9/24/2024

Worklist: 6937

LAB CASE	ITEM	ITEM TYPE	DESCRIPTION
M2024-2869	2	UCK	AM 27 Urine Cannabinoids Confirmation by LC-QQQ
M2024-2997	2	UCK	AM 27 Urine Cannabinoids Confirmation by LC-QQQ
M2024-3866	5	ВСК	AM 27 Blood THC Quant by LC-QQQ
P2024-2598	1	ВСК	AM 27 Blood THC Quant by LC-QQQ
P2024-2625	1	ВСК	AM 27 Blood THC Quant by LC-QQQ
P2024-2871	1	ВСК	AM 27 Blood THC Quant by LC-QQQ
P2024-2873	1	ВСК	AM 27 Blood THC Quant by LC-QQQ
P2024-2918	3	ВСК	AM 27 Blood THC Quant by LC-QQQ
P2024-2919	4	ВСК	AM 27 Blood THC Quant by LC-QQQ
P2024-2951	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: 9/23/2024 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: <u>Celena Shrum</u> Plate Retest Date: 11/13/2024 Mobile phase B: 0.1% Formic acid in Acetonitrile Blank Urine Lot: POC021022 LCMS-QQQ ID: 069901

Pre-Analytic:

- \boxtimes 1. Check levels of mobile phases and needle wash refill as needed. Ensure waste is not full.
- \boxtimes 2. Ensure correct column is installed and begin mobile phase flow allow to equilibrate ~ 30 minutes.

Analytic:

- \boxtimes 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.
- \boxtimes 4. Add 500µL of 0.1% formic acid in water in the wells of the analytical plate.
- \boxtimes 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- Δ 6. Transfer 700-800µL of blood+acid or urine+acid mixture to corresponding wells of SLE+ plate. Amount transferred: 750 µL
- 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
- \boxtimes 8. Wait 5 minutes.
- 9. Add 2.25mL MTBE. (Add in 3 increments of 750uL)
- \boxtimes 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)
- \boxtimes 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
- Σ 16. Reconstitute in **100µL 100% MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

- \boxtimes 1. Create batch and process data.
- \boxtimes 2. Make any necessary integration changes, Curve weighting of Linear 1/x with r² values ≥ 0.98 for each analyte
- 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)
- \boxtimes 5. Enter QCs into control charting.
- ☑ 6. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS: Urines not evaluated for THC due to ratios in urine QC. P2024-2871-1 was not injected in the initial run. It was injected on 9/30/24 (along with the negative urine and QC at the end as the mobile phase had been remade).

	1	2	3	4	5	6
а				M2024-2869-2	P2024-2873-1	QC 1
b				M2024-2997-2	P2024-2918-3	cal 100 ng
с				NEG Urine	P2024-2919-4	cal 50 ng
d				NEG Blood	P2024-2951-1	cal 25 ng
е				M2024-3866-5		cal 10ng
f				P2024-2598-1		cal 5 ng
g				P2024-2625-1		cal 3 ng
h				P2024-2871-1	QC 2	cal 1ng

G



Batch resultsD:\MassHunter\Data\2024\AM 27 28\092324 AM 27 28 CS\QuantResults\AM 27.batch.binCalibration Last Update10/2/2024 10:59:01 AM

Instrument Type Acq. Method Sample Position Injection Volume Acq. Date-Time Sample Info. Falco (069901) Sample AM 27 Agilent Method.m P5-D4 10 9/23/2024 3:20:25 PM Data File Sample Operator Comment MJ Negative Blood.d MJ Negative Blood Celena Shrum 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 resultsD:\MassHunter\Data\2024\AM 27 28\092324 AM 27 28 CS\QuantResults\AM 27.batch.binCalibration Last Update10/2/2024 10:59:01 AM

Instrument Type Acq. Method Sample Position Injection Volume Acq. Date-Time Sample Info. Falco (069901) Sample AM 27 Agilent Method.m P5-C4 10 9/23/2024 7:42:36 PM Data File Sample Operator Comment MJ Negative Urine.d MJ Negative Urine Celena Shrum 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 resultsD:\MassHunter\Data\2024\AM 27 28\092324 AM 27 28 CS\QuantResults\AM 27.batch.binCalibration Last Update10/2/2024 10:59:01 AM

Instrument Type Acq. Method Sample Position Injection Volume Acq. Date-Time Sample Info. Falco (069901) QC AM 27 Agilent Method.m P5-A6 10 9/23/2024 2:54:12 PM Data File Sample Operator Comment MJ QC Control Blood.d MJ QC Control Blood Celena Shrum 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\2024\AM 27 28\092324 AM 27 28 CS\QuantResults\AM 27.batch.bin

