



Worklist: 5002

REVIEWED
By: Eileen Wylie at 11:45 am Jun 02, 2021

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>	
C2021-1036	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2021-1038	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2021-1039	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2021-1079	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2021-1140	2	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2021-1143	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2021-1146	3	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2021-1148	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2021-1182	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2021-1183	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	
C2021-1190	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2021-1228	1	BCK	AM 25/AM 26 Blood MultiDrug/THC Screen by LC-QQQ	
C2021-1229	1	UCK	AM 25/AM 26 Urine MultiDrug/THC Screen by LC-QQQ	

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

Extraction Date: 5/26/21 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: 20K20702 **Blank Urine lot:** 5621 **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. 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: Due to the extraction occurring after the expiration of the analytical plate, an external control was included with this run as specified in the analytical method.



	1	2	3	4	5	6	7	8	9	10	11	12
A				1228-1 g4			1079-1 e7					
B			neg blood H3	negative urine h4			1146-3 f7					
C			1190-1 a4	external control urine a5			1183-1 g7					
D	Cal 1 G3		1140-2 b4									
E			1143-1 c4		1036-1 b7							Cal 2
F			1148-1 d4		1038-1 c7							Cal 2
G			1182-1 e4		1039-1 d8							Cal 1
H			external control blood f4	1229-1 a7								Cal 1

Extraction plate position

SLE and Collection noted after case number

lab number format

C2021-____-__



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 4700 ul MeOH (Honeywell EA078-US)

ppd 4/14/21: Exp: 4/14/2022 lot 41422 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
Methylphenidate	FE01212007	2/1/2025
Morphine	FE03232010	4/1/2025

AM 25/28 control 500 ul working solution (41422) in 4500 ul negative urine (1000ng/mL Expected concentration)

ppd 4/14/22, exp 4/14/22 lot u41422 negative urine 2121 by AMN

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

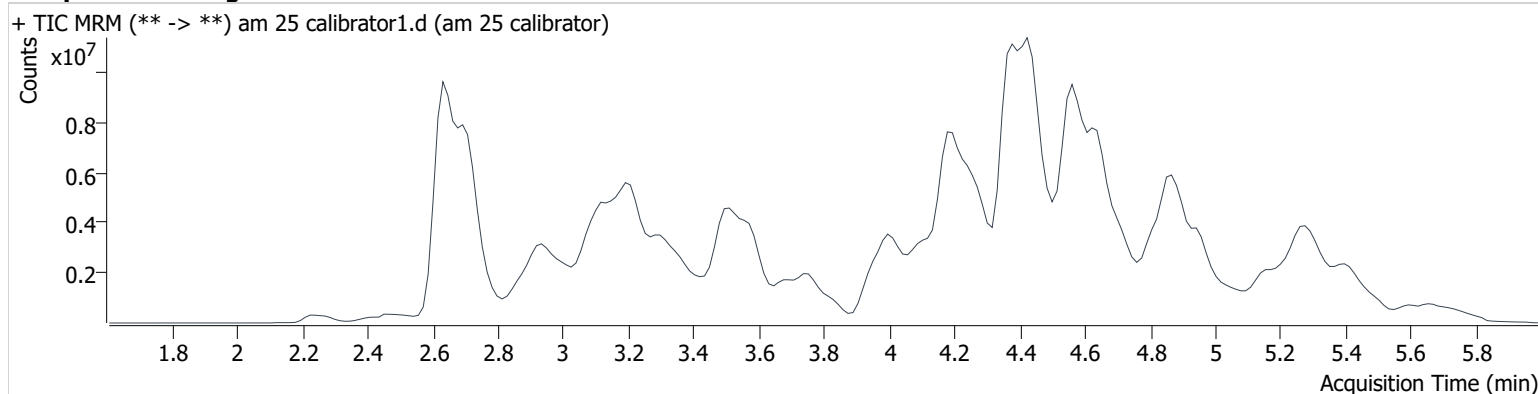
ppp 4/14/21, exp 4/14/22 lot b41422 neg blood 20J20793 by AMN

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2021\am 25-26\052621\QuantResults\mds.batch.bin
Calibration Last Update 6/1/2021 3:10:31 PM

Instrument	69679	Data File	am 25 calibrator1.d
Type	Cal	Sample	am 25 calibrator
Acq. Method	mds 826.m	Operator	Anne Nord
Sample Position	P1-G3	Comment	
Injection Volume	2.5		
Acq. Date-Time	5/26/2021 12:05:43 PM		

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
6-MAM	3.737	45031	14016.5	32.1	1530305	10.000
7-aminoclonazepam	3.316	757009	1429.5	229.1	3173747	10.000
7-aminoflunitrazepam	3.543	1024603	174.3	506.4	3173747	10.000
Acetyl Fentanyl	4.671	322514	42.6	53593.8	22391313	10.000
Acetyl Norfentanyl	2.941	218644	37.4	158.2	22391313	10.000
a-hydroxyalprazolam	4.271	191099	81.0	93.5	3173747	10.000
alpha-hydroxymidazolam	4.378	2437431	597.1	319.7	3173747	10.000
alpha-PHP	4.527	2362030	511.8	∞	9075206	10.000
alpha-PVP	4.313	3114696	442.9	1151.6	9075206	10.000
Alprazolam	4.397	1279296	369.4	173.2	8928370	10.000
Amitriptyline	5.269	727509	414.8	143.7	3890994	10.000
Amphetamine	2.931	3557053	1046.9	314.9	9075206	10.000
Benzoyllecgonine	3.057	129140	395.1	114.8	272190	10.000
Brompheniramine	4.824	110600	27.2	8.3	50875012	10.000
Buprenorphine	5.213	357886	526.4	1928.5	1517930	10.000
Bupropion	4.419	3142403	844.0	388.4	12576820	10.000
Carbamazepine	3.976	4492269	753.0	1716.7	71817	10.000
Carisoprodol	3.942	757776	1234.8	92.2	4165071	10.000
Chlordiazepoxide	4.507	507898	70.0	32.3	8928370	10.000
Chlorpheniramine	4.616	5611186	13405.6	12.5	50875012	10.000
Citalopram	4.640	2526485	468.7	1623.4	50875012	10.000
Clomipramine	5.717	1864708	2596.7	1855.5	50875012	10.000
Clonazepam	4.211	451166	57.7	83.9	8928370	10.000
Clonazolam	4.131	447323	1491.2	116.4	8928370	10.000
Cocaethylene	4.365	3177398	247.8	390.5	50875012	10.000
Cocaine	4.213	4357340	2924.7	118.2	24087121	10.000
Codeine	3.709	388249	149.6	87.2	226217	10.000
Cyclobenzaprine	5.149	1807749	4099.1	41.8	3890994	10.000
Desipramine	4.708	200475	154.5	6.7	3890994	10.000
Dextromethorphan	5.074	2578042	672.4	∞	5958444	10.000
Dextrorphan	3.988	2216847	5907.2	1428.1	5958444	10.000
Diazepam	4.645	898229	278.5	327.4	8928370	10.000
Dihydrocodeine	3.282	832788	337.1	349.9	2334038	10.000
Diphenhydramine	4.587	7648440	3326.4	1044.4	50875012	10.000



AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Doxepin	4.965	1098611	242.4	∞	9112762	10.000
Doxylamine	4.110	6999983	3544.3	3630.2	5958444	10.000
EDDP	4.432	1061012	860.1	475.6	2334038	10.000
Estazolam	4.307	2398947	531.4	361.0	8928370	10.000
Etizolam	4.439	108027	24142.4	1469.0	8928370	10.000
Fentanyl	4.838	246600	55.4	∞	13609208	10.000
Flualprazolam	4.270	568545	1423.6	499.7	8928370	10.000
Flunitrazepam	4.335	1283328	307.9	195.4	8928370	10.000
Fluoxetine	4.734	812919	790.5	17789.0	1729052	10.000
Flurazepam	4.789	2810979	1059195.2	126604.1	8928370	10.000
Hydrocodone	4.183	1299241	316.6	59.2	7733592	10.000
Hydromorphone	3.073	1003299	762.3	263.1	226217	10.000
Imipramine	5.283	3253441	134.6	57.6	3890994	10.000
Ketamine	4.220	2386986	672.7	115.7	15547782	10.000
Lamotrigine	3.394	187086	71.1	413.9	50875012	10.000
Levamisole	3.719	1729743	2389.8	73.9	5958444	10.000
Levetireacetam	2.232	678828	∞	364.2	50875012	10.000
Lorazepam	4.195	72109	70.8	∞	8928370	10.000
Maprotiline	5.270	459654	67.6	28.1	3890994	10.000
MDA	3.171	2647241	274.3	96.0	20505911	10.000
MDEA	3.535	3495607	1784.2	693.8	20505911	10.000
MDMA	3.352	3921578	2637.2	261.1	20505911	10.000
Meperidine	4.311	2378787	517.3	970.5	5958444	10.000
Meprobamate	3.335	229496	140.4	31.2	4165071	10.000
Methadone	4.871	2914949	2730.2	154.3	2334038	10.000
Methamphetamine	3.142	9162044	76.7	262.3	20505911	10.000
Methocarbamol	3.258	180659	125.4	191.1	2334038	10.000
Methylphenidate	4.022	7037425	189.9	296.0	15547782	10.000
Metoprolol	3.666	557480	975.4	952.8	5958444	10.000
Midazolam	4.594	455685	299.0	1814.4	8928370	10.000
Mirtazapine	4.709	2617042	4634.7	3331.4	5958444	10.000
Mitragynine	4.849	336988	33093.4	133416.3	5958444	10.000
Morphine	2.545	303127	351.6	177.2	226217	10.000
Norbuprenorphine	4.528	35880	8.1	17429.4	1517930	10.000
Nordiazepam	4.479	766031	617.8	452.0	8928370	10.000
Norfentanyl	3.533	4349547	5441.3	590.6	22391313	10.000
Norhydrocodone	3.406	72871	268.4	10.2	7733592	10.000
norketamine	4.007	462922	82.6	1788.2	15547782	10.000
Normeperidine	3.976	2252340	673.4	64.6	50875012	10.000
Noroxycodone	3.115	1022122	50.1	126.4	9127770	10.000
Nortriptyline	5.679	497221	33.9	42.6	3890994	10.000
O-desmethyl-tramadol	2.940	5236438	10030.9	529.7	50875012	10.000
Olanzapine	4.566	1091142	596.6	522.8	71817	10.000
Oxazepam	4.277	562586	138.1	42.2	3429500	10.000
Oxycodone	3.493	2103736	333.9	29.6	9127770	10.000
Oxymorphone	2.420	1460052	193.4	737.7	226217	10.000
Paroxetine	5.654	53827	66.8	54.5	1729052	10.000
Phenazepam	4.424	1222958	1157.5	303.9	8928370	10.000
Phencyclidine	4.404	3852116	2191.0	148.8	5958444	10.000
Phentermine	3.232	47160	8.3	∞	15547782	10.000
Phenytoin	3.851	128789	88.1	72.9	71817	10.000
Promethazine	5.161	6130987	3856.0	∞	50875012	10.000
Pseudoephedrine	2.642	66871498	13424.6	12898.6	20505911	10.000
Quetiapine	4.713	3525312	1597.0	433727.4	26624004	10.000
Sertraline	5.445	403568	∞	91.7	1729052	10.000
Sufentanil	5.033	186080	27354.5	∞	22391313	10.000
Tapentadol	3.688	3556916	∞	106.6	2334038	10.000
Temazepam	4.445	1729909	196.2	∞	8928370	10.000
Tramadol	3.758	5531932	27682.2	37.3	50875012	10.000
Trazodone	4.867	3150304	∞	1011.2	9112762	10.000



AM #25 Multi-Drug Screen Results

Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Venlafaxine	4.200	4704273	3894.4	116.3	1729052	10.000
Zaleplon	4.121	827432	218.5	129.2	26624004	10.000
Zolpidem	4.382	5297152	8513.1	870.2	26624004	10.000
Zopiclone	4.422	632171	1210.5	524.5	3064748	10.000

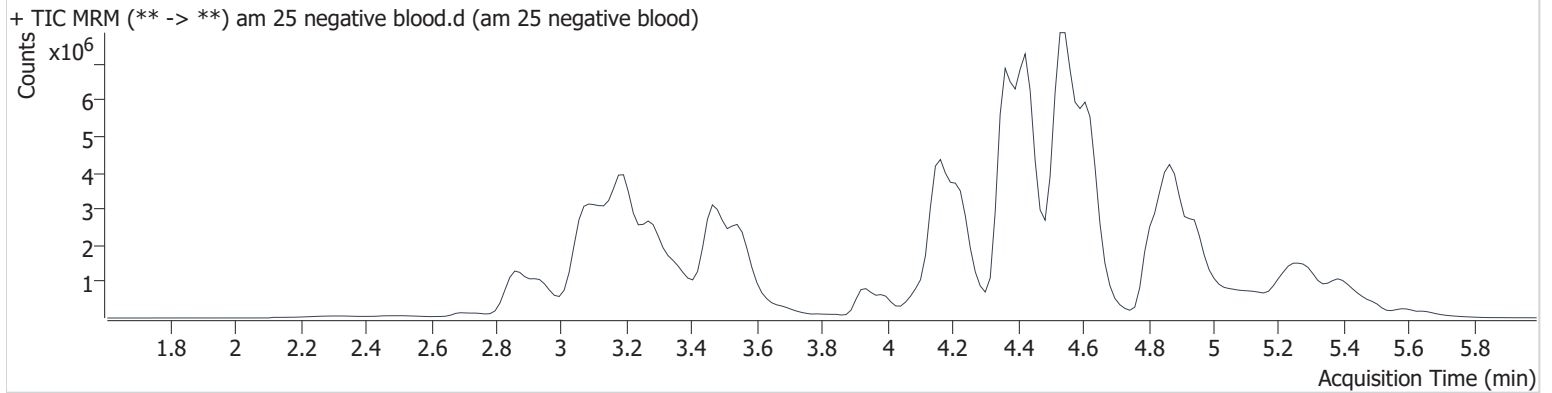


AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2021\am 25-26\052621\QuantResults\mds.batch.bin
Calibration Last Update 5/29/2021 9:07:59 AM

Instrument	69679	Data File	am 25 negative blood.d
Type	Sample	Sample	am 25 negative blood
Acq. Method	mds 826.m	Operator	Anne Nord
Sample Position	P1-H3	Comment	
Injection Volume	2.5		
Acq. Date-Time	5/26/2021 11:38:59 AM		
Sample Info.			

Sample Chromatogram



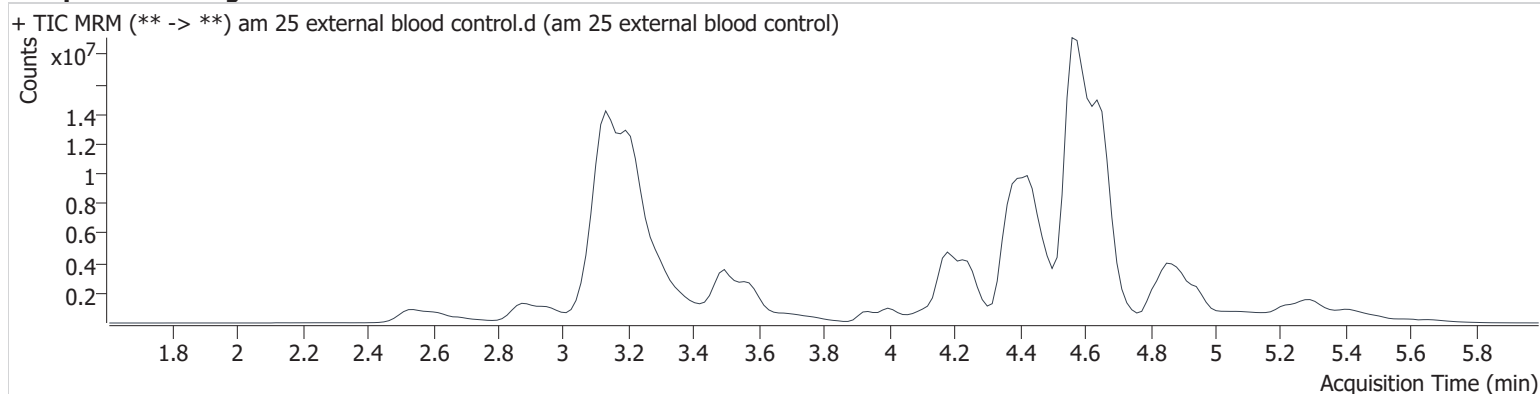


AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2021\am 25-26\052621\QuantResults\mds.batch.bin
Calibration Last Update 5/29/2021 9:07:59 AM

Instrument	69679	Data File	am 25 external blood control.d
Type	Sample	Sample	am 25 external blood control
Acq. Method	mds 826.m	Operator	Anne Nord
Sample Position	P1-F4	Comment	
Injection Volume	2.5		
Acq. Date-Time	5/26/2021 12:25:45 PM		
Sample Info.			

