Worklist: 6923

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION	
M2024-3439	1	BCK	AM 27 Blood THC Quant by LC-QQQ	‖‖ ‖‖ ‖‖‖‖‖‖‖‖‖‖‖‖ ‖‖ ‖‖‖ ‖‖
P2024-2399	1	BCK	AM 27 Blood THC Quant by LC-QQQ	‖‖ ‖‖ ‖‖‖‖‖‖‖‖‖‖‖‖ ‖‖‖ ‖‖ ‖‖
P2024-2411	1	BCK	AM 27 Blood THC Quant by LC-QQQ	‖‖ ‖‖ ‖‖‖‖‖‖‖‖‖‖‖‖ ‖‖ ‖‖ ‖‖
P2024-2432	1	BCK	AM 27 Blood THC Quant by LC-QQQ	‖‖ ‖‖ ‖‖‖‖‖‖‖‖‖‖‖‖ ‖‖ ‖‖
P2024-2467	1	BCK	AM 27 Blood THC Quant by LC-QQQ	‖‖ ‖‖ ‖‖‖‖‖‖‖‖‖‖‖ ‖ ‖‖‖‖ ‖
P2024-2607	1	BCK	AM 27 Blood THC Quant by LC-QQQ	‖‖ ‖‖ ‖‖‖‖‖‖‖‖‖‖‖ ‖‖‖ ‖‖ ‖
P2024-2629	1	BCK	AM 27 Blood THC Quant by LC-QQQ	‖‖ ‖‖ ‖‖‖‖‖‖‖‖‖‖‖‖ ‖‖‖‖ ‖‖
P2024-2648	1	BCK	AM 27 Blood THC Quant by LC-QQQ	‖‖ ‖‖ ‖‖‖‖‖‖‖‖‖‖‖ ‖‖ ‖‖ ‖
P2024-2654	1	BCK	AM 27 Blood THC Quant by LC-QQQ	‖‖ ‖‖ ‖‖‖‖‖‖‖‖‖‖‖‖‖ ‖‖
P2024-2677	1	BCK	AM 27 Blood THC Quant by LC-QQQ	‖‖ ‖‖ ‖‖‖‖‖‖‖‖‖‖‖ ‖‖‖ ‖‖ ‖ ‖
P2024-2678	1	BCK	AM 27 Blood THC Quant by LC-QQQ	‖‖ ‖‖ ‖‖‖‖‖‖‖‖‖‖‖ ‖‖‖ ‖‖ ‖‖
P2024-2707	1	BCK	AM 27 Blood THC Quant by LC-QQQ	‖‖ ‖‖ ‖‖‖‖‖‖‖‖‖‖‖‖‖ ‖‖‖ ‖‖
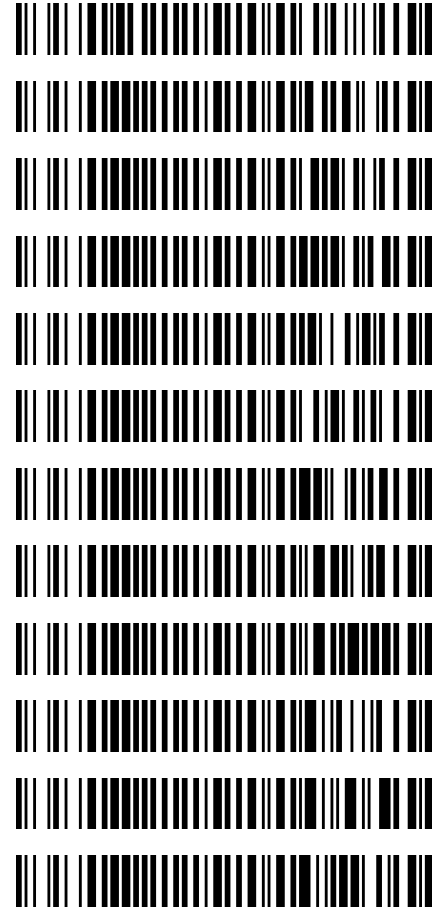
AM# 27: Quantitation of THC and Metabolites in Blood and Urine by LC-MS/MS

Extraction Date: 09/03/2024   Analyst: Celena Shrum

Plate lot#: 240513   Plate Retest Date: 11/13/2024

Mobile phase A: 0.1% Formic Acid in LCMS Water   **Mobile phase B:** 0.1% Formic acid in Acetonitrile

Blank Blood Lot: Lampire 24C52816   **Column**: UCT Selectra DA 100 x 2.1mm 3um

LCMS-QQQ ID: 069901

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 (if applicable): add 1.5mL urine to blank plate, add 250μl 1N KOH. Shake and incubate at 40 degrees for 15 minutes.

☒   3.   Using a calibrated pipette, add **1000μl blood or 1000μl hydrolyzed urine** into the appropriate wells of the analytical (standards) plate. **Pipette ID: #42**

☒   4.   Add **500μL of 0.1% formic acid in water to blood samples or 500μl of saturated phosphate buffer to urine samples** to the appropriate wells of the analytical plate.

☒   5.   Place on shaking incubator at ambient temp., 900rpm for 15 minutes.

☒   6.   Transfer **800μL of blood+acid mixture or urine+acid** 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: 067104

☒   8.   Wait 5 minutes.

☒   9.   Add **2.25mL MTBE. (*Add in 3 increments of 750uL*)**

☒   10.   Wait 5 minutes.

☒   11.   Apply positive pressure for approx. 15 seconds. **(*10-15 PSI- Selector to the left*).**

☒   12.   Add **2.25mL Hexane. (*Add in 3 increments of 750uL*)**

☒   13.   Wait 5 minutes.

☒   14.   Apply positive pressure for approx. 15 seconds. **(*10-15 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: 067103*

☒   16.   Reconstitute in **100μL 100% MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

☒   1.   Create batch and process data.

☒   2.   Make any necessary integration changes, Curve weighting of Linear 1/x with r^2 values ≥0.98 for each analyte

☒   3.   RT +/- 3% or 0.100 min, whichever is greater, +/- 20% Accuracy for greater than (+/- 30% for 10ng/ml or less). Ion ratios must be within +/- 20% of the averaged calibrators

☒   4.   Case sample response for THC 1ng/mL and OH-THC 3ng/mL (quantitative), Carboxy-THC: 5ng/mL (qualitative only) will be reported. Samples with a THC or OH-THC response over 50 ng/mL will be reported out as greater than 50 ng/mL. THC concentrations of 1-3ng/mL will be reported qualitatively.

☒   5.   Did all QCs pass for each analyte? (if not, describe in comments section)

☒   6.   Enter QCs into control charting.

☒   7.   Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS: The QC was reconstituted and reinjected due to low ISTD responses.

