

10/7/2020

REVIEWED

By Brittany Wyllie at 2:13 pm, Oct 13, 2020

**Worklist: 4560**

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>	
C2020-1912	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2020-1916	2	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2020-1918	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2020-1919	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2020-1925	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2020-1934	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2020-1935	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2020-1936	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2020-1937	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2020-1948	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	

~~GA~~

10/7/2020

**Worklist: 4561**

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>
C2020-1840	1	BCK	AM 25 Blood Multi-Drug Screen by LC-QQQ



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

Extraction Date: 10/6/20 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:** 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 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: *Started run acquisition windows shifted for some compounds, adjusted acquisition window. Once all of the compounds were falling in the acquisition window, the samples were reinjected and evaluated.*

*Phentermine not evaluated.*

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	1935				1937						
B	Cal 1	1936				1925						
C	Cal 2	1948-2				1918						
D	Cal 2	1840				1916-2						
E	neg blood					1912						Cal 2
F	blood external					urine external						Cal 2
G	1919					neg urine						Cal 1
H	1934											Cal 1

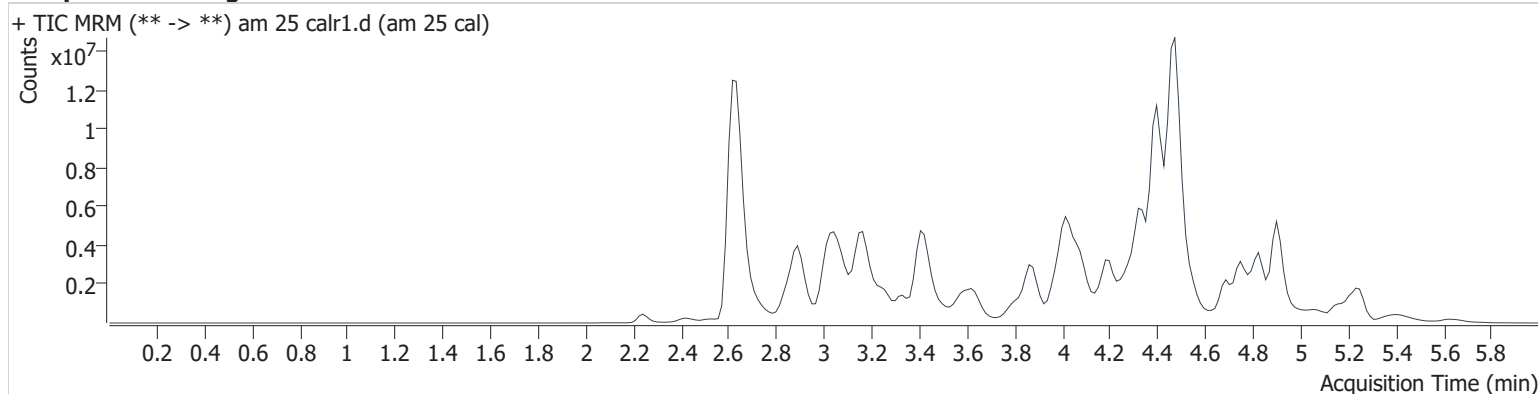
C2020-

# AM #25 Multi-Drug Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 100620\QuantResults\mds.batch.bin  
**Calibration Last Update** 10/7/2020 3:57:12 PM

<b>Instrument</b>	69679	<b>Data File</b>	am 25 calr1.d
<b>Type</b>	Cal	<b>Sample</b>	am 25 cal
<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>	10/6/2020 12:56:34 PM		

## Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
6-MAM	3.481	31939	43.9	15356.2	823810	10.000
7-aminoclonazepam	3.334	619013	126.9	1538.5	2377563	10.000
7-aminoflunitrazepam	3.562	979007	12473.7	146.8	2377563	10.000
Acetyl Fentanyl	4.674	195831	45.4	91668.6	13700421	10.000
Acetyl Norfentanyl	2.881	149670	444.7	151.9	13700421	10.000
a-hydroxyalprazolam	4.306	120008	132.0	26848.9	2377563	10.000
alpha-hydroxymidazolam	4.428	1833619	517.0	396.4	2377563	10.000
alpha-PHP	4.453	1670031	743.6	197.8	5616162	10.000
alpha-PVP	4.194	2666821	975.8	296.1	5616162	10.000
Alprazolam	4.432	1172712	570.1	325.0	8708228	10.000
Amitriptyline	5.242	512442	43.7	148.9	2875000	10.000
Amphetamine	2.901	2711670	740.2	599.8	5616162	10.000
Benzoyllecgonine	3.074	354943	600.6	71.5	172125	10.000
Brompheniramine	4.614	45240	21.0	5.9	32119470	10.000
Buprenorphine	5.261	244994	723.5	17623.1	1070079	10.000
Bupropion	4.377	2226897	280.6	679.0	8390571	10.000
Carbamazepine	4.010	3233443	2033.6	687.2	63053	10.000
Carisoprodol	3.976	581614	569.6	100.6	3211187	10.000
Chlordiazepoxide	4.555	372457	350.7	78.8	8708228	10.000
Chlorpheniramine	4.482	3257477	4411.4	∞	32119470	10.000
Citalopram	4.551	1540521	280.5	128.7	32119470	10.000
Clomipramine	5.628	707252	799.0	372.8	2875000	10.000
Clonazepam	4.246	192129	858.4	31.5	8708228	10.000
Clonazolam	4.166	459919	876.1	922.5	8708228	10.000
Cocaethylene	4.262	2768332	7223.8	166.2	17333582	10.000
Cocaine	4.065	3423806	301.2	93.4	17333582	10.000
Codeine	3.377	263437	1003.7	21.4	5002726	10.000
Cyclobenzaprine	5.090	1359395	387.7	38.3	2875000	10.000
Desipramine	5.001	1697372	31692.4	131.7	2875000	10.000
Dextromethorphan	4.818	1043680	856.2	578.1	5543712	10.000
Dextrorphan	3.808	1545415	1572.2	5795.8	5543712	10.000
Diazepam	4.679	604639	343.5	226.1	8708228	10.000
Dihydrocodeine	3.040	745101	342.9	411.1	5002726	10.000
Diphenhydramine	4.499	4551505	13838.5	372.7	32119470	10.000



# AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Doxepin	4.892	774189	105.8	90.5	12015144	10.000
Doxylamine	3.991	1181559	1142.8	891.3	5543712	10.000
EDDP	4.328	3036438	3744.4	2907751.7	1672673	10.000
Estazolam	4.342	2168957	387.3	467.7	8708228	10.000
Etizolam	4.458	112543	59878.0	324627.5	8708228	10.000
Fentanyl	4.841	119906	38.9	60767.7	7077743	10.000
Flualprazolam	4.290	393314	139.3	6609.6	8708228	10.000
Flunitrazepam	4.369	887189	451.1	481.8	8708228	10.000
Fluoxetine	4.676	590241	582.7	164.6	2363815	10.000
Flurazepam	4.792	1942053	1397420.5	184252.9	8708228	10.000
Hydrocodone	3.880	745315	234.2	53.2	5002726	10.000
Hydromorphone	2.862	628355	79.0	73.8	159802	10.000
Imipramine	5.240	1781557	1530.4	795.8	2875000	10.000
Ketamine	4.209	2030183	306.4	196.0	7585974	10.000
Lamotrigine	3.427	158706	279.2	101.3	32119470	10.000
Levamisole	3.524	1278732	1913.4	264.9	17333582	10.000
Levetireacetam	2.248	570078	680.7	1463.2	3211187	10.000
Lorazepam	4.230	62347	207.4	48.8	8708228	10.000
Maprotiline	5.059	78302	8.6	157.5	2875000	10.000
MDA	3.112	1493802	311.1	49.1	15769382	10.000
MDEA	3.448	2429679	13994.7	1296.5	15769382	10.000
MDMA	3.264	2768526	9288.1	711.8	15769382	10.000
Meperidine	4.208	1529888	831.7	835.3	5543712	10.000
Meprobamate	3.370	174090	115.9	12.9	3211187	10.000
Methadone	4.752	2711027	1674.0	1021.4	1672673	10.000
Methamphetamine	3.067	4379668	1074.2	218.3	15769382	10.000
Methocarbamol	3.275	171984	149.1	164.7	1672673	10.000
Methylphenidate	3.887	5907434	10104.3	350.6	12027317	10.000
Metoprolol	3.594	398334	135.5	154.8	5543712	10.000
Midazolam	4.628	362837	166733.3	693.0	8708228	10.000
Mirtazapine	4.697	1842222	661.0	778.8	5543712	10.000
Mitragynine	4.837	143420	46720.9	257167.5	5543712	10.000
Morphine	2.529	187184	∞	343.7	159802	10.000
Norbuprenorphine	4.501	25732	186.7	4376.1	1070079	10.000
Nordiazepam	4.513	411823	321.5	804.3	8708228	10.000
Norfentanyl	3.430	2591572	7398.5	592.5	13700421	10.000
Norhydrocodone	3.226	55071	121.5	26.5	5002726	10.000
norketamine	4.011	276461	93.3	1932.1	32119470	10.000
Normeperidine	3.872	1294821	545.2	713.7	32119470	10.000
Noroxycodone	3.025	571405	44.6	169.7	7585974	10.000
Nortriptyline	5.047	633618	337.9	20.7	2875000	10.000
O-desmethyl-tramadol	2.895	4483199	1330.2	125.4	32119470	10.000
Olanzapine	4.538	134540	58.0	56.7	63053	10.000
Oxazepam	4.312	266487	428.3	72.0	1684468	10.000
Oxycodone	3.237	1662204	236.4	1019.2	7585974	10.000
Oxymorphone	2.419	876631	185.4	98.1	159802	10.000
Paroxetine	5.353	21883	9.8	26.7	2363815	10.000
Phenazepam	4.458	627972	530.7	174069.0	8708228	10.000
Phencyclidine	4.285	2456827	2650.1	476.3	5543712	10.000
Phenytoin	3.901	113644	61.3	118.3	63053	10.000
Promethazine	5.162	2621771	10833.8	269.8	32119470	10.000
Pseudoephedrine	2.640	51455136	23488.8	778.6	15769382	10.000
Quetiapine	4.747	2898074	1624.1	34297.7	26163245	10.000
Sertraline	5.402	455995	175.4	230.8	2363815	10.000
Sufentanil	5.065	97157	70124.1	65.6	13700421	10.000
Tapentadol	3.599	2637652	1863.5	617.6	7585974	10.000
Temazepam	4.479	1556787	295.6	44.7	8708228	10.000
Tramadol	3.640	4623972	10664.7	52.9	32119470	10.000
Trazodone	4.916	2415391	626582.5	724263.6	12015144	10.000

# AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Venlafaxine	4.083	3580488	12043.2	303.4	2363815	10.000
Zaleplon	4.157	807541	384.9	262.9	26163245	10.000
Zolpidem	4.402	4968795	3236592.6	3196.3	26163245	10.000
Zopiclone	4.441	412325	343.4	285.6	2173339	10.000



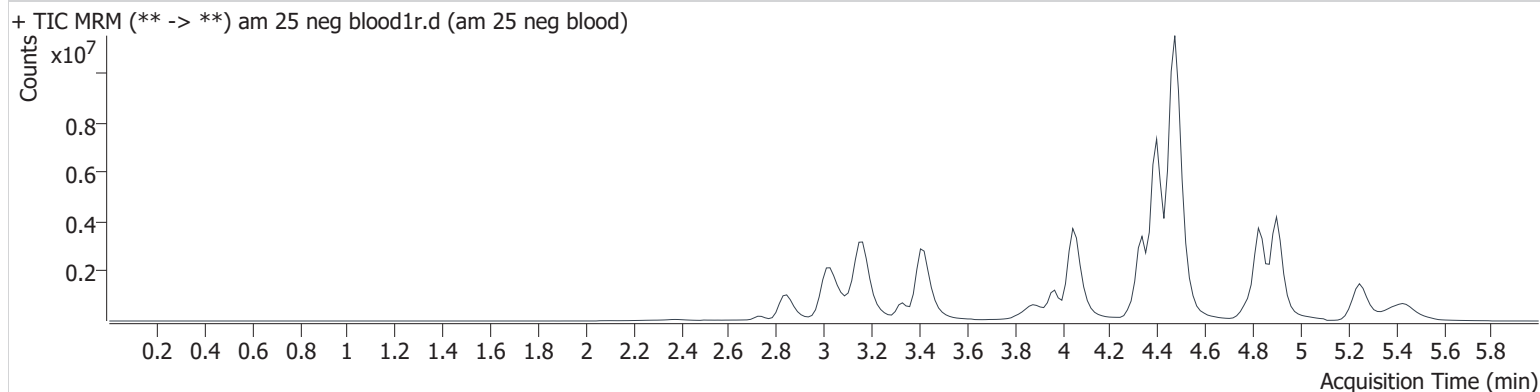
GA

# AM #25 Multi-Drug Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 100620\QuantResults\mds.batch.bin  
**Calibration Last Update** 10/7/2020 3:57:12 PM

<b>Instrument</b>	69679	<b>Data File</b>	am 25 neg blood1r.d
<b>Type</b>	Sample	<b>Sample</b>	am 25 neg 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>	10/6/2020 1:09:58 PM		
<b>Sample Info.</b>			

## Sample Chromatogram

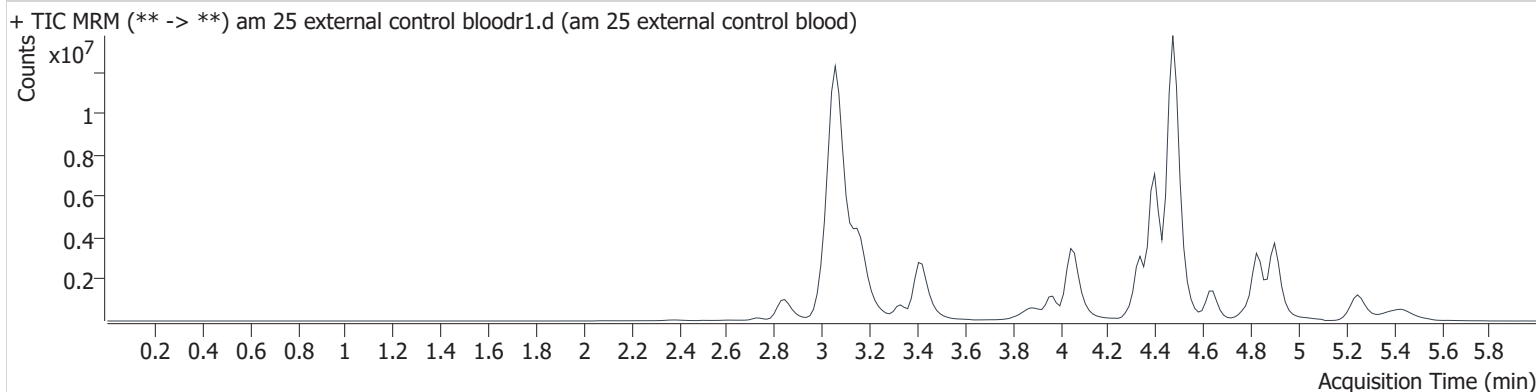


# AM #25 Multi-Drug Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 100620\QuantResults\mds.batch.bin  
**Calibration Last Update** 10/7/2020 3:57:12 PM