Sample Chromatogram



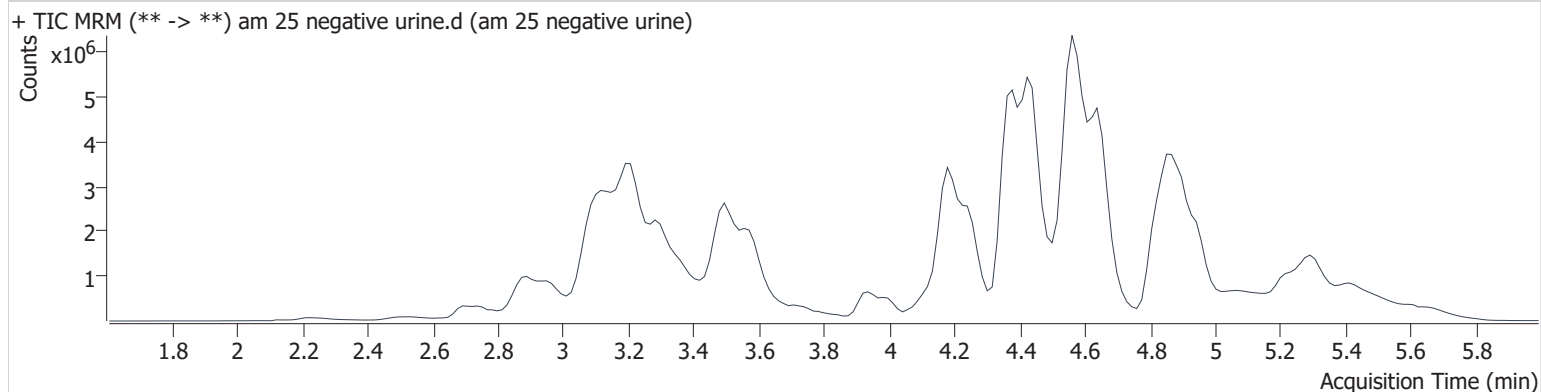
Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.397	11611603	920.1	811.2	9951852	81.431
Diphenhydramine	4.587	74397992	28243.9	2560.3	54254381	91.213
Methamphetamine	3.142	48135842	2856.0	∞	21945158	49.093
Methocarbamol	3.258	1729456	1215.0	485.7	2467632	90.548
Methylphenidate	4.022	2632503	90.5	55.9	16441854	3.537
Morphine	2.545	2659104	∞	3647.9	216428	91.690

AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2021\am 25-26\052621\QuantResults\mds.batch.bin
Calibration Last Update 5/29/2021 9:07:59 AM

Instrument	69679	Data File	am 25 negative urine.d
Type	Sample	Sample	am 25 negative urine
Acq. Method	mds 826.m	Operator	Anne Nord
Sample Position	P1-H4	Comment	
Injection Volume	2.5		
Acq. Date-Time	5/26/2021 12:39:07 PM		
Sample Info.			

Sample Chromatogram

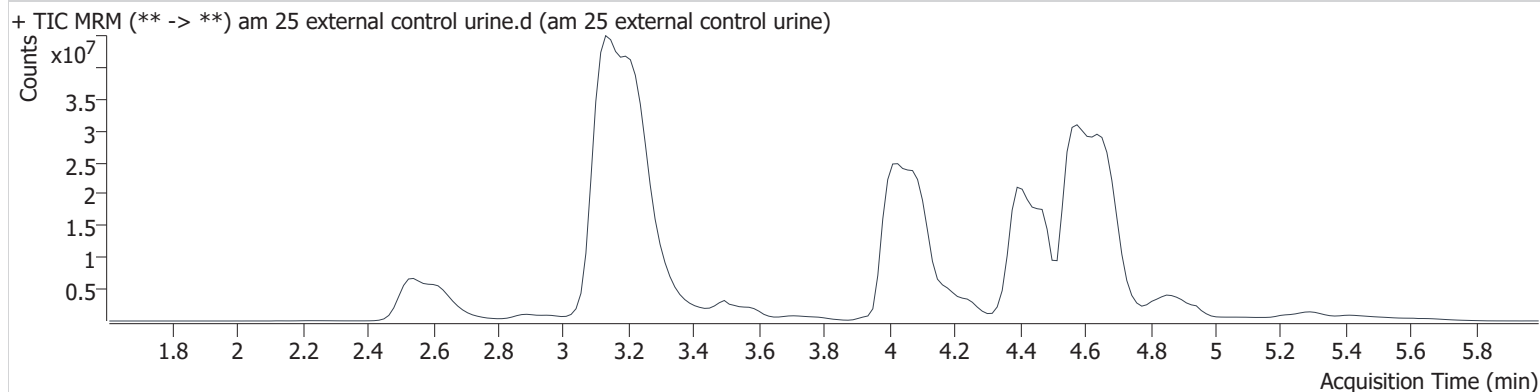


AM #25 Multi-Drug Screen Results

Batch results D:\MassHunter\Data\2021\am 25-26\052621\QuantResults\mds.batch.bin
Calibration Last Update 5/29/2021 9:07:59 AM

Instrument	69679	Data File	am 25 external control urine.d
Type	Sample	Sample	am 25 external control urine
Acq. Method	mds 826.m	Operator	Anne Nord
Sample Position	P1-A5	Comment	
Injection Volume	2.5		
Acq. Date-Time	5/26/2021 12:45:48 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
Alprazolam	4.397	66762682	∞	12119.5	6451396	722.239
Diphenhydramine	4.587	171796001	19559.6	24218.9	33670115	339.391
Methamphetamine	3.194	156788886	∞	∞	14024351	250.218
Methocarbamol	3.258	7785610	2843.0	1423.9	1782646	564.255
Methylphenidate	4.037	148032069	104162.1	49631.2	9477635	345.073
Morphine	2.545	16979784	∞	4502.2	208092	608.944

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

Extraction Date: 5/26/21 Analyst: Anne Nord

Plate lot#: 210412 Plate Expiration: 10/12/21

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: 20K20702 **Urine Blank:** 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 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:

	1	2	3	4	5	6
a	cal 1	neg blood	urine control			QC 1
b	cal 2	1190-1	1036-1			cal 100 ng
c	cal 3	1140-2	1038-1			cal 50 ng
d	cal 4	1143-1	1039-1			cal 25 ng
e	Cal 5	1148-1	1079-1			cal 10ng
f	cal 6	1182-1	1146-3			cal 5 ng
g	cal 7	1228-1	1183-1			cal 3 ng
h	Internal control	neg urine	1229-1			cal 1ng