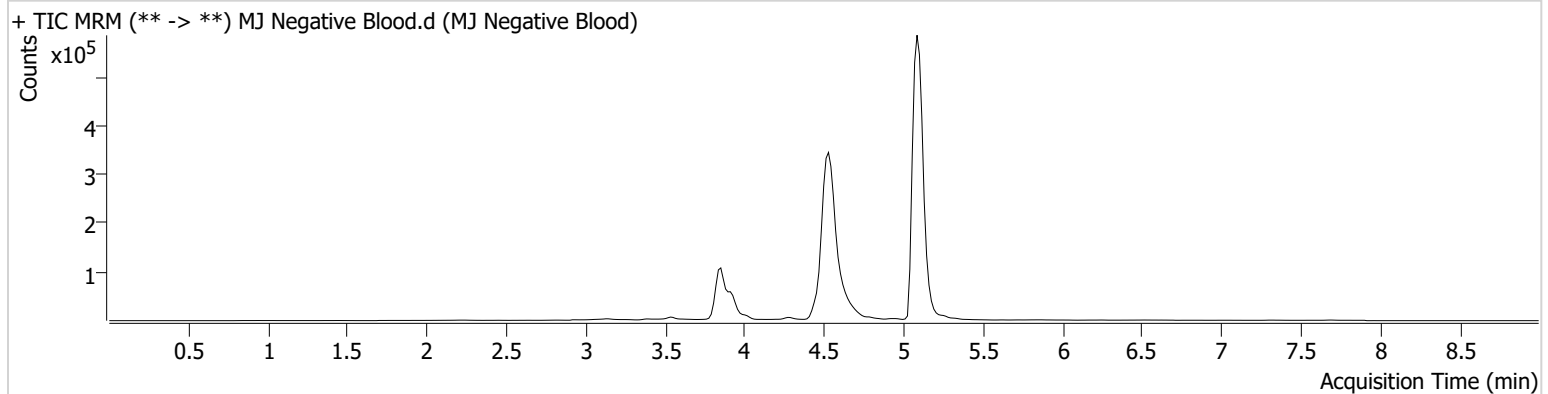|	1	2	3	4	5	6
A	IS + Cal. 1	QC2	P2024-2629-1			
B	IS + Cal. 2	NEG Blood	P2024-2648-1			
C	IS + Cal. 3	M2024-3439-1	P2024-2654-1			
D	IS + Cal. 4	P2024-2399-1	P2024-2677-1			
E	IS + Cal. 5	P2024-2411-1	P2024-2678-1			
F	IS + Cal. 6	P2024-2432-1	P2024-2707-1			
G	IS + Cal. 7	P2024-2467-1				
H	QC1	P2024-2607-1				

Batch results   D:\MassHunter\Data\2024\AM 27 28\090324 AM 27 28 CS\QuantResults\AM 27.batch.bin
Calibration Last Update   9/10/2024 2:16:13 PM

Instrument	Falco (069901)	**Data File**	MJ Negative Blood.d
Type	Sample	**Sample**	MJ Negative Blood
Acq. Method	AM 27 Agilent Method.m	**Operator**	Celena Shrum
Sample Position	P1-B2	**Comment**	Only drugs and concentrations listed on the laboratory
Injection Volume	10		report itself are appropriate to be used for
Acq. Date-Time	9/3/2024 4:10:28 PM		interpretation purposes. Any drugs or values included
Sample Info.			in the notes but not included on the report are used by
			laboratory personnel to make determinations/reach
			conclusions within the confines of the methods.

Sample Chromatogram

+ TIC MRM (** -> **) MJ Negative Blood.d (MJ Negative Blood)

AM #27 Cannabinoids Quant. Results

Batch results D:\MassHunter\Data\2024\AM 27 28\090324 AM 27 28 CS\QuantResults\AM 27.batch.bin
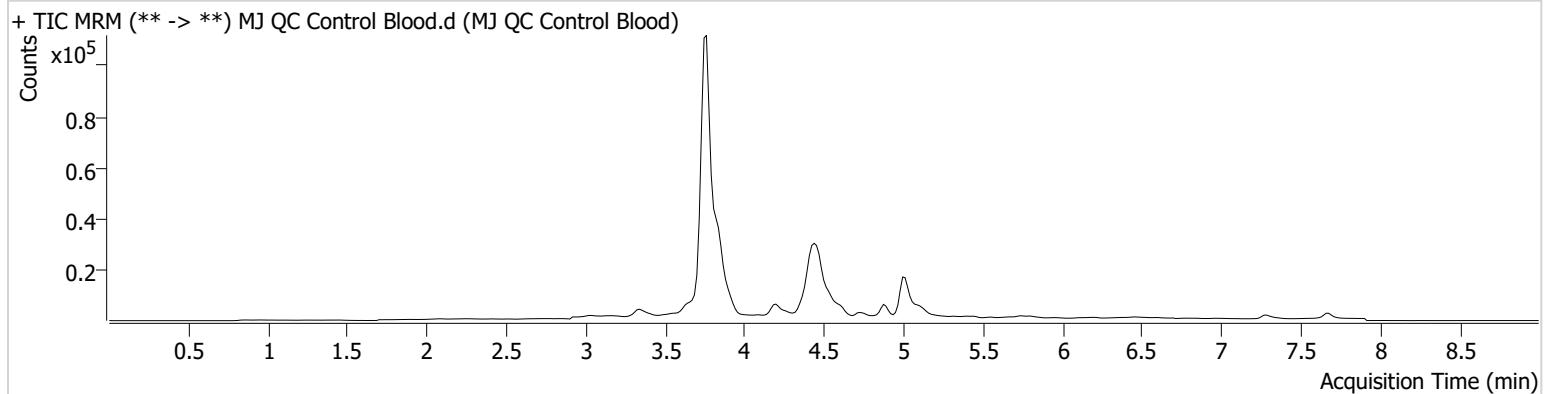**Calibration Last Update** 9/10/2024 2:16:13 PM

Instrument	Falco (069901)	**Data File**	MJ QC Control Blood.d
Type	QC	**Sample**	MJ QC Control Blood
Acq. Method	AM 27 Agilent Method.m	**Operator**	Celena Shrum
Sample Position	P1-H1	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	10		
Acq. Date-Time	9/3/2024 3:44:14 PM		
Sample Info.			

Sample reinjected due to low ISTD responses. Refer to reinject data.