 Calibration Last Update
 10/2/2024 10:59:01 AM

Instrument Type Acq. Method Sample Position Injection Volume Acq. Date-Time Sample Info. Falco (069901) QC AM 27 Agilent Method.m P5-H5 10 9/23/2024 8:08:51 PM Data File Sample Operator Comment Urine QC MJ.d Urine QC MJ Celena Shrum 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 resultsD:\MassHunter\Data\2024\AM 27 28\092324 AM 27 28 CS\QuantResults\AM 27.batch.binCalibration Last Update10/2/2024 10:59:01 AM

Instrument Type Acq. Method Sample Position Injection Volume Acq. Date-Time Sample Info. Falco (069901) QC AM 27 Agilent Method.m P5-A6 10 9/23/2024 8:35:03 PM Data File Sample Operator Comment MJ QC Control Blood_end.d MJ QC Control Blood_end Celena Shrum 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 resultsD:\MassHunter\Data\2024\AM 27 28\092324 AM 27 28 CS\QuantResults\AM 27.batch.binCalibration Last Update10/2/2024 10:59:01 AM

Instrument Type Acq. Method Sample Position Injection Volume Acq. Date-Time Sample Info. Falco (069901) Sample AM 27 Agilent Method.m P5-D4 10 9/30/2024 1:54:55 PM Data File Sample Operator Comment MJ Negative Blood_r.d MJ Negative Blood_r Celena Shrum 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 resultsD:\MassHunter\Data\2024\AM 27 28\092324 AM 27 28 CS\QuantResults\AM 27.batch.binCalibration Last Update10/2/2024 10:59:01 AM

Instrument Type Acq. Method Sample Position Injection Volume Acq. Date-Time Sample Info. Falco (069901) QC AM 27 Agilent Method.m P5-A6 10 9/30/2024 2:47:29 PM Data File Sample Operator Comment MJ QC Control Blood_end_r.d MJ QC Control Blood_end_r Celena Shrum 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.







AM #27 Cannabinoids Quant. Calibration Curve Report

/\\\\				J Yuu		andrad			<u>,choi</u>	L	
Batch results	D:\Mass	Hunter\Da	ta∖2024∖	AM 27 28\	092324	AM 27 28 C	S\QuantRe	sults\A	M 27.batc	h.bin	
Last Cal. Update	10/2/202	/2/2024 10:59 AM									
Analyst Name	ISP\Dat	\Datastor									
Analyte	THC					Intern	al Standar	d	THC-D3		
THC - 7 Levels, 7 y = 0. R^2 = Type:I 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1 0.1 0 0 0 0 0 0 0 0 0 0 0 0 0	Levels Used 010253 * x = 0.9998014 Linear, Origi	d, 7 Point - 0.0019 2 n:Ignore,	s, 7 Poi 92 Weight	nts Used, t:1/x 40	4 QCs	60	70	80 R	90 elative C	• 100 concentra	tion
Sample	•			Enable	4	Expected	Einal (`oncon	tration	Accura	o\/

Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	5	1.0	1.1	108.3
Cal 2 MJ	2	~	3.0	2.9	98.2
Cal 3 MJ	3	~	5.0	4.9	97.5
Cal 4 MJ	4	5	10.0	9.6	96.1
Cal 5 MJ	5	~	25.0	24.9	99.4
Cal 6 MJ	6	~	50.0	49.9	99.7
Cal 7 MJ	7	~	100.0	100.8	100.8





AM #27 Cannabinoids Quant. Calibration Curve Report

Batch results Last Cal. Update Analyst Name	D:\MassHunter\Data\2024\AM 27 28\092324 AM 27 28 CS\QuantResults\AM 27.batch.bin 10/2/2024 10:59 AM ISP\Datastor										
Analyte	THC-COOH		Internal S	tandard	THC-CC	OH-D9)				
THC-COOH - 7 Levels $\begin{array}{cccc} y &= 0.007 \\ R^2 &= 0.9 \\ R^2 &= 0.9 \\ R^2 &= 0.9 \\ R^2 &= 0.9 \\ Type:Line $ 1.4- 1.4- 1.4- 0.8- 0.6- 0.4- 0.2- 0- 0- 0	s, 7 Levels Used, 7 Points, 7 853 * x - 0.001205 99988916 ar, Origin:Ignore, Weight:1 20 40 60 80	 Points Used, 4 Q /x 100 120 140 	2Cs	180 200	220	240	260				
					Relative (Concer	ntration				

Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	~	5.0	4.9	97.7
Cal 2 MJ	2	V	10.0	10.1	100.5
Cal 3 MJ	3	V	20.0	20.3	101.3
Cal 4 MJ	4	~	50.0	49.6	99.2
Cal 5 MJ	5	V	75.0	75.4	100.6
Cal 6 MJ	6	V	100.0	101.4	101.4
Cal 7 MJ	7	~	250.0	248.4	99.4





