TS   5/2/2024

Worklist: 6795

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION	
M2024-1508	1	BCK	AM 27 Blood THC Quant by LC-QQQ	|||||||||||||||
M2024-1537	2	BCK	AM 27 Blood THC Quant by LC-QQQ	|||||||||||||||
P2024-1116	1	BCK	AM 27 Blood THC Quant by LC-QQQ	|||||||||||||||
P2024-1173	1	BLOOD	AM 27 Blood THC Quant by LC-QQQ	|||||||||||||||
P2024-1175	1	BCK	AM 27 Blood THC Quant by LC-QQQ	|||||||||||||||
P2024-1194	1	BCK	AM 27 Blood THC Quant by LC-QQQ	|||||||||||||||
P2024-1195	1	BCK	AM 27 Blood THC Quant by LC-QQQ	|||||||||||||||
P2024-1202	1	BCK	AM 27 Blood THC Quant by LC-QQQ	|||||||||||||||
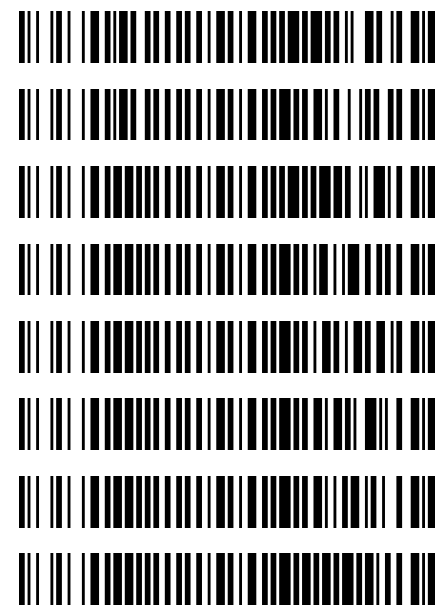
AM# 27: Quantitation of THC and Metabolites in Blood and Urine by LC-MS/MS

Extraction Date: 05/02/2024   Analyst: Tamara Salazar
Plate lot#: 231212   Plate Retest Date: 06/12/2024
Mobile phase A: 0.1% Formic Acid in LCMS Water   Mobile phase B: 0.1% Formic acid in Acetonitrile
Blank Blood Lot: Lampire 23A52595   Blank Urine Lot: N/A
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: 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 and urine (if applicable) (calibrated pipette)** into the appropriate wells of analytical (standards) plate. **Pipette ID:** *42*
☒ 4. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
☒ 5. Add **500µL of 0.1% formic acid in water to blood samples,** and **500µL of saturated phosphate buffer to urine samples**-in the wells of the analytical plate.
☒ 6. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
☒ 7. Transfer **700-800µL of blood+acid or urine+acid** mixture to corresponding wells of SLE+ plate.
Amount transferred: *750µL*
☒ 8. 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)
☒ 9. Wait 5 minutes.
☒ 10. Add **2.25mL MTBE. (*Add in 3 increments of 750uL)***
☒ 11. Wait 5 minutes.
☒ 12. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left).*
☒ 13. Add **2.25mL Hexane. (*Add in 3 increments of 750uL)***
☒ 14. Wait 5 minutes.
☒ 15. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left).*
☒ 16. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C.
☒ 17. 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. Did all QCs pass for each analyte? (if not, describe in comments section)
☒ 5. Enter QCs into control charting.
☒ 6. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS: Incorrect well position specified for case M2024-1537-2. The well position was corrected and the sample was reinjected.

TS

	1	2	3	4	5	6
A	IS + Cal. 1	IS + QC_1	P2024-1195-1			IS + QC_1
B	IS + Cal. 2	Neg Blood	P2024-1202-1			IS + Cal. 7
C	IS + Cal. 3	M2024-1508-1				IS + Cal. 6
D	IS + Cal. 4	M2024-1537-2				IS + Cal. 5
E	IS + Cal. 5	P2024-1116-1				IS + Cal. 4
F	IS + Cal. 6	P2024-1173-1				IS + Cal. 3
G	IS + Cal. 7	P2024-1175-1				IS + Cal. 2
H	IS + QC_1	P2024-1194-1			IS + QC_1	IS + Cal. 1

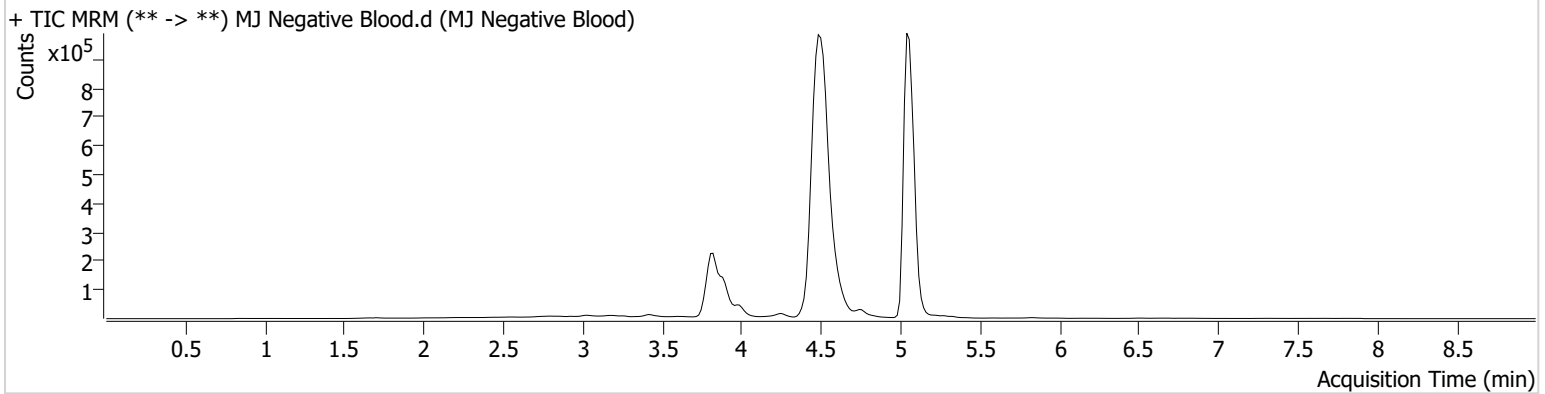All wells to contain 100 µl of residual DMSO

AM #27 Cannabinoids Quant. Results

TS

Batch results D:\MassHunter\Data\2024\AM 27 28\050224 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update 5/9/2024 10:56:18 AM

Instrument	Falco (069901)	**Data File**	MJ Negative Blood.d
Type	Sample	**Sample**	MJ Negative Blood
Acq. Method	AM 27 Agilent Method.m	**Operator**	Tamara Salazar
Sample Position	P1-B2	**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	5/2/2024 3:03:54 PM		
Sample Info.			