<b>Instrument</b>	69679	<b>Data File</b>	am 25 external control bloodr1.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-F1	<b>Comment</b>	
<b>Injection Volume</b>	2.5		
<b>Acq. Date-Time</b>	10/6/2020 1:16:39 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



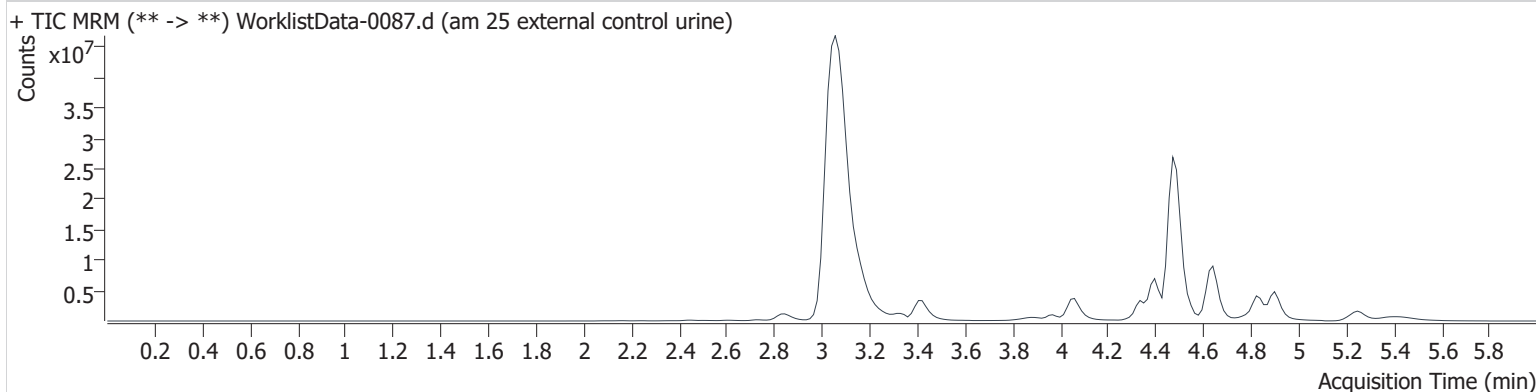
Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Methamphetamine	3.067	24483179	6428.5	5909.3	10889206	80.955
Midazolam	4.643	2256406	2752803.9	953769.3	6559723	82.556
Temazepam	4.479	8959681	1865.8	258.2	6559723	76.403

# AM #25 Multi-Drug Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 100620\QuantResults\mds.batch.bin  
**Calibration Last Update** 10/7/2020 3:57:12 PM

<b>Instrument</b>	69679	<b>Data File</b>	WorklistData-0087.d
<b>Type</b>	Sample	<b>Sample</b>	am 25 external control urine
<b>Acq. Method</b>	mds 826.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P2-F6	<b>Comment</b>	
<b>Injection Volume</b>	2.5		
<b>Acq. Date-Time</b>	10/6/2020 3:59:14 PM		

## Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Methamphetamine	3.085	103428486	16189.7	27511.2	12580625	296.013
Midazolam	4.643	16160161	1950193.4	7116291.2	5226930	742.023
Temazepam	4.479	46470555	16748.6	∞	5226930	497.315

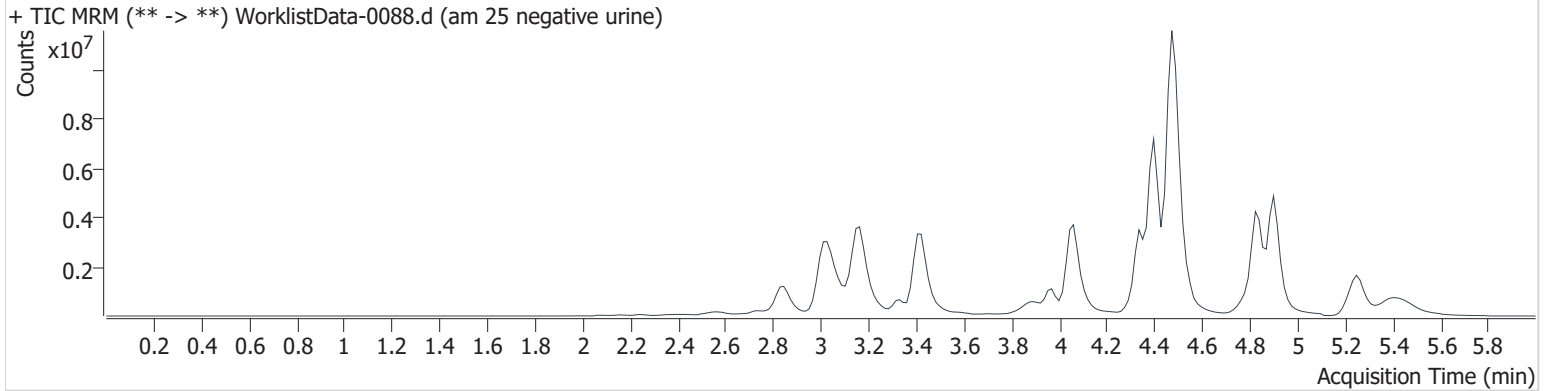
A

# AM #25 Multi-Drug Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 100620\QuantResults\mds.batch.bin  
**Calibration Last Update** 10/7/2020 3:57:12 PM

<b>Instrument</b>	69679	<b>Data File</b>	WorklistData-0088.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-G6	<b>Comment</b>	
<b>Injection Volume</b>	2.5		
<b>Acq. Date-Time</b>	10/6/2020 4:12:32 PM		

## Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Codeine	3.377	61121	561.6	262.4	4123599	2.815 <5
Methamphetamine	3.067	1078181	35.3	51.3	14015943	2.770 <32

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

Extraction Date: 10-7-20 Analyst: Anne Nord

Plate lot#: 200723 Plate Expiration: 1/23/2021

**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: Extracts run on both am 26 and am 30

# Toxicology AM method 27/26 external prep information



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	

GA

	1	2	3	4	5	6
a	cal 100 ng	neg blood	1912			QC 1
b	cal 50 ng	1919	1916-2			cal 100 ng
c	cal 25 ng	1934	1918			cal 50 ng
d	cal 10ng	1935	1925			cal 25 ng
e	cal 5 ng	1936	1937			cal 10ng
f	cal 3 ng	1948-2				cal 5 ng
g	cal 1ng	neg urine				cal 3 ng
h	QC 1	external urine				cal 1ng

c2020-

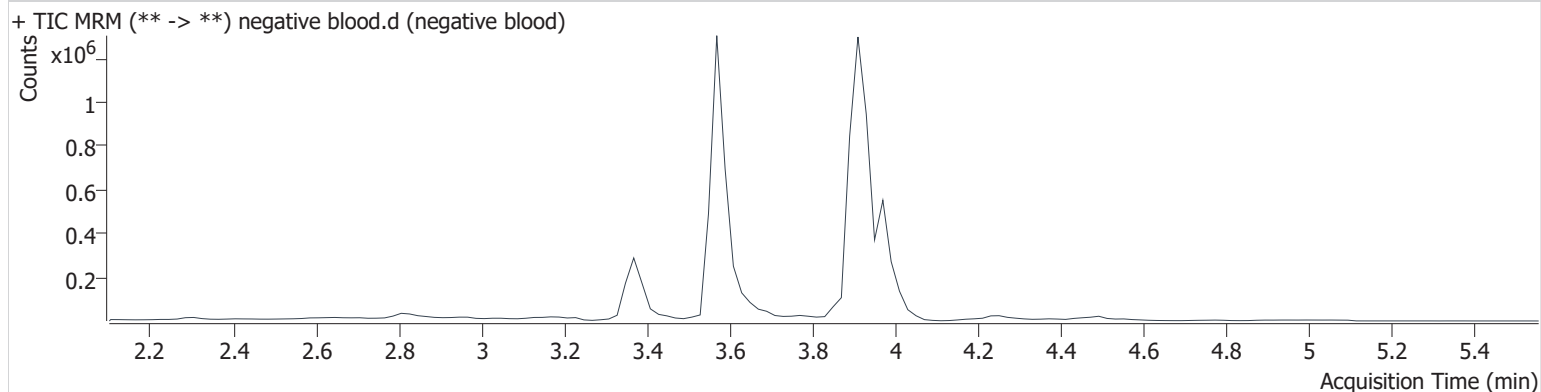
GA

# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 100620\QuantResults\cann.batch.bin  
**Calibration Last Update** 10/7/2020 11:08:34 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>	10/6/2020 5:32:39 PM		
<b>Sample Info.</b>			

## Sample Chromatogram





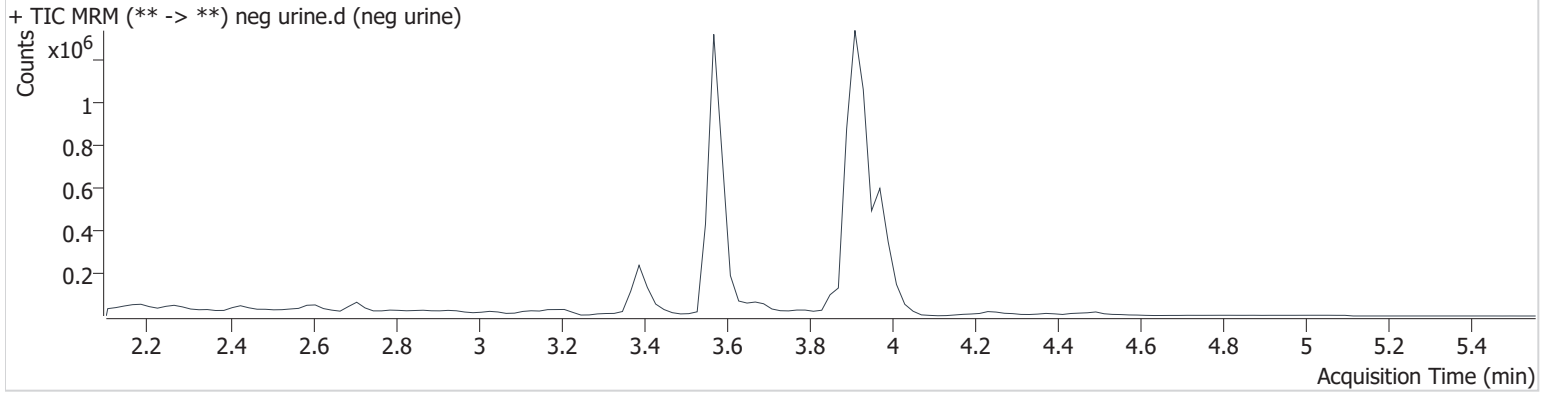
GA

# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 100620\QuantResults\cann.batch.bin  
**Calibration Last Update** 10/7/2020 11:08:34 AM

<b>Instrument</b>	69679	<b>Data File</b>	neg urine.d
<b>Type</b>	Sample	<b>Sample</b>	neg urine
<b>Acq. Method</b>	am 26 cann scr 5-5-20.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P3-G2	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	10/6/2020 6:12:17 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



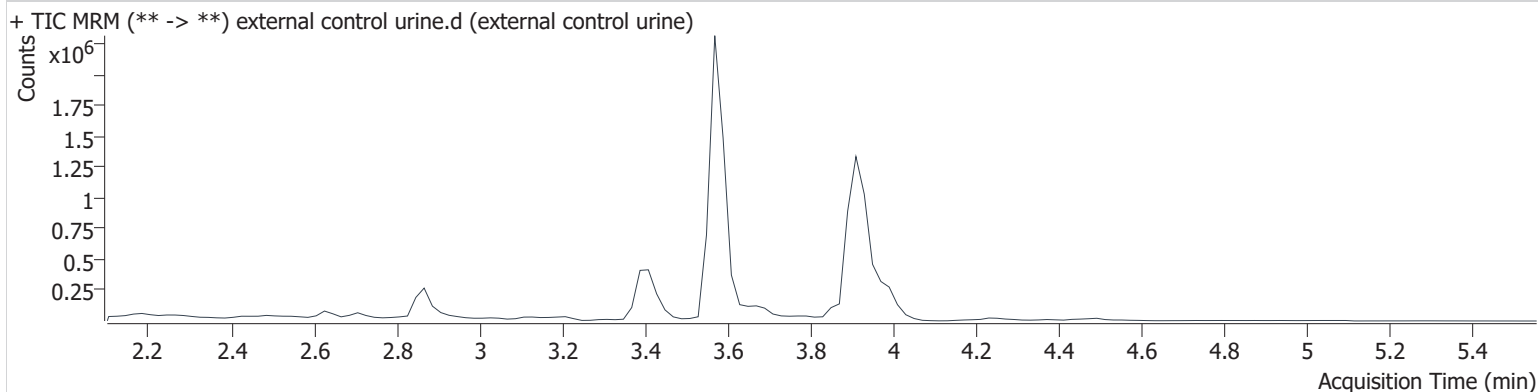
GA

# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 100620\QuantResults\cann.batch.bin  
**Calibration Last Update** 10/7/2020 11:08:34 AM

<b>Instrument</b>	69679	<b>Data File</b>	external control urine.d
<b>Type</b>	Sample	<b>Sample</b>	external control 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>	10/6/2020 6:18:54 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



