REVIEWED
By Celena Shrum at 2:53 pm, Sep 10, 2024

TS 9/10/2024

Worklist: 6916

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION	
M2024-3216	4	BCK	AM 27 Blood THC Quant by LC-QQQ	
M2024-3231	1	BCK	AM 27 Blood THC Quant by LC-QQQ	
M2024-3239	1	BCK	AM 27 Blood THC Quant by LC-QQQ	
M2024-3275	3	BCK	AM 27 Blood THC Quant by LC-QQQ	
P2024-2439	1	BCK	AM 27 Blood THC Quant by LC-QQQ	
P2024-2463	1	BCK	AM 27 Blood THC Quant by LC-QQQ	
P2024-2471	1	BCK	AM 27 Blood THC Quant by LC-QQQ	
P2024-2473	1	BCK	AM 27 Blood THC Quant by LC-QQQ	
P2024-2474	1	BCK	AM 27 Blood THC Quant by LC-QQQ	
P2024-2511	1	BCK	AM 27 Blood THC Quant by LC-QQQ	
P2024-2513	1	BCK	AM 27 Blood THC Quant by LC-QQQ	
P2024-2515	1	BCK	AM 27 Blood THC Quant by LC-QQQ	
P2024-2517	1	BCK	AM 27 Blood THC Quant by LC-QQQ	
P2024-2566	1	BCK	AM 27 Blood THC Quant by LC-QQQ	

TS

AM# 27: Quantitation of THC and Metabolites in Blood and Urine by LC-MS/MS

Extraction Date: 09/05/2024
Plate lot#: 240513
Mobile phase A: 0.1% Formic Acid in LCMS Water
Blank Blood Lot: Lampire 24C52816
Column: UCT Selectra DA 100 x 2.1mm 3um

Analyst: Tamara Salazar
Plate Retest Date: 11/13/2024
Mobile phase B: 0.1% Formic acid in Acetonitrile
Blank Urine Lot:
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. Using a calibrated pipette, pipette 1000µL blood or 1000µL urine in wells of analytical (standards) plate. **Pipette ID: 42**
☐ 3. Urine hydrolysis add **100 ul BG turbo, and 200 ul BG turbo buffer** to the urine samples in wells of the analytical plate.
☒ 4. Add **500µL of 0.1% formic acid in water** in the wells of the analytical plate.
☒ 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
☒ 6. Transfer **700-800µL of blood+acid or urine+acid** mixture to corresponding wells of SLE+ plate. Amount transferred: **750 µL**
☒ 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. 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: THC-OH - 3-100--calibrator 1 dropped due to poor response

TS

	1	2	3	4	5	6
A	IS + Cal. 1	IS + QC_1		P2024-2566-1	P2024-2463-1	IS + QC_1
B	IS + Cal. 2			P2024-2517-1	P2024-2439-1	IS + Cal. 7
C	IS + Cal. 3			P2024-2515-1	M2024-3275-3	IS + Cal. 6
D	IS + Cal. 4			P2024-2513-1	M2024-3239-1	IS + Cal. 5
E	IS + Cal. 5			P2024-2511-1	M2024-3231-1	IS + Cal. 4
F	IS + Cal. 6			P2024-2474-1	M2024-3216-4	IS + Cal. 3
G	IS + Cal. 7			P2024-2473-1	Neg Blood	IS + Cal. 2
H	IS + QC_1			P2024-2471-1	IS + QC_1	IS + Cal. 1

All wells to contain 100 µl of residual DMSO

TS

AM #27 Cannabinoids Quant. Results

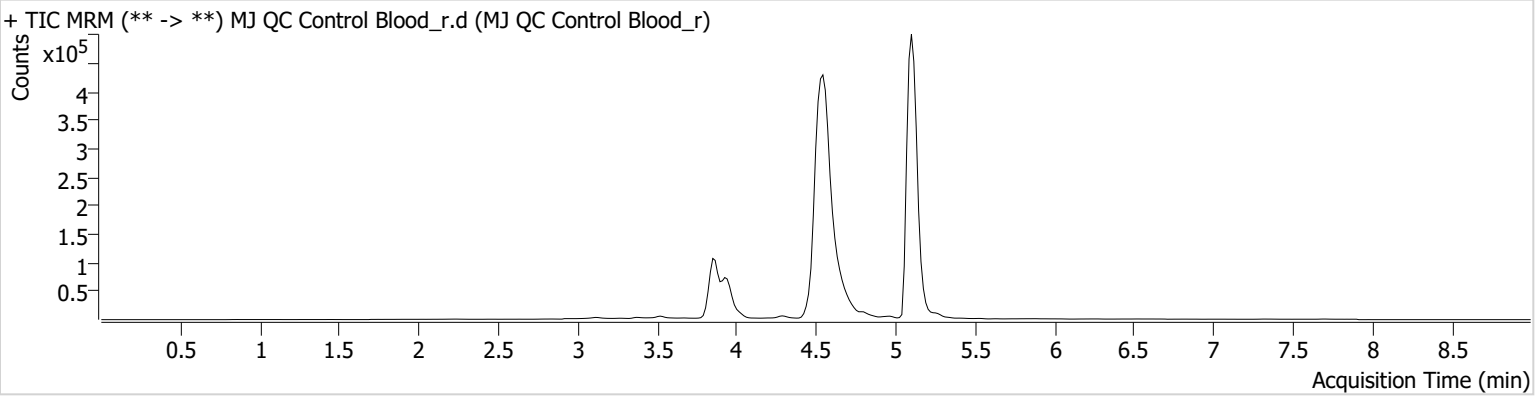
Batch results D:\MassHunter\Data\2024\AM 27 28\090524 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update 9/10/2024 1:37:58 PM

