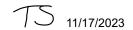


Worklist: 6529

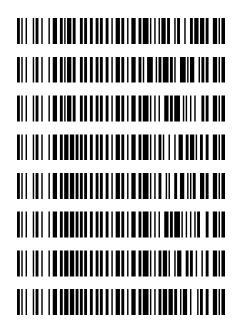
LAB CASE	ITEM	ITEM TYPE	DESCRIPTION	
P2023-2558	3	вск	AM 27 Blood THC Quant by LC-QQQ	
P2023-2564	1	BCK	AM 27 Blood THC Quant by LC-QQQ	
P2023-2567	1	BLOOD	AM 27 Blood THC Quant by LC-QQQ	
P2023-2740	1	BCK	AM 27 Blood THC Quant by LC-QQQ	
P2023-2784	1	BCK	AM 27 Blood THC Quant by LC-QQQ	
P2023-2891	1	вск	AM 27 Blood THC Quant by LC-QQQ	
P2023-3057	1	ВСК	AM 27 Blood THC Quant by LC-QQQ	

Samples associated with worklist 6529 were originally ran on 10/19/2023. However, the sample data did not acquire properly and resulted in poor chromatography. The samples were re-extracted and run with worklist 6563 on 11/17/2023.



Worklist: 6563

LAB CASE IT	ΓΕM <u></u>	ITEM TYPE	DESCRIPTION
M2023-3910	2	ВСК	AM 27 Blood THC Quant by LC-QQQ
M2023-4195	2	UCK	AM 27 Urine Cannabinoids Confirmation by LC-QQQ
M2023-4503	2	ВСК	AM 27 Blood THC Quant by LC-QQQ
P2023-3193	1	ВСК	AM 27 Blood THC Quant by LC-QQQ
P2023-3216	1	ВСК	AM 27 Blood THC Quant by LC-QQQ
P2023-3304	1	BCK	AM 27 Blood THC Quant by LC-QQQ
P2023-3321	1	BLOOD	AM 27 Blood THC Quant by LC-QQQ
P2023-3345	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: 11/17/2023 Analyst: <u>Tamara Salazar</u>
Plate lot#: 230627 Plate Retest Date: 12/27/2023

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

Blank Blood Lot: Lampire 23E52981 Blank Urine Lot: POC021022 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.

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.
- 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.
- 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.
- Σ 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)
- \boxtimes 9. Wait 5 minutes.
- ≥ 10. Add 2.25mL MTBE. (Add in 3 increments of 750uL)
- \boxtimes 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)
- \boxtimes 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

- \boxtimes 2. Make any necessary integration changes, Curve weighting of Linear 1/x with r² values \ge 0.98 for each analyte
- ☑ 4. Did all QCs pass for each analyte? (if not, describe in comments section)
- ☑ 6. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS:

THC - 3-100 -- calibrator 1 dropped due to ratio

Analytical Plate Map

	1	2	3	4	5	6
Α	IS + Cal. 1	IS + QC_1		P2023-3345-1	P2023-2891-1	IS + QC_1
В	IS + Cal. 2			P2023-3321-1	P2023-2784-1	IS + Cal. 7
С	IS + Cal. 3			P2023-3304-1	P2023-2740-1	IS + Cal. 6
D	IS + Cal. 4			P2023-3216-1	P2023-2567-1	IS + Cal. 5
E	IS + Cal. 5			P2023-3193-1	P2023-2564-1	IS + Cal. 4
F	IS + Cal. 6			M2023-4503-2	P2023-2558-3	IS + Cal. 3
G	IS + Cal. 7		M2023-4195-2	M2023-3910-2	Neg Blood	IS + Cal. 2
Н	IS + QC_1		Neg Urine	P2023-3057-1	IS + QC_1	IS + Cal. 1

All wells to contain 100 μl of residual DMSO

	1	2	3	4	5	6
А				P2023-3345-1	P2023-2891-1	IS + QC_1
В				P2023-3321-1*	P2023-2784-1	IS + Cal. 7
С				P2023-3304-1	P2023-2740-1	IS + Cal. 6
D			P2023-3321-1	P2023-3216-1	P2023-2567-1	IS + Cal. 5
E			P2023-3193-1	P2023-3193-1*	P2023-2564-1	IS + Cal. 4
F			P2023-2558-3*	M2023-4503-2	P2023-2558-3*	IS + Cal. 3
G			M2023-4195-2	M2023-3910-2	Neg Blood	IS + Cal. 2
Н			Neg Urine	P2023-3057-1	IS + QC_1	IS + Cal. 1

^{*}Moved during step 7 of the extraction due to clotting.