Sample Chromatogram

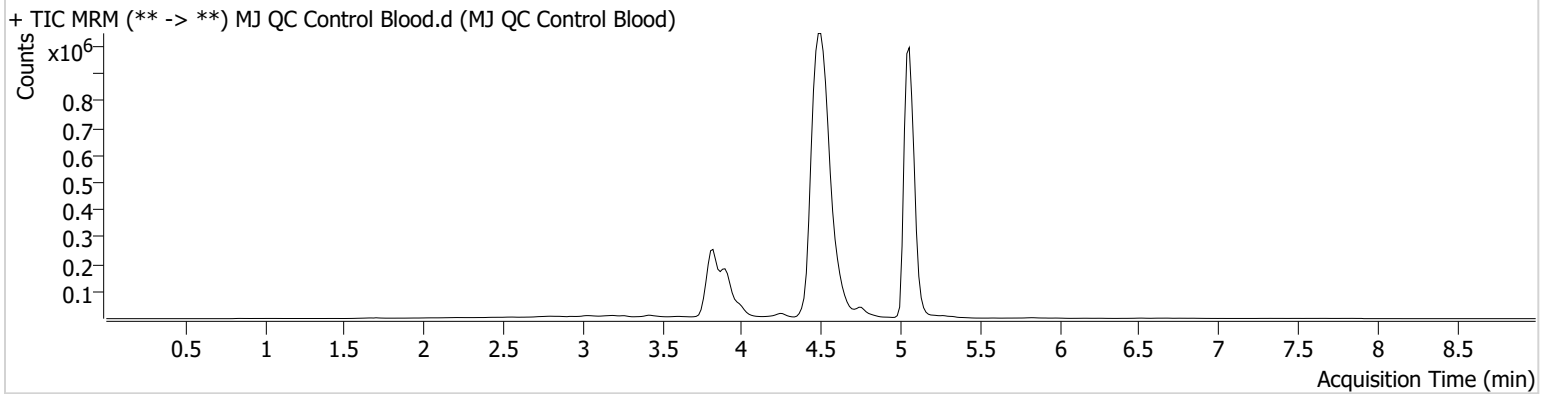+ TIC MRM (** -> **) MJ Negative Blood.d (MJ Negative Blood)

AM #27 Cannabinoids Quant. Results

TS

Batch results   D:\MassHunter\Data\2024\AM 27 28\050224 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update   5/9/2024 10:56:18 AM

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**	Tamara Salazar
Sample Position	P1-H1	**Comment**	
Injection Volume	10		
Acq. Date-Time	5/2/2024 1:57:35 PM		
Sample Info.			

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.

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	5.060	178845	778.36	24.9	125.27	4167667	5.0998 ng/ml
THC-COOH	3.909	43310	∞	212.4	7137.00	412109	15.8636 ng/ml
THC-OH	3.820	96905	∞	12.3	∞	1124663	5.0529 ng/ml

AM #27 Cannabinoids Quant. Results

TS

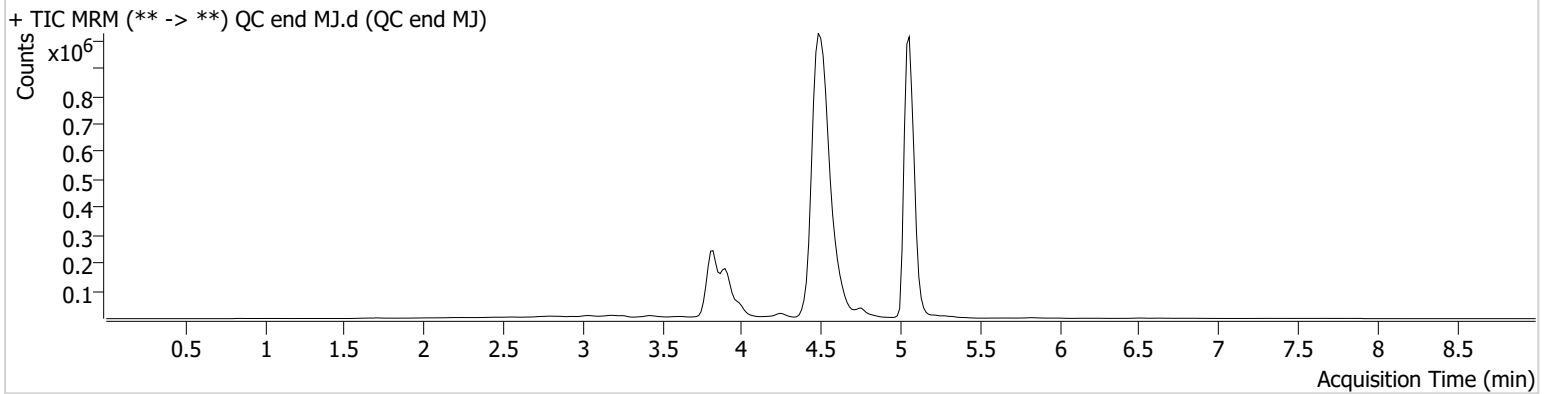**Batch results**   D:\MassHunter\Data\2024\AM 27 28\050224 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update   5/9/2024 10:56:18 AM

Instrument	Falco (069901)	**Data File**	QC end MJ.d
Type	QC	**Sample**	QC end MJ
Acq. Method	AM 27 Agilent Method.m	**Operator**	Tamara Salazar
Sample Position	P1-A2	**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	5/2/2024 7:25:48 PM		
Sample Info.			