Sample Chromatogram

+ TIC MRM (** -> **) MJ QC Control Blood.d (MJ QC Control Blood)

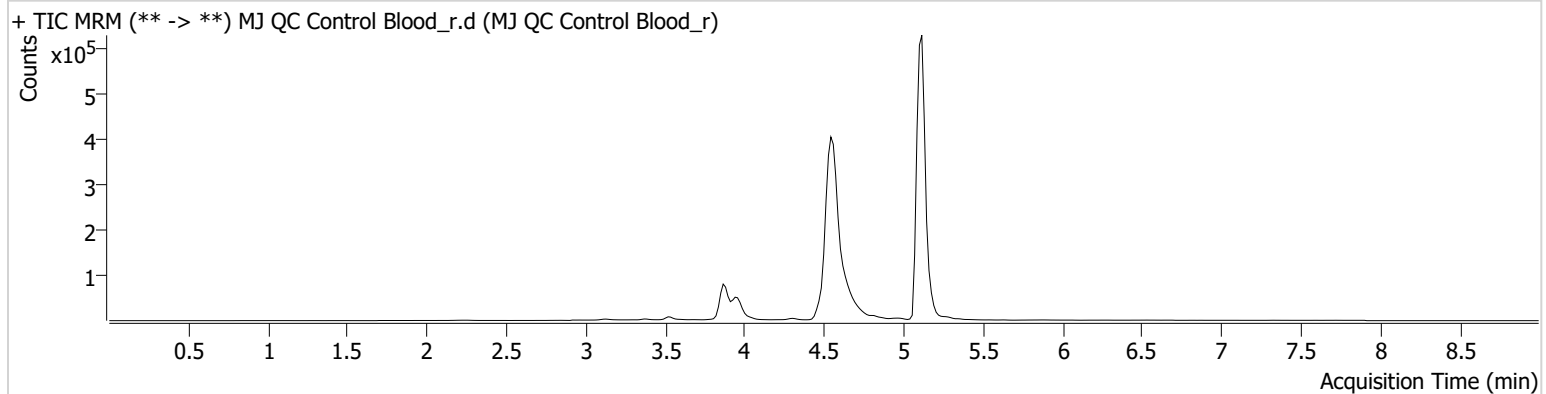| Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC-COOH	3.864	3702	47.93	231.0	437.96	87274	7.0138 ng/ml
THC-OH	3.760	26719	∞	15.7	∞	410062	3.8568 ng/ml

AM #27 Cannabinoids Quant. Results

Batch results　　　　D:\MassHunter\Data\2024\AM 27 28\090324 AM 27 28 CS\QuantResults\AM 27.batch.bin
Calibration Last Update　9/10/2024 2:16:13 PM

Instrument	Falco (069901)	**Data File**	MJ QC Control Blood_r.d
Type	QC	**Sample**	MJ QC Control Blood_r
Acq. Method	AM 27 Agilent Method.m	**Operator**	Celena Shrum
Sample Position	P1-H1	**Comment**	
Injection Volume	10		
Acq. Date-Time	9/5/2024 11:28:19 AM		
Sample Info.			

Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

Reinject data

Sample Chromatogram

+ TIC MRM (** -> **) MJ QC Control Blood_r.d (MJ QC Control Blood_r)

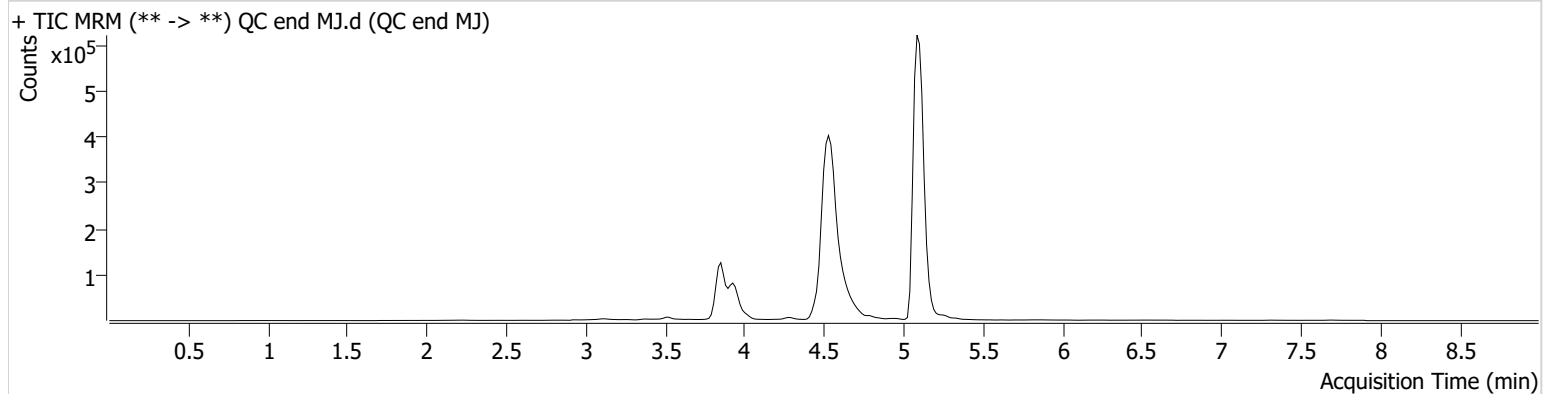| Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.120	98906	4709.09	27.7	∞	2129255	4.7095 ng/ml
THC-COOH	3.969	10375	336.93	239.0	893.67	116036	14.5815 ng/ml
THC-OH	3.881	23430	408.10	13.8	60.76	278116	5.0472 ng/ml

AM #27 Cannabinoids Quant. Results

Batch results   D:\MassHunter\Data\2024\AM 27 28\090324 AM 27 28 CS\QuantResults\AM 27.batch.bin
Calibration Last Update   9/10/2024 2:16:13 PM

Instrument	Falco (069901)	**Data File**	QC end MJ.d
Type	QC	**Sample**	QC end MJ
Acq. Method	AM 27 Agilent Method.m	**Operator**	Celena Shrum
Sample Position	P1-A2	**Comment**	Only drugs and concentrations listed on the laboratory
Injection Volume	10		report itself are appropriate to be used for
Acq. Date-Time	9/3/2024 9:51:11 PM		interpretation purposes. Any drugs or values included
Sample Info.			in the notes but not included on the report are used by
			laboratory personnel to make determinations/reach
			conclusions within the confines of the methods.

Sample Chromatogram

+ TIC MRM (** -> **) QC end MJ.d (QC end MJ)