This is the original injection. The sample was not reinjected. --09/10/2024 TS

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**	Tamara Salazar
Sample Position	P5-A6	**Comment**	
Injection Volume	10		
Acq. Date-Time	9/5/2024 4:09:58 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



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.120	99328	∞	27.4	∞	1975018	5.0648 ng/ml
THC-COOH	3.954	15082	708.81	237.1	280.55	175012	14.6739 ng/ml
THC-OH	3.865	35071	∞	14.0	491.47	416888	5.5533 ng/ml

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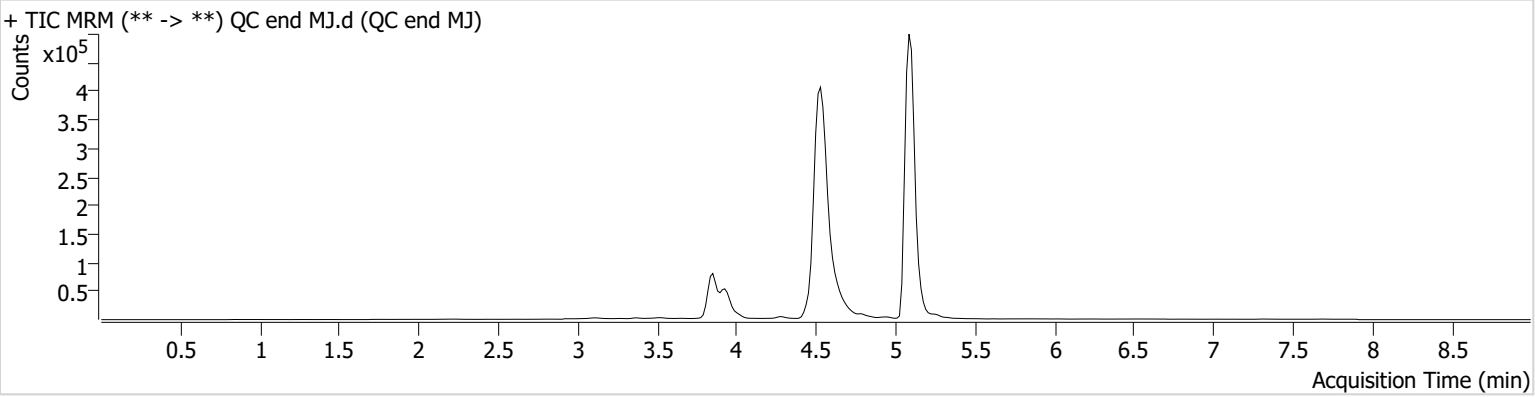
AM #27 Cannabinoids Quant. Results

Batch results D:\MassHunter\Data\2024\AM 27 28\090524 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update 9/10/2024 1:37:58 PM

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	P5-H5	**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	9/5/2024 11:09:26 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.105	92211	∞	27.5	∞	1889914	4.9177 ng/ml
THC-COOH	3.939	11026	330.02	231.2	224.72	123037	15.2683 ng/ml
THC-OH	3.850	24683	∞	13.9	119.84	302365	5.3859 ng/ml

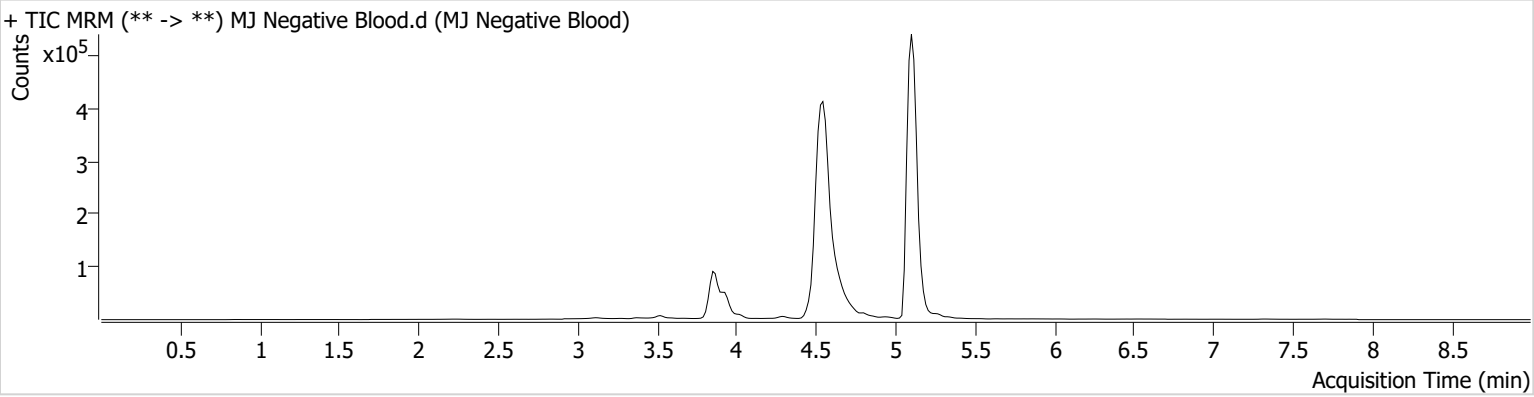
TS

AM #27 Cannabinoids Quant. Results

Batch results	D:\MassHunter\Data\2024\AM 27 28\090524 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update	9/10/2024 1:37:58 PM

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	P5-G5	**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	9/5/2024 4:36:12 PM		
Sample Info.			