C2021-____-__

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

out of use

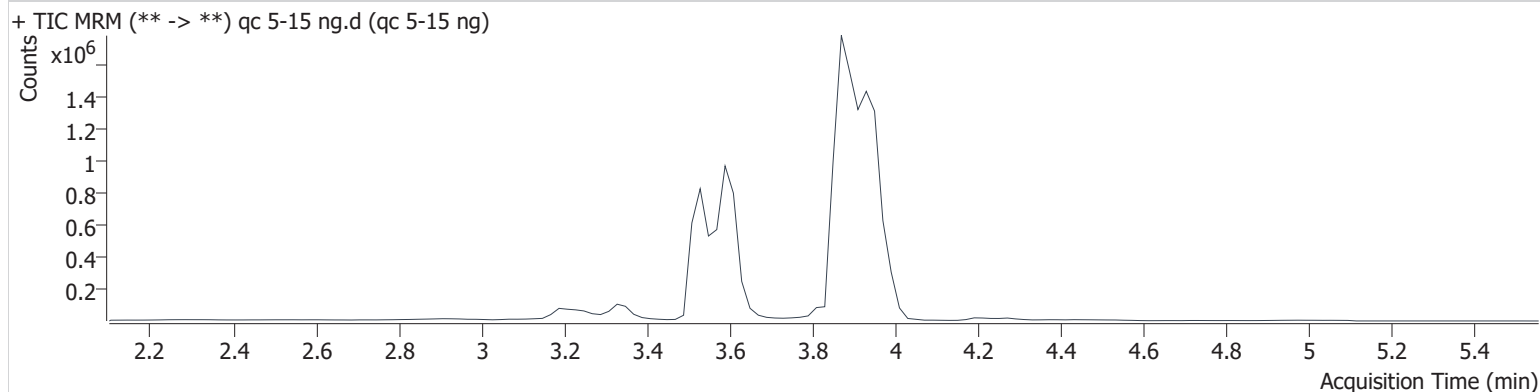
ppd 8/26/20 Exp 7/1/21 neg urine lot 73020	lot u82620	Concentration 30 ng/ml THC, and 60 ng/ml C-THC, THC-OH	by amn	10/4/2020
ppd 10/5/20 Exp 7/1/21 neg urine lot 10120	lot 10520	Concentration 30 ng/ml THC, and 60 ng/ml C-THC, THC-OH	by amn	1/12/2021
ppd 1/13/21 Exp 7/1/21 neg urine lot 10120	lot 11321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

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2021\am 25-26\052621\QuantResults\cann.batch.bin
Calibration Last Update 5/28/2021 12:59:23 PM

Instrument	69679	Data File	qc 5-15 ng.d
Type	QC	Sample	qc 5-15 ng
Acq. Method	am 26 cann scr 5-5-20.m	Operator	Anne Nord
Sample Position	P3-H1	Comment	
Injection Volume	5		
Acq. Date-Time	5/26/2021 3:33:08 PM		
Sample Info.			

Sample Chromatogram



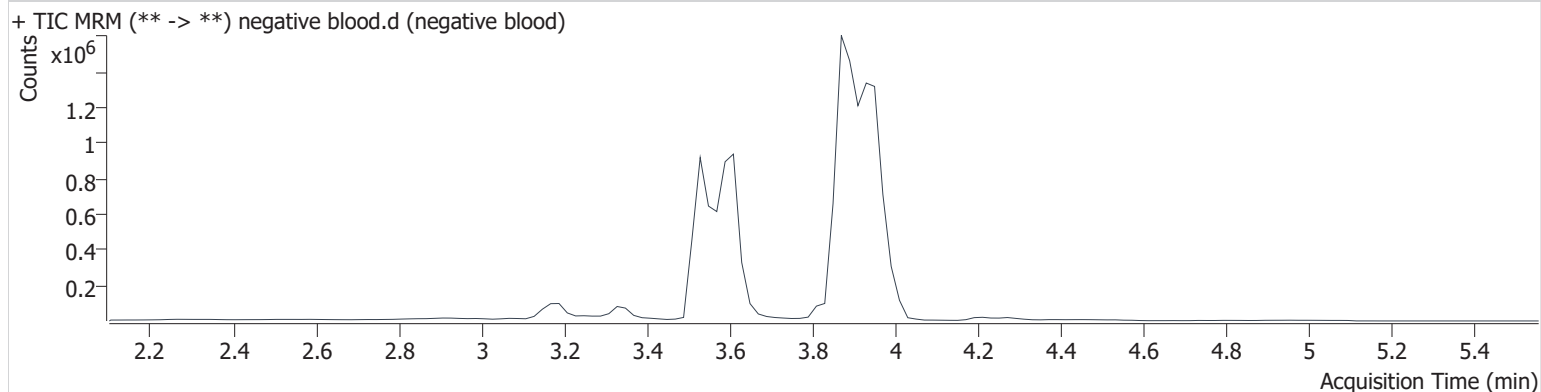
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.004	26985	694442	4.325 ng/ml
THC-COOH	3.351	50778	237175	15.864 ng/ml
THC-OH	3.598	41700	5222172	4.774 ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2021\am 25-26\052621\QuantResults\cann.batch.bin
Calibration Last Update 5/28/2021 12:59:23 PM

Instrument	69679	Data File	negative blood.d
Type	Sample	Sample	negative blood
Acq. Method	am 26 cann scr 5-5-20.m	Operator	Anne Nord
Sample Position	P3-A2	Comment	
Injection Volume	5		
Acq. Date-Time	5/26/2021 3:39:44 PM		
Sample Info.			

Sample Chromatogram

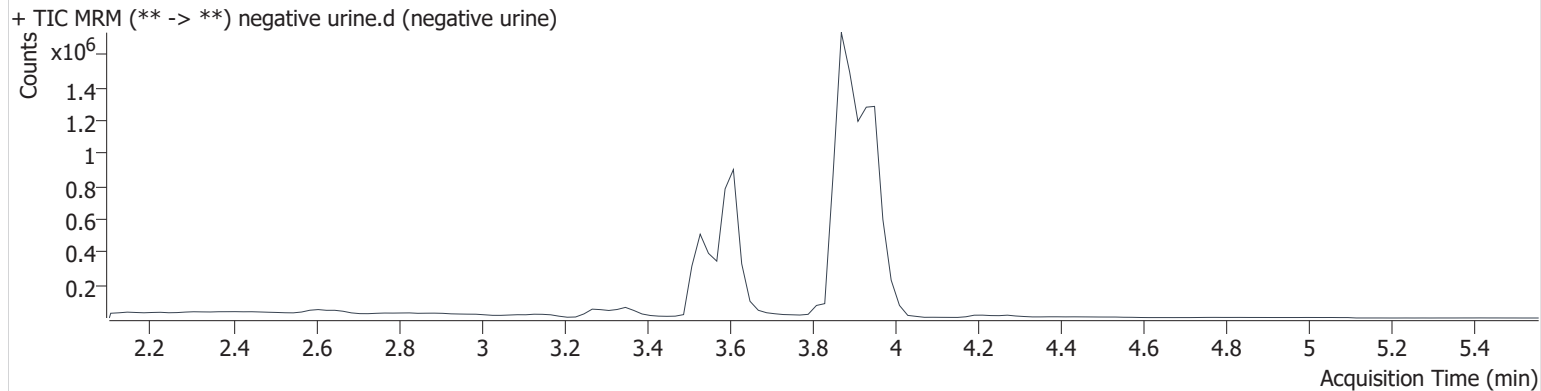


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2021\am 25-26\052621\QuantResults\cann.batch.bin
Calibration Last Update 5/28/2021 12:59:23 PM

Instrument	69679	Data File	negative urine.d
Type	Sample	Sample	negative urine
Acq. Method	am 26 cann scr 5-5-20.m	Operator	Anne Nord
Sample Position	P3-H2	Comment	
Injection Volume	5		
Acq. Date-Time	5/26/2021 4:25:56 PM		
Sample Info.			