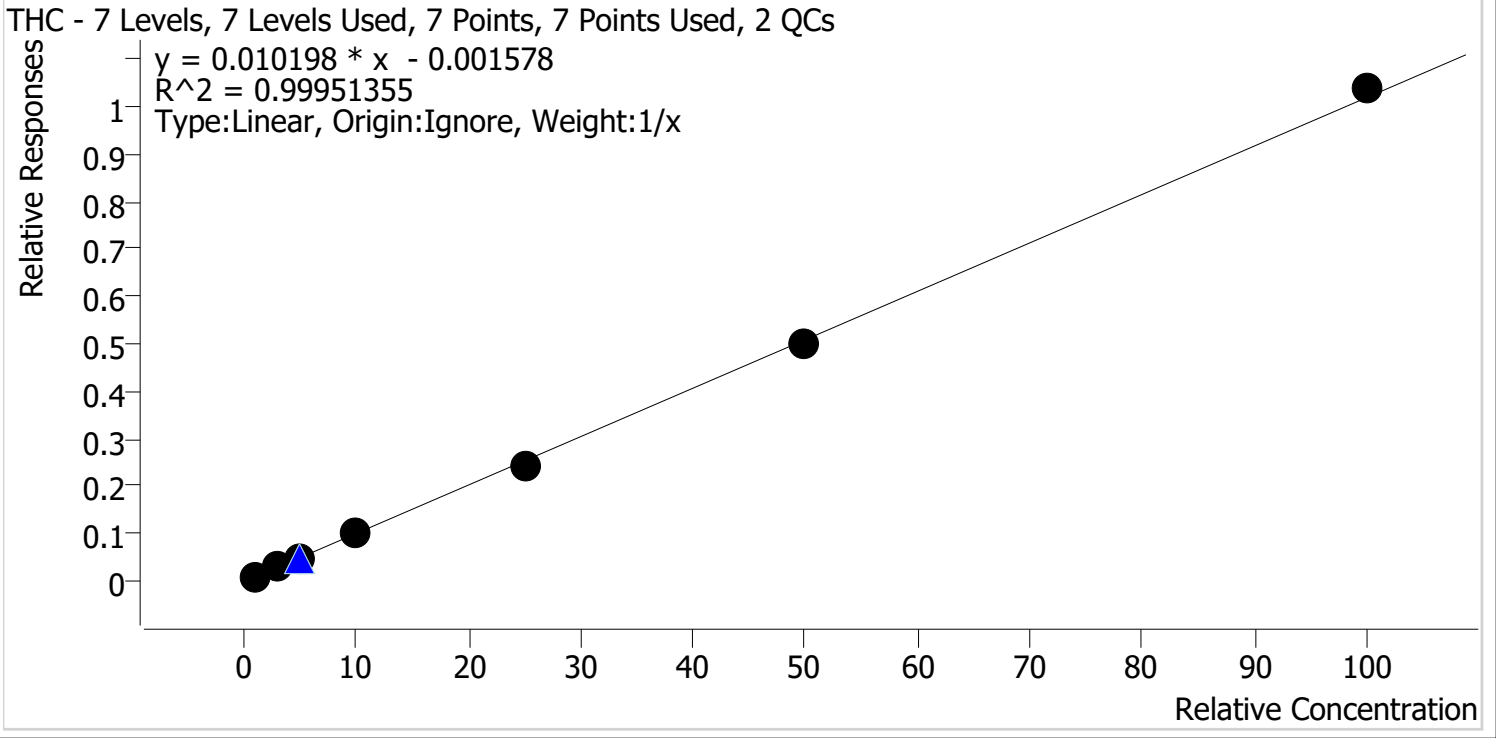| Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.105	125588	∞	27.9	∞	2532220	5.0179 ng/ml
THC-COOH	3.939	17260	589.40	231.5	∞	189525	14.8484 ng/ml
THC-OH	3.850	38839	∞	13.6	133.17	473290	4.9111 ng/ml

AM #27 Cannabinoids Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2024\AM 27 28\090324 AM 27 28 CS\QuantResults\AM 27.batch.bin
Last Cal. Update 9/10/2024 2:16 PM
Analyst Name ISP\Datastor
Analyte THC **Internal Standard** THC-D3

THC - 7 Levels, 7 Levels Used, 7 Points, 7 Points Used, 2 QCs
$y = 0.010198 * x - 0.001578$
$R^2 = 0.99951355$
Type:Linear, Origin:Ignore, Weight:1/x

Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	✔	1.0	1.1	108.0
Cal 2 MJ	2	✔	3.0	3.0	98.7
Cal 3 MJ	3	✔	5.0	4.9	98.3
Cal 4 MJ	4	✔	10.0	9.8	97.8
Cal 5 MJ	5	✔	25.0	24.3	97.1
Cal 6 MJ	6	✔	50.0	49.2	98.4
Cal 7 MJ	7	✔	100.0	101.8	101.8

AM #27 Cannabinoids Quant. Calibration Curve Report

Batch results   D:\MassHunter\Data\2024\AM 27 28\090324 AM 27 28 CS\QuantResults\AM 27.batch.bin
Last Cal. Update   9/10/2024 2:16 PM
Analyst Name   ISP\Datastor
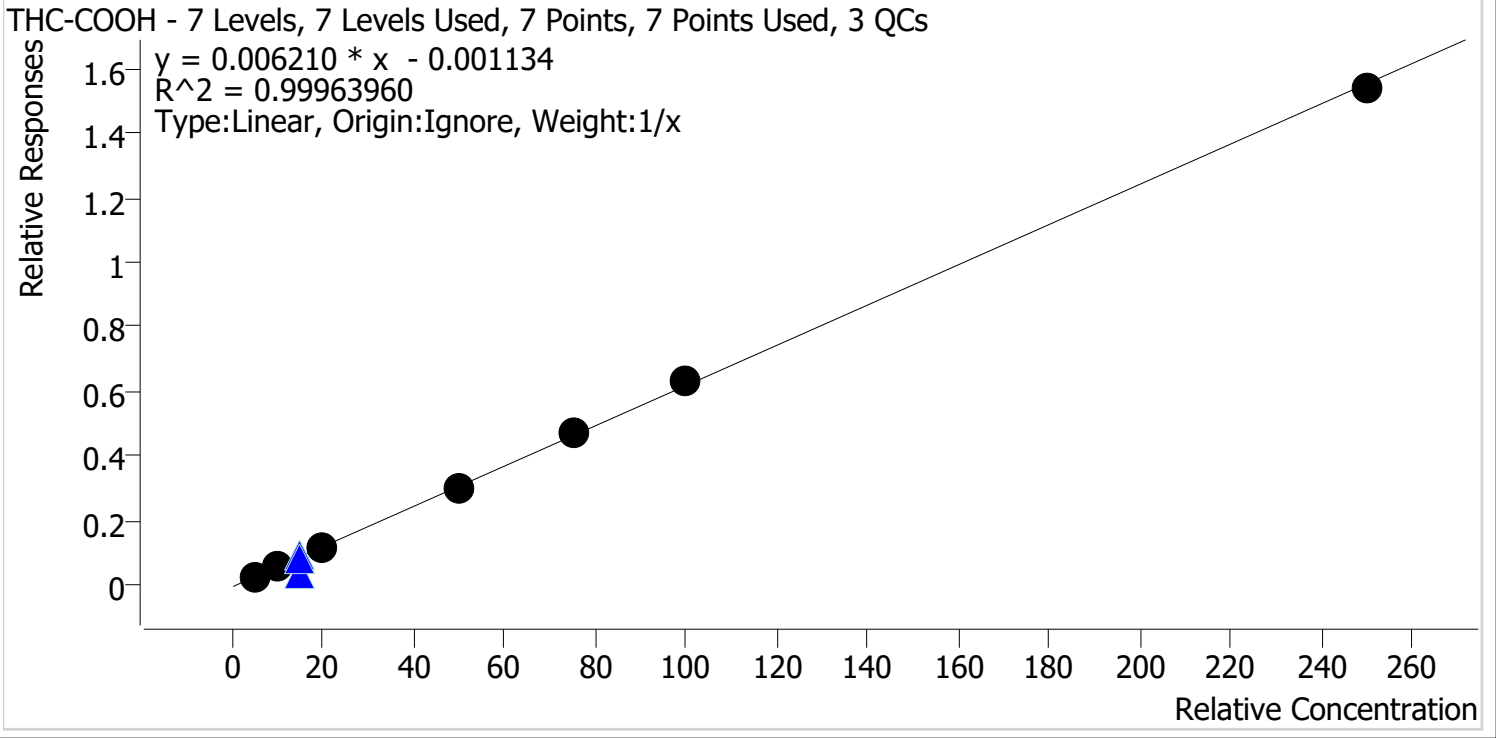**Analyte**   THC-COOH   **Internal Standard**   THC-COOH-D9