Sample Chromatogram

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

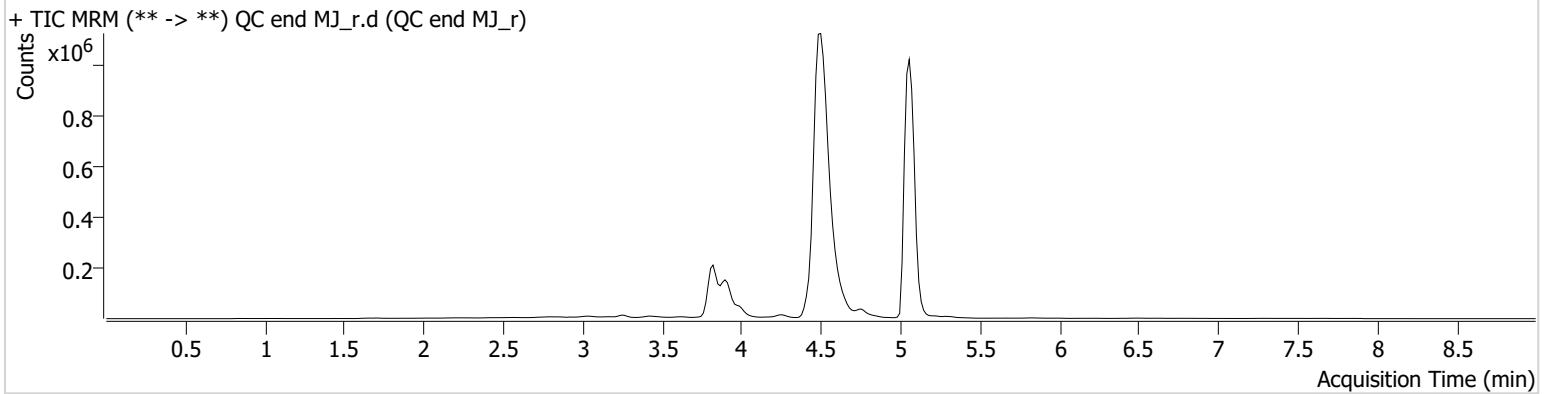| Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.060	173212	1474.29	25.1	∞	4152355	4.9649 ng/ml
THC-COOH	3.909	40313	181.37	218.6	∞	435062	14.1352 ng/ml
THC-OH	3.820	89376	∞	12.2	65.72	1049973	4.9934 ng/ml

AM #27 Cannabinoids Quant. Results

Batch results   D:\MassHunter\Data\2024\AM 27 28\050224 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update   5/9/2024 10:56:18 AM

Instrument	Falco (069901)	**Data File**	QC end MJ_r.d
Type	QC	**Sample**	QC end MJ_r
Acq. Method	AM 27 Agilent Method.m	**Operator**	Tamara Salazar
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	5/3/2024 11:04:15 AM		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_r.d (QC end MJ_r)

| Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.060	171841	∞	25.8	30.35	4232555	4.8394 ng/ml
THC-COOH	3.909	32848	∞	218.4	496.97	347474	14.3955 ng/ml
THC-OH	3.820	74290	134.52	12.6	∞	828986	5.2499 ng/ml

AM #27 Cannabinoids Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2024\AM 27 28\050224 AM 27 28 TS\QuantResults\AM 27.batch.bin
Last Cal. Update 5/9/2024 10:56 AM
Analyst Name ISP\datastor
Analyte THC **Internal Standard** THC-D3

THC - 7 Levels, 7 Levels Used, 7 Points, 7 Points Used, 3 QCs
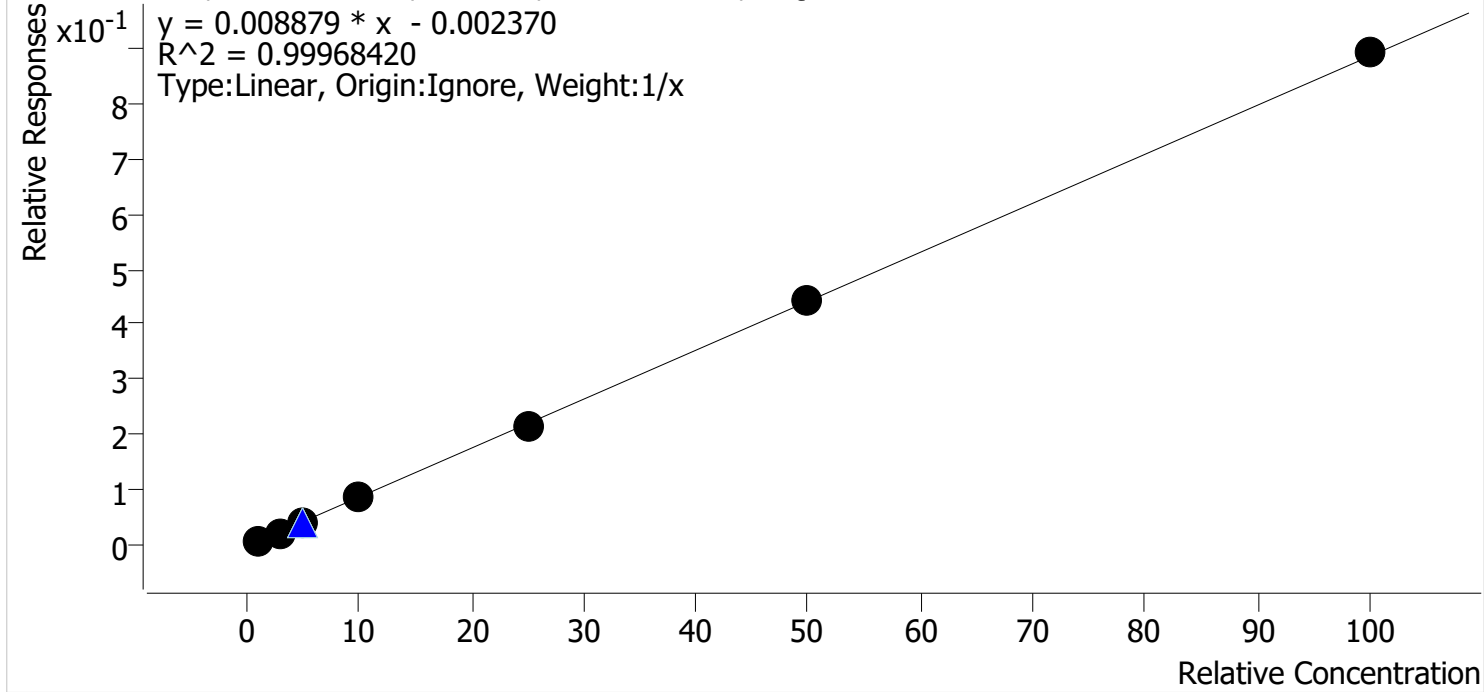
$y = 0.008879 * x - 0.002370$
$R^2 = 0.99968420$
Type:Linear, Origin:Ignore, Weight:1/x

