REVIEWED
By Anne Nord at 11:43 am, Oct 08, 2024

TS

10/4/2024

Worklist: 6931

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
M2024-1207	1	COBCK	AM 27 Blood THC Quant by LC-QQQ
M2024-1668	1	COBCK	AM 27 Blood THC Quant by LC-QQQ
M2024-3496	4	BCK	AM 27 Blood THC Quant by LC-QQQ
M2024-3550	1	BCK	AM 27 Blood THC Quant by LC-QQQ
M2024-3566	3	BCK	AM 27 Blood THC Quant by LC-QQQ
M2024-3567	1	BCK	AM 27 Blood THC Quant by LC-QQQ
M2024-3705	3	BCK	AM 27 Blood THC Quant by LC-QQQ
M2024-3726	1	BCK	AM 27 Blood THC Quant by LC-QQQ
M2024-3937	2	BCK	AM 27 Blood THC Quant by LC-QQQ
P2024-2716	2	BCK	AM 27 Blood THC Quant by LC-QQQ
P2024-2803	1	BCK	AM 27 Blood THC Quant by LC-QQQ
P2024-2836	1	BCK	AM 27 Blood THC Quant by LC-QQQ
P2024-2851	1	BCK	AM 27 Blood THC Quant by LC-QQQ
P2024-2891	1	BCK	AM 27 Blood THC Quant by LC-QQQ
P2024-2950	1	BCK	AM 27 Blood THC Quant by LC-QQQ
P2024-2960	1	BCK	AM 27 Blood THC Quant by LC-QQQ
P2024-2999	1	BCK	AM 27 Blood THC Quant by LC-QQQ
P2024-3003	1	BCK	AM 27 Blood THC Quant by LC-QQQ
P2024-3010	1	BCK	AM 27 Blood THC Quant by LC-QQQ
P2024-3014	1	BCK	AM 27 Blood THC Quant by LC-QQQ
P2024-3027	1	BCK	AM 27 Blood THC Quant by LC-QQQ

TS

Worklist: 6931

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
P2024-3030	2	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: 10/04/2024
Plate lot#: 240919
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: 03/19/2025
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 ratio

TS

	1	2	3	4	5	6
A	IS + Cal. 1	IS + QC_1	M2024-3726-1	P2024-2891-1	P2024-3030-2	IS + QC_1
B	IS + Cal. 2	IS + QC_2	P2024-2716-2	P2024-2950-1		IS + Cal. 7
C	IS + Cal. 3	Neg Blood	P2024-2803-1	P2024-2960-1		IS + Cal. 6
D	IS + Cal. 4	M2024-1207-1	P2024-2836-1	P2024-2999-1		IS + Cal. 5
E	IS + Cal. 5	M2024-1668-1	P2024-2851-1	P2024-3003-1		IS + Cal. 4
F	IS + Cal. 6	M2024-3496-4	M2024-3550-1	P2024-3010-1		IS + Cal. 3
G	IS + Cal. 7	M2024-3566-3	M2024-3567-1	P2024-3014-1	IS + QC_2	IS + Cal. 2
H	IS + QC_1	M2024-3705-3	M2024-3937-2	P2024-3027-1	IS + QC_1	IS + Cal. 1

All wells to contain 100 µl of residual DMSO

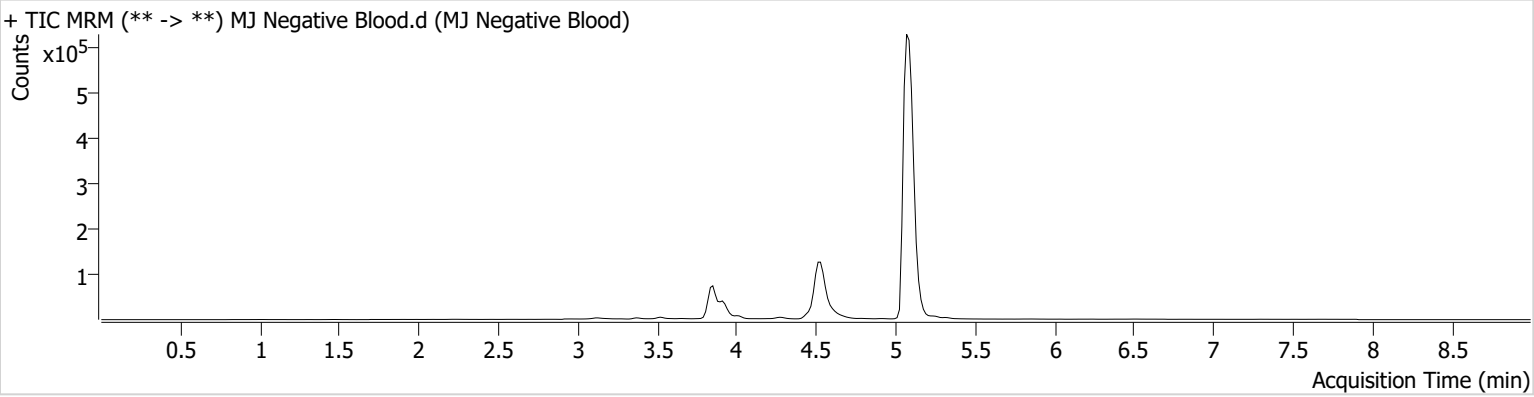
TS

AM #27 Cannabinoids Quant. Results

Batch results D:\MassHunter\Data\2024\AM 27 28\100424 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update 10/8/2024 8:20:46 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	P5-C2	**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	10/4/2024 1:47:40 PM		
Sample Info.			