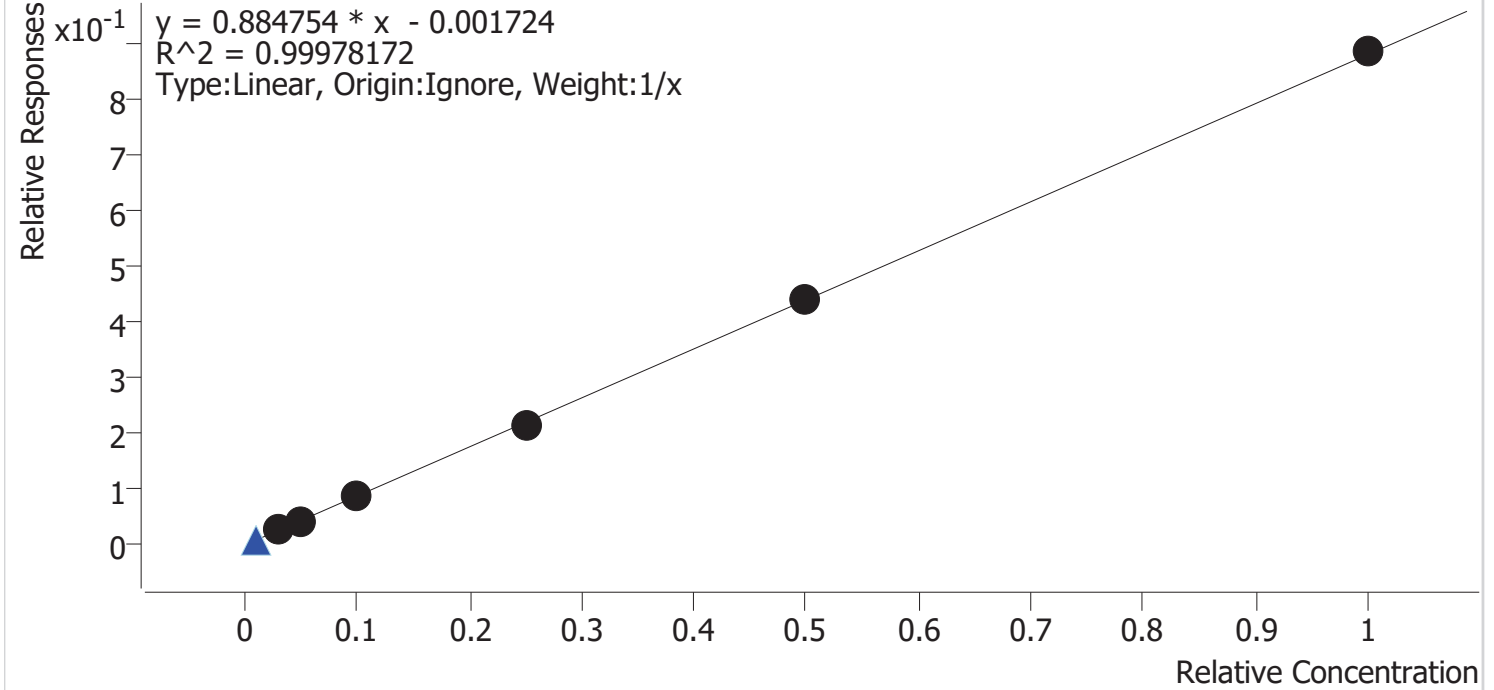
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	3.984	138421	399165	39.389 ng/ml
THC-COOH	3.409	558932	573246	44.467 ng/ml
THC-OH	3.578	329478	3430250	51.092 ng/ml

# Compound Calibration Report



**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 100620\QuantResults\cann.batch.bin  
**Last Cal. Update** 10/7/2020 11:08 AM  
**Analyst Name** ISP\datastor  
**Analyte** THC **Internal Standard** THC-d3

THC - 6 Levels, 6 Levels Used, 6 Points, 6 Points Used, 1 QCs



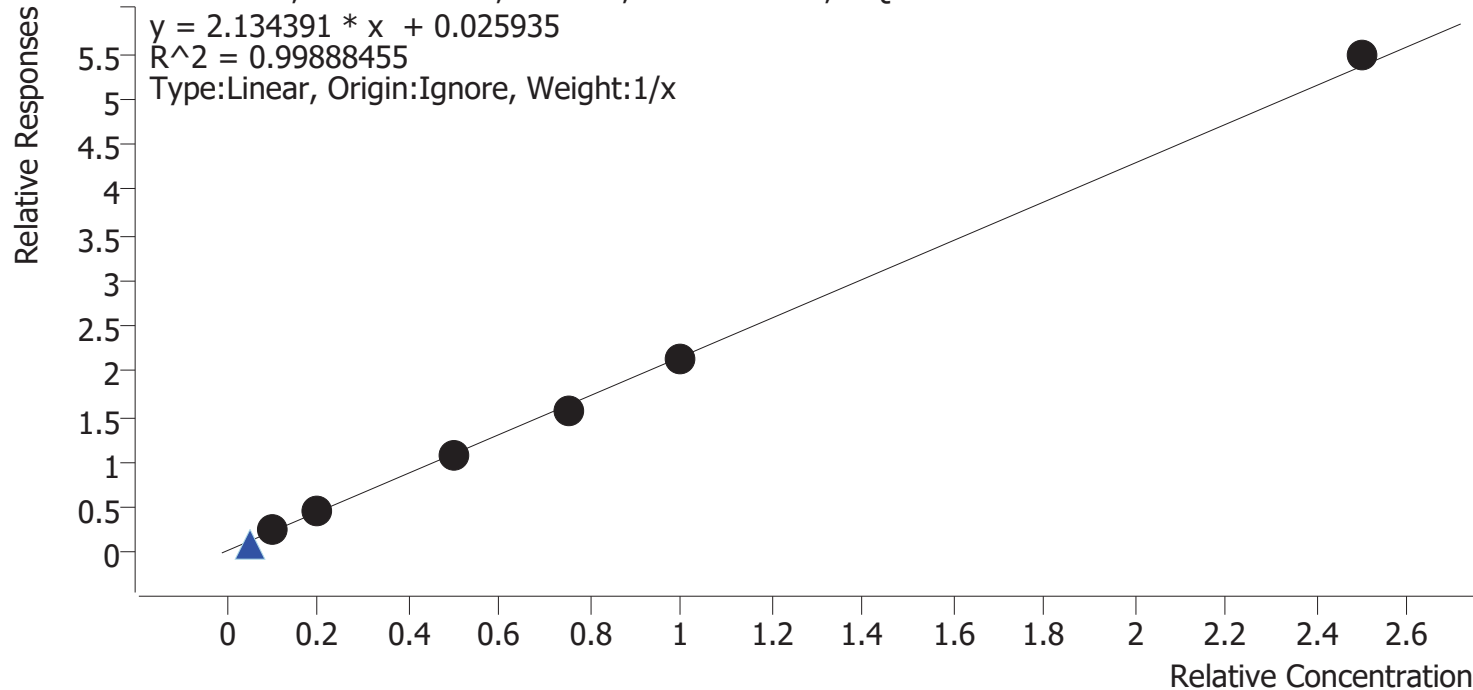
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 2	2	✓	3.0	3.1	102.8
cal 3	3	✓	5.0	5.1	101.6
cal 4	4	✓	10.0	9.7	97.2
cal 5	5	✓	25.0	24.4	97.5
cal-6	6	✓	50.0	50.2	100.3
cal-7	7	✓	100.0	100.6	100.6

# Compound Calibration Report



<b>Batch results</b>	D:\MassHunter\Data\2020 Data\am 25-26 100620\QuantResults\cann.batch.bin		
<b>Last Cal. Update</b>	10/7/2020 11:08 AM		
<b>Analyst Name</b>	ISP\datastor		
<b>Analyte</b>	THC-COOH	<b>Internal Standard</b>	THC-COOH-d9