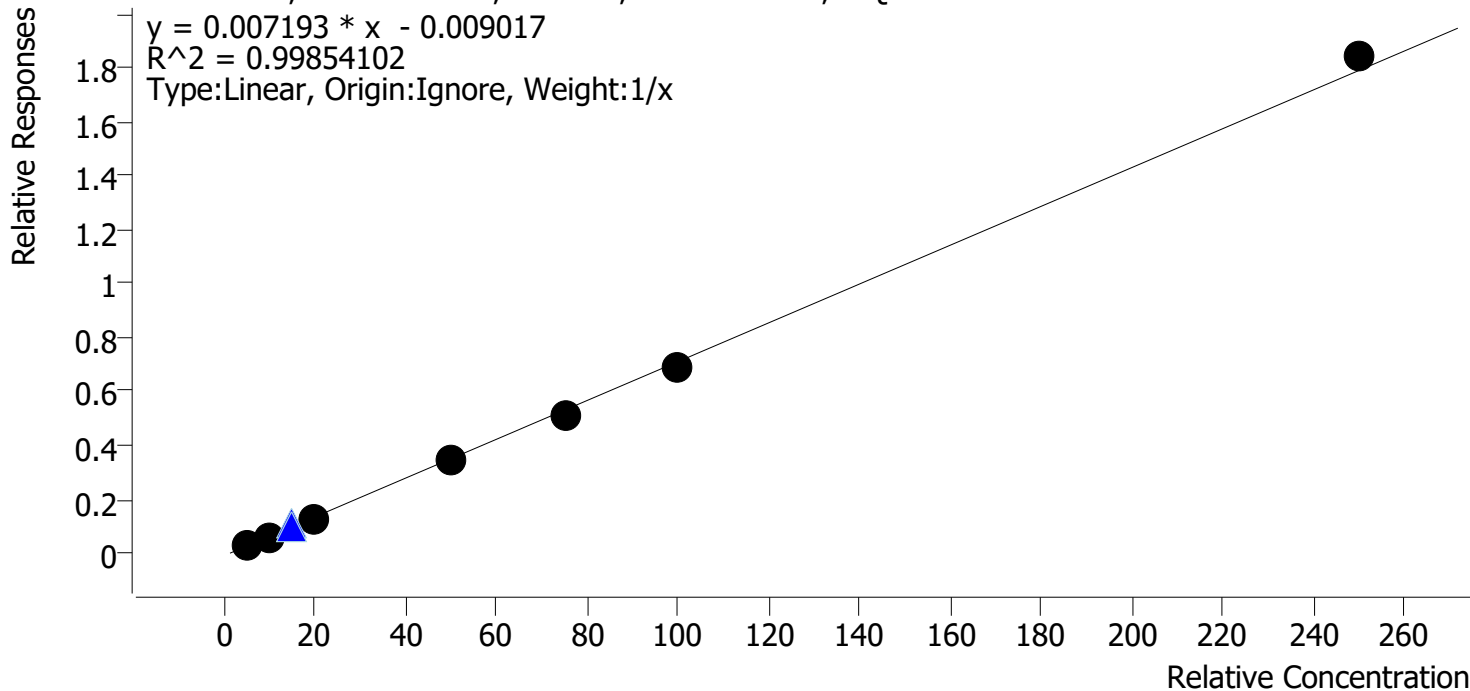| Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ_r	1	✔	1.0	1.1	110.8
Cal 2 MJ	2	✔	3.0	2.9	95.2
Cal 3 MJ	3	✔	5.0	4.9	97.7
Cal 4 MJ	4	✔	10.0	9.7	97.4
Cal 5 MJ	5	✔	25.0	24.3	97.4
Cal 6 MJ	6	✔	50.0	50.3	100.7
Cal 7 MJ	7	✔	100.0	100.7	100.7

AM #27 Cannabinoids Quant. Calibration Curve Report

Batch results   D:\MassHunter\Data\2024\AM 27 28\050224 AM 27 28 TS\QuantResults\AM 27.batch.bin
Last Cal. Update   5/9/2024 10:56 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, 3 QCs

$y = 0.007193 * x - 0.009017$
$R^2 = 0.99854102$
Type:Linear, Origin:Ignore, Weight:1/x