Sample Chromatogram



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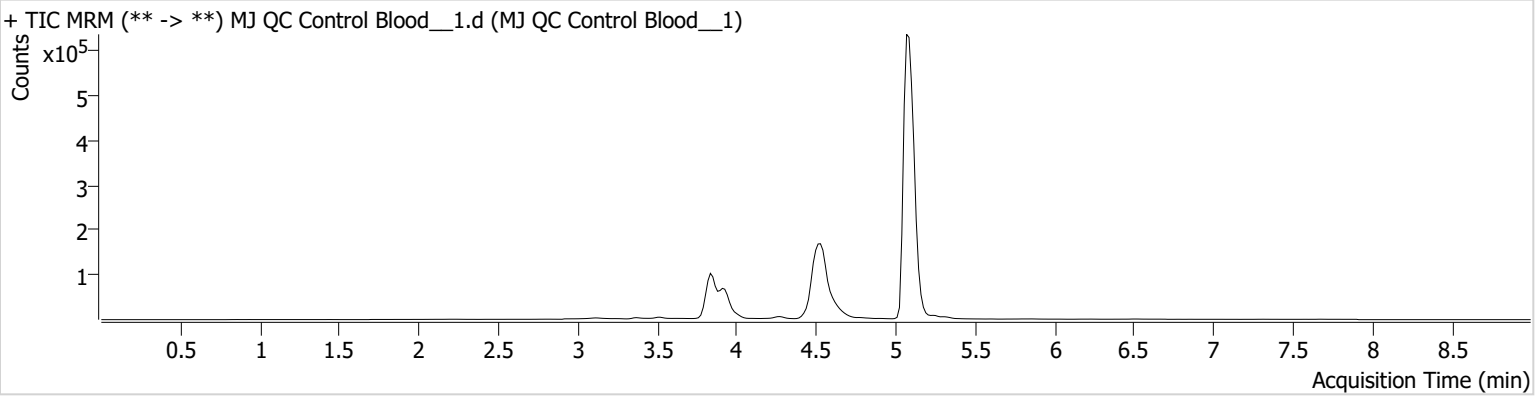
AM #27 Cannabinoids Quant. Results

Batch results D:\MassHunter\Data\2024\AM 27 28\100424 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update 10/8/2024 8:20:46 AM

Instrument	Falco (069901)	**Data File**	MJ QC Control Blood__1.d
Type	QC	**Sample**	MJ QC Control Blood__1
Acq. Method	AM 27 Agilent Method.m	**Operator**	Tamara Salazar
Sample Position	P5-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	10/4/2024 1:21:30 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.090	132055	∞	28.1	∞	2660575	5.0020 ng/ml
THC-COOH	3.924	18577	∞	198.1	738.91	158062	14.4006 ng/ml
THC-OH	3.850	35715	∞	12.7	84.19	403805	5.2035 ng/ml

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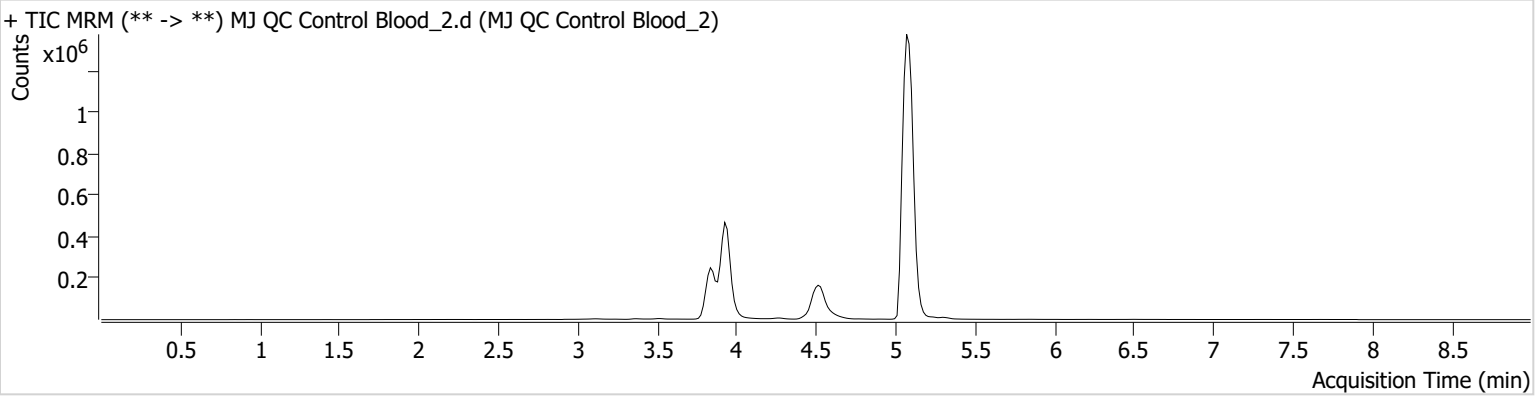
AM #27 Cannabinoids Quant. Results

Batch results D:\MassHunter\Data\2024\AM 27 28\100424 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update 10/8/2024 8:20:46 AM

Instrument	Falco (069901)	**Data File**	MJ QC Control Blood_2.d
Type	QC	**Sample**	MJ QC Control Blood_2
Acq. Method	AM 27 Agilent Method.m	**Operator**	Tamara Salazar
Sample Position	P5-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	10/4/2024 11:50:04 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.090	2786951	∞	27.2	∞	2803374	97.5076 ng/ml
THC-COOH	3.924	281620	∞	200.8	16707.81	140901	243.2862 ng/ml
THC-OH	3.835	641387	∞	14.0	3806.52	396543	100.8283 ng/ml

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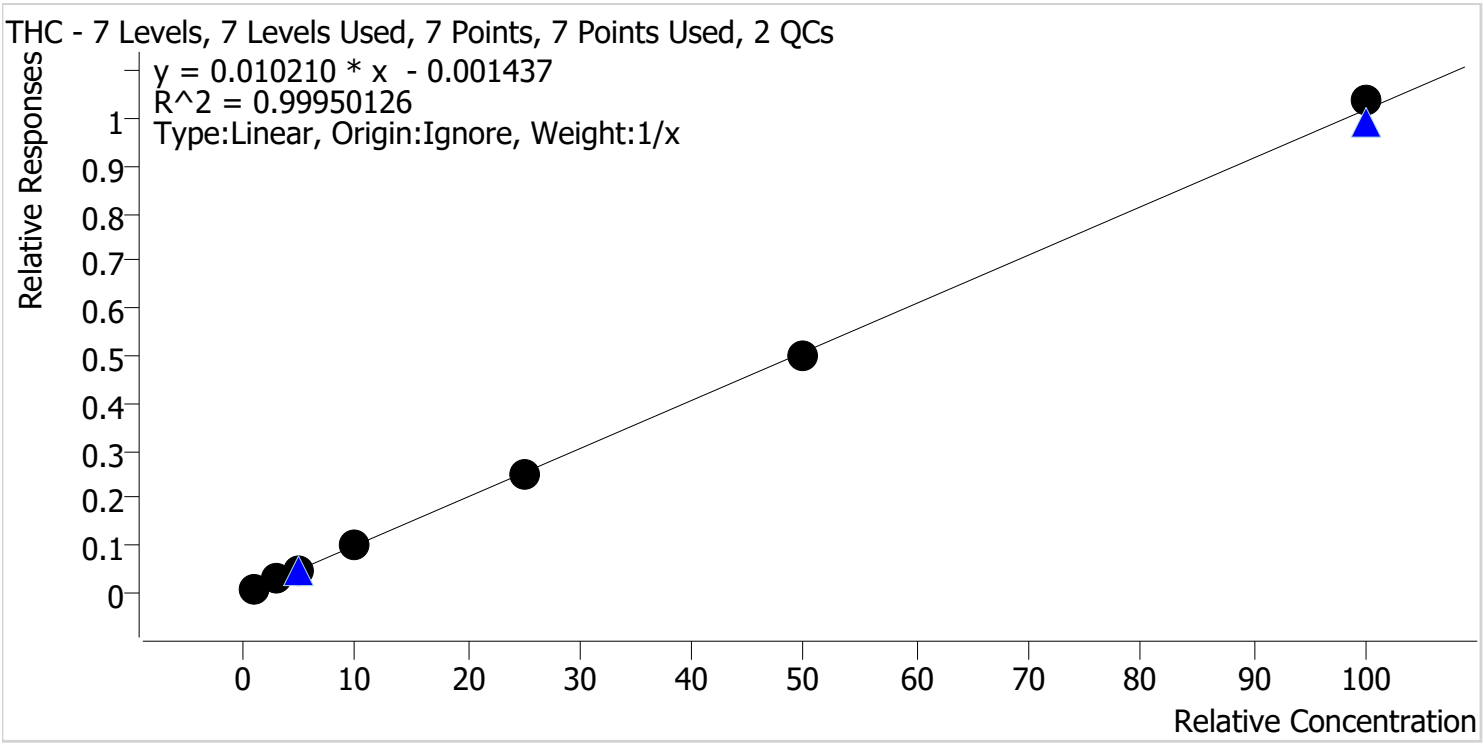
AM #27 Cannabinoids Quant. Calibration Curve Report

Batch results	D:\MassHunter\Data\2024\AM 27 28\100424 AM 27 28 TS\QuantResults\AM 27.batch.bin
Last Cal. Update	10/8/2024 8:20 AM
Analyst Name	ISP\Datastor
Analyte	THC
Internal Standard	THC-D3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	✔	1.0	1.1	109.0
Cal 2 MJ	2	✔	3.0	2.9	97.6
Cal 3 MJ	3	✔	5.0	4.9	97.7
Cal 4 MJ	4	✔	10.0	9.8	97.8
Cal 5 MJ	5	✔	25.0	24.5	98.2
Cal 6 MJ	6	✔	50.0	48.9	97.9
Cal 7 MJ	7	✔	100.0	101.8	101.8