THC-COOH - 7 Levels, 7 Levels Used, 7 Points, 7 Points Used, 3 QCs

$y = 0.006210 * x - 0.001134$
$R^2 = 0.99963960$
Type:Linear, Origin:Ignore, Weight:1/x

Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	✔	5.0	5.0	100.3
Cal 2 MJ	2	✔	10.0	10.1	101.1
Cal 3 MJ	3	✔	20.0	19.3	96.3
Cal 4 MJ	4	✔	50.0	49.5	99.0
Cal 5 MJ	5	✔	75.0	76.9	102.5
Cal 6 MJ	6	✔	100.0	101.8	101.8
Cal 7 MJ	7	✔	250.0	247.5	99.0

AM #27 Cannabinoids Quant. Calibration Curve Report

Batch results   D:\MassHunter\Data\2024\AM 27 28\090324 AM 27 28 CS\QuantResults\AM 27.batch.bin
Last Cal. Update   9/10/2024 2:16 PM
Analyst Name   ISP\Datastor
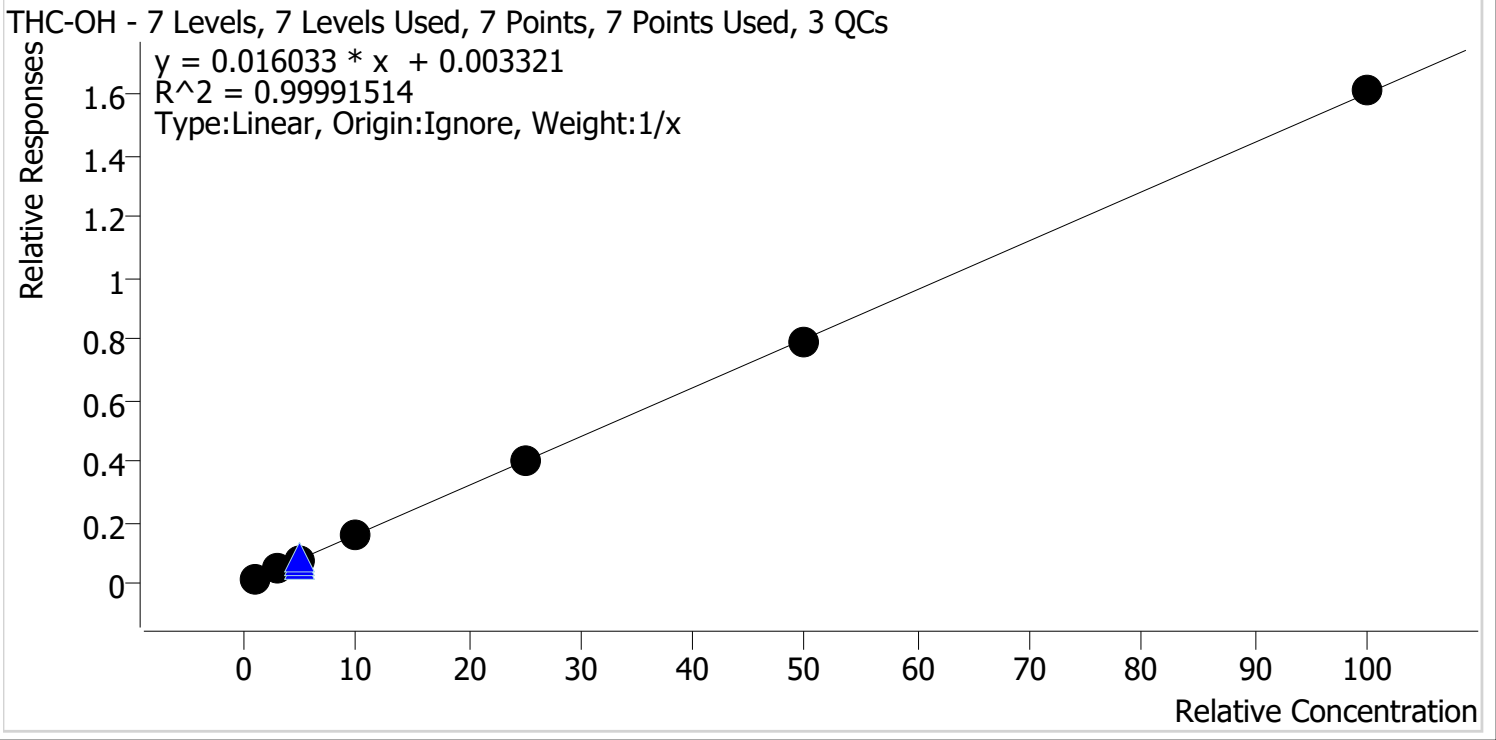**Analyte**   THC-OH   **Internal Standard**   THC-OH-D3

THC-OH - 7 Levels, 7 Levels Used, 7 Points, 7 Points Used, 3 QCs

$y = 0.016033 * x + 0.003321$
$R^2 = 0.99991514$
Type:Linear, Origin:Ignore, Weight:1/x

Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	✔	1.0	1.0	101.5
Cal 2 MJ	2	✔	3.0	3.1	102.4
Cal 3 MJ	3	✔	5.0	4.8	96.9
Cal 4 MJ	4	✔	10.0	10.0	99.6
Cal 5 MJ	5	✔	25.0	25.0	99.9
Cal 6 MJ	6	✔	50.0	49.6	99.1
Cal 7 MJ	7	✔	100.0	100.6	100.6