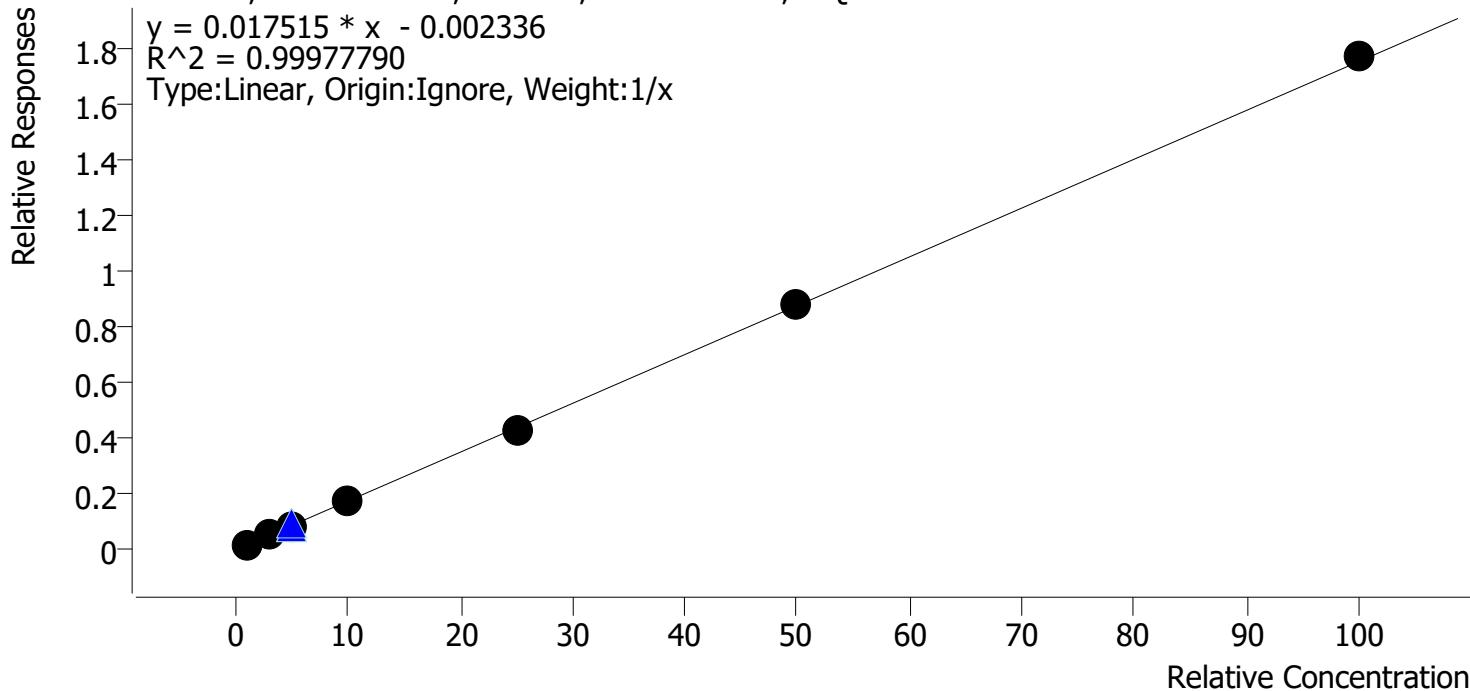| Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ_r	1	✔	5.0	5.6	112.5
Cal 2 MJ	2	✔	10.0	9.9	98.6
Cal 3 MJ	3	✔	20.0	18.8	94.1
Cal 4 MJ	4	✔	50.0	49.5	98.9
Cal 5 MJ	5	✔	75.0	71.7	95.7
Cal 6 MJ	6	✔	100.0	97.4	97.4
Cal 7 MJ	7	✔	250.0	257.1	102.8

TS

AM #27 Cannabinoids Quant. Calibration Curve Report

Batch results   D:\MassHunter\Data\2024\AM 27 28\050224 AM 27 28 TS\QuantResults\AM 27.batch.bin
Last Cal. Update   5/9/2024 10:56 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, 3 QCs

$y = 0.017515 * x - 0.002336$
$R^2 = 0.99977790$
Type:Linear, Origin:Ignore, Weight:1/x

| Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ_r	1	✔	1.0	1.0	103.8
Cal 2 MJ	2	✔	3.0	3.0	101.3
Cal 3 MJ	3	✔	5.0	5.0	99.4
Cal 4 MJ	4	✔	10.0	9.7	97.3
Cal 5 MJ	5	✔	25.0	24.3	97.3
Cal 6 MJ	6	✔	50.0	49.9	99.8
Cal 7 MJ	7	✔	100.0	101.0	101.0

AM #27 Cannabinoids Quant. Results

TS

Batch results   D:\MassHunter\Data\2024\AM 27 28\050224 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update   5/9/2024 10:56:18 AM

Instrument	Falco (069901)	**Data File**	Cal 2 MJ.d
Type	Cal	**Sample**	Cal 2 MJ
Acq. Method	AM 27 Agilent Method.m	**Operator**	Tamara Salazar
Sample Position	P1-B1	**Comment**	
Injection Volume	10		
Acq. Date-Time	5/2/2024 12:25:55 PM		
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.