D:\MassHunter\Data\2023\AM 27 28\111723 AM 27 28 TS\QuantResults\AM 27.batch.bin **Batch results** Calibration Last Update 11/21/2023 8:06:30 AM

Instrument **Type** Acq. Method **Sample Position** Falco (069901) Sample

AM 27 Agilent Method.m

Injection Volume

Acq. Date-Time Sample Info.

P1-G5

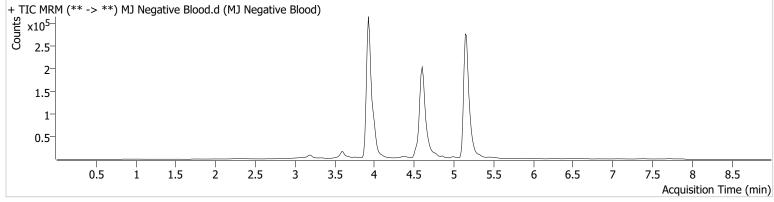
11/18/2023 3:00:07 AM

Sample Operator Comment

Data File

MJ Negative Blood.d MJ Negative Blood Tamara Salazar

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.



D:\MassHunter\Data\2023\AM 27 28\111723 AM 27 28 TS\QuantResults\AM 27.batch.bin **Batch results** Calibration Last Update 11/21/2023 8:06:30 AM

Instrument **Type** Acq. Method Falco (069901) QC

AM 27 Agilent Method.m

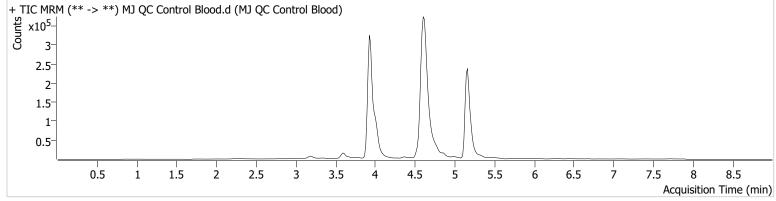
11/18/2023 2:33:53 AM

Sample Position Injection Volume P1-A6 10

Acq. Date-Time Sample Info.

Data File Sample Operator Comment MJ QC Control Blood.d MJ QC Control Blood Tamara Salazar

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.



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.165	31932	426.88	29.1	∞	843020	4.5158 ng/ml
THC-COOH	4.015	17179	∞	233.1	245.07	177066	15.3816 ng/ml
THC-OH	3.941	73210	∞	13.8	235.06	1149314	4.5178 ng/ml

D:\MassHunter\Data\2023\AM 27 28\111723 AM 27 28 TS\QuantResults\AM 27.batch.bin **Batch results** Calibration Last Update 11/21/2023 8:06:30 AM

Instrument **Type** Acq. Method Falco (069901) QC

AM 27 Agilent Method.m

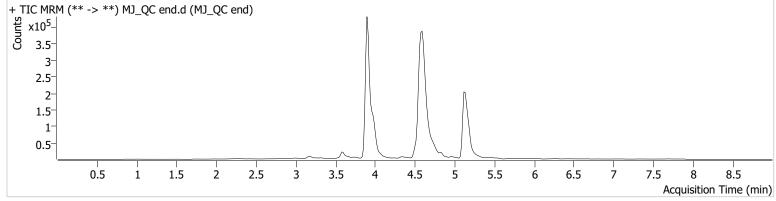
11/18/2023 10:52:07 AM

Sample Position P1-A6 **Injection Volume** 10

Acq. Date-Time Sample Info.

Data File Sample Operator Comment MJ_QC end.d MJ_QC end Tamara Salazar

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.