Sample Chromatogram



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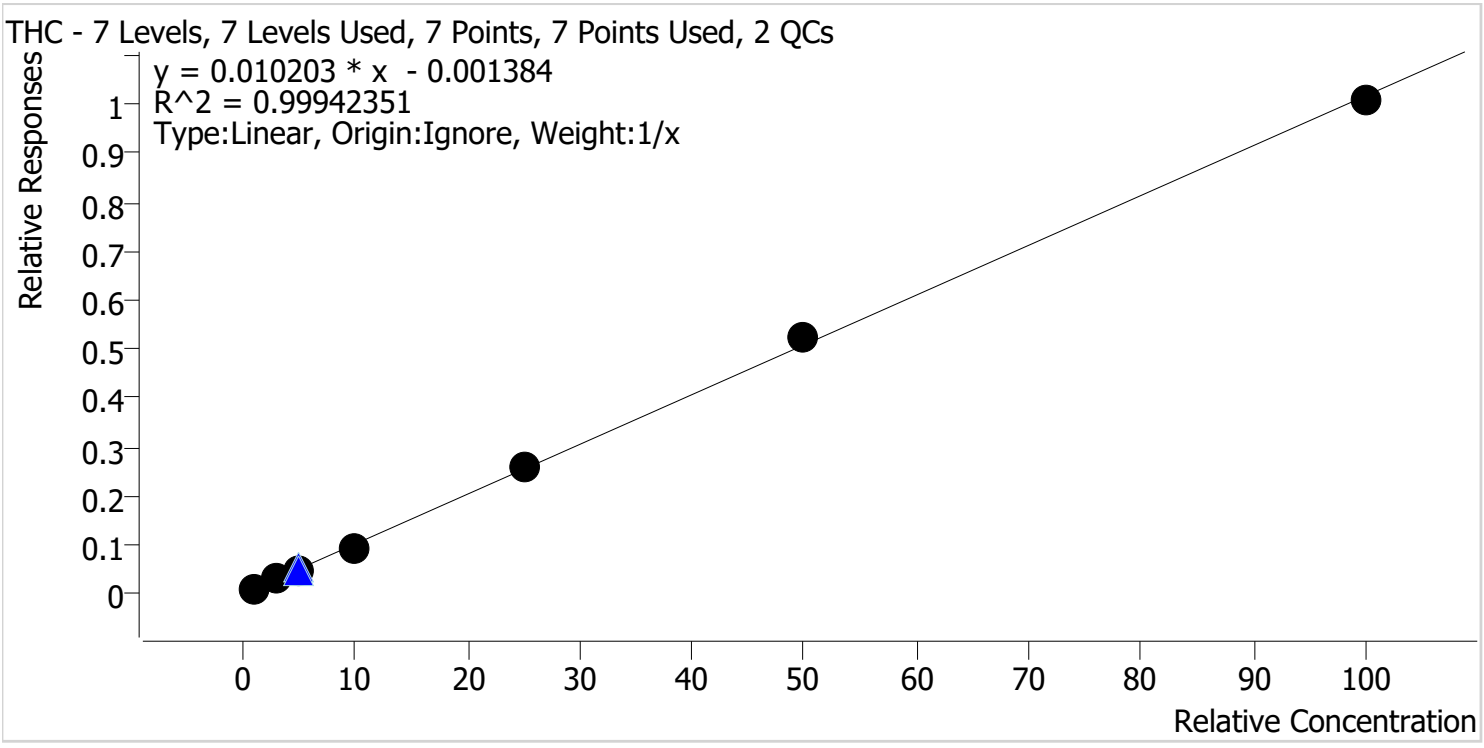
AM #27 Cannabinoids Quant. Calibration Curve Report

Batch results	D:\MassHunter\Data\2024\AM 27 28\090524 AM 27 28 TS\QuantResults\AM 27.batch.bin
Last Cal. Update	9/10/2024 1:37 PM
Analyst Name	ISP\Datastor
Analyte	THC
Internal Standard	THC-D3