Sample Chromatogram

+ TIC MRM (** -> **) Cal 2 MJ.d (Cal 2 MJ)
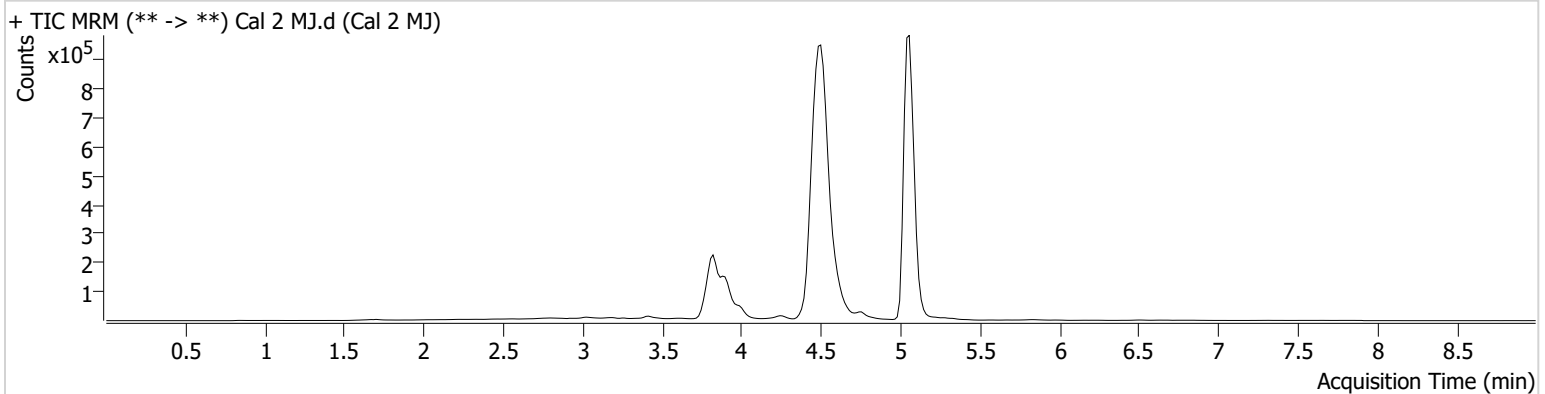
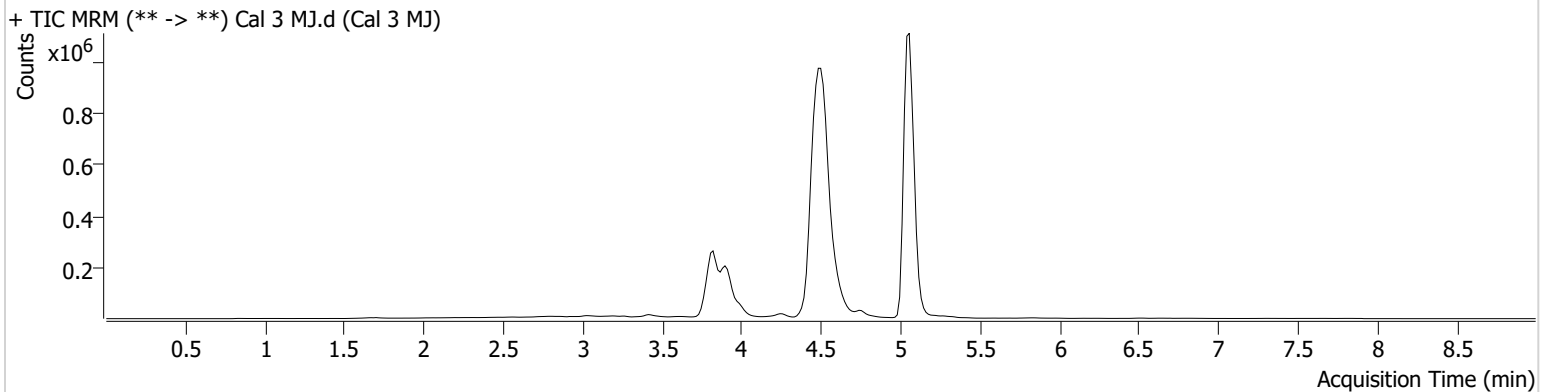| Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.060	98222	553.05	26.2	∞	4271391	2.8567 ng/ml
THC-COOH	3.909	25331	225.98	217.2	1757.10	409310	9.8570 ng/ml
THC-OH	3.820	51823	∞	12.6	36.27	1018184	3.0393 ng/ml

AM #27 Cannabinoids Quant. Results

Batch results   D:\MassHunter\Data\2024\AM 27 28\050224 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update   5/9/2024 10:56:18 AM

Instrument	Falco (069901)	**Data File**	Cal 3 MJ.d
Type	Cal	**Sample**	Cal 3 MJ
Acq. Method	AM 27 Agilent Method.m	**Operator**	Tamara Salazar
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	5/2/2024 12:39:01 PM		
Sample Info.			

Sample Chromatogram

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

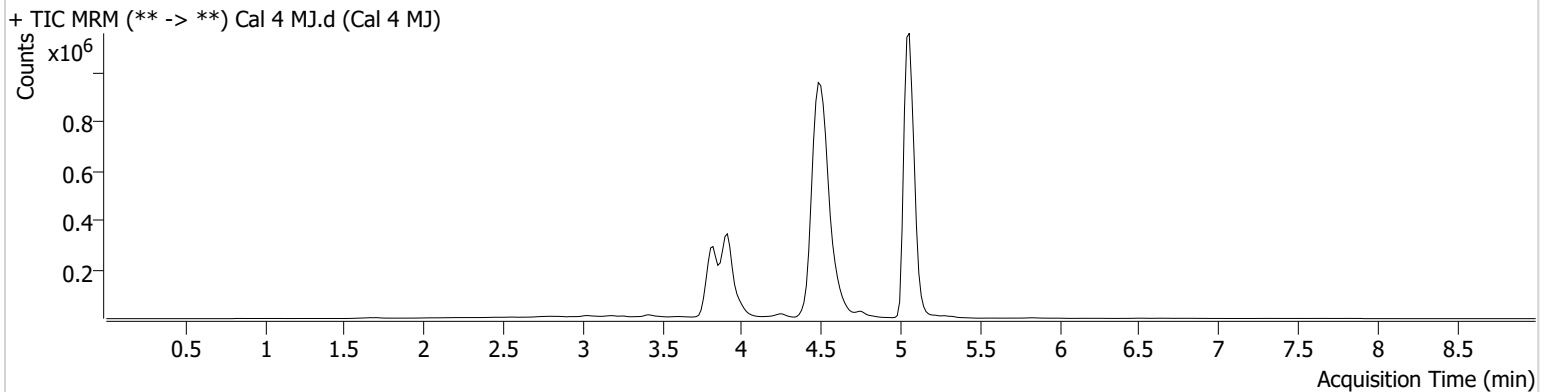| Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.060	193594	∞	23.8	107.85	4721008	4.8852 ng/ml
THC-COOH	3.909	56713	282.76	218.9	238.08	448734	18.8236 ng/ml
THC-OH	3.820	98054	∞	12.1	∞	1157169	4.9714 ng/ml

AM #27 Cannabinoids Quant. Results

TS

Batch results   D:\MassHunter\Data\2024\AM 27 28\050224 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update   5/9/2024 10:56:18 AM

Instrument	Falco (069901)	**Data File**	Cal 4 MJ.d
Type	Cal	**Sample**	Cal 4 MJ
Acq. Method	AM 27 Agilent Method.m	**Operator**	Tamara Salazar
Sample Position	P1-D1	**Comment**	
Injection Volume	10		
Acq. Date-Time	5/2/2024 12:52:07 PM		
Sample Info.			