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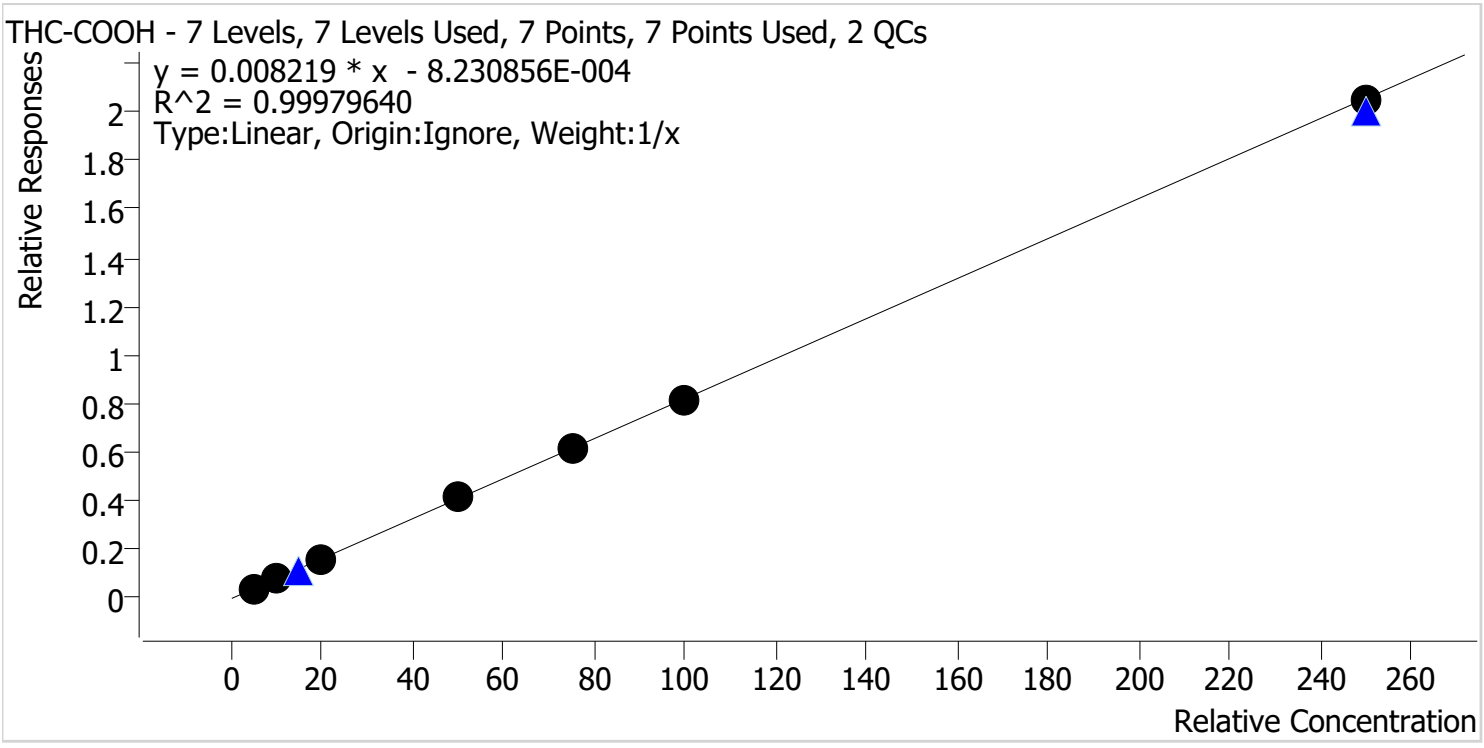
AM #27 Cannabinoids Quant. Calibration Curve Report

Batch results	D:\MassHunter\Data\2024\AM 27 28\100424 AM 27 28 TS\QuantResults\AM 27.batch.bin
Last Cal. Update	10/8/2024 8:20 AM
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	5.0	99.1
Cal 2 MJ	2	✔	10.0	9.8	98.5
Cal 3 MJ	3	✔	20.0	19.9	99.6
Cal 4 MJ	4	✔	50.0	51.8	103.6
Cal 5 MJ	5	✔	75.0	75.3	100.4
Cal 6 MJ	6	✔	100.0	99.3	99.3
Cal 7 MJ	7	✔	250.0	248.9	99.5