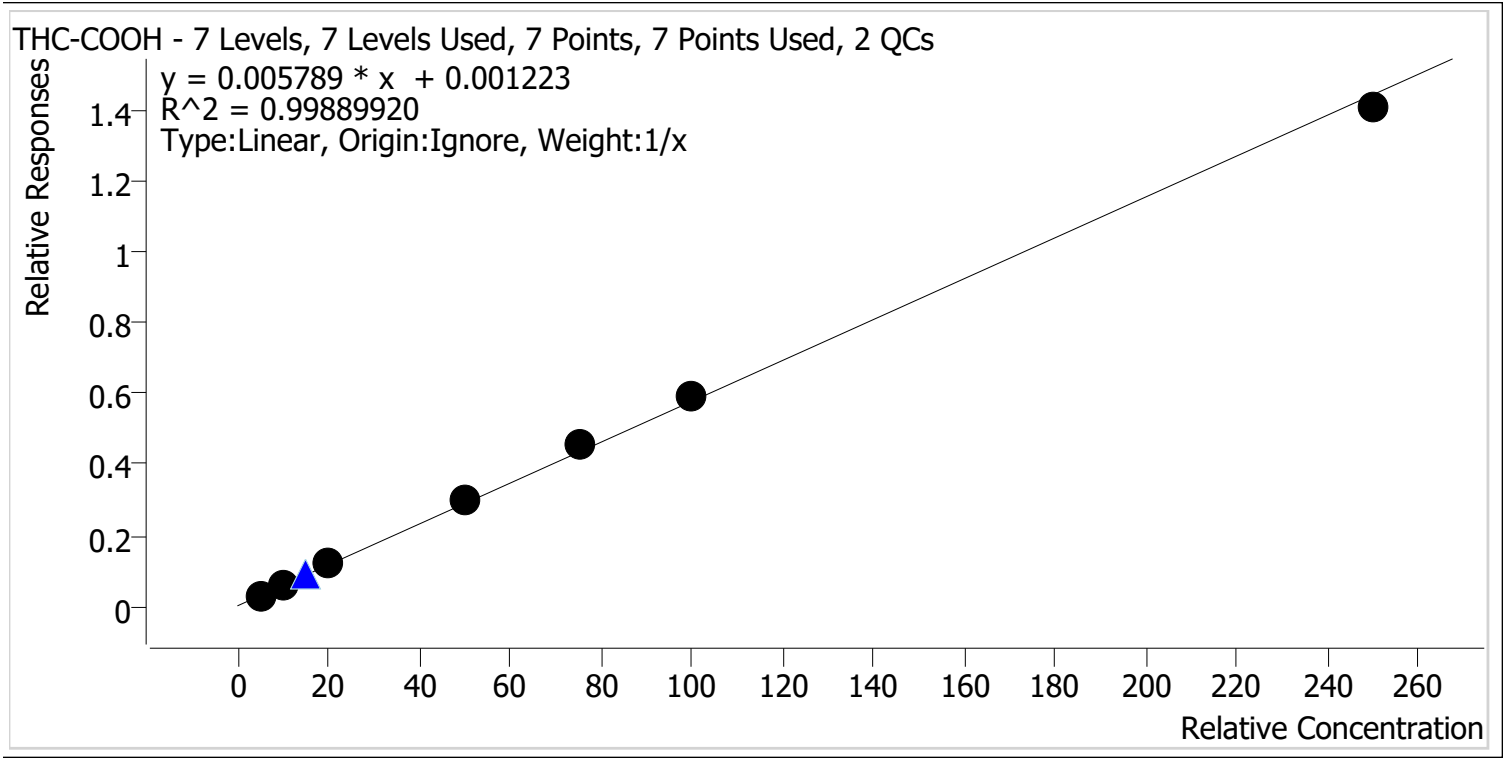


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	✔	1.0	1.0	103.2
Cal 2 MJ	2	✔	3.0	3.1	101.9
Cal 3 MJ	3	✔	5.0	4.9	98.7
Cal 4 MJ	4	✔	10.0	9.4	93.6
Cal 5 MJ	5	✔	25.0	25.2	100.8
Cal 6 MJ	6	✔	50.0	51.4	102.8
Cal 7 MJ	7	✔	100.0	99.0	99.0

TS

AM #27 Cannabinoids Quant. Calibration Curve Report

Batch results	D:\MassHunter\Data\2024\AM 27 28\090524 AM 27 28 TS\QuantResults\AM 27.batch.bin
Last Cal. Update	9/10/2024 1:37 PM
Analyst Name	ISP\Datastor
Analyte	THC-COOH
Internal Standard	THC-COOH-D9



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	✔	5.0	4.8	95.5
Cal 2 MJ	2	✔	10.0	9.8	97.9
Cal 3 MJ	3	✔	20.0	20.1	100.5
Cal 4 MJ	4	✔	50.0	50.7	101.5
Cal 5 MJ	5	✔	75.0	78.8	105.0
Cal 6 MJ	6	✔	100.0	102.2	102.2
Cal 7 MJ	7	✔	250.0	243.6	97.5