Sample Chromatogram

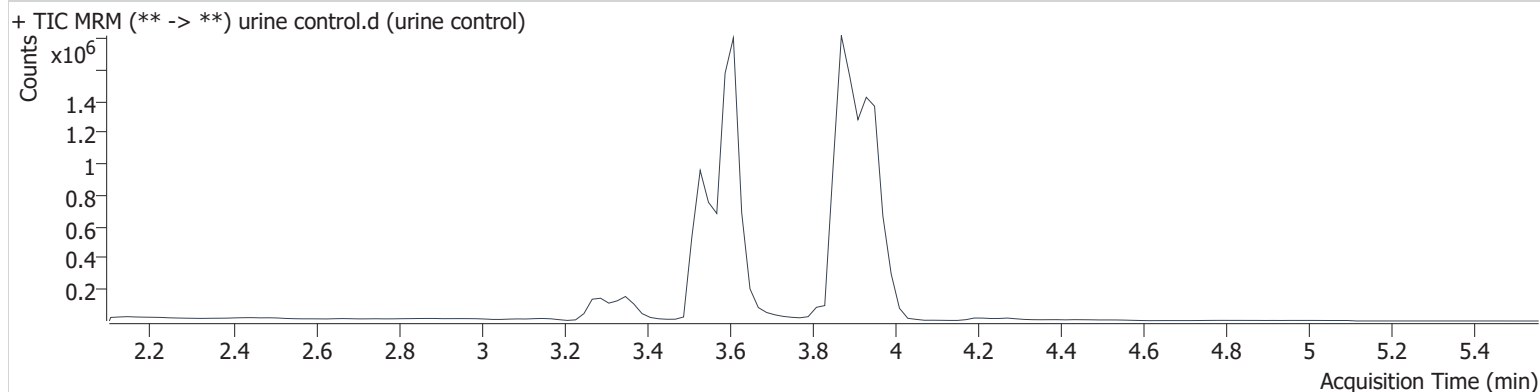


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2021\am 25-26\052621\QuantResults\cann.batch.bin
Calibration Last Update 5/28/2021 12:59:23 PM

Instrument	69679	Data File	urine control.d
Type	Sample	Sample	urine control
Acq. Method	am 26 cann scr 5-5-20.m	Operator	Anne Nord
Sample Position	P3-A3	Comment	
Injection Volume	5		
Acq. Date-Time	5/26/2021 4:32:31 PM		
Sample Info.			

Sample Chromatogram

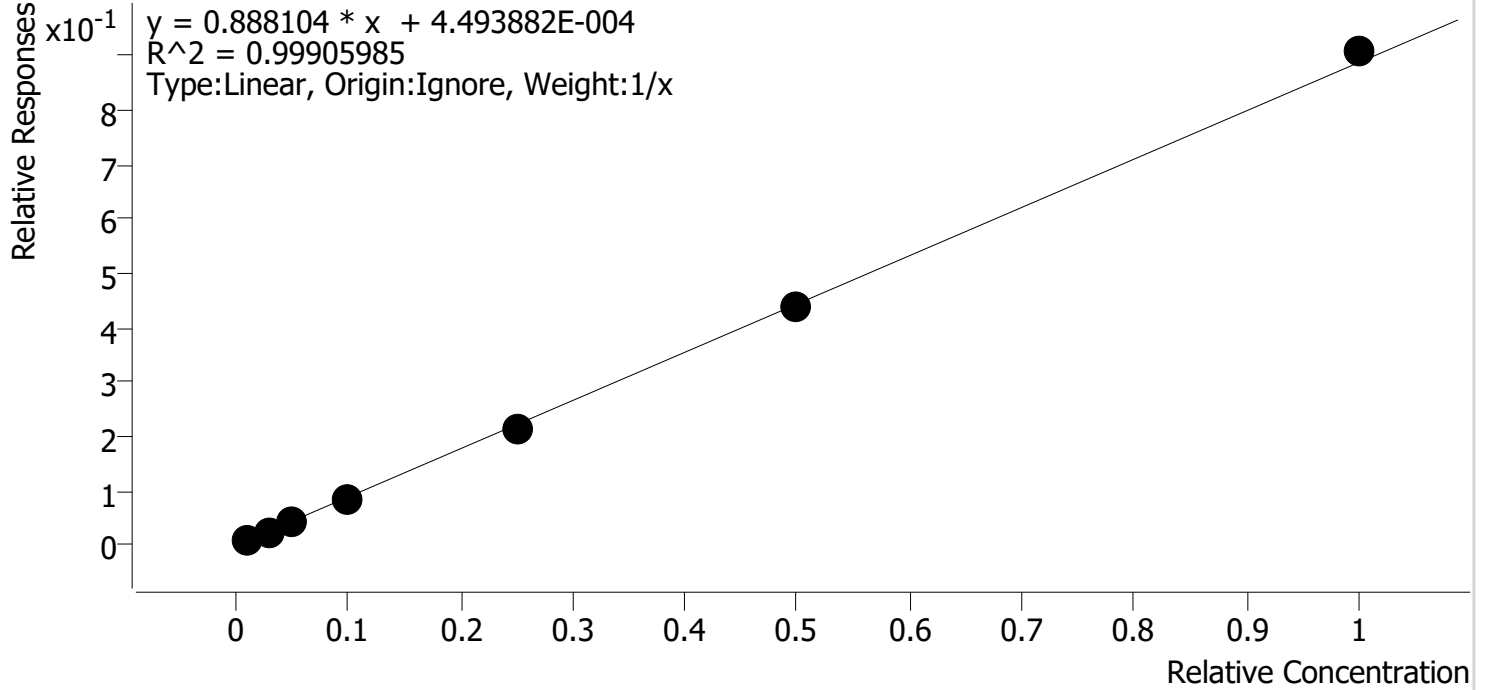


Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.004	85371	493062	19.445 ng/ml
THC-COOH	3.291	236776	412243	40.676 ng/ml
THC-OH	3.618	388671	5232530	43.907 ng/ml

Compound Calibration Report

Batch results D:\MassHunter\Data\2021\am 25-26\052621\QuantResults\cann.batch.bin
Last Cal. Update 5/28/2021 12:59 PM
Analyst Name ISP\datastor
Analyte THC **Internal Standard** THC-d3

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



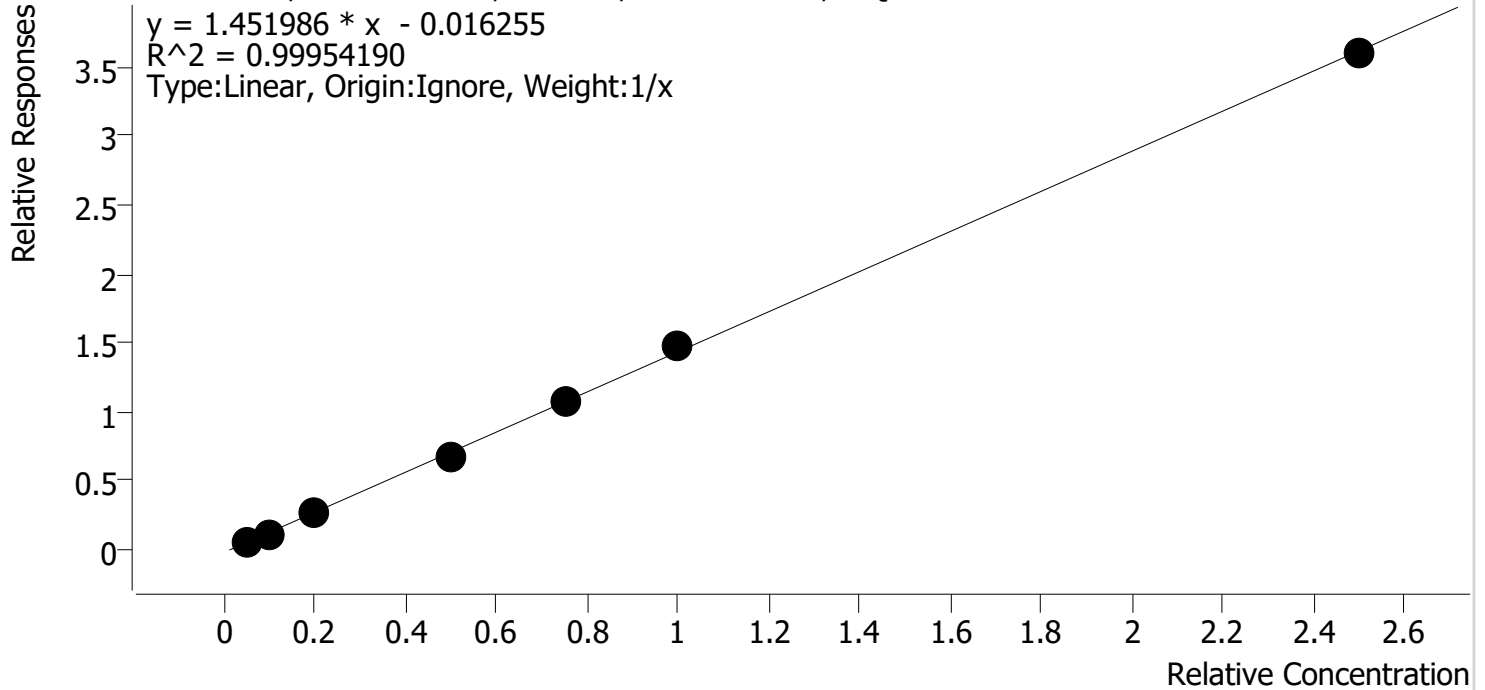
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	1.0	1.2	116.4
cal 2	2	✓	3.0	2.9	96.6
cal 3	3	✓	5.0	4.7	93.3
cal 4	4	✓	10.0	9.6	96.2
cal 5	5	✓	25.0	24.2	96.7
cal-6	6	✓	50.0	49.2	98.5
cal-7	7	✓	100.0	102.2	102.2