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.135	31373	∞	30.7	∞	795804	4.6753 ng/ml
THC-COOH	3.985	20279	793.17	251.8	∞	223707	14.4263 ng/ml
THC-OH	3.911	91415	∞	13.9	∞	1458703	4.4479 ng/ml

D:\MassHunter\Data\2023\AM 27 28\111723 AM 27 28 TS\QuantResults\AM 27.batch.bin **Batch results** Calibration Last Update 11/21/2023 8:06:30 AM

Instrument **Type** Acq. Method **Sample Position Injection Volume** Falco (069901) Sample

AM 27 Agilent Method.m

11/18/2023 9:59:42 AM

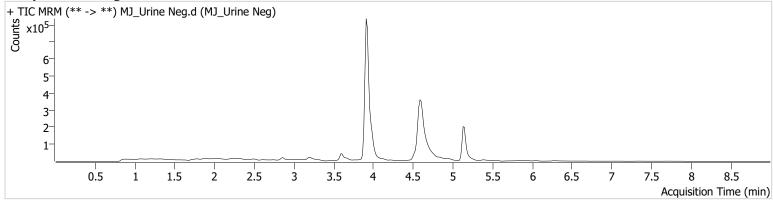
P1-H3 10

Acq. Date-Time Sample Info.

Data File Sample Operator Comment

MJ_Urine Neg.d MJ_Urine Neg Tamara Salazar

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.



Batch results D:\MassHunter\Data\2023\AM 27 28\111723 AM 27 28 TS\QuantResults\AM 27.batch.bin 11/21/2023 8:06:30 AM

Instrument Type Falco (069901)

QC

Acq. Method AM 27 Agilent Method.m Sample Position P1-H5

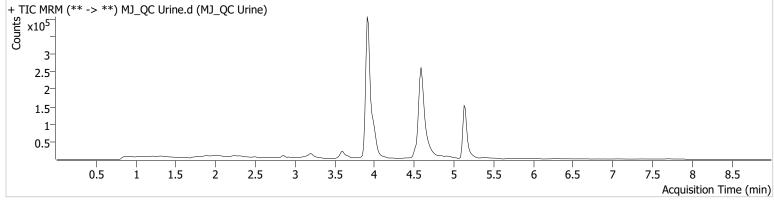
Sample Position Injection Volume Acq. Date-Time

Sample Info.

10 11/18/2023 9:33:29 AM Data File Sample Operator Comment

MJ_QC Urine.d MJ_QC Urine Tamara Salazar

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.



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.150	20872	∞	31.4	∞	529800	4.6725 ng/ml
THC-COOH	4.000	150 4 5	∞	241.8	681.90	165262	14.4840 ng/ml
THC-OH	3.926	96529	∞	11.7	∞	1404138	4.8602 ng/ml



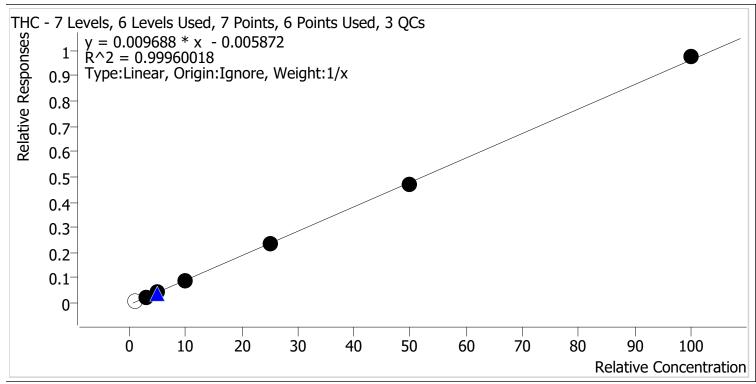
AM #27 Cannabinoids Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2023\AM 27 28\111723 AM 27 28 TS\QuantResults\AM 27.batch.bin

Last Cal. Update 11/21/2023 8:06 AM

Analyst Name ISP\Datastor

Analyte THC Internal Standard THC-D3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	X	1.0	1.5	153.3
Cal 2 MJ	2	~	3.0	3.2	106.4
Cal 3 MJ	3	~	5.0	4.9	98.5
Cal 4 MJ	4	~	10.0	9.7	96.9
Cal 5 MJ	5	~	25.0	24.6	98.2
Cal 6 MJ	6	~	50.0	49.3	98.7
Cal 7 MJ	7	~	100.0	101.3	101.3