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.

Sample Chromatogram

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

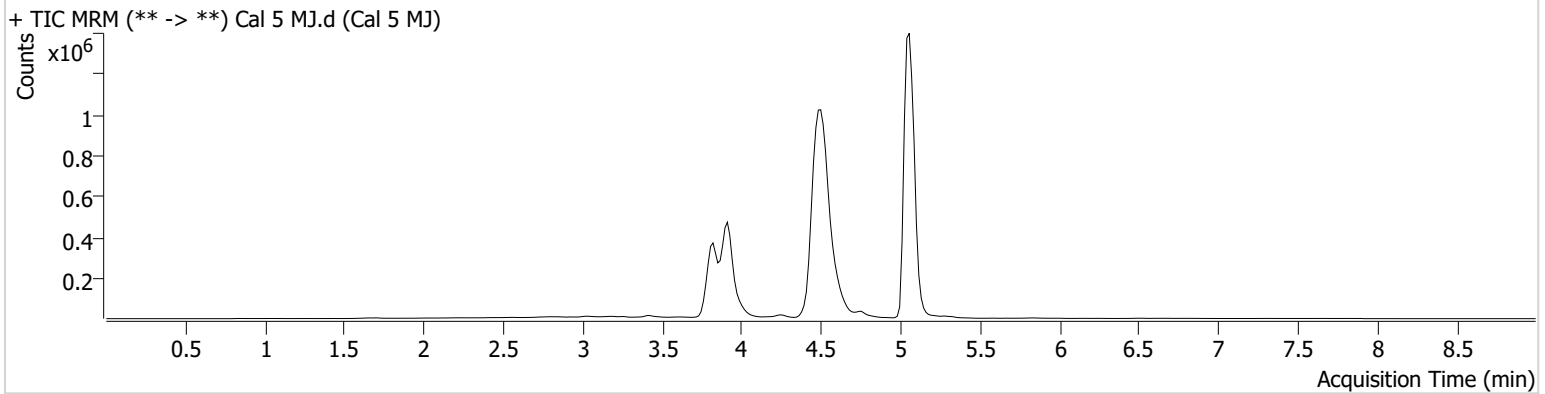| Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.060	397106	∞	23.7	∞	4719409	9.7434 ng/ml
THC-COOH	3.909	150942	2558.56	215.2	4271.78	435204	49.4697 ng/ml
THC-OH	3.820	200542	∞	12.0	40.21	1192735	9.7331 ng/ml

AM #27 Cannabinoids Quant. Results

TS

Batch results   D:\MassHunter\Data\2024\AM 27 28\050224 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update   5/9/2024 10:56:18 AM

Instrument	Falco (069901)	**Data File**	Cal 5 MJ.d
Type	Cal	**Sample**	Cal 5 MJ
Acq. Method	AM 27 Agilent Method.m	**Operator**	Tamara Salazar
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	5/2/2024 1:05:13 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)

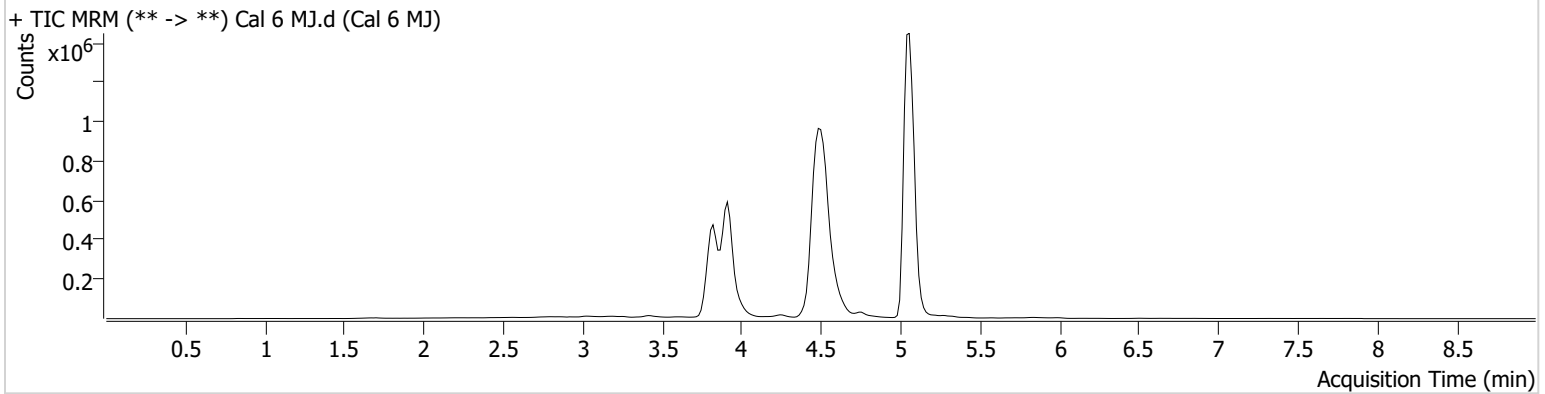| Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.060	1064271	6278.38	25.2	∞	4977162	24.3493 ng/ml
THC-COOH	3.909	230031	2099.57	213.0	2724.55	453665	71.7437 ng/ml
THC-OH	3.820	512692	∞	13.0	∞	1209386	24.3375 ng/ml

AM #27 Cannabinoids Quant. Results

Batch results   D:\MassHunter\Data\2024\AM 27 28\050224 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update 5/9/2024 10:56:18 AM

Instrument	Falco (069901)	**Data File**	Cal 6 MJ.d
Type	Cal	**Sample**	Cal 6 MJ
Acq. Method	AM 27 Agilent Method.m	**Operator**	Tamara Salazar
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	5/2/2024 1:18:19 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)

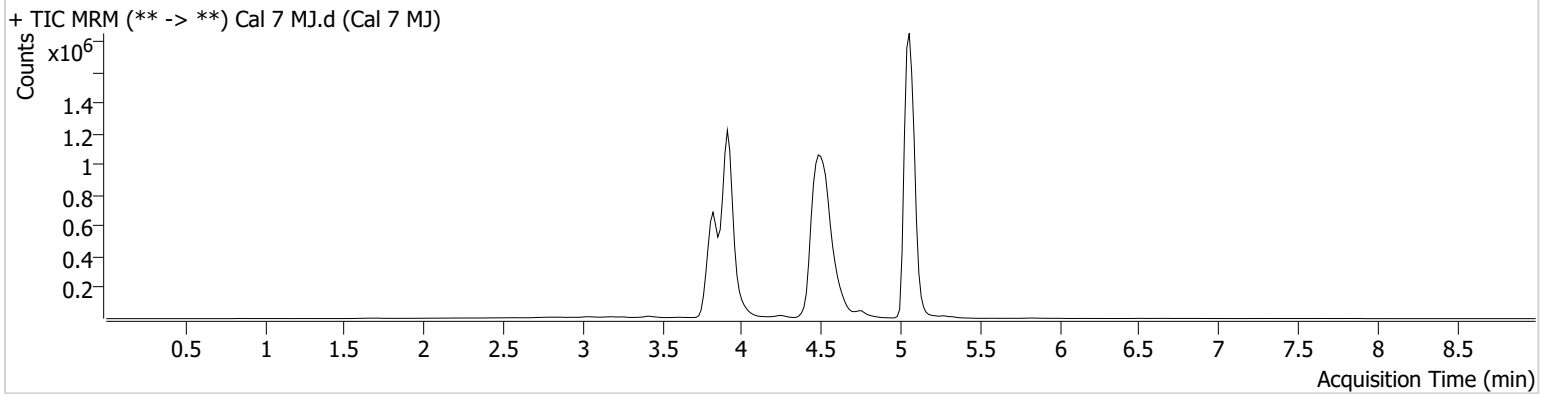| Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.060	1892021	∞	24.4	∞	4254703	50.3493 ng/ml
THC-COOH	3.909	291510	1965.23	219.2	∞	421524	97.3944 ng/ml
THC-OH	3.820	1023070	∞	13.0	∞	1173799	49.8967 ng/ml

AM #27 Cannabinoids Quant. Results

TS

Batch results   D:\MassHunter\Data\2024\AM 27 28\050224 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update   5/9/2024 10:56:18 AM

Instrument	Falco (069901)	**Data File**	Cal 7 MJ.d
Type	Cal	**Sample**	Cal 7 MJ
Acq. Method	AM 27 Agilent Method.m	**Operator**	Tamara Salazar
Sample Position	P1-G1	**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	5/2/2024 1:31:23 PM		
Sample Info.			

Sample Chromatogram

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

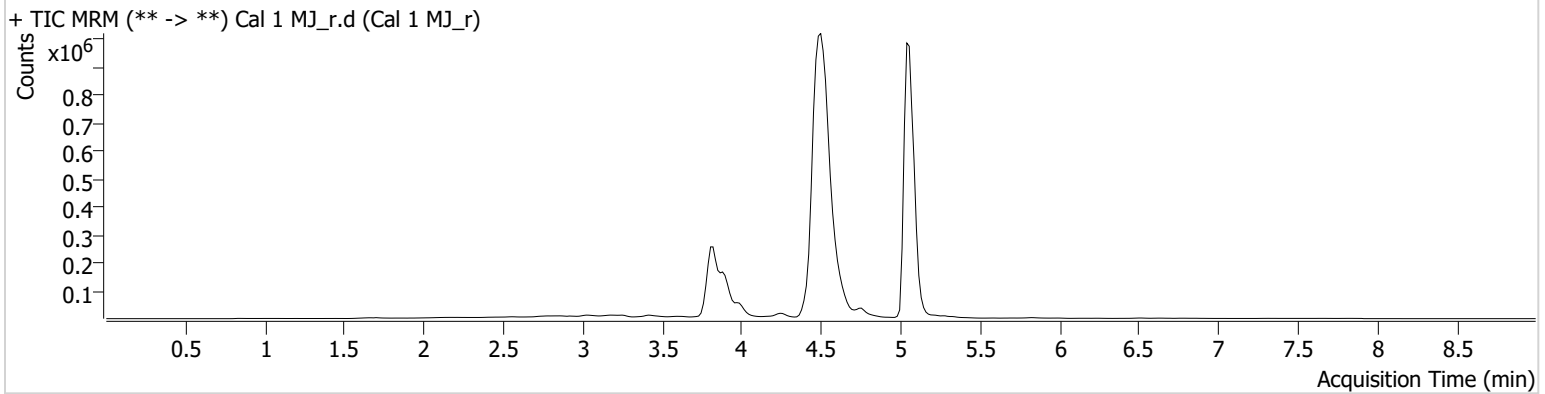| Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.060	3474979	∞	26.1	∞	3896465	100.7078 ng/ml
THC-COOH	3.909	696817	∞	214.8	19437.41	378650	257.0873 ng/ml
THC-OH	3.820	2021751	∞	13.1	∞	1144581	100.9840 ng/ml

AM #27 Cannabinoids Quant. Results

TS

Batch results   D:\MassHunter\Data\2024\AM 27 28\050224 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update 5/9/2024 10:56:18 AM

Instrument	Falco (069901)	**Data File**	Cal 1 MJ_r.d
Type	Cal	**Sample**	Cal 1 MJ_r
Acq. Method	AM 27 Agilent Method.m	**Operator**	Tamara Salazar
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	5/2/2024 2:37:43 PM		
Sample Info.			

Sample Chromatogram

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

Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.060	31792	479.53	26.7	∞	4255060	1.1084 ng/ml
THC-COOH	3.909	14003	110.21	223.7	220.61	445387	5.6242 ng/ml
THC-OH	3.820	18517	∞	12.7	11.21	1168627	1.0380 ng/ml