Compound Calibration Report



Batch results	D:\MassHunter\Data\2021\am 25-26\052621\QuantResults\cann.batch.bin		
Last Cal. Update	5/28/2021 12:59 PM		
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



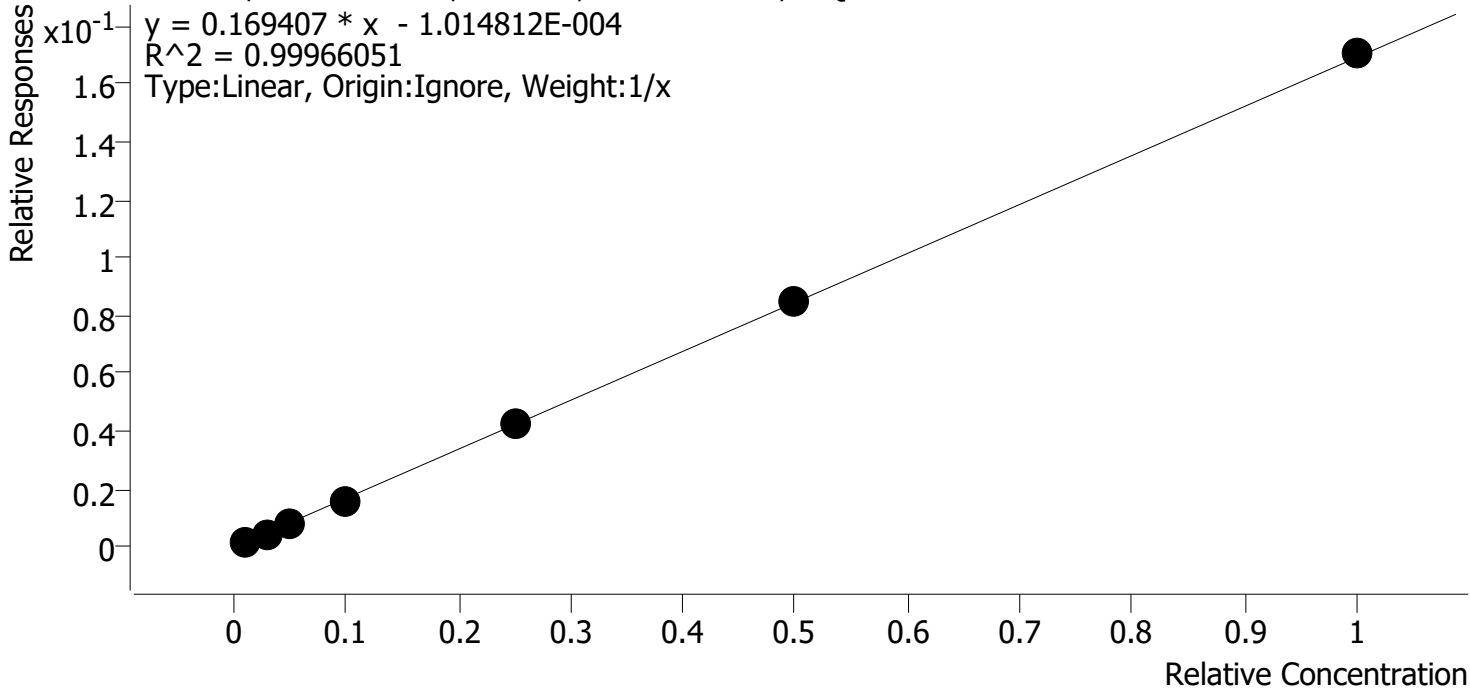
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	5.0	5.3	105.3
cal 2	2	✓	10.0	9.4	93.7
cal 3	3	✓	20.0	20.3	101.4
cal 4	4	✓	50.0	48.3	96.7
cal 5	5	✓	75.0	76.0	101.4
cal-6	6	✓	100.0	102.1	102.1
cal-7	7	✓	250.0	248.6	99.5



Compound Calibration Report

Batch results D:\MassHunter\Data\2021\am 25-26\052621\QuantResults\cann.batch.bin
Last Cal. Update 5/28/2021 12:59 PM
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
cal 1	1	✓	1.0	1.1	111.6
cal 2	2	✓	3.0	2.9	96.0
cal 3	3	✓	5.0	4.9	97.3
cal 4	4	✓	10.0	9.5	94.7
cal 5	5	✓	25.0	24.9	99.7
cal-6	6	✓	50.0	50.0	100.0
cal-7	7	✓	100.0	100.8	100.8



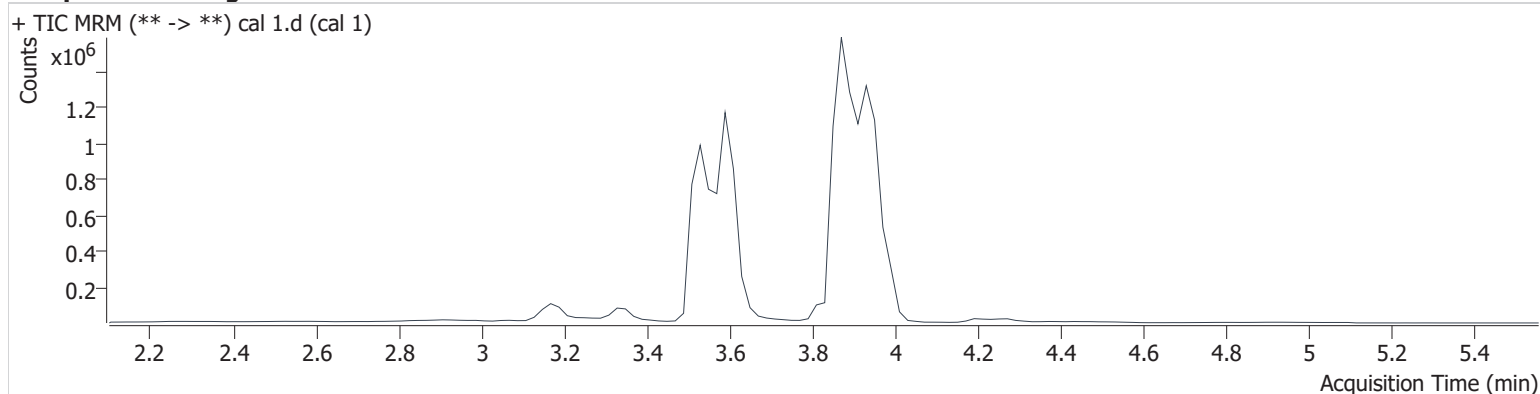
AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2021\am 25-26\052621\QuantResults\cann.batch.bin
Calibration Last Update 5/28/2021 12:59:23 PM

Instrument	69679	Data File	cal 1.d
Type	Cal	Sample	cal 1
Acq. Method	am 26 cann scr 5-5-20.m	Operator	Anne Nord
Sample Position	P3-A1	Comment	
Injection Volume	5		
Acq. Date-Time	5/26/2021 2:46:54 PM		

Sample Info.