THC-COOH - 6 Levels, 6 Levels Used, 6 Points, 6 Points Used, 1 QCs



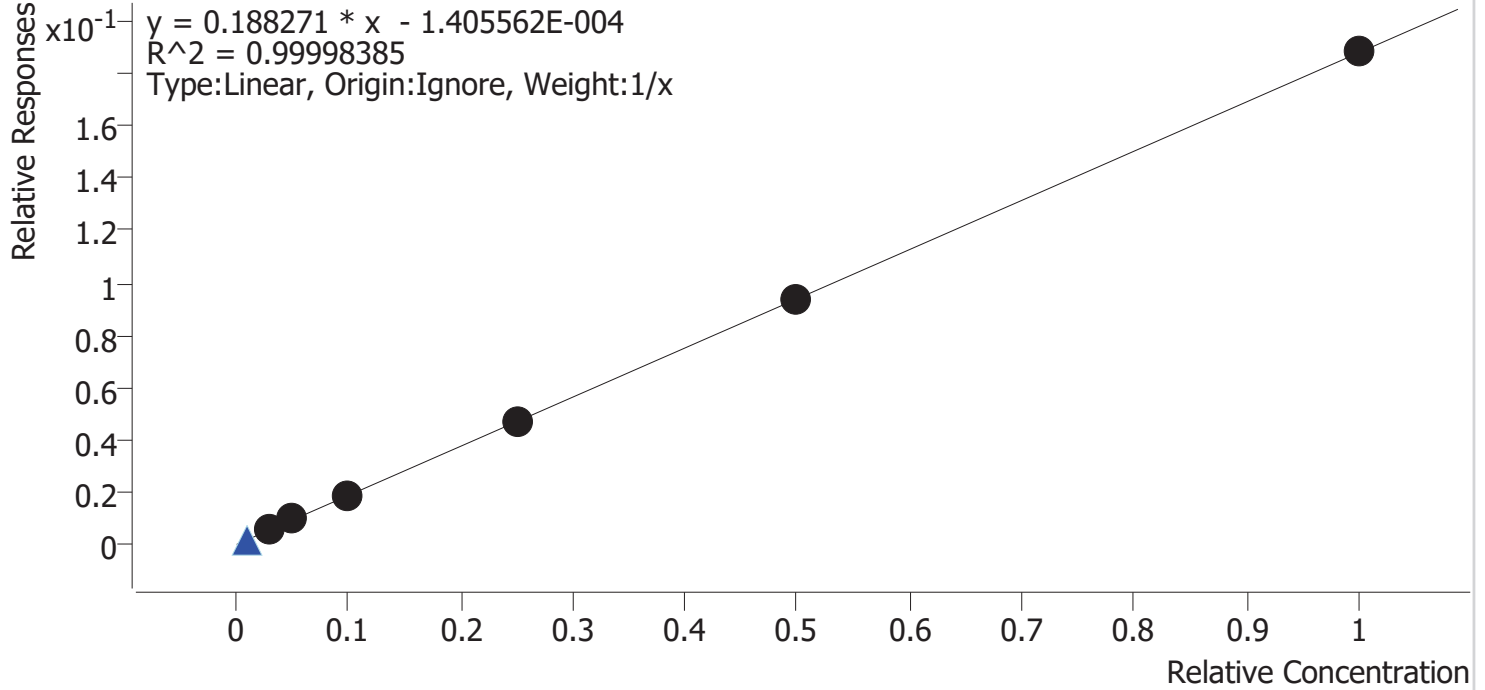
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 2	2	✓	10.0	10.4	103.8
cal 3	3	✓	20.0	20.4	102.0
cal 4	4	✓	50.0	49.4	98.9
cal 5	5	✓	75.0	71.3	95.1
cal-6	6	✓	100.0	98.1	98.1
cal-7	7	✓	250.0	255.4	102.1

# Compound Calibration Report



**Batch results** D:\MassHunter\Data\2020 Data\lam 25-26 100620\QuantResults\cann.batch.bin  
**Last Cal. Update** 10/7/2020 11:08 AM  
**Analyst Name** ISP\datastor  
**Analyte** THC-OH **Internal Standard** THC-OH-d3

THC-OH - 6 Levels, 6 Levels Used, 6 Points, 6 Points Used, 1 QCs



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 2	2	✓	3.0	3.0	99.4
cal 3	3	✓	5.0	5.1	101.4
cal 4	4	✓	10.0	10.0	99.6
cal 5	5	✓	25.0	24.9	99.6
cal-6	6	✓	50.0	49.9	99.8
cal-7	7	✓	100.0	100.2	100.2

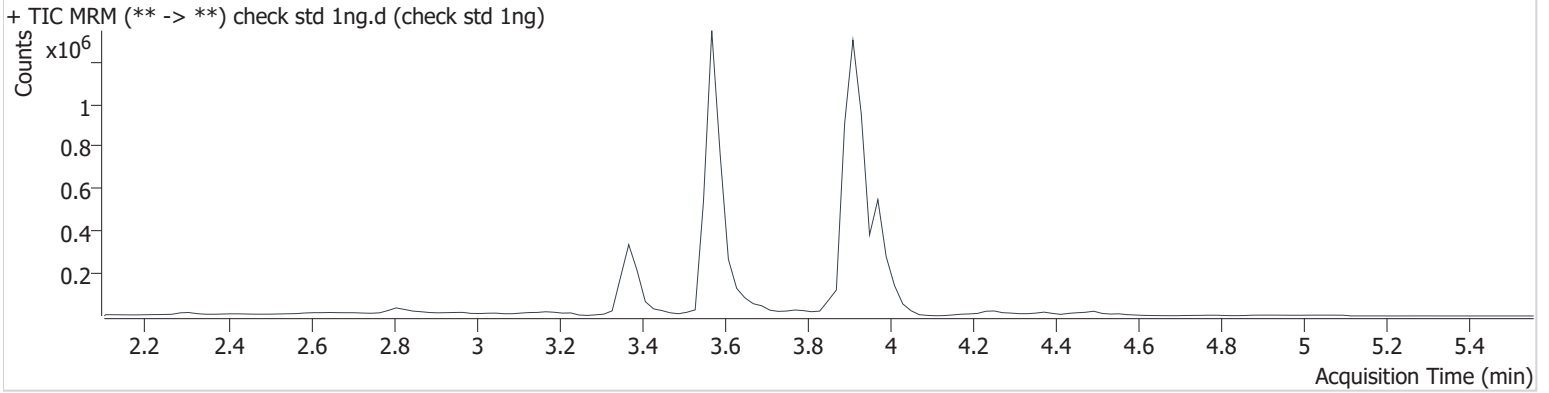
OA

# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 100620\QuantResults\cann.batch.bin  
**Calibration Last Update** 10/7/2020 11:08:34 AM

<b>Instrument</b>	69679	<b>Data File</b>	check std 1ng.d
<b>Type</b>	QC	<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>	10/6/2020 4:39:48 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	3.984	6489	826424	1.082 ng/ml <b>Low</b>
THC-COOH	3.389	83350	818655	3.555 ng/ml <b>Low</b>
THC-OH	3.578	6822	3784944	1.032 ng/ml <b>Low</b>

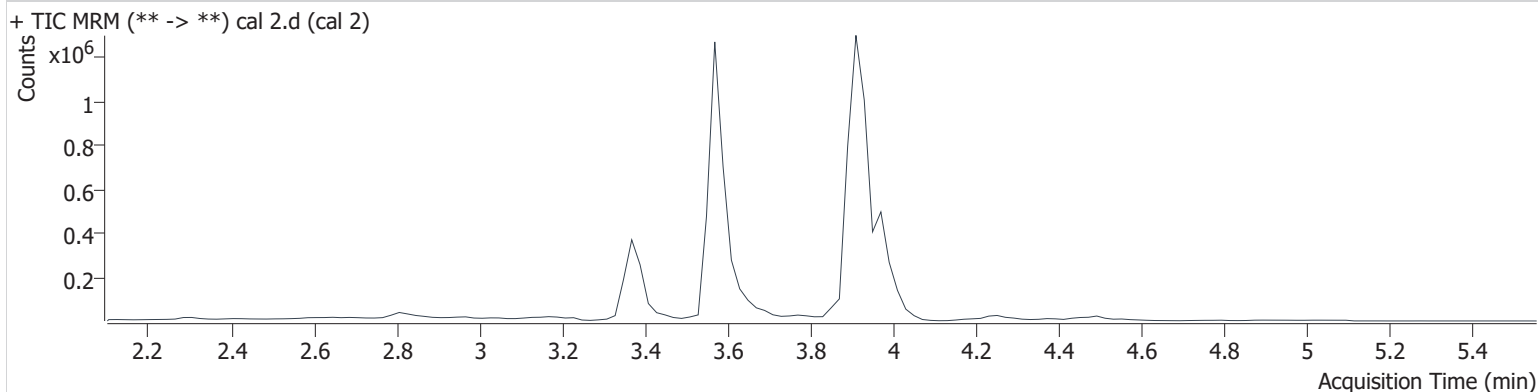
# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 100620\QuantResults\cann.batch.bin  
**Calibration Last Update** 10/7/2020 11:08:34 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>	10/6/2020 4:46:26 PM		