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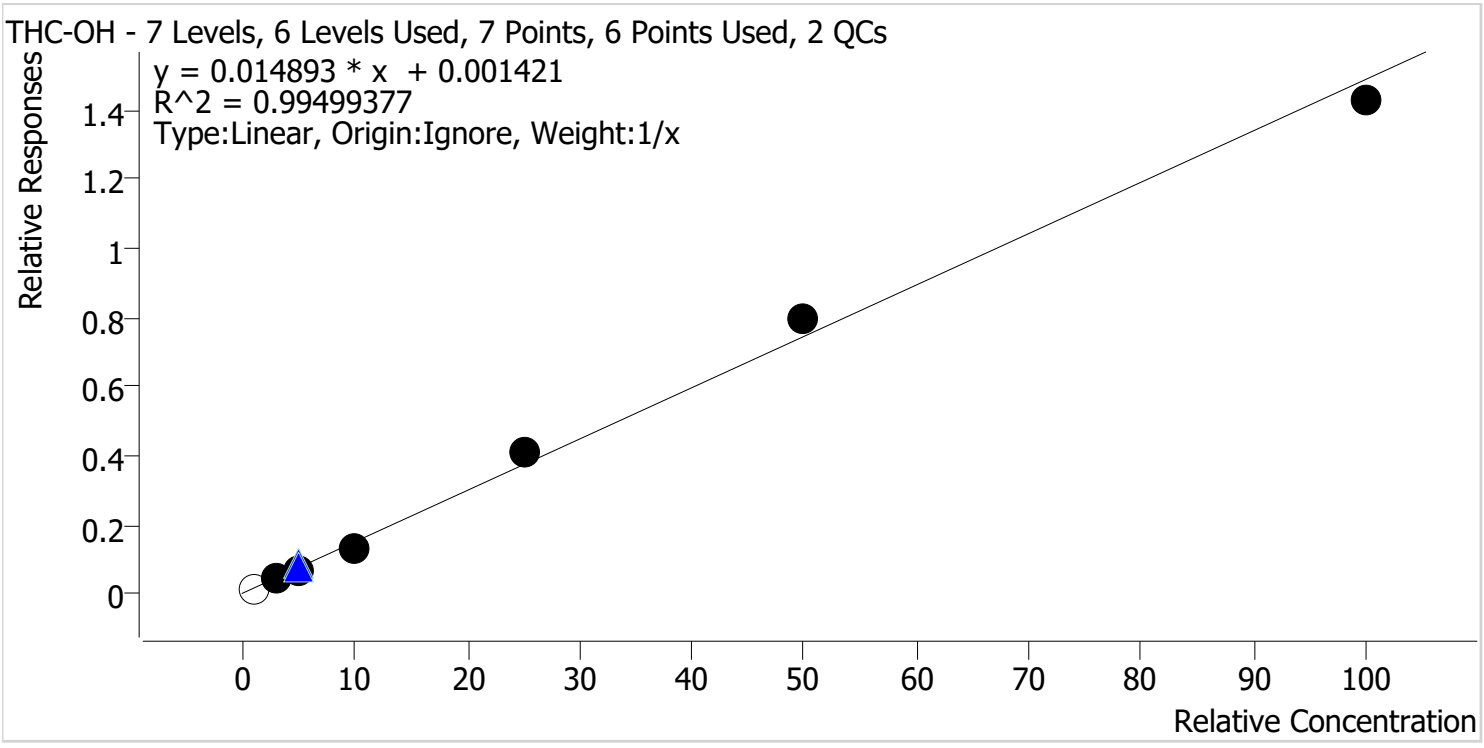
AM #27 Cannabinoids Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2024\AM 27 28\090524 AM 27 28 TS\QuantResults\AM 27.batch.bin
Last Cal. Update 9/10/2024 1:37 PM
Analyst Name ISP\Datastor
Analyte THC-OH **Internal Standard** THC-OH-D3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	✗	1.0	0.9	85.5
Cal 2 MJ	2	✔	3.0	3.2	108.0
Cal 3 MJ	3	✔	5.0	4.5	91.0
Cal 4 MJ	4	✔	10.0	9.0	90.3
Cal 5 MJ	5	✔	25.0	27.1	108.4
Cal 6 MJ	6	✔	50.0	53.2	106.5
Cal 7 MJ	7	✔	100.0	95.8	95.8

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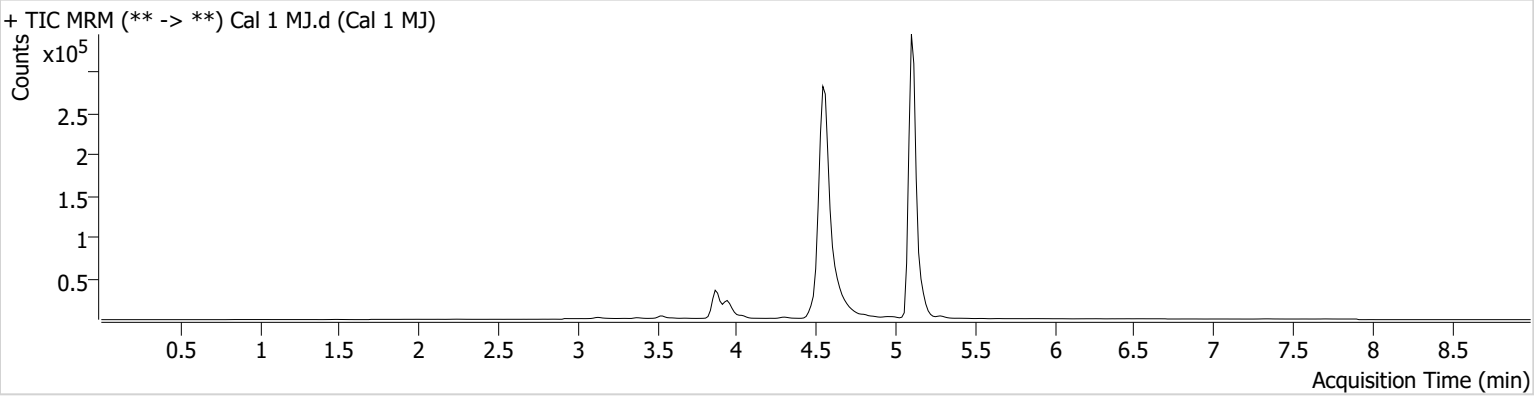
AM #27 Cannabinoids Quant. Results

Batch results D:\MassHunter\Data\2024\AM 27 28\090524 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update 9/10/2024 1:37:58 PM

Instrument	Falco (069901)	**Data File**	Cal 1 MJ.d
Type	Cal	**Sample**	Cal 1 MJ
Acq. Method	AM 27 Agilent Method.m	**Operator**	Tamara Salazar
Sample Position	P5-H6	**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	9/5/2024 2:24:55 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.105	9592	∞	30.5	∞	1048928	1.0319 ng/ml
THC-COOH	3.969	1740	74.02	248.8	112.45	60287	4.7741 ng/ml
THC-OH	3.881	1704	0.39 **Low**	15.1	5.10 **Low**	120451	0.8547 ng/ml

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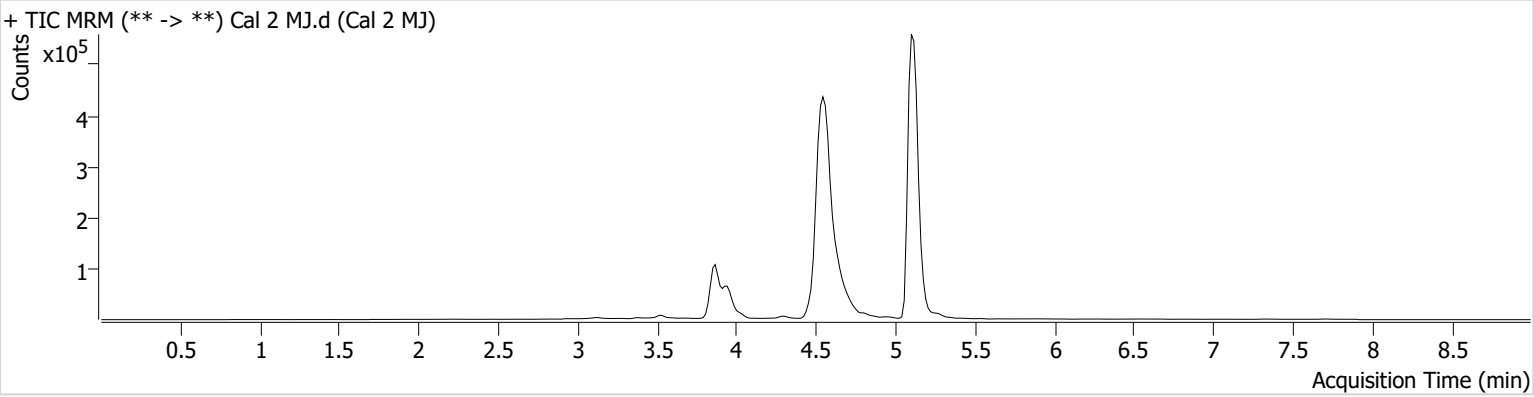
AM #27 Cannabinoids Quant. Results

Batch results D:\MassHunter\Data\2024\AM 27 28\090524 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update 9/10/2024 1:37:58 PM

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	P5-G6	**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	9/5/2024 2:38:13 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.120	67562	7664.29	27.0	144.09	2267261	3.0563 ng/ml
THC-COOH	3.954	9814	442.39	235.4	238.36	169508	9.7893 ng/ml
THC-OH	3.865	20711	76.88	13.8	171.41	416851	3.2407 ng/ml

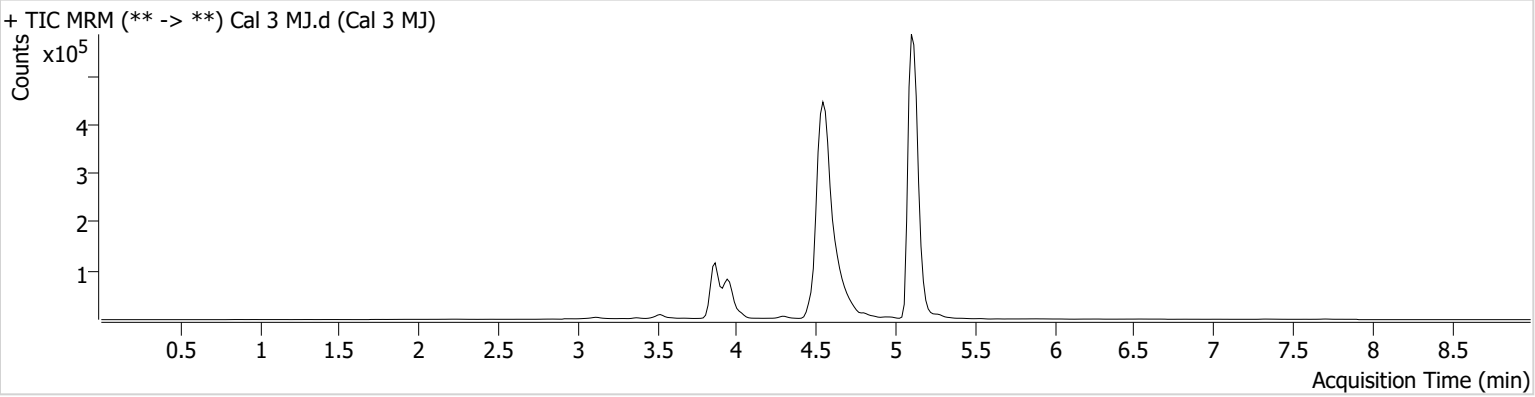
TS

AM #27 Cannabinoids Quant. Results

Batch results D:\MassHunter\Data\2024\AM 27 28\090524 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update 9/10/2024 1:37:58 PM