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.004	7346	680784	1.164 ng/ml Low
THC-COOH	3.351	15718	261194	5.264 ng/ml Low
THC-OH	3.598	11984	6698282	1.116 ng/ml Low

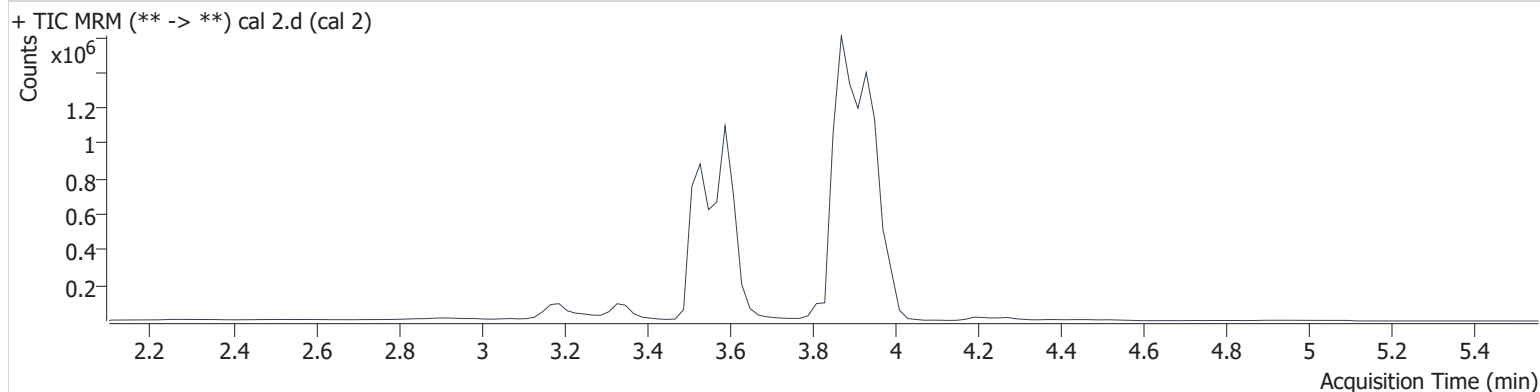


AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2021\am 25-26\052621\QuantResults\cann.batch.bin
Calibration Last Update 5/28/2021 12:59:23 PM

Instrument	69679	Data File	cal 2.d
Type	Cal	Sample	cal 2
Acq. Method	am 26 cann scr 5-5-20.m	Operator	Anne Nord
Sample Position	P3-B1	Comment	
Injection Volume	5		
Acq. Date-Time	5/26/2021 2:53:32 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.004	18583	709426	2.899 ng/ml Low
THC-COOH	3.351	31775	265230	9.370 ng/ml Low
THC-OH	3.598	27909	5840986	2.880 ng/ml Low

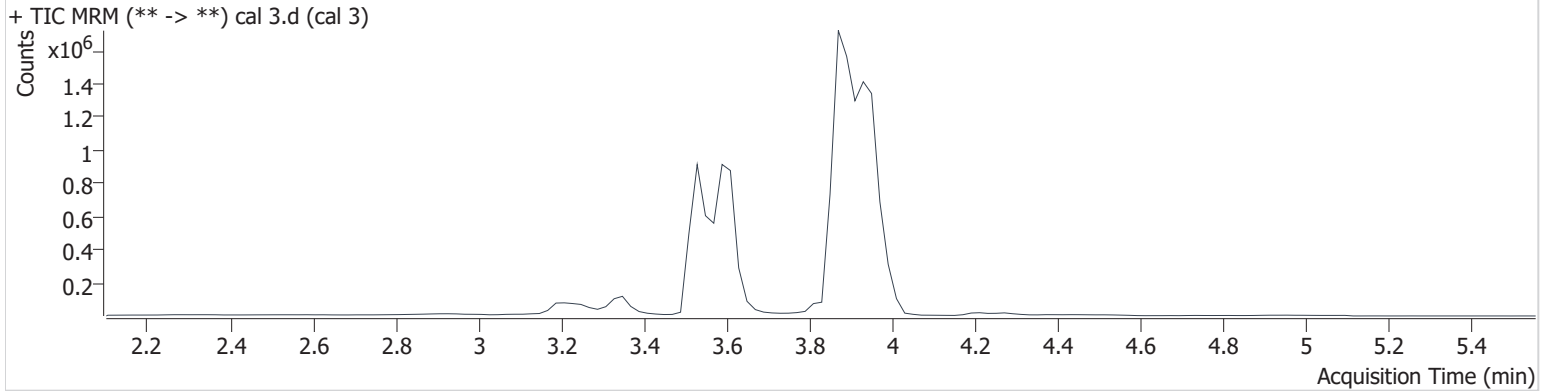
AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2021\am 25-26\052621\QuantResults\cann.batch.bin
Calibration Last Update 5/28/2021 12:59:23 PM

Instrument	69679	Data File	cal 3.d
Type	Cal	Sample	cal 3
Acq. Method	am 26 cann scr 5-5-20.m	Operator	Anne Nord
Sample Position	P3-C1	Comment	
Injection Volume	5		
Acq. Date-Time	5/26/2021 3:00:08 PM		

Sample Info.

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	3.944	28151	671884	4.667 ng/ml
THC-COOH	3.351	68592	246485	20.285 ng/ml
THC-OH	3.598	43597	5356828	4.864 ng/ml

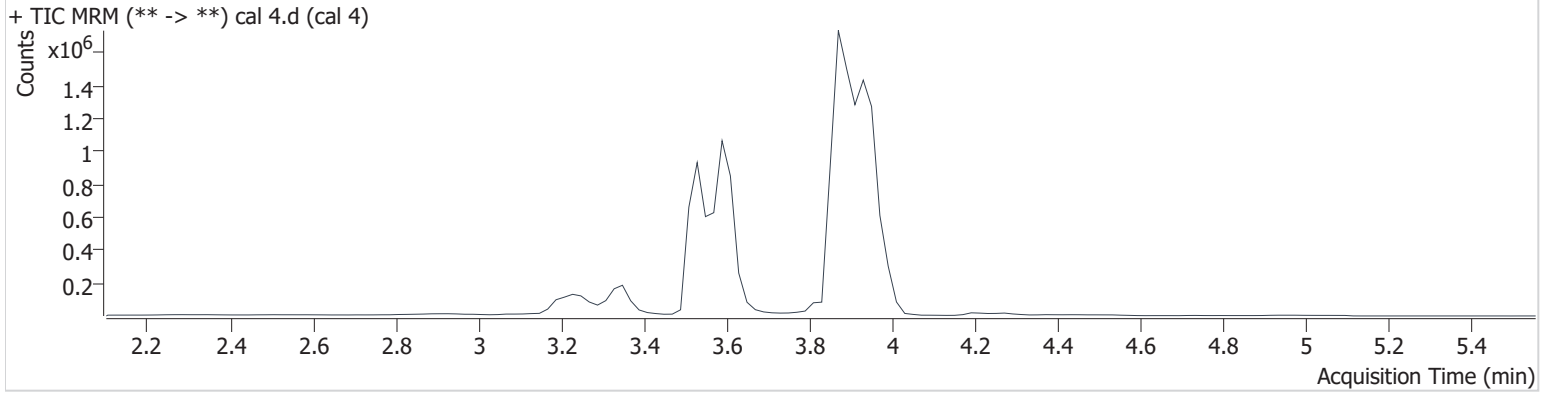
AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2021\am 25-26\052621\QuantResults\cann.batch.bin
Calibration Last Update 5/28/2021 12:59:23 PM

Instrument	69679	Data File	cal 4.d
Type	Cal	Sample	cal 4
Acq. Method	am 26 cann scr 5-5-20.m	Operator	Anne Nord
Sample Position	P3-D1	Comment	
Injection Volume	5		
Acq. Date-Time	5/26/2021 3:06:44 PM		

Sample Info.

