

**REVIEWED**

By Anne Nord at 11:46 am, Apr 09, 2024

4/8/2024

*Boyle*

**Worklist: 6759**

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>
C2024-0539	3	UCK	AM 6 Urine GHB



# AM 6: Urine GHB Screening Extraction

*B. Wylie*

Extraction Date: 04/08/24

Analyst: Britany Wylie

**Mobile phase A:** 0.1% Formic Acid in Water  
0.1% formic acid in methanol

**Mobile phase B:** 0.1% Formic Acid in MeOH  
0.1% formic acid in water

**Blank Urine Lot:** 1324

**Column:** Agilent poroshell 120 (4.6x50mm, 2.7um)

**LCMS-QQ ID:**

**GHB Control Lot:** 1424

## 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.
  - Preparation of 10,000 ng/mL Positive Control: Add 10µL of GHB 200,000 ng/mL working solution to 190 µL 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.
- 2. Label centrifuge tubes for positive control, negative control and case samples.
- 3. Label ALS or LCMS vials for positive control, negative control, and case samples. Place insert in all vials.
- 4. Place on tube rocker at ambient temp for approx. 10 minutes.
- 5. Pipette positive and negative controls (for negative control, 200 µL urine will be added to the appropriate tube). 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. Made fresh 10 ul 195725 formic acid fisher, 10 ml Honeywell lot ED456-US 01-4-24 BAW
- 8. Centrifuge at ~3400 rpm for 15 minutes.
- 9. Add 100µL 0.1% formic acid in water to each vial insert.
- 10. 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:

*Byyle*

GHB controls

200000 ng/ml working solution 200 ul 1 mg/ml GHB into 800 ul neg urine (1324)

ppd 1/4/24 Exp 7/4/24 lot 1424 by AMN

Drug	lot	expiration
GHB	FE04111903	5/1/2024

20000 ng/ml working internal standard solution 1ml 100ul/ml GHB D6 stock in 4000 ul methanol

Ppd 1/4/24 exp 1/4/25 lot GHB-D6 01424 by amn

Drug	lot
GHB-D6	FE07031801

\* AM 6 Control: add 10uL of working solution to 190uL negative urine and extract. Approx conc 10,000ng/mL

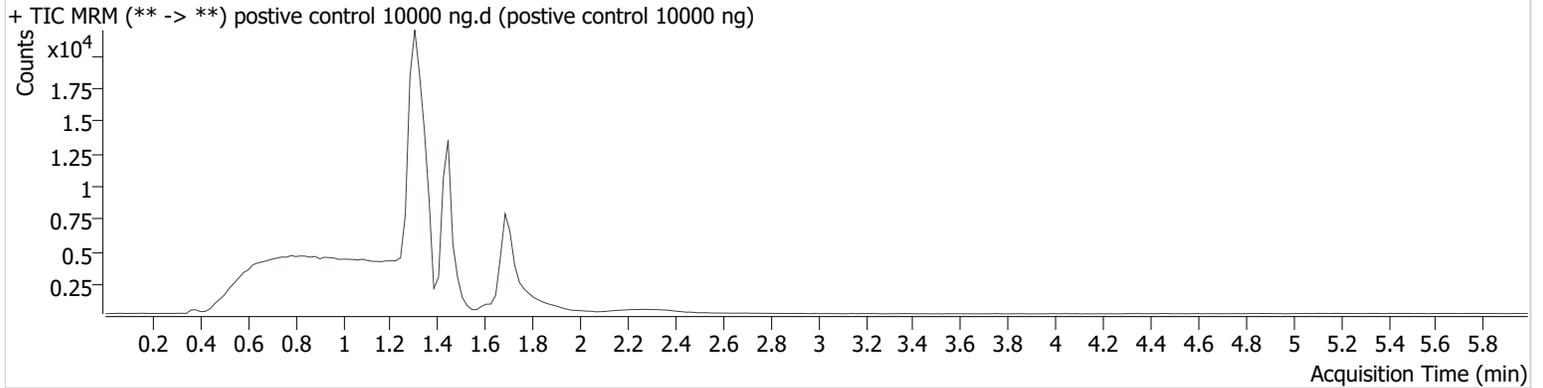
# GHB Screen results

*BWylie*

**Batch results** D:\MassHunter\Data\2024\ghb\040824\QuantResults\4824\_ghb.batch.bin  
**Calibration Last Update** 4/8/2024 12:00:19 PM

<b>Instrument</b>	69679	<b>Data File</b>	postive control 10000 ng.d
<b>Type</b>	Cal	<b>Sample</b>	postive control 10000 ng
<b>Acq. Method</b>	GHB urine screen.m	<b>Operator</b>	Britany Wylie
<b>Sample Position</b>	P5-A1	<b>Comment</b>	
<b>Injection Volume</b>	3		
<b>Acq. Date-Time</b>	4/8/2024 10:09:04 AM		

## Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
GHB	1.687	13346	58.1	10.9	17460	10000.000

# GHB Screen results

*B. Wylie*

**Batch results** D:\MassHunter\Data\2024\ghb\040824\QuantResults\4824\_ghb.batch.bin  
**Calibration Last Update** 4/8/2024 12:00:19 PM

<b>Instrument</b>	69679	<b>Data File</b>	negative urine.d
<b>Type</b>	Sample	<b>Sample</b>	negative urine
<b>Acq. Method</b>	GHB urine screen.m	<b>Operator</b>	Britany Wylie
<b>Sample Position</b>	P5-B1	<b>Comment</b>	
<b>Injection Volume</b>	3		
<b>Acq. Date-Time</b>	4/8/2024 10:15:30 AM		
<b>Sample Info.</b>			

## Sample Chromatogram