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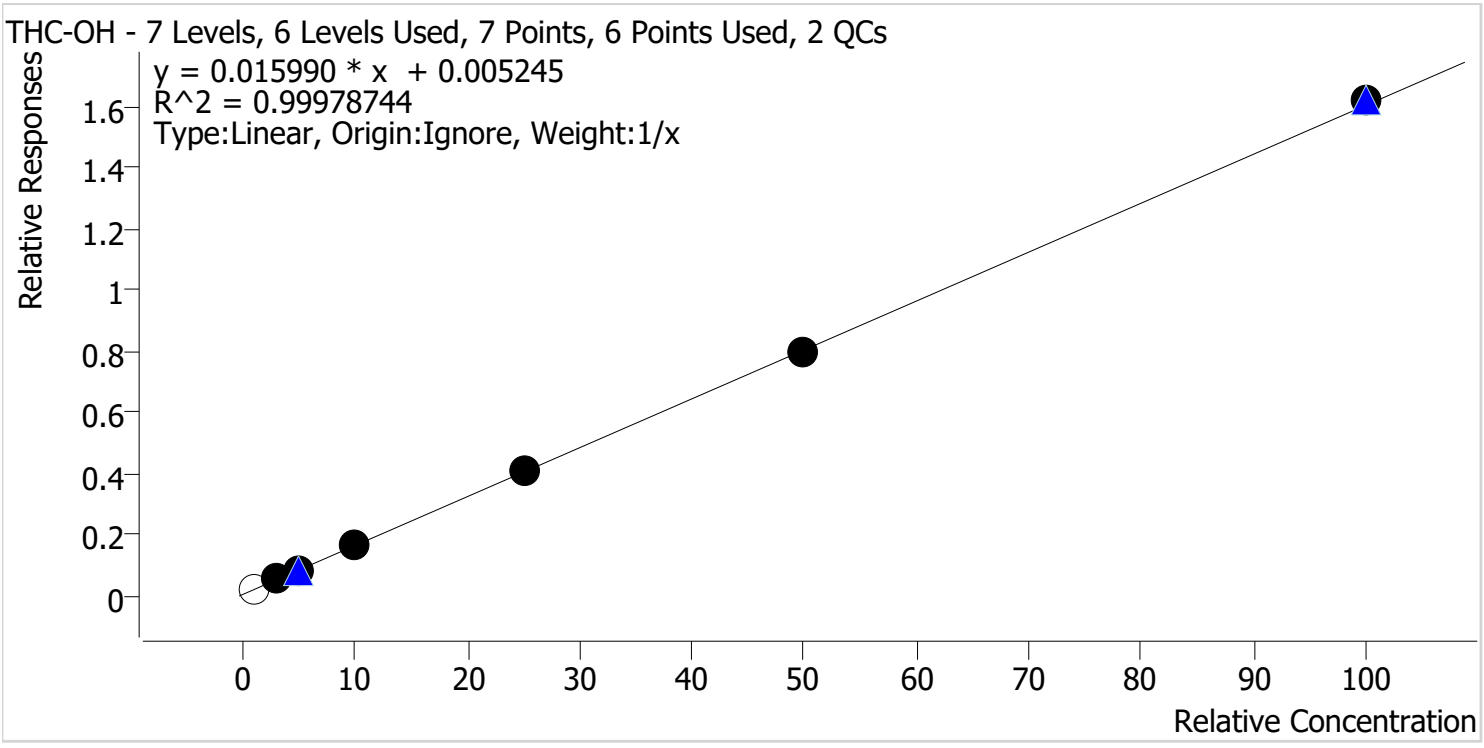
AM #27 Cannabinoids Quant. Calibration Curve Report

Batch results	D:\MassHunter\Data\2024\AM 27 28\100424 AM 27 28 TS\QuantResults\AM 27.batch.bin
Last Cal. Update	10/8/2024 8:20 AM
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	1.2	117.1
Cal 2 MJ	2	✔	3.0	3.1	104.0
Cal 3 MJ	3	✔	5.0	4.9	97.5
Cal 4 MJ	4	✔	10.0	9.9	99.4
Cal 5 MJ	5	✔	25.0	24.9	99.7
Cal 6 MJ	6	✔	50.0	49.2	98.4
Cal 7 MJ	7	✔	100.0	100.9	100.9

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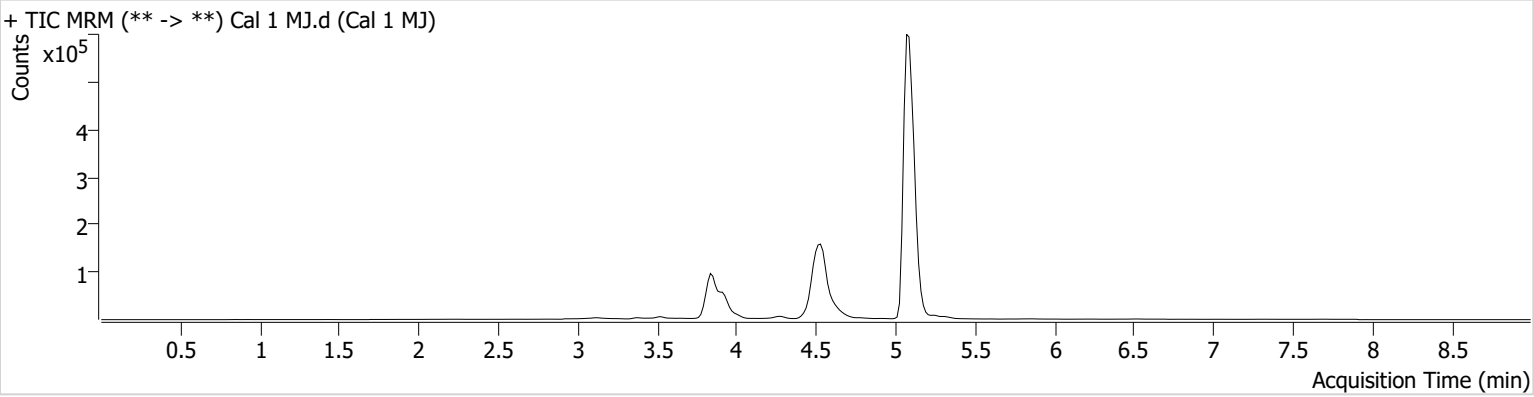
AM #27 Cannabinoids Quant. Results

Batch results D:\MassHunter\Data\2024\AM 27 28\100424 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update 10/8/2024 8:20:46 AM

