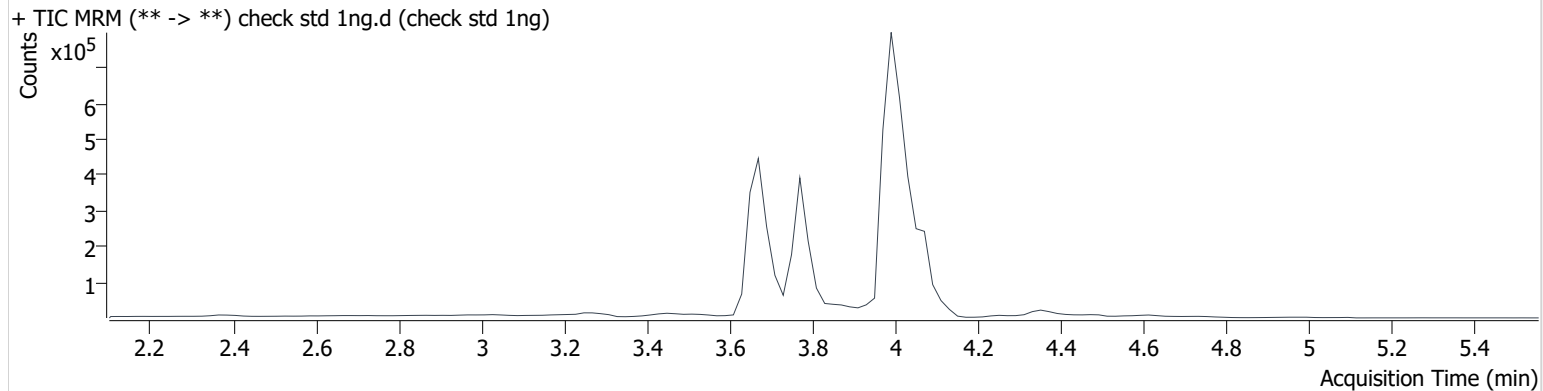
BW

# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 8-11-20\QuantResults\cann scr.batch.bin  
**Calibration Last Update** 8/12/2020 6:28:09 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>	Britany Wylie
<b>Sample Position</b>	P3-A1	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	8/11/2020 7:51:33 PM		

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	4.084	5480	621099	1.195 ng/ml	Low
THC-COOH	3.772	49541	874393	5.304 ng/ml	Low
THC-OH	3.679	3429	1532783	1.059 ng/ml	Low

BW

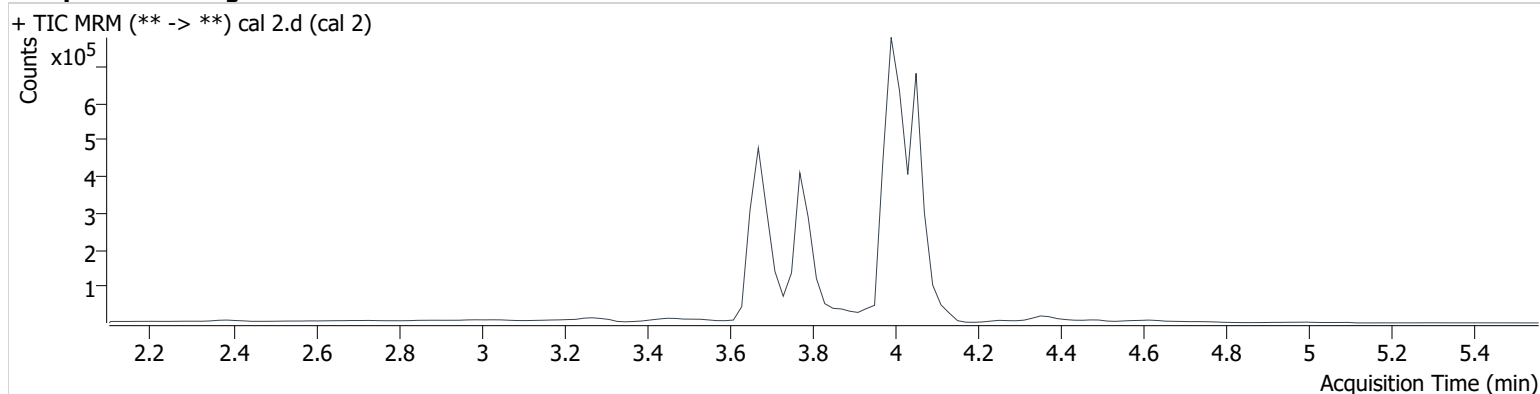
# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 8-11-20\QuantResults\cann scr.batch.bin  
**Calibration Last Update** 8/12/2020 6:28:09 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>	8/11/2020 7:58:12 PM		