AM #27 Cannabinoids Quant. Calibration Curve Report

	$\pi m \pi 27$ Califiantions Quarte Caliniation Curve Report												
Bato	h resu	lts		D:\MassH	lunter\Da	ta\2024\A	M 27 28\0	092324 Al	M 27 28 C	S\QuantRe	esults\A	M 27.batc	h.bin
Last	Cal. U	pdate		10/2/2024	4 10:59 A	М							
Ana	lyst Na	me		ISP\Datastor									
Analyte				THC-OH						Internal Standard THC-OH-D3			-D3
THO	с-он -	7 Lev	els, 7	Levels U	lsed, 7 P	Cs							
y = 0.015858 * x + 0.003978													
Lod	1.6	Tvpe	= 0.9	r. Oriain	:Ianore.	Weiaht	:1/x					/	
Res	1.4-	.,		.,			_,,,						
tive	1.2-	-											
Rela	1-												
	0.8-												
	0.6-					/							
	0.4-												
	0.2-												
	0-	-		<u>v</u>									
		I	0	10	20	30	40	50	60	70	80	90	100
											R	Relative C	oncentration

Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
Cal 1 MJ	1	~	1.0	1.0	104.7
Cal 2 MJ	2	~	3.0	2.9	97.0
Cal 3 MJ	3	~	5.0	5.0	99.9
Cal 4 MJ	4	~	10.0	9.8	98.5
Cal 5 MJ	5	~	25.0	25.0	100.0
Cal 6 MJ	6	~	50.0	49.8	99.5
Cal 7 MJ	7	~	100.0	100.4	100.4



Batch resultsD:\MassHunter\Data\2024\AM 27 28\092324 AM 27 28 CS\QuantResults\AM 27.batch.binCalibration Last Update10/2/2024 10:59:01 AM

Instrument Type Acq. Method Sample Position Injection Volume Acq. Date-Time Sample Info. Falco (069901) Cal AM 27 Agilent Method.m P5-H6 10 9/23/2024 1:09:12 PM Data File Sample Operator Comment Cal 1 MJ.d Cal 1 MJ Celena Shrum 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 resultsD:\MassHunter\Data\2024\AM 27 28\092324 AM 27 28 CS\QuantResults\AM 27.batch.binCalibration Last Update10/2/2024 10:59:01 AM

Instrument Type Acq. Method Sample Position Injection Volume Acq. Date-Time Sample Info. Falco (069901) Cal AM 27 Agilent Method.m P5-G6 10 9/23/2024 1:22:27 PM Data File Sample Operator Comment Cal 2 MJ.d Cal 2 MJ Celena Shrum 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 resultsD:\MassHunter\Data\2024\AM 27 28\092324 AM 27 28 CS\QuantResults\AM 27.batch.binCalibration Last Update10/2/2024 10:59:01 AM

Instrument Type Acq. Method Sample Position Injection Volume Acq. Date-Time Sample Info. Falco (069901) Cal AM 27 Agilent Method.m P5-F6 10 9/23/2024 1:35:34 PM Data File Sample Operator Comment Cal 3 MJ.d Cal 3 MJ Celena Shrum 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 resultsD:\MassHunter\Data\2024\AM 27 28\092324 AM 27 28 CS\QuantResults\AM 27.batch.binCalibration Last Update10/2/2024 10:59:01 AM

Instrument Type Acq. Method Sample Position Injection Volume Acq. Date-Time Sample Info. Falco (069901) Cal AM 27 Agilent Method.m P5-E6 10 9/23/2024 1:48:41 PM Data File Sample Operator Comment Cal 4 MJ.d Cal 4 MJ Celena Shrum 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 resultsD:\MassHunter\Data\2024\AM 27 28\092324 AM 27 28 CS\QuantResults\AM 27.batch.binCalibration Last Update10/2/2024 10:59:01 AM

Instrument Type Acq. Method Sample Position Injection Volume Acq. Date-Time Sample Info. Falco (069901) Cal AM 27 Agilent Method.m P5-D6 10 9/23/2024 2:01:47 PM Data File Sample Operator Comment Cal 5 MJ.d Cal 5 MJ Celena Shrum 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 resultsD:\MassHunter\Data\2024\AM 27 28\092324 AM 27 28 CS\QuantResults\AM 27.batch.binCalibration Last Update10/2/2024 10:59:01 AM

Instrument Type Acq. Method Sample Position Injection Volume Acq. Date-Time Sample Info. Falco (069901) Cal AM 27 Agilent Method.m P5-C6 10 9/23/2024 2:14:53 PM Data File Sample Operator Comment Cal 6 MJ.d Cal 6 MJ Celena Shrum 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\2024\AM 27 28\092324 AM 27 28 CS\QuantResults\AM 27.batch.bin

 Calibration Last Update
 10/2/2024 10:59:01 AM

Instrument Type Acq. Method Sample Position Injection Volume Acq. Date-Time Sample Info. Falco (069901) Cal AM 27 Agilent Method.m P5-B6 10 9/23/2024 2:28:00 PM Data File Sample Operator Comment Cal 7 MJ.d Cal 7 MJ Celena Shrum 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.

