Name: **Silas, Hailey Nickole**

Case: **2023-2491**
Race: White
Sex: Female
Age: 22 years

Date of Exam: 10/23/2023
Time of Exam: 11:15
County: Shelby, TN
Identification: Fingerprint
Pathologist: Erica Curry, M.D.
Autopsy Procedure: Full
Authorized By: Marco Ross, MD
Autopsy Assistant: Paris Jamison

Forensic Examination Report

PATHOLOGICAL DIAGNOSES

I. Multiple blunt traumatic injuries
a. Blunt trauma of the head and neck
i. Abrasions, lacerations, and contusion
ii. Left frontal scalp hemorrhage
iii. Fractures of the skull and maxilla
iv. Subarachnoid hemorrhage
b. Blunt trauma of the torso
i. Abrasions
ii. Hemothoraces (750 milliliters; 250 milliliters)
iii. Multiple bilateral rib fractures
iv. Contusions and lacerations of the right and left lungs
v. Lacerations of the liver
vi. Complete transection of the aorta
vii. Fracture of the pelvis
c. Blunt trauma of the extremities
i. Abrasions, contusions, and lacerations
ii. Fractures of the left ulna and radius
iii. Fractures of the left femur and left and right tibia and fibula

CAUSE OF DEATH: Multiple Blunt Traumatic Injuries

EXTERNAL EXAMINATION:

The unembalmed body is that of a well-developed, well nourished, 60 inch, 131 pound, white female who is reported to be 22 years of age. The body has partial rigor mortis in the jaw and extremities. Pink-purple livor mortis is anterior and fixed and faint pink livor mortis is posterior and fixed.

The scalp is covered by brown hair. The irides are blue. The corneas are clear and the sclerae are white. The conjunctivae are pale and have no petechiae or hemorrhages. The external auditory canals, external nares, and oral cavity are free of lesions. The frenula are intact. The teeth are natural and in good condition. The tongue and buccal mucosa have no injuries or lesions.

The neck is symmetrical. The nipples and breasts have no palpable masses. The chest and abdomen have no obvious scars. The back appears straight and symmetric. The external genitalia are those of a normal adult female.

The external anus has no abnormalities.

The upper and lower extremities have no obvious scars and tattoos are on the right and left arms and on the right leg. The fingernails and toenails are painted red and with glitter. The soles of the right and left feet are black with dirt.

EVIDENCE OF INJURY:

BLUNT TRAUMA OF THE HEAD AND NECK

Three 1/8 inch red-brown abrasions are on the left eyebrow. The left upper and lower eyelids are ecchymotic. A 1 inch laceration is on the left upper eyelid and a 1 inch laceration is lateral to the left eye. A 1/2 inch laceration and a 1-1/2 inch contused red-brown abrasion are on the left side of the undersurface of the chin. A 1/4 inch yellow abrasion is on the left side of the anterior neck. The maxilla is fractured.

The left frontal scalp has minimal hemorrhage focally. The left frontal and temporal bones of the calvarium have comminuted fractures and the right temporal bone of the calvarium has a linear fracture. The anterior fossa of the skull base on the midline has comminuted fractures and the right and left temporal bones of the skull base have comminuted fractures. The brain has mild diffuse subarachnoid hemorrhage.

BLUNT TRAUMA OF THE TORSO

A 1 inch red abrasion is on the left side of the upper chest. Several, 1/8 inch, red abrasions are on the lateral aspect of the left breast. A 2 inch red-yellow abrasion is on the left upper quadrant of the abdomen. A 3 inch red-brown abrasion and a 2 inch red-yellow abrasion are on the left lower quadrant of the abdomen. A 5 inch red-brown abrasion is on the left buttock and a 2 inch red abrasion is on the right buttock.

The left pleural cavity contains 750 milliliters of blood, and the right pleural cavity contains 250 milliliters of blood. All the ribs on the right and left sides anteriorly are fractured. The right 1st-3rd ribs and the left 11th and 12th ribs are fractured posteriorly. The left upper lobe of lung has a 9 centimeter contusion, laterally, and a 5 centimeter laceration, inferiorly. The left lower lobe of lung has a 3 centimeter contusion, anteriorly. The right upper lobe of lung has a 9 centimeter contusion, anteriorly. The right middle lobe of lung has a 6 centimeter contusion, anteriorly and a 12 centimeter contusion, posteriorly. The diaphragmatic surface of the right lung has a 7 centimeter laceration. The thoracic aorta is completely transected. The left lobe of the liver has a 3 centimeter and a 4 centimeter laceration, posteriorly. The right lobe of the liver, superiorly and laterally, have numerous, up to 4.5 centimeter, lacerations. The pelvis is fractured.

BLUNT TRAUMA OF THE EXTREMITIES

A 12 x 4 inch red contusion is on the anterior-medial aspect of the right upper arm. A 1-1/4 inch red-brown abrasion is on the right elbow. A 1 inch red contusion is on the anterior aspect of the right wrist and red abrasions, 1/2 inch and 1-1/4 inch, are on the posterior aspect of the right wrist. A 3 inch red abrasion is on the anterior aspect of the left upper arm. A 2 inch laceration with protrusion of bone is on the left elbow. A 4 inch red contusion is on the palm of the left hand. The left ulna and radius are fractured.

A 6 inch red to green contusion is on the lateral aspect of the right thigh and multiple, 2 inch, red abrasions are on the posterior aspect of the right thigh. A 5 inch red contusion and a 4 inch red abrasion are on the anterior aspect of the right lower leg and a 2 inch red abrasion is on the medial aspect of the right lower leg. A 1/8 inch red abrasion is on the posterior aspect of the right lower leg. A 1 inch red contusion is on the anterior aspect of the right ankle and a 2 inch red contusion is on the medial aspect of the right ankle. A 1/16 inch red abrasion is on the posterior aspect of the left thigh. A 6 inch purple contusion is on the left knee. A 1/2 inch laceration with protruding bone is on the anterior aspect of the left lower leg, proximally. A 4 inch purple contusion is on the medial aspect of the left ankle and a 1 inch red contusion and a 3 inch red contusion are on the dorsal aspect of the left foot. The left femur and left and right tibia and fibula are fractured.

INTERNAL EXAMINATION:

NERVOUS SYSTEM:

The brain is 1168 grams. The leptomeninges are thin and delicate. The cerebral hemispheres are symmetrical. The vessels at the base of the brain are intact and have no evidence of aneurysm or thrombosis and have no atherosclerosis. The brain parenchyma has no masses or cysts.

NECK:

The cervical spine is structurally intact. The hyoid bone and thyroid and cricoid cartilages are intact. The soft tissues and strap muscles have no abnormalities.

CARDIOVASCULAR SYSTEM:

The 218 gram heart has a smooth and glistening pericardial surface. The pericardial sac is free of significant fluid and adhesions. The epicardium is shiny and has an excess of epicardial fat. The coronary arteries have no atherosclerosis. The chambers and valves exhibit the usual positional relationships. All the valves are thin, pliable, and translucent. The chordae tendineae and papillary muscles have no abnormalities. The myocardium is brