

REVIEWED
By Celena Shrum at 1:18 pm, Aug 18, 2022

TS 8/17/2022

Worklist: 6067

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>
M2022-2311	2	UCK	AM 6 Urine GHB



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AM 6: Urine GHB Screening Extraction

Extraction Date: 08/17/2022

Analyst: Tamara Salazar –HOA Amber Gerheart

Mobile phase A: 0.1% Formic Acid in Water

Mobile phase B: 0.1% Formic Acid in MeOH

0.1% formic acid in methanol

0.1% formic acid in water

Blank Urine Lot: POC021022

Column: Phenomenex Phenyl Hexyl (4.6x50mm, 2.6um)

LCMS-QQQ ID: 069901

Pre-Analytic:

- ☒ 1. *Positive Control Working Solution Preparation Instructions:*
 - *Working Solution:* Preparation of 200,000 ng/mL Positive Control Working Solution: Add 200µL of GHB 1 mg/mL stock solution to 800µL negative urine.
- ☒ 2. Check levels of mobile phases and needle wash refill as needed. Ensure waste is not full.
- ☒ 3. Ensure correct column is installed and begin mobile phase flow allow to equilibrate ~ 30 minutes.

Analytic:

- ☒ 1. Remove working solutions, controls, and samples from cold storage. Place on tube rocker at ambient temp for approx. 10 minutes.
- ☒ 2. Label centrifuge tubes for positive control, negative control and case samples.
- ☒ 3. Pipette positive control into corresponding centrifuge tube.
 - Preparation of 10,000 ng/mL Positive Control: Add 10µL of GHB 20,000 ng/mL working solution to 190 µL negative urine. *Working Solution Lot: WS081722*
- ☒ 4. Pipette negative controls (for negative control, 200 µL urine will be added to the appropriate tube) into corresponding centrifuge tube.
- ☒ 5. Add 200µL urine to each centrifuge tube for case samples.
- ☒ 6. Add 100µL of the GHB-D6 Internal Standard Working Solution to each tube.
- ☒ 7. Add 900µL of 0.1% formic acid in methanol to each tube. Vortex.
- ☒ 8. Centrifuge at ~3400 rpm for 15 minutes.
- ☒ 9. Label ALS or LCMS vials for positive control, negative control, and case samples. Place insert in all vials.
- ☒ 10. Add 100µL 0.1% formic acid in water to each vial insert.
- ☒ 11. Transfer 10µL of sample from each centrifuge tube to the corresponding vial insert (avoid disturbing the pellet at the bottom). Vortex.

Post-Analytic

- ☒ 1. Open quantitation software and create a new quantitation batch.
- ☒ 2. Using the positive control, a 1-point calibration curve will be established. The curve will be set to linear, non-weighted and origin set to force.
- ☒ 3. If a sample gives a response that is greater than 10,000 ng/mL, a statement on the report will be included saying that preliminary testing indicated a possible presence of an elevated level of GHB and that it is recommended that the sample be sent to a private lab for quantitation. If a sample gives a response between 7,000 and 10,000 ng/mL, an inconclusive statement can be added to the report.
- ☒ 4. The S/N for samples and controls at and over 10,000 ng/mL must be 5 or greater
- ☒ 5. Case samples and negative controls will generally be considered negative if the calculated concentration is less than 7,000 ng/mL.
- ☒ 6. Central File Packet to include: LIMS Worklist, Method Checklist, Working solution prep sheet(s), Calibration and Control Reports

COMMENTS: Extraction initially performed on 08/16/2022; however, the positive control was improperly prepared. The extraction was re-done on 08/17/2022.



Idaho State Police Forensic Services

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AM #6 Screening for Gamma-Hydroxybutyrate (GHB) in Urine

GHB-D6 Internal Standard Solution

1mL of GHB-D6 0.1mg/mL stock solution to 4mL methanol.

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>	<i>Expiration Date</i>
GHB-D6	Cerilliant	FE07031801	09/30/2023
Methanol	Fisher	215245	-
Prepared:	08/17/2022		
Prepared By:	Amber Gerheart		
Expires:	02/17/2023		

200,000 ng/mL Positive Control Working Solution (WS081722)

200uL of GHB 1mg/mL stock to 800uL negative urine.

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>	<i>Expiration Date</i>
GHB	Cerilliant	FE04111903	05/31/2022
Negative Urine	-	POC021022	
Prepared:	08/17/2022		
Prepared By:	Amber Gerheart		
Expires:	02/17/2023		

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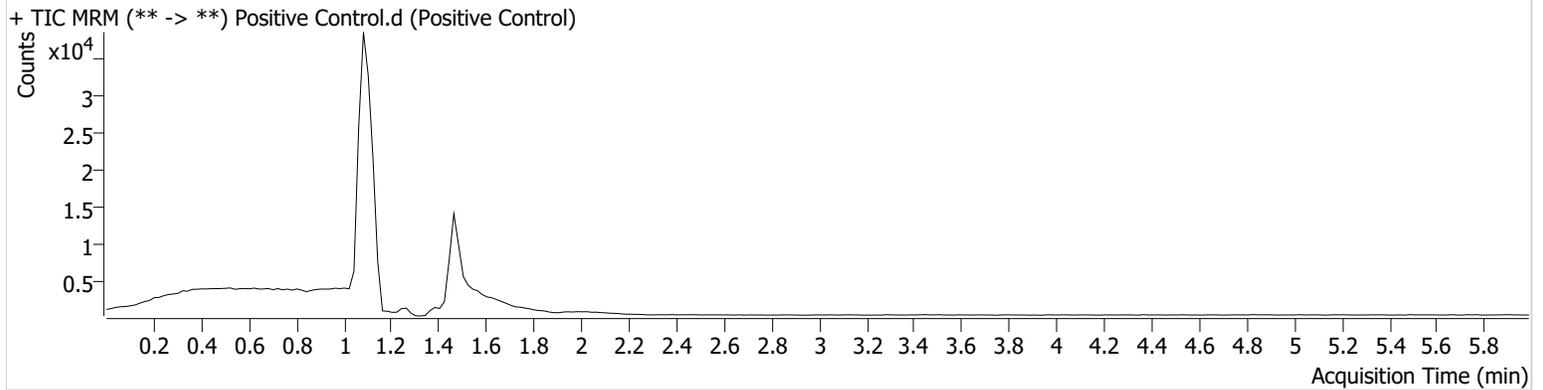


AM #6 GHB Screen Results

Batch results D:\MassHunter\Data\2022\AM 6\081722 AM 6 TS AG\QuantResults\AM 6_Evaluated.batch.bin
Calibration Last Update 8/18/2022 9:19:54 AM

Instrument	Falco (069901)	Data File	Positive Control.d
Type	Cal	Sample	Positive Control
Acq. Method	GHB urine screen.m	Operator	Tamara Salazar
Sample Position	P6-C1	Comment	
Injection Volume	2.5		
Acq. Date-Time	8/17/2022 4:05:21 PM		

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
GHB	1.466	25078	56.99	∞	35529	10000.0000

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AM #6 GHB Screen Results

Batch results D:\MassHunter\Data\2022\AM 6\081722 AM 6 TS AG\QuantResults\AM 6_Evaluated.batch.bin
Calibration Last Update 8/18/2022 9:19:54 AM

Instrument	Falco (069901)	Data File	Negative Control.d
Type	Sample	Sample	Negative Control
Acq. Method	GHB urine screen.m	Operator	Tamara Salazar
Sample Position	P6-C2	Comment	
Injection Volume	2.5		
Acq. Date-Time	8/17/2022 4:11:56 PM		

Sample Chromatogram