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	P5-F6	**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	9/5/2024 2:51:19 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.120	111234	2130.55	26.9	∞	2271783	4.9346 ng/ml
THC-COOH	3.954	20654	352.27	231.3	∞	175707	20.0929 ng/ml
THC-OH	3.865	29094	540.13	16.8	148.22	420694	4.5482 ng/ml

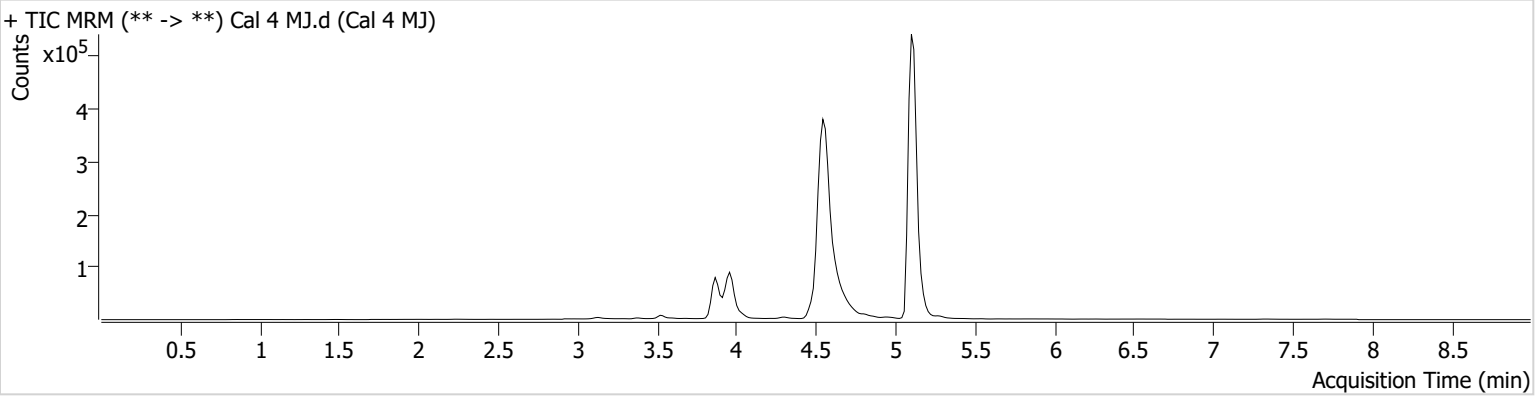
TS

AM #27 Cannabinoids Quant. Results

Batch results D:\MassHunter\Data\2024\AM 27 28\090524 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update 9/10/2024 1:37:58 PM

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	P5-E6	**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	9/5/2024 3:04:25 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.120	164331	778.37	26.2	∞	1745816	9.3612 ng/ml
THC-COOH	3.954	32232	2264.35	229.9	2016.46	109265	50.7412 ng/ml
THC-OH	3.881	33124	561.56	15.0	180.07	243773	9.0283 ng/ml

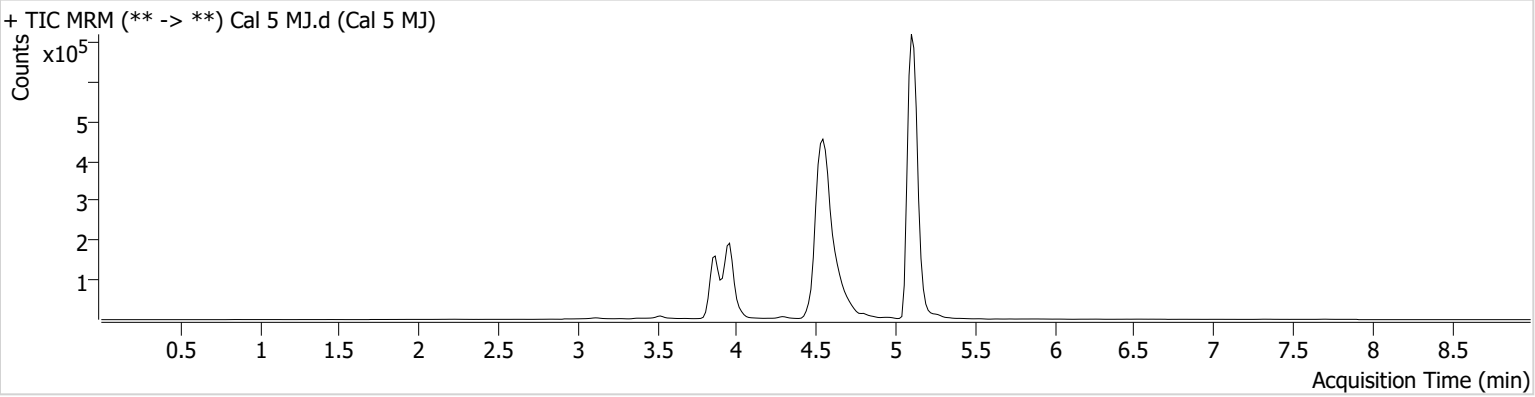
TS

AM #27 Cannabinoids Quant. Results

Batch results D:\MassHunter\Data\2024\AM 27 28\090524 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update 9/10/2024 1:37:58 PM