**Sample Info.**

## Sample Chromatogram



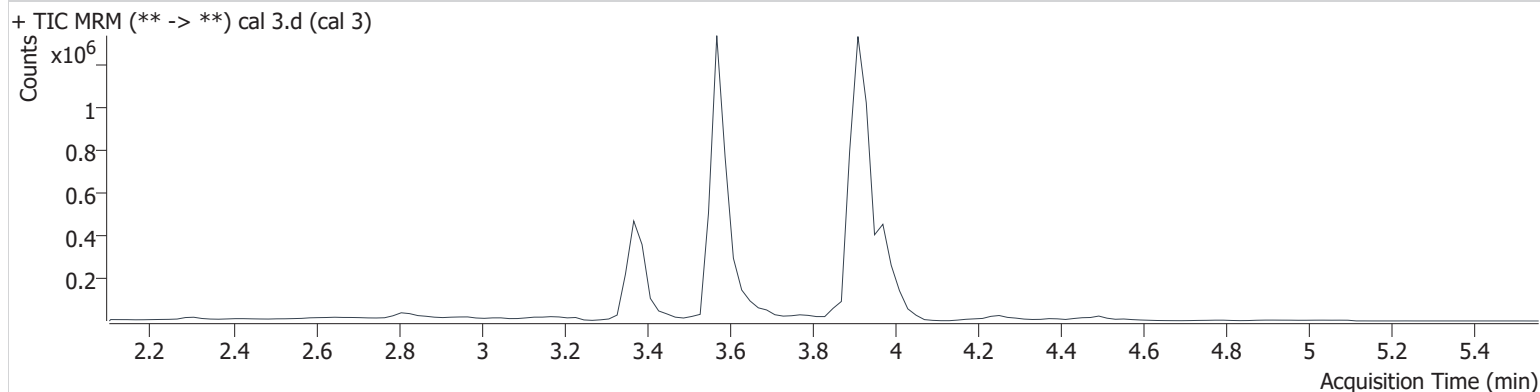
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	3.984	18512	724536	3.083 ng/ml
THC-COOH	3.389	190400	769583	10.376 ng/ml
THC-OH	3.578	18753	3427508	2.981 ng/ml <b>Low</b>

# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 100620\QuantResults\cann.batch.bin  
**Calibration Last Update** 10/7/2020 11:08:34 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>	10/6/2020 4:53:02 PM		

**Sample Chromatogram**



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	3.984	28353	655688	5.082 ng/ml
THC-COOH	3.389	377018	817031	20.405 ng/ml
THC-OH	3.578	33519	3563139	5.071 ng/ml

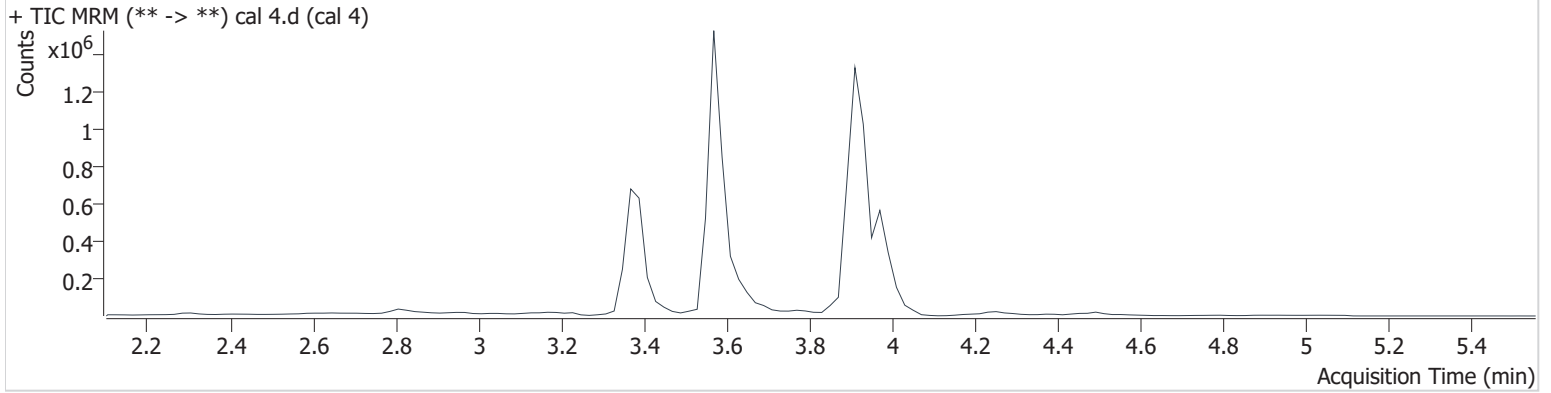


# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 100620\QuantResults\cann.batch.bin  
**Calibration Last Update** 10/7/2020 11:08:34 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>	10/6/2020 4:59:38 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	3.984	69849	828932	9.719 ng/ml
THC-COOH	3.389	872688	807178	49.439 ng/ml
THC-OH	3.578	69054	3709173	9.963 ng/ml

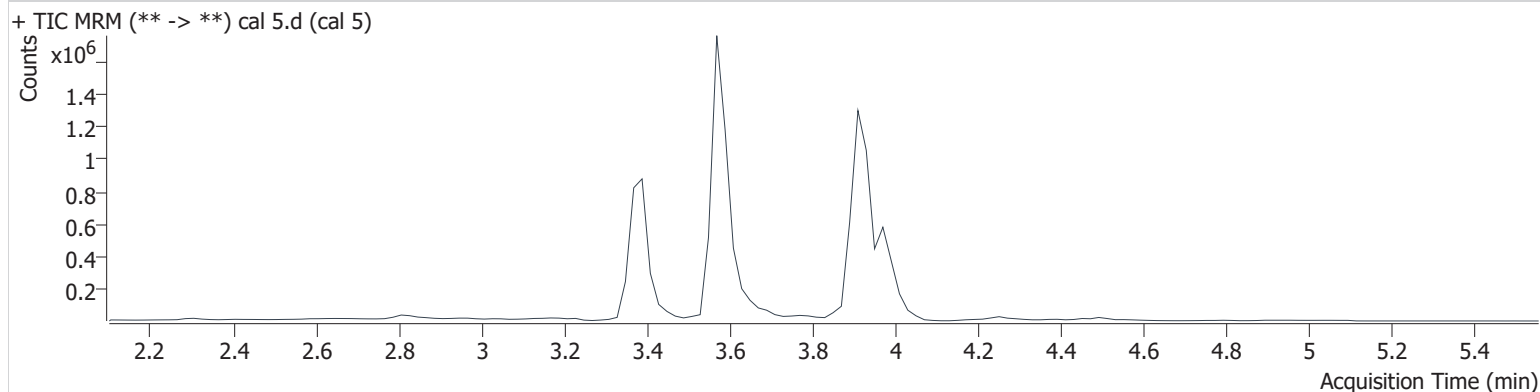
GA

# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 100620\QuantResults\cann.batch.bin  
**Calibration Last Update** 10/7/2020 11:08:34 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>	10/6/2020 5:06:15 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	3.984	164786	770234	24.376 ng/ml
THC-COOH	3.389	1267201	818276	71.341 ng/ml
THC-OH	3.578	171687	3672554	24.905 ng/ml