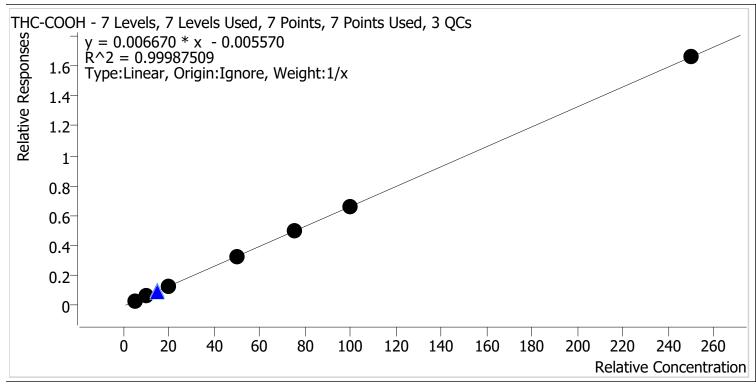
AM #27 Cannabinoids Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2023\AM 27 28\111723 AM 27 28 TS\QuantResults\AM 27.batch.bin

Last Cal. Update 11/21/2023 8:06 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	V	5.0	5.2	104.0
Cal 2 MJ	2	V	10.0	9.9	99.0
Cal 3 MJ	3	V	20.0	19.5	97.5
Cal 4 MJ	4	V	50.0	49.0	98.1
Cal 5 MJ	5	V	75.0	75.6	100.7
Cal 6 MJ	6	V	100.0	100.6	100.6
Cal 7 MJ	7	~	250.0	250.2	100.1



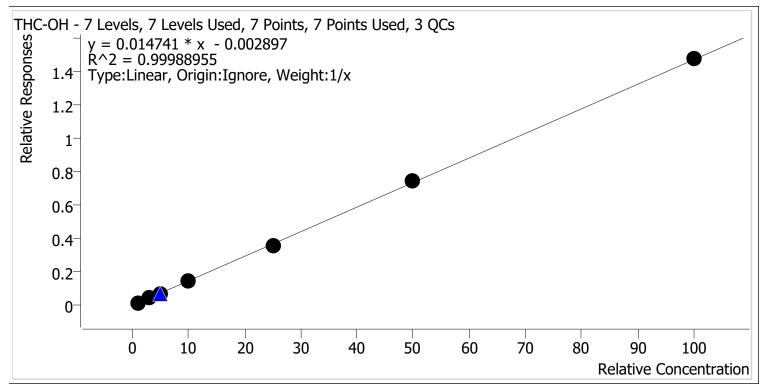
AM #27 Cannabinoids Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2023\AM 27 28\111723 AM 27 28 TS\QuantResults\AM 27.batch.bin

Last Cal. Update 11/21/2023 8:06 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	1.0	104.9
Cal 2 MJ	2	V	3.0	2.9	98.3
Cal 3 MJ	3	V	5.0	5.0	99.9
Cal 4 MJ	4	V	10.0	9.7	97.5
Cal 5 MJ	5	V	25.0	24.6	98.5
Cal 6 MJ	6	~	50.0	50.3	100.6
Cal 7 MJ	7	V	100.0	100.3	100.3

D:\MassHunter\Data\2023\AM 27 28\111723 AM 27 28 TS\QuantResults\AM 27.batch.bin **Batch results** Calibration Last Update 11/21/2023 8:06:30 AM

Instrument **Type** Acq. Method **Sample Position** Falco (069901) Cal

AM 27 Agilent Method.m

P1-H6 10

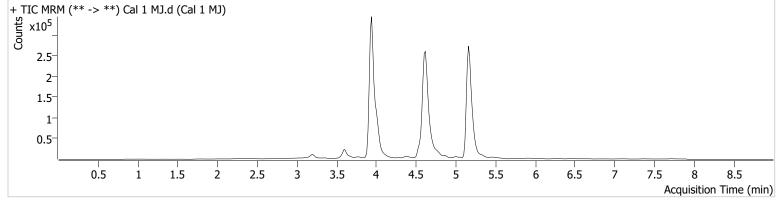
Injection Volume Acq. Date-Time Sample Info.

11/18/2023 12:48:53 AM

Data File Sample Operator Comment

Cal 1 MJ.d Cal 1 MJ Tamara Salazar

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.