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	P5-D6	**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	9/5/2024 3:17:32 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.120	587594	∞	26.8	∞	2297669	25.2001 ng/ml
THC-COOH	3.954	84567	∞	227.3	∞	184920	78.7799 ng/ml
THC-OH	3.865	187620	∞	13.8	686.76	463162	27.1043 ng/ml

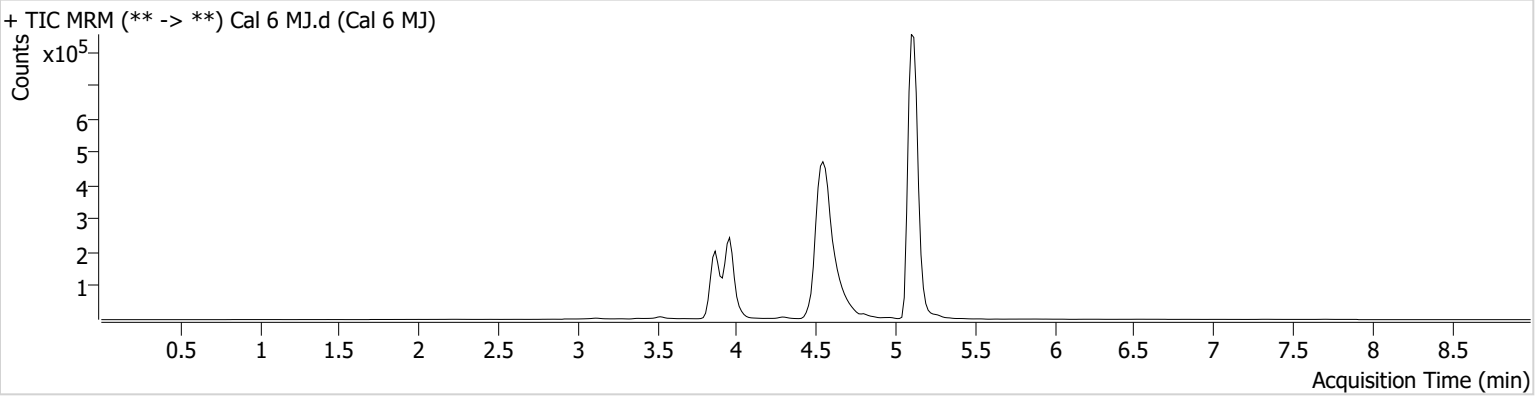
TS

AM #27 Cannabinoids Quant. Results

Batch results D:\MassHunter\Data\2024\AM 27 28\090524 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update 9/10/2024 1:37:58 PM

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	P5-C6	**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	9/5/2024 3:30:38 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.120	1137173	∞	26.5	∞	2173500	51.4142 ng/ml
THC-COOH	3.954	108974	5774.30	231.7	4066.66	183825	102.1839 ng/ml
THC-OH	3.865	359249	∞	14.2	1848.72	452322	53.2340 ng/ml

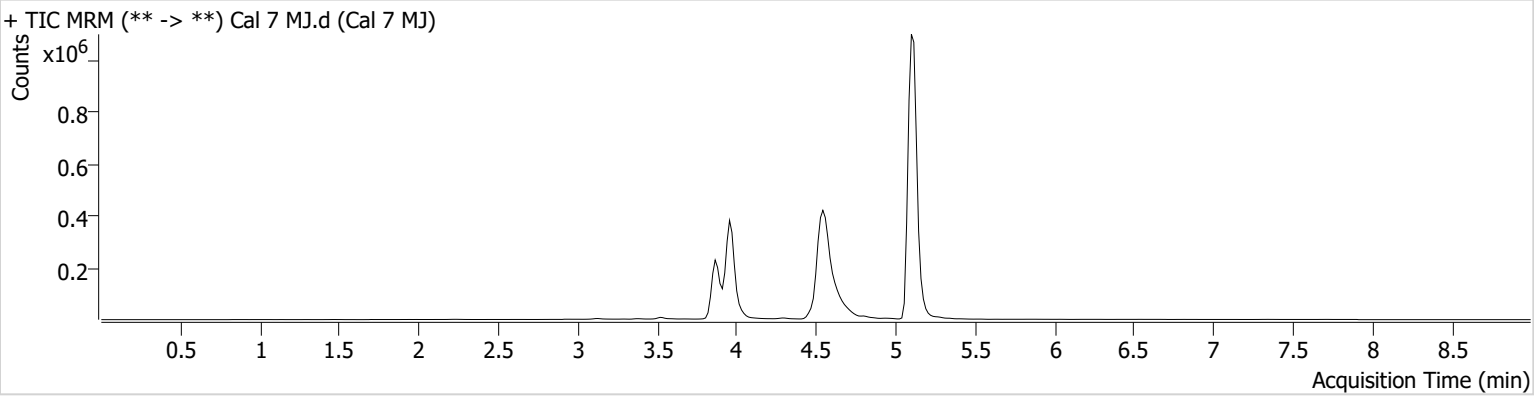
TS

AM #27 Cannabinoids Quant. Results

Batch results D:\MassHunter\Data\2024\AM 27 28\090524 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update 9/10/2024 1:37:58 PM

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	P5-B6	**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	9/5/2024 3:43:45 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.120	1846790	∞	26.9	∞	1830793	99.0017 ng/ml
THC-COOH	3.954	177524	4239.09	231.5	10535.47	125746	243.6388 ng/ml
THC-OH	3.865	444907	∞	14.0	1601.81	311379	95.8444 ng/ml