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-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	10/4/2024 11:36:39 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.090	25727	387.08	31.0	∞	2653934	1.0902 ng/ml
THC-COOH	3.939	6424	143.62	199.0	312.48	161015	4.9541 ng/ml
THC-OH	3.850	9927	∞	10.3 **Low**	20.09	414107	1.1712 ng/ml

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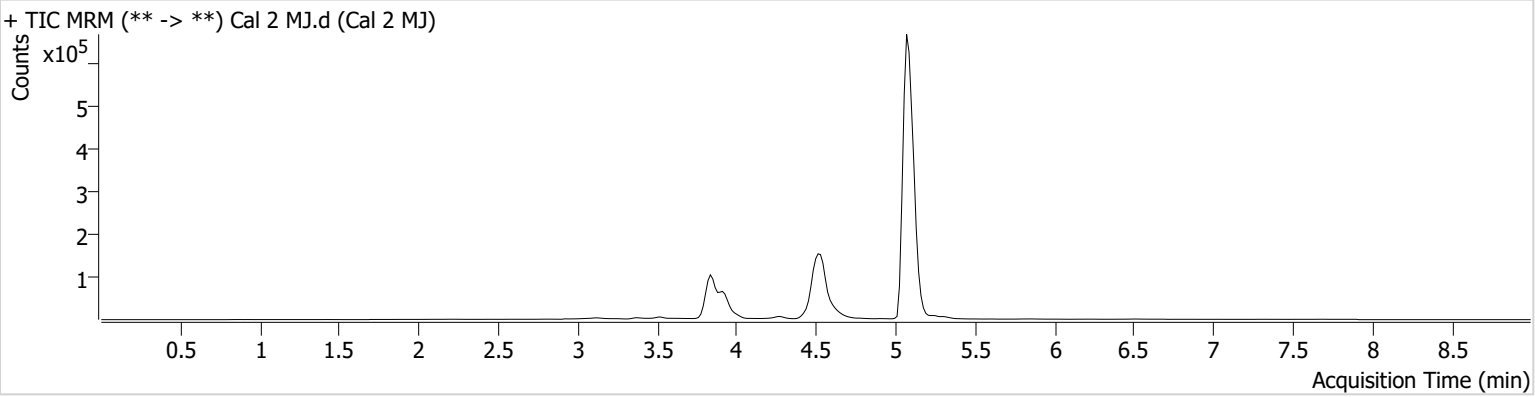
AM #27 Cannabinoids Quant. Results

Batch results D:\MassHunter\Data\2024\AM 27 28\100424 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update 10/8/2024 8:20:46 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	P5-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	10/4/2024 11:49:54 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.090	81123	∞	29.2	∞	2850134	2.9284 ng/ml
THC-COOH	3.939	12993	∞	196.2	461.37	162190	9.8470 ng/ml
THC-OH	3.835	23622	∞	12.2	23.02	428502	3.1196 ng/ml

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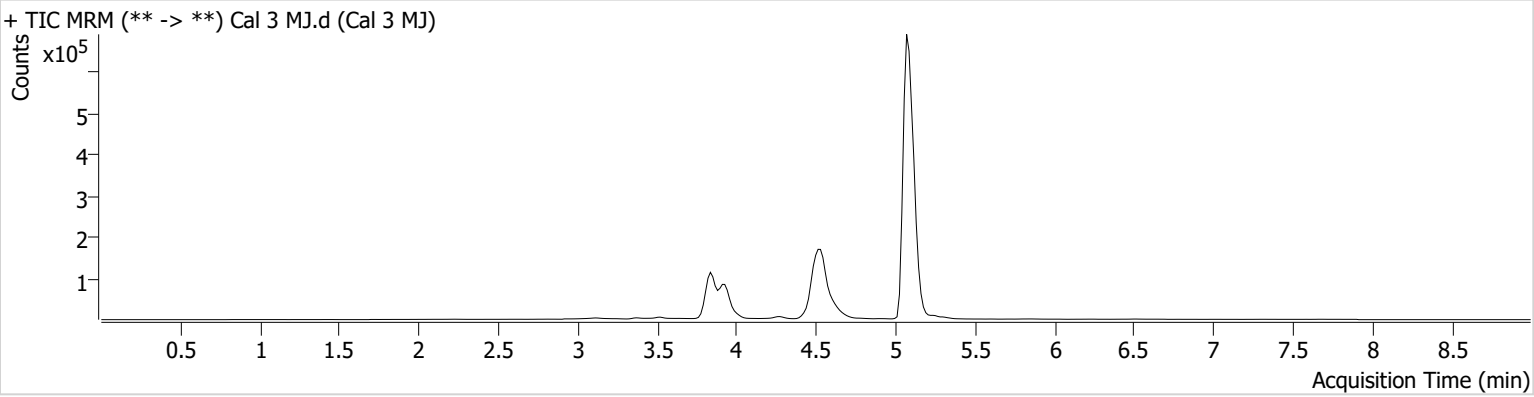
AM #27 Cannabinoids Quant. Results

Batch results D:\MassHunter\Data\2024\AM 27 28\100424 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update 10/8/2024 8:20:46 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	P5-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	10/4/2024 12:02:58 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.090	139627	∞	28.1	∞	2882210	4.8855 ng/ml
THC-COOH	3.924	28892	328.94	187.3	∞	177387	19.9176 ng/ml
THC-OH	3.835	38185	∞	13.2	165.88	458804	4.8771 ng/ml