**Sample Info.**

## Sample Chromatogram



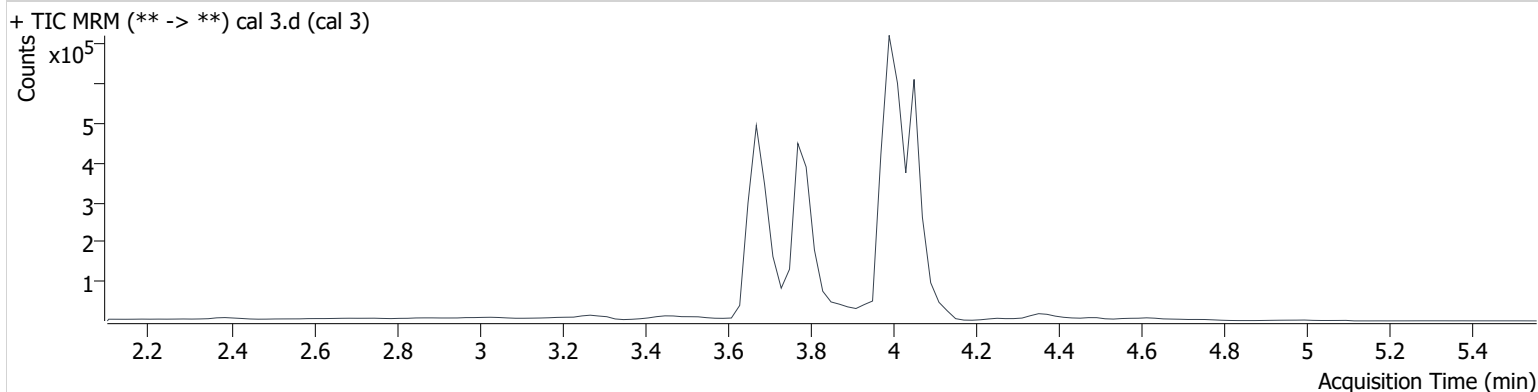
Name	RT	Resp.	ISTD Resp.	Final Conc.	
THC	4.064	26686	1134996	3.056 ng/ml	
THC-COOH	3.792	97053	887058	9.847 ng/ml	Low
THC-OH	3.679	9312	1532350	2.969 ng/ml	Low

# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 8-11-20\QuantResults\cann scr.batch.bin  
**Calibration Last Update** 8/12/2020 6:28:09 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>	8/11/2020 8:04:49 PM		

**Sample Chromatogram**



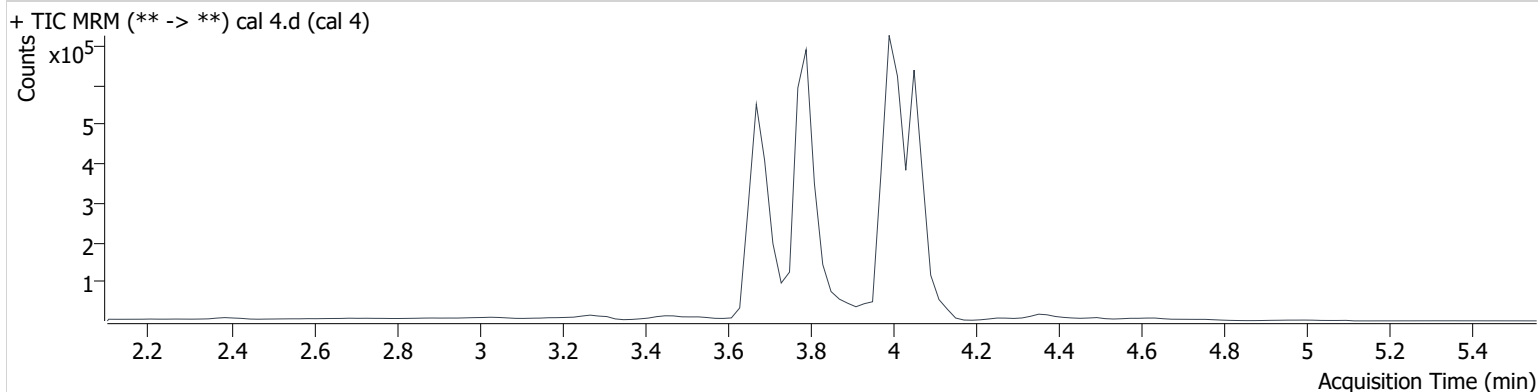
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.064	30597	984603	4.013 ng/ml
THC-COOH	3.792	203141	884703	20.198 ng/ml
THC-OH	3.679	15813	1572819	4.948 ng/ml

# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 8-11-20\QuantResults\cann scr.batch.bin  
**Calibration Last Update** 8/12/2020 6:28:09 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>	8/11/2020 8:11:26 PM		

**Sample Chromatogram**



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.064	83211	1083328	9.805 ng/ml
THC-COOH	3.792	513696	935272	47.724 ng/ml
THC-OH	3.679	33226	1655608	9.931 ng/ml

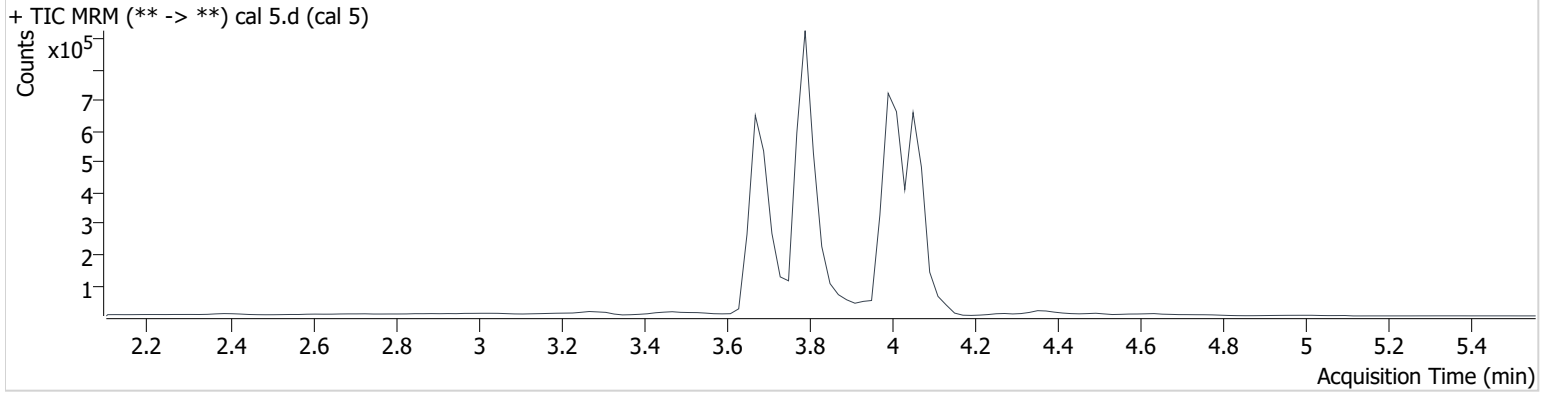


# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 8-11-20\QuantResults\cann scr.batch.bin  
**Calibration Last Update** 8/12/2020 6:28:09 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>	8/11/2020 8:18:02 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.064	212530	1078564	25.032 ng/ml
THC-COOH	3.792	772573	911980	73.377 ng/ml
THC-OH	3.679	79215	1629247	24.138 ng/ml