Generated at 2:17 PM on 9/10/2024

AM #27 Cannabinoids Quant. Results

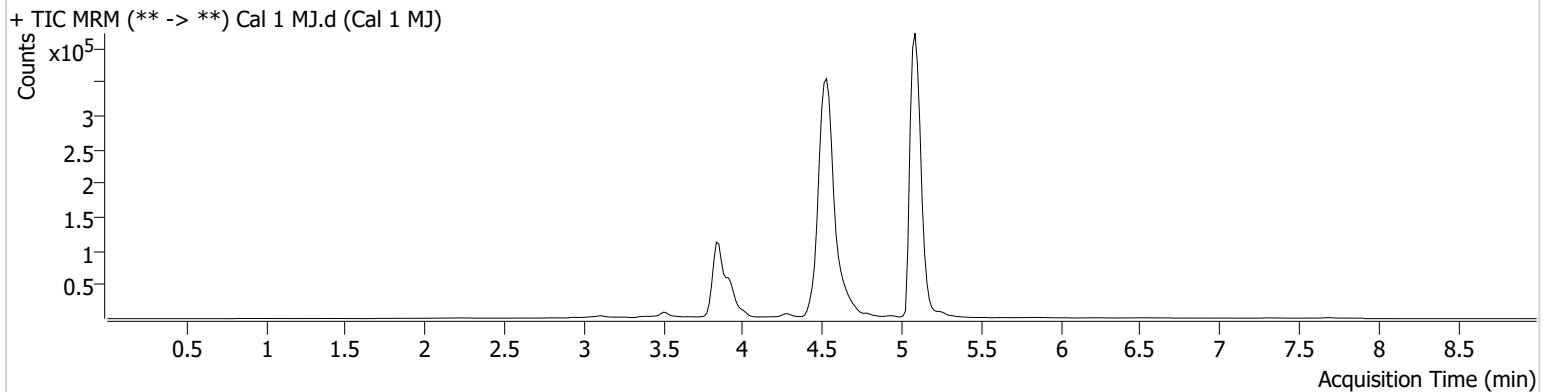**Batch results**   D:\MassHunter\Data\2024\AM 27 28\090324 AM 27 28 CS\QuantResults\AM 27.batch.bin
Calibration Last Update   9/10/2024 2:16:13 PM

Instrument	Falco (069901)	**Data File**	Cal 1 MJ.d
Type	Cal	**Sample**	Cal 1 MJ
Acq. Method	AM 27 Agilent Method.m	**Operator**	Celena Shrum
Sample Position	P1-A1	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	10		
Acq. Date-Time	9/3/2024 1:59:16 PM		
Sample Info.			

Sample Chromatogram

+ TIC MRM (** -> **) Cal 1 MJ.d (Cal 1 MJ)

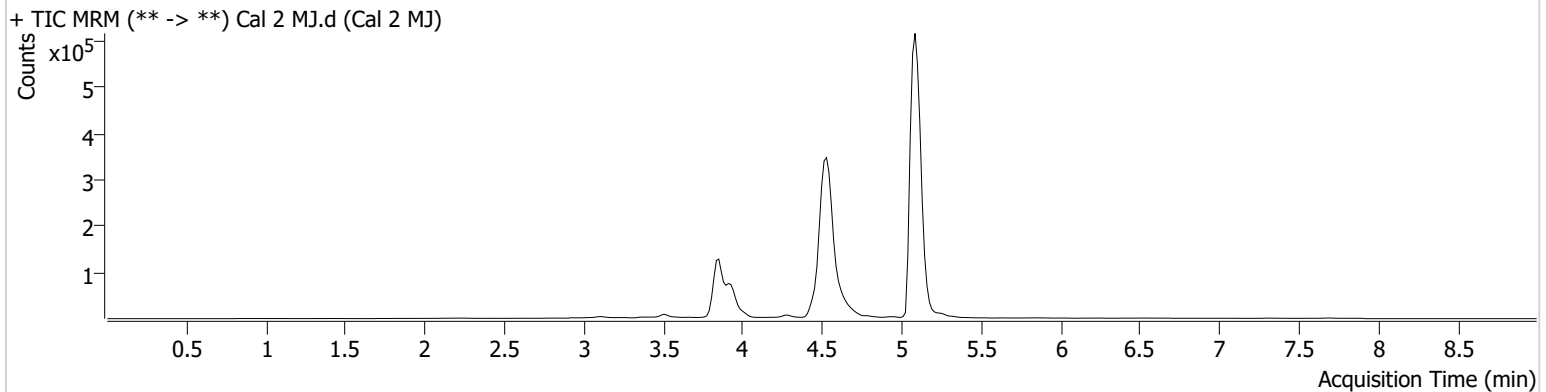| Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.090	17192	∞	30.9	∞	1822498	1.0797 ng/ml
THC-COOH	3.939	4899	77.04	269.9	117.09	163213	5.0168 ng/ml
THC-OH	3.850	9375	∞	11.5	10.46	478586	1.0146 ng/ml

AM #27 Cannabinoids Quant. Results

Batch results   D:\MassHunter\Data\2024\AM 27 28\090324 AM 27 28 CS\QuantResults\AM 27.batch.bin
Calibration Last Update   9/10/2024 2:16:13 PM

Instrument	Falco (069901)	**Data File**	Cal 2 MJ.d
Type	Cal	**Sample**	Cal 2 MJ
Acq. Method	AM 27 Agilent Method.m	**Operator**	Celena Shrum
Sample Position	P1-B1	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	10		
Acq. Date-Time	9/3/2024 2:12:32 PM		
Sample Info.			

Sample Chromatogram

+ TIC MRM (** -> **) Cal 2 MJ.d (Cal 2 MJ)

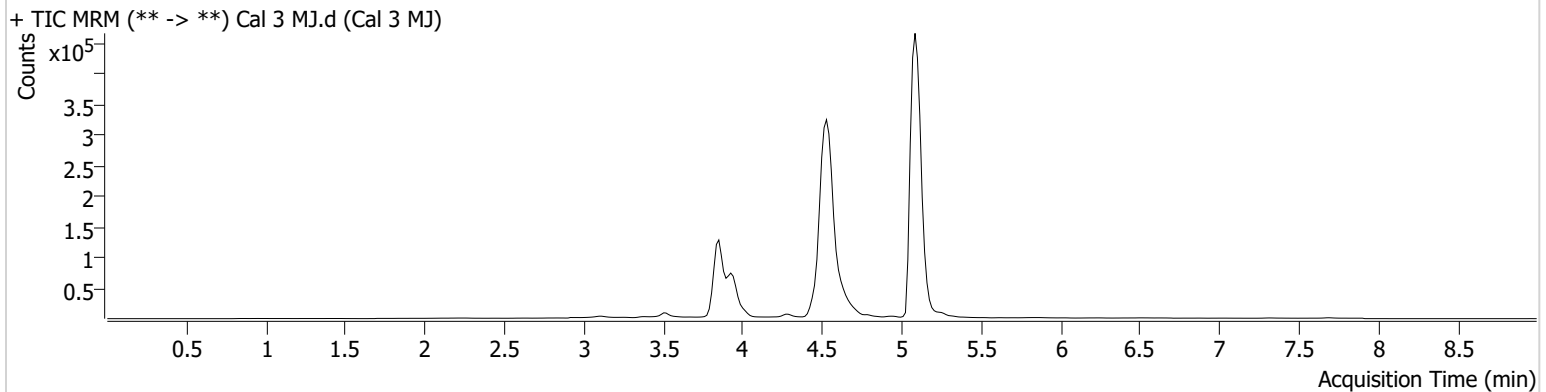| Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.105	74243	∞	28.0	∞	2595038	2.9601 ng/ml
THC-COOH	3.939	12003	354.98	236.9	∞	194656	10.1129 ng/ml
THC-OH	3.850	27011	∞	13.9	151.50	513595	3.0730 ng/ml

AM #27 Cannabinoids Quant. Results

Batch results   D:\MassHunter\Data\2024\AM 27 28\090324 AM 27 28 CS\QuantResults\AM 27.batch.bin
Calibration Last Update   9/10/2024 2:16:13 PM

Instrument	Falco (069901)	**Data File**	Cal 3 MJ.d
Type	Cal	**Sample**	Cal 3 MJ
Acq. Method	AM 27 Agilent Method.m	**Operator**	Celena Shrum
Sample Position	P1-C1	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	10		
Acq. Date-Time	9/3/2024 2:25:37 PM		
Sample Info.			