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.165	9134	∞	39.1 High	∞	1017413	1.5327 ng/ml
THC-COOH	4.030	5971	346.26	254.3	∞	205076	5.2006 ng/ml
THC-OH	3.956	15363	∞	14.8	25.31	1222235	1.0493 ng/ml

D:\MassHunter\Data\2023\AM 27 28\111723 AM 27 28 TS\QuantResults\AM 27.batch.bin **Batch results** Calibration Last Update 11/21/2023 8:06:30 AM

Instrument **Type** Acq. Method Falco (069901)

Cal

AM 27 Agilent Method.m

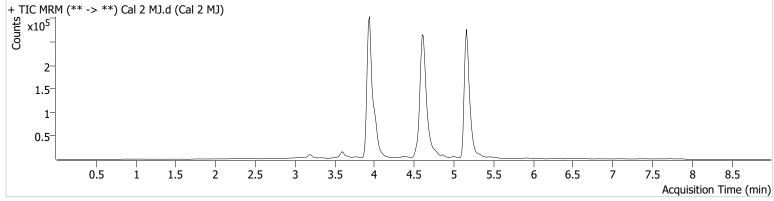
Sample Position Injection Volume Acq. Date-Time

P1-G6

Sample Info.

10 11/18/2023 1:02:11 AM **Data File** Sample Operator Comment Cal 2 MJ.d Cal 2 MJ Tamara Salazar

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.



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.165	25125	∞	30.2	∞	1002928	3.1918 ng/ml
THC-COOH	4.030	11107	134.59	246.3	∞	183722	9.8989 ng/ml
THC-OH	3.9 4 1	44 636	∞	14.3	202.84	1100565	2.9479 ng/ml

Batch results
D:\MassHunter\Data\2023\AM 27 28\111723 AM 27 28 TS\QuantResults\AM 27.batch.bin
11/21/2023 8:06:30 AM

Instrument Type Acq. Method Falco (069901) Cal

AM 27 Agilent Method.m

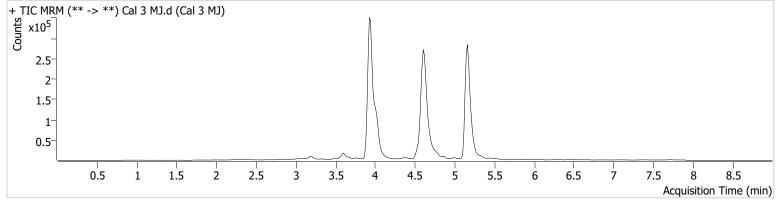
Sample Position
Injection Volume

P1-F6 10 11/18/2023 1:15:16 AM

Acq. Date-Time Sample Info.

Data File Sample Operator Comment Cal 3 MJ.d Cal 3 MJ Tamara Salazar

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.



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.165	43370	∞	30.3	œ	1036569	4.9247 ng/ml
THC-COOH	4.015	24746	496.11	244.7	∞	198794	19.4985 ng/ml
THC-OH	3.9 4 1	90148	∞	14.3	178.36	1274905	4.9934 ng/ml

Batch results D:\MassHunter\Data\2023\AM 27 28\111723 AM 27 28 TS\QuantResults\AM 27.batch.bin 11/21/2023 8:06:30 AM

Instrument Type Acq. Method Falco (069901) Cal

AM 27 Agilent Method.m

Sample Position
Injection Volume

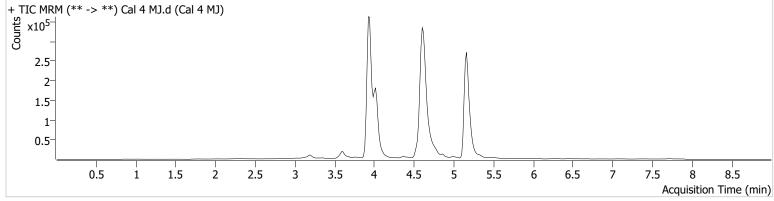
P1-E6 10

Acq. Date-Time Sample Info.

11/18/2023 1:28:21 AM

Data File Sample Operator Comment Cal 4 MJ.d Cal 4 MJ Tamara Salazar

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.