Sample Chromatogram



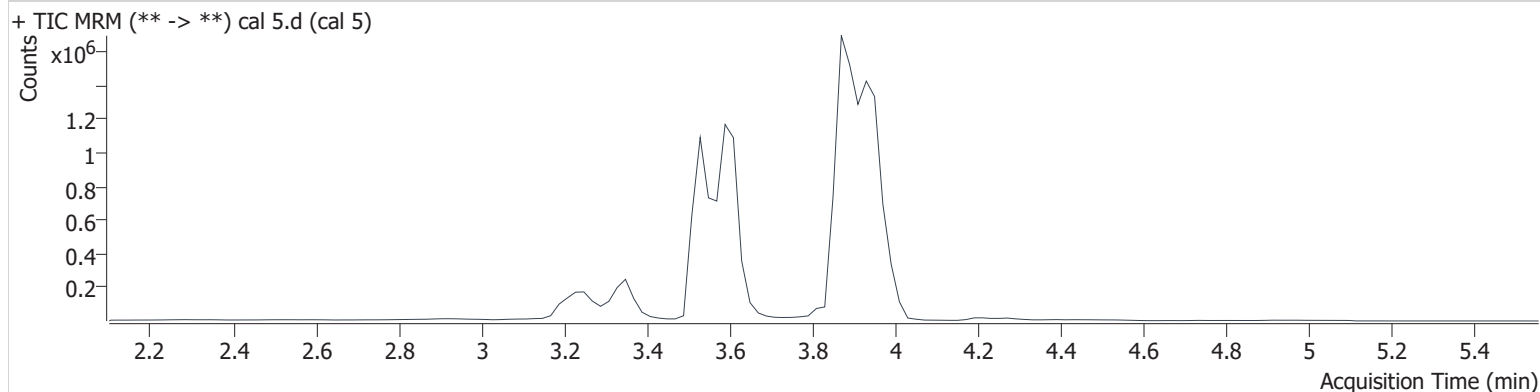
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	3.944	58651	683250	9.615 ng/ml
THC-COOH	3.351	171938	250742	48.346 ng/ml
THC-OH	3.598	85243	5347381	9.470 ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2021\am 25-26\052621\QuantResults\cann.batch.bin
Calibration Last Update 5/28/2021 12:59:23 PM

Instrument	69679	Data File	cal 5.d
Type	Cal	Sample	cal 5
Acq. Method	am 26 cann scr 5-5-20.m	Operator	Anne Nord
Sample Position	P3-E1	Comment	
Injection Volume	5		
Acq. Date-Time	5/26/2021 3:13:20 PM		
Sample Info.			

Sample Chromatogram



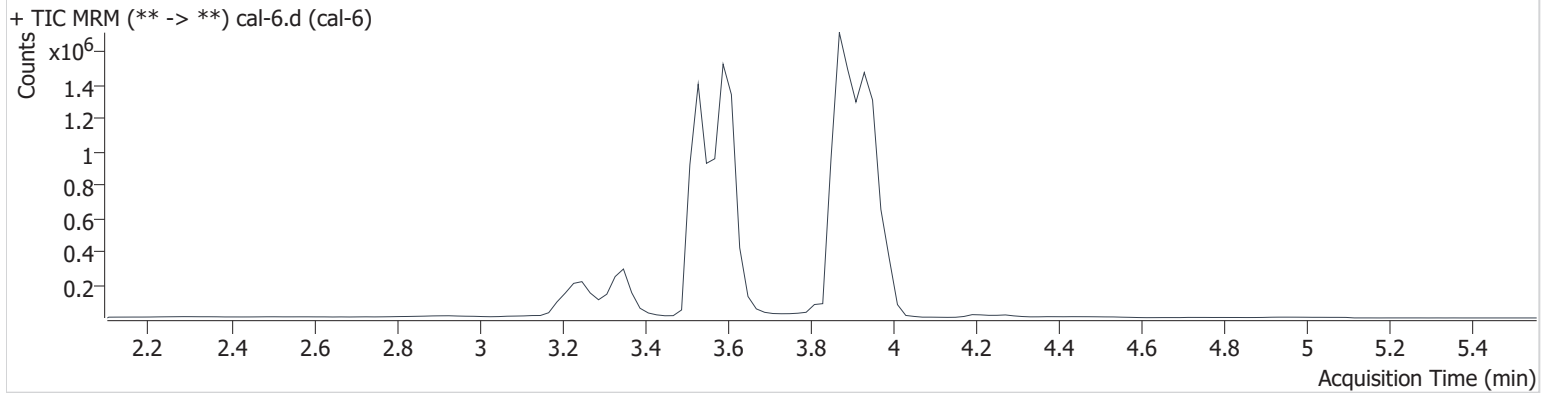
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	3.944	144573	671750	24.183 ng/ml
THC-COOH	3.351	268139	246542	76.024 ng/ml
THC-OH	3.598	216686	5146252	24.915 ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2021\am 25-26\052621\QuantResults\cann.batch.bin
Calibration Last Update 5/28/2021 12:59:23 PM

Instrument	69679	Data File	cal-6.d
Type	Cal	Sample	cal-6
Acq. Method	am 26 cann scr 5-5-20.m	Operator	Anne Nord
Sample Position	P3-F1	Comment	
Injection Volume	5		
Acq. Date-Time	5/26/2021 3:19:56 PM		
Sample Info.			

Sample Chromatogram



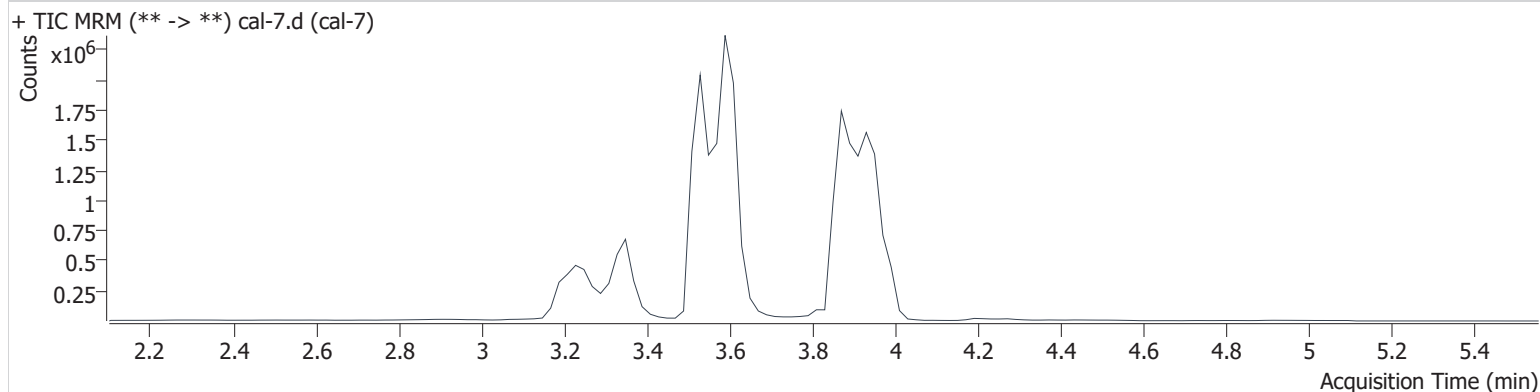
Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.004	299282	683683	49.240 ng/ml
THC-COOH	3.351	350416	239036	102.082 ng/ml
THC-OH	3.598	441507	5219235	49.994 ng/ml

AM #26 Cannabinoids Screen Results

Batch results D:\MassHunter\Data\2021\am 25-26\052621\QuantResults\cann.batch.bin
Calibration Last Update 5/28/2021 12:59:23 PM

Instrument	69679	Data File	cal-7.d
Type	Cal	Sample	cal-7
Acq. Method	am 26 cann scr 5-5-20.m	Operator	Anne Nord
Sample Position	P3-G1	Comment	
Injection Volume	5		
Acq. Date-Time	5/26/2021 3:26:32 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	ISTD Resp.	Final Conc.
THC	4.004	631789	695516	102.232 ng/ml
THC-COOH	3.351	888985	247365	248.630 ng/ml
THC-OH	3.598	925482	5425033	100.761 ng/ml