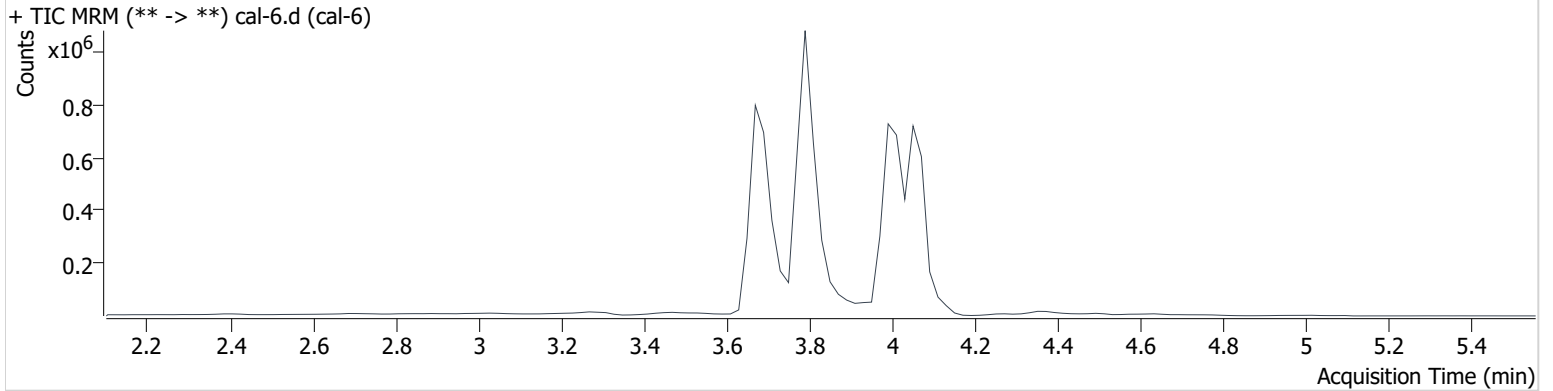
# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 8-11-20\QuantResults\cann scr.batch.bin  
**Calibration Last Update** 8/12/2020 6:28:09 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>	8/11/2020 8:24:40 PM		

**Sample Info.**

**Sample Chromatogram**



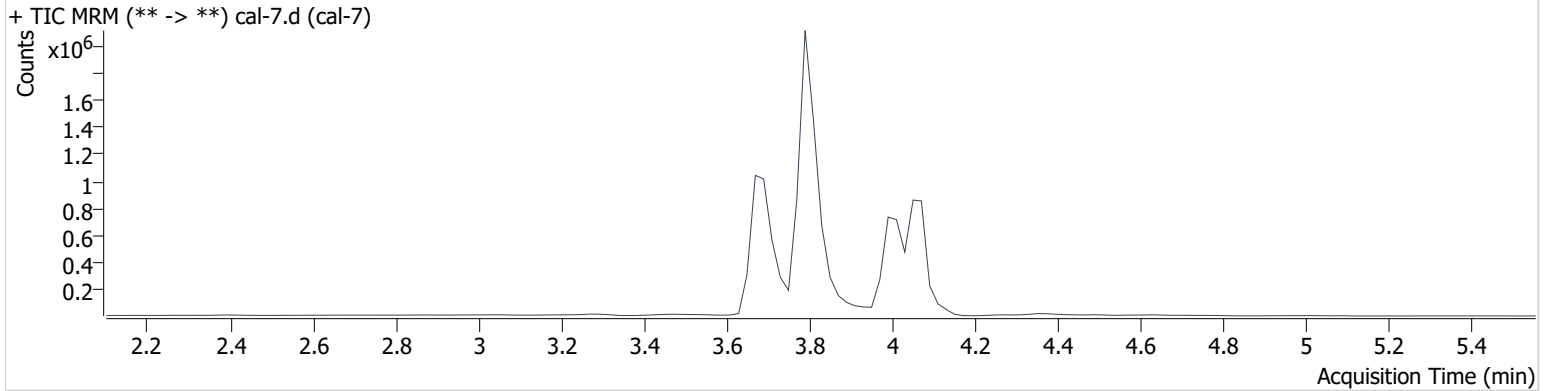
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.064	409015	1053153	49.260 ng/ml
THC-COOH	3.792	961220	834556	99.611 ng/ml
THC-OH	3.679	154875	1559612	49.355 ng/ml

# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 8-11-20\QuantResults\cann scr.batch.bin  
**Calibration Last Update** 8/12/2020 6:28:09 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>	8/11/2020 8:31:17 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.084	833130	1038827	101.639 ng/ml
THC-COOH	3.792	2263785	768988	253.939 ng/ml
THC-OH	3.679	301200	1474274	101.599 ng/ml