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.165	81505	∞	26.1	∞	925772	9.6935 ng/ml
THC-COOH	4.015	61227	∞	235.9	∞	190449	49.0357 ng/ml
THC-OH	3.941	171139	∞	12.6	613.57	121573 4	9.7463 ng/ml

D:\MassHunter\Data\2023\AM 27 28\111723 AM 27 28 TS\QuantResults\AM 27.batch.bin **Batch results** Calibration Last Update 11/21/2023 8:06:30 AM

Instrument **Type** Acq. Method Falco (069901) Cal

Sample Position Injection Volume AM 27 Agilent Method.m

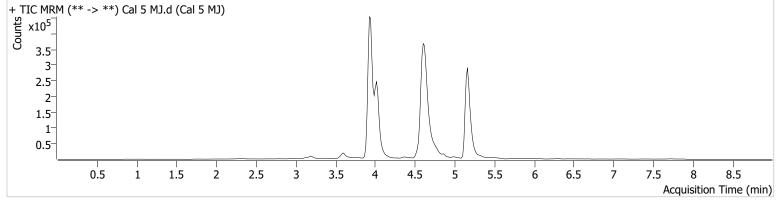
Acq. Date-Time Sample Info.

P1-D6 10

11/18/2023 1:41:26 AM

Data File Sample Operator Comment Cal 5 MJ.d Cal 5 MJ Tamara Salazar

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.



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.165	197947	∞	25.5	∞	853295	24.5507 ng/ml
THC-COOH	4.015	97312	1413.36	228.9	962.97	195263	75.5545 ng/ml
THC-OH	3.941	460553	∞	13.9	∞	1278643	24.6315 ng/ml

D:\MassHunter\Data\2023\AM 27 28\111723 AM 27 28 TS\QuantResults\AM 27.batch.bin **Batch results** Calibration Last Update 11/21/2023 8:06:30 AM

Instrument **Type** Acq. Method Falco (069901) Cal

AM 27 Agilent Method.m P1-C6

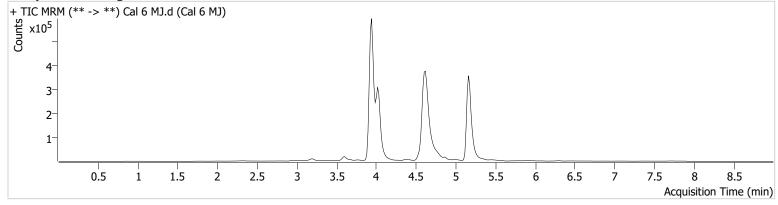
Sample Position Injection Volume 10

Acq. Date-Time Sample Info.

11/18/2023 1:54:31 AM

Data File Sample Operator Comment Cal 6 MJ.d Cal 6 MJ Tamara Salazar

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.



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.165	391721	1241.13	25.1	∞	829751	49.3351 ng/ml
THC-COOH	4.030	124033	3013.23	230.3	2901.18	186368	100.6175 ng/ml
THC-OH	3.941	931660	∞	14.0	∞	1260872	50.3229 ng/ml

Batch results D:\MassHunter\Data\2023\AM 27 28\111723 AM 27 28 TS\QuantResults\AM 27.batch.bin 11/21/2023 8:06:30 AM

Instrument Type Acq. Method Falco (069901) Cal

AM 27 Agilent Method.m

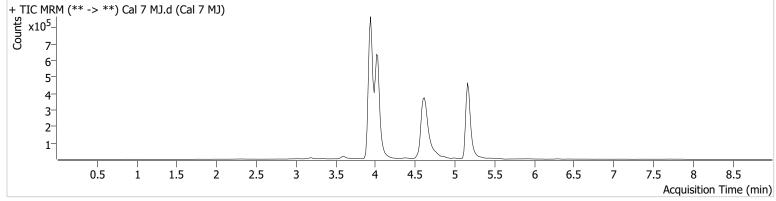
Sample Position Injection Volume Acq. Date-Time P1-B6 10

11/18/2023 2:07:37 AM

Sample Info.

Data File Sample Operator Comment Cal 7 MJ.d Cal 7 MJ Tamara Salazar

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.



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
THC	5.165	781012	∞	25.1	∞	800560	101.3043 ng/ml
THC-COOH	4.030	307812	4325.65	229.2	∞	185076	250.1942 ng/ml
THC-OH	3.941	1904852	œ	12.7	1301. 44	1290786	100.3088 ng/ml