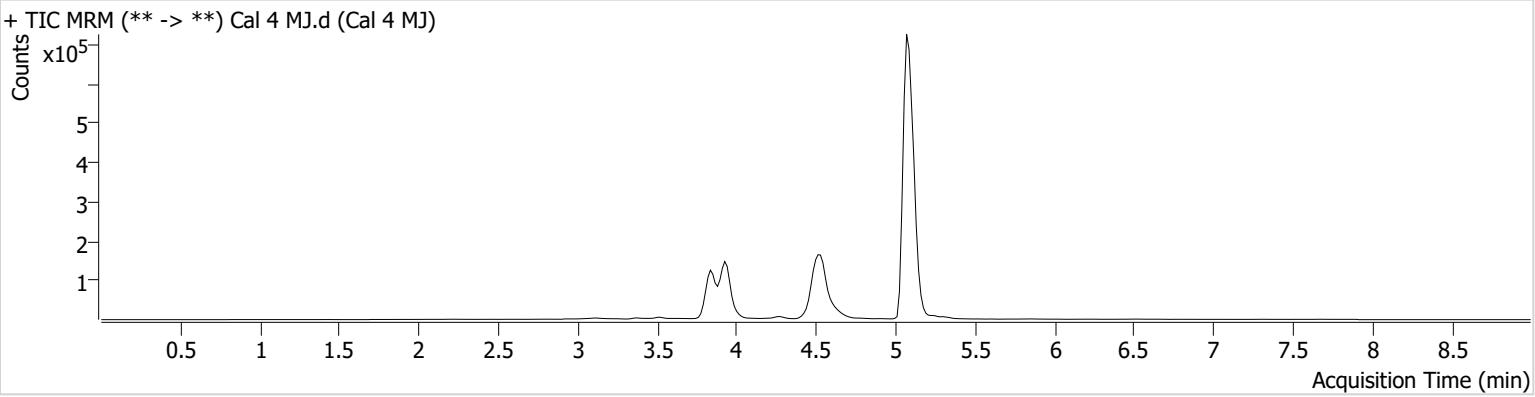
TS

AM #27 Cannabinoids Quant. Results

Batch results D:\MassHunter\Data\2024\AM 27 28\100424 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update 10/8/2024 8:20:46 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	P5-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	10/4/2024 12:16:02 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.090	282161	∞	27.3	∞	2867734	9.7773 ng/ml
THC-COOH	3.924	73056	1414.73	191.3	∞	171936	51.7988 ng/ml
THC-OH	3.850	76608	∞	13.7	239.48	466517	9.9419 ng/ml

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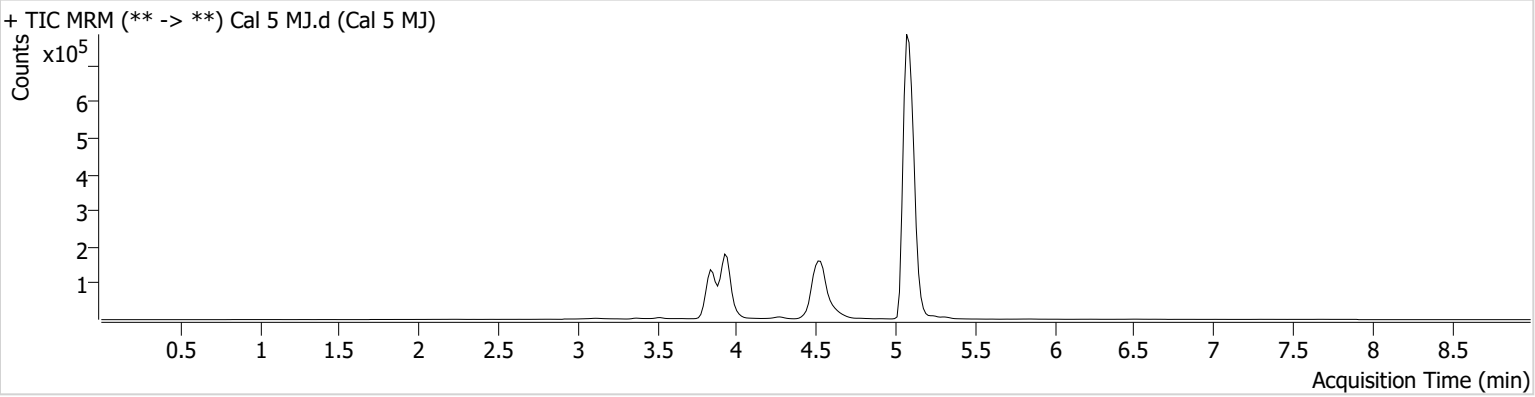
AM #27 Cannabinoids Quant. Results

Batch results D:\MassHunter\Data\2024\AM 27 28\100424 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update 10/8/2024 8:20:46 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	P5-E1	**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	10/4/2024 12:29:08 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.090	672245	∞	27.0	∞	2697973	24.5443 ng/ml
THC-COOH	3.939	96872	1277.12	194.8	3314.91	156744	75.2963 ng/ml
THC-OH	3.850	168658	∞	13.6	∞	417562	24.9329 ng/ml