OA

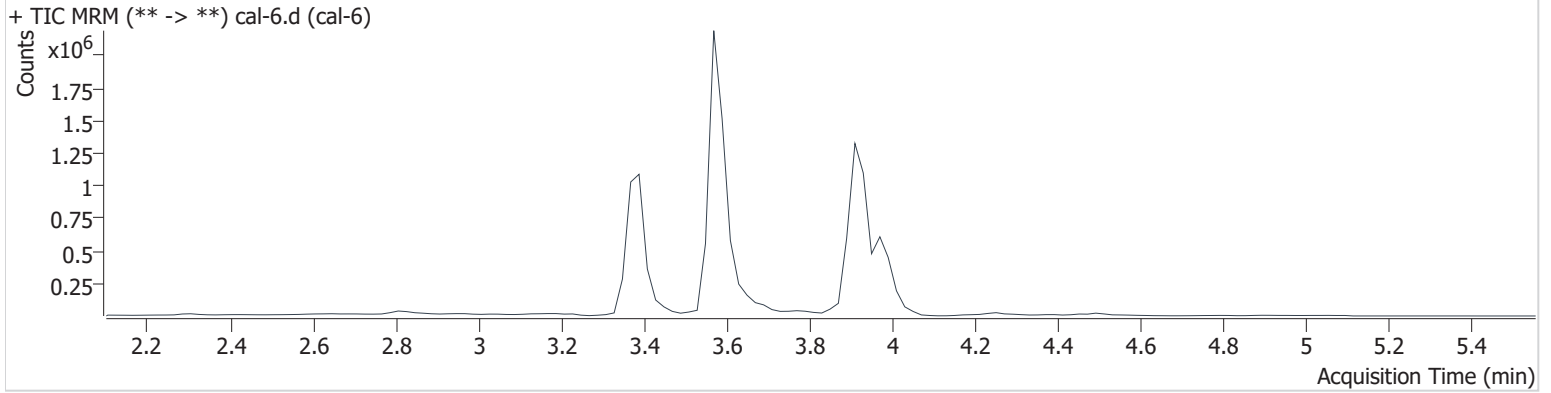
# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 100620\QuantResults\cann.batch.bin  
**Calibration Last Update** 10/7/2020 11:08:34 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>	10/6/2020 5:12:51 PM		

**Sample Info.**

## Sample Chromatogram



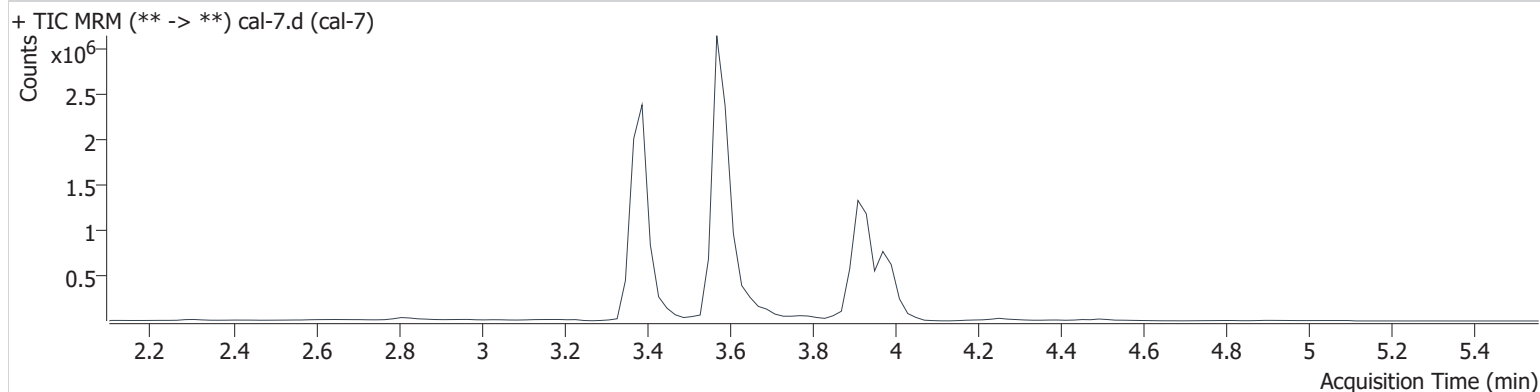
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	3.984	322291	728952	50.167 ng/ml
THC-COOH	3.389	1677600	791689	98.064 ng/ml
THC-OH	3.578	327964	3497299	49.884 ng/ml

# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 100620\QuantResults\cann.batch.bin  
**Calibration Last Update** 10/7/2020 11:08:34 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>	10/6/2020 5:19:27 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



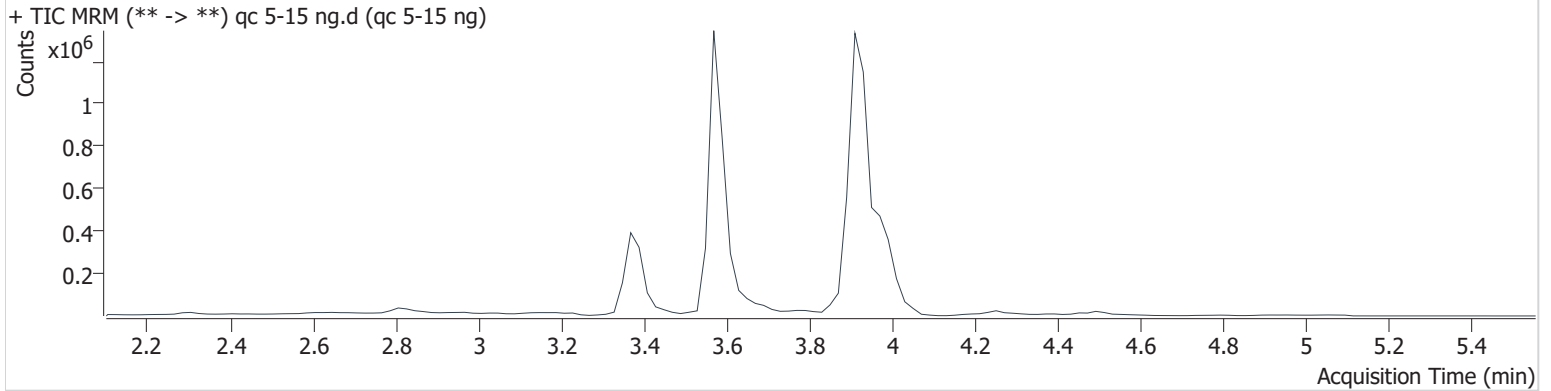
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	3.984	655876	738512	100.573 ng/ml
THC-COOH	3.389	4049300	739378	255.375 ng/ml
THC-OH	3.578	674071	3575991	100.196 ng/ml

# AM #26 Cannabinoids Screen Results

**Batch results** D:\MassHunter\Data\2020 Data\am 25-26 100620\QuantResults\cann.batch.bin  
**Calibration Last Update** 10/7/2020 11:08:34 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>	Anne Nord
<b>Sample Position</b>	P3-H1	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	10/6/2020 5:26:03 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	3.984	29586	754121	4.629 ng/ml
THC-COOH	3.389	288876	720493	17.570 ng/ml
THC-OH	3.578	29010	3413813	4.588 ng/ml