REVIEWED
By Tamara Salazar at 7:58 am, Oct 24, 2022

10/21/2022

Worklist: 6141

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
M2022-3995	3	UCK	AM 6 Urine GHB
P2022-3042	1	UCK	AM 6 Urine GHB

AM 6: Urine GHB Screening Extraction

Extraction Date: 10/21/2022 Analyst: Celena Shrum
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.
- Preparation of 10,000 ng/mL Positive Control: Add 10µL of GHB 20,000 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.

☒ 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: Samples were injected on 10/21/22, during data analysis, the analyst realized that the vial positions specified for the negative and positive controls were incorrect, so the run was reinjected immediately after.

Idaho State Police
Forensic Services

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.

Component	*Source*	*Source Lot Number*	*Expiration Date*
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.

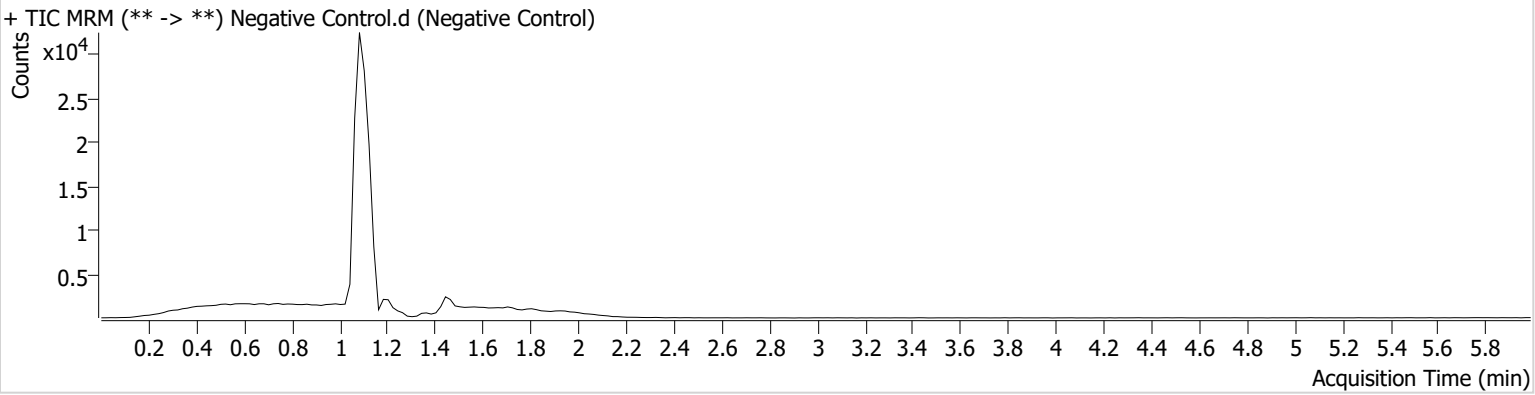
Component	*Source*	*Source Lot Number*	*Expiration Date*
GHB	Cerilliant	FE04111903	05/31/2022
Negative Urine	-	POC021022	
Prepared:	08/17/2022		
Prepared By:	Amber Gerheart		
Expires:	02/17/2023		

AM #6 GHB Screen Results

Batch results	D:\MassHunter\Data\2022\AM 6\102122 AM 6 CS\Reinjects\QuantResults\AM 6.batch.bin
Calibration Last Update	10/21/2022 11:51:21 AM

Instrument	Falco (069901)	**Data File**	Negative Control.d
Type	Sample	**Sample**	Negative Control
Acq. Method	GHB urine screen.m	**Operator**	Celena Shrum
Sample Position	Vial 2	**Comment**	
Injection Volume	2.5		
Acq. Date-Time	10/21/2022 11:15:58 AM		
Sample Info.			

Sample Chromatogram

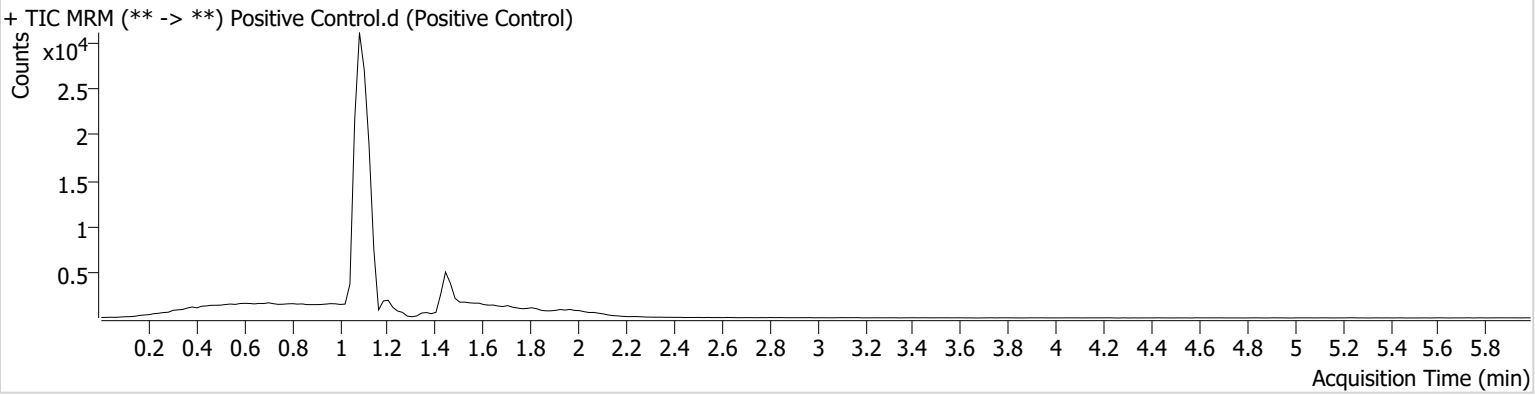


AM #6 GHB Screen Results

Batch results D:\MassHunter\Data\2022\AM 6\102122 AM 6 CS\Reinjects\QuantResults\AM 6.batch.bin
Calibration Last Update 10/21/2022 11:51:21 AM

Instrument	Falco (069901)	**Data File**	Positive Control.d
Type	Cal	**Sample**	Positive Control
Acq. Method	GHB urine screen.m	**Operator**	Celena Shrum
Sample Position	Vial 3	**Comment**	
Injection Volume	2.5		
Acq. Date-Time	10/21/2022 11:09:31 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	S/N	ISTD Resp.	Calc. Conc.
GHB	1.446	5393	10.00	16.66	30304	10000.0000