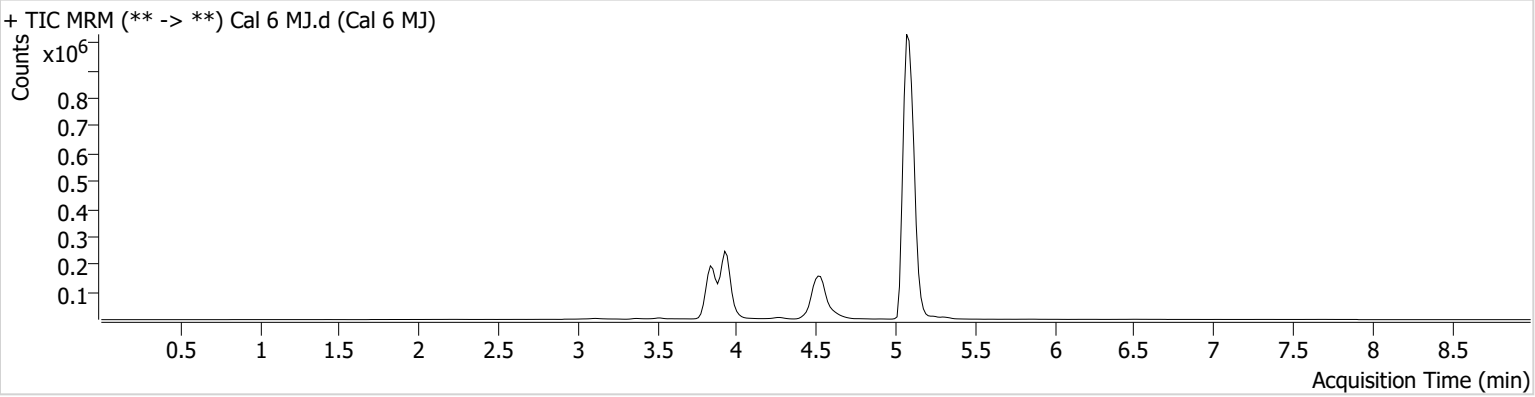
TS

AM #27 Cannabinoids Quant. Results

Batch results D:\MassHunter\Data\2024\AM 27 28\100424 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update 10/8/2024 8:20:46 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	P5-F1	**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	10/4/2024 12:42:14 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.090	1462233	∞	27.0	∞	2935173	48.9324 ng/ml
THC-COOH	3.924	135033	∞	197.7	6563.93	165587	99.3209 ng/ml
THC-OH	3.850	366417	∞	14.1	1665.47	462765	49.1917 ng/ml

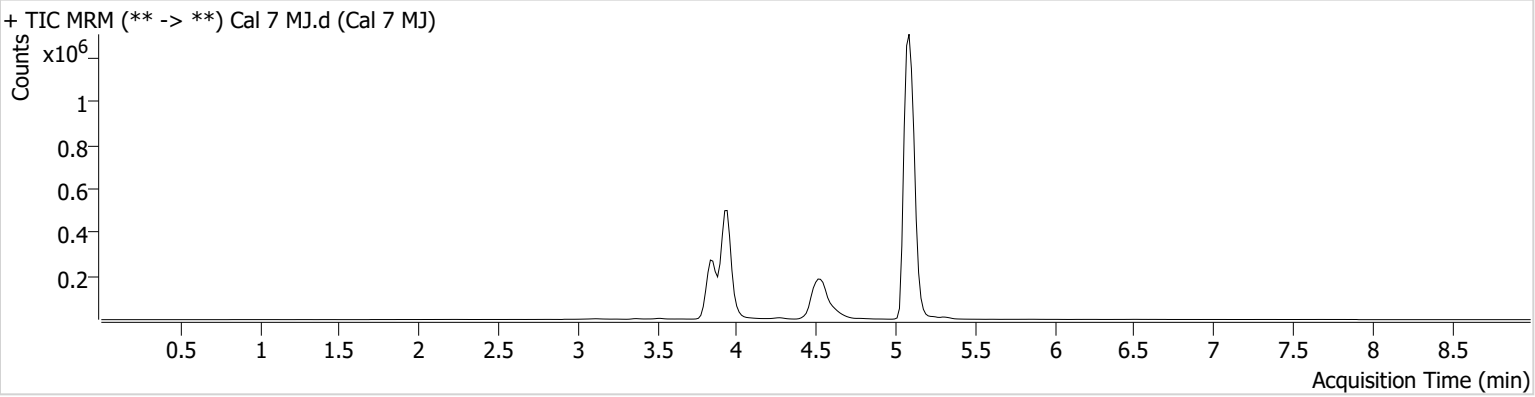
TS

AM #27 Cannabinoids Quant. Results

Batch results D:\MassHunter\Data\2024\AM 27 28\100424 AM 27 28 TS\QuantResults\AM 27.batch.bin
Calibration Last Update 10/8/2024 8:20:46 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	P5-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	10/4/2024 12:55:19 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.090	2624200	∞	27.1	∞	2527168	101.8419 ng/ml
THC-COOH	3.939	312842	∞	195.3	∞	153012	248.8653 ng/ml
THC-OH	3.850	714683	∞	13.5	1993.55	441385	100.9368 ng/ml