Sample Chromatogram

+ TIC MRM (** -> **) Cal 3 MJ.d (Cal 3 MJ)

Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.105	92585	∞	27.6	∞	1907618	4.9138 ng/ml
THC-COOH	3.939	18591	703.00	238.5	∞	156962	19.2575 ng/ml
THC-OH	3.850	40004	96.04	13.7	122.26	493824	4.8453 ng/ml

AM #27 Cannabinoids Quant. Results

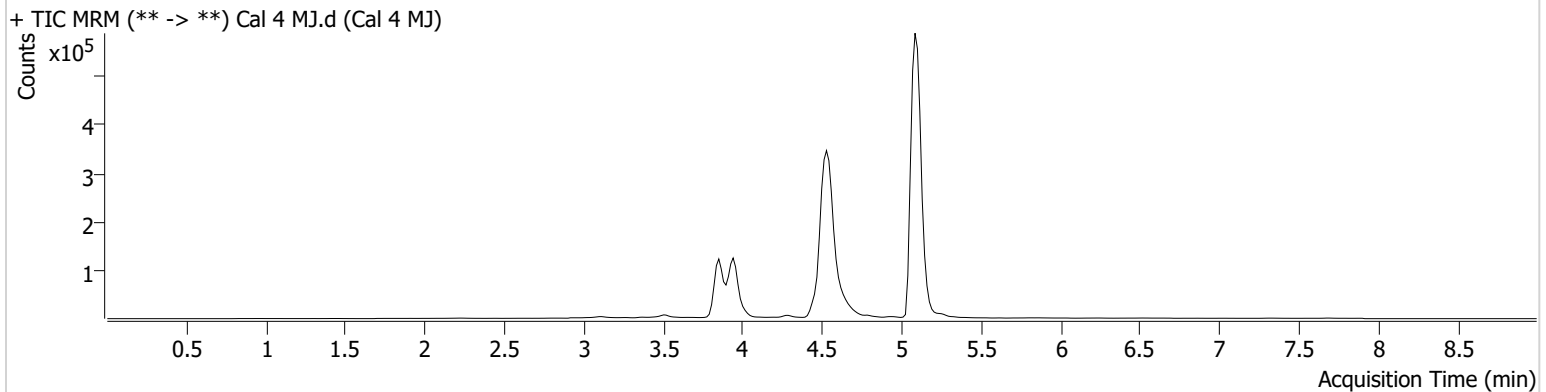**Batch results**   D:\MassHunter\Data\2024\AM 27 28\090324 AM 27 28 CS\QuantResults\AM 27.batch.bin
Calibration Last Update   9/10/2024 2:16:13 PM

Instrument	Falco (069901)	**Data File**	Cal 4 MJ.d
Type	Cal	**Sample**	Cal 4 MJ
Acq. Method	AM 27 Agilent Method.m	**Operator**	Celena Shrum
Sample Position	P1-D1	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	10		
Acq. Date-Time	9/3/2024 2:38:43 PM		
Sample Info.			

Sample Chromatogram

+ TIC MRM (** -> **) Cal 4 MJ.d (Cal 4 MJ)

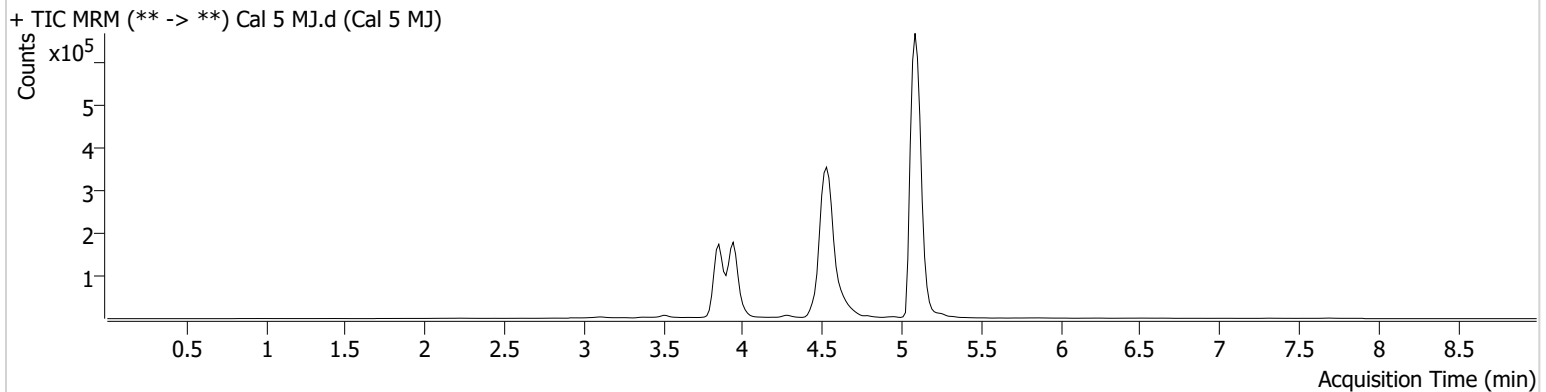| Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.105	216998	∞	26.6	∞	2210293	9.7815 ng/ml
THC-COOH	3.939	48062	1445.27	236.0	∞	157004	49.4808 ng/ml
THC-OH	3.850	67973	294.12	14.1	∞	416980	9.9599 ng/ml

AM #27 Cannabinoids Quant. Results

Batch results   D:\MassHunter\Data\2024\AM 27 28\090324 AM 27 28 CS\QuantResults\AM 27.batch.bin
Calibration Last Update   9/10/2024 2:16:13 PM

Instrument	Falco (069901)	**Data File**	Cal 5 MJ.d
Type	Cal	**Sample**	Cal 5 MJ
Acq. Method	AM 27 Agilent Method.m	**Operator**	Celena Shrum
Sample Position	P1-E1	**Comment**	Only drugs and concentrations listed on the laboratory
Injection Volume	10		report itself are appropriate to be used for
Acq. Date-Time	9/3/2024 2:51:49 PM		interpretation purposes. Any drugs or values included
Sample Info.			in the notes but not included on the report are used by
			laboratory personnel to make determinations/reach
			conclusions within the confines of the methods.

Sample Chromatogram

+ TIC MRM (** -> **) Cal 5 MJ.d (Cal 5 MJ)

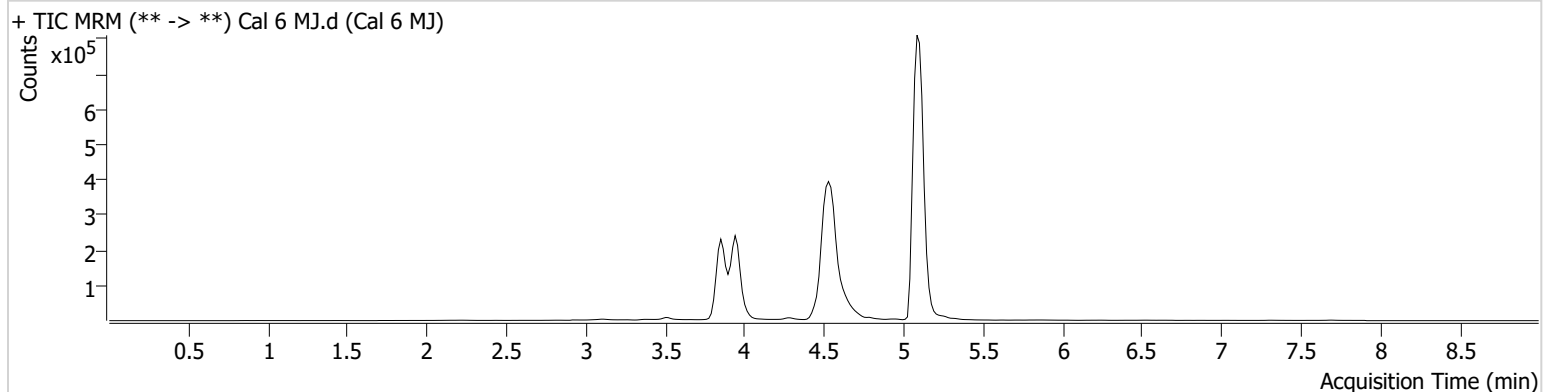| Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.105	550393	∞	26.8	∞	2237727	24.2726 ng/ml
THC-COOH	3.939	81586	2631.90	218.9	3687.51	171288	76.8889 ng/ml
THC-OH	3.850	206486	∞	13.9	851.34	511342	24.9787 ng/ml

AM #27 Cannabinoids Quant. Results

Batch results   D:\MassHunter\Data\2024\AM 27 28\090324 AM 27 28 CS\QuantResults\AM 27.batch.bin
Calibration Last Update   9/10/2024 2:16:13 PM

Instrument	Falco (069901)	**Data File**	Cal 6 MJ.d
Type	Cal	**Sample**	Cal 6 MJ
Acq. Method	AM 27 Agilent Method.m	**Operator**	Celena Shrum
Sample Position	P1-F1	**Comment**	Only drugs and concentrations listed on the laboratory
Injection Volume	10		report itself are appropriate to be used for
Acq. Date-Time	9/3/2024 3:04:56 PM		interpretation purposes. Any drugs or values included
Sample Info.			in the notes but not included on the report are used by
			laboratory personnel to make determinations/reach
			conclusions within the confines of the methods.

Sample Chromatogram

+ TIC MRM (** -> **) Cal 6 MJ.d (Cal 6 MJ)

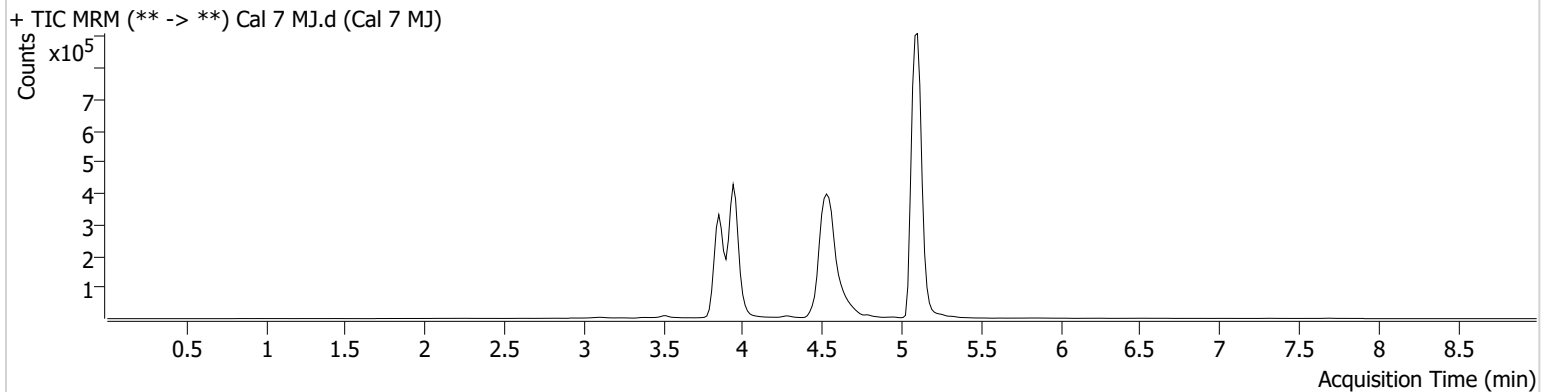| Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.105	1095198	∞	26.9	∞	2190388	49.1828 ng/ml
THC-COOH	3.939	111664	2913.69	222.3	5793.22	176996	101.7822 ng/ml
THC-OH	3.850	414286	7169.92	14.2	1137.20	519187	49.5612 ng/ml

AM #27 Cannabinoids Quant. Results

Batch results D:\MassHunter\Data\2024\AM 27 28\090324 AM 27 28 CS\QuantResults\AM 27.batch.bin
Calibration Last Update 9/10/2024 2:16:13 PM

Instrument	Falco (069901)	**Data File**	Cal 7 MJ.d
Type	Cal	**Sample**	Cal 7 MJ
Acq. Method	AM 27 Agilent Method.m	**Operator**	Celena Shrum
Sample Position	P1-G1	**Comment**	Only drugs and concentrations listed on the laboratory
Injection Volume	10		report itself are appropriate to be used for
Acq. Date-Time	9/3/2024 3:18:03 PM		interpretation purposes. Any drugs or values included
Sample Info.			in the notes but not included on the report are used by
			laboratory personnel to make determinations/reach
			conclusions within the confines of the methods.

Sample Chromatogram

+ TIC MRM (** -> **) Cal 7 MJ.d (Cal 7 MJ)

Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.105	1791404	∞	27.3	∞	1727979	101.8095 ng/ml
THC-COOH	3.939	224381	3827.12	219.9	5466.84	146131	247.4609 ng/ml
THC-OH	3.850	815789	∞	14.1	2764.82	504898	100.5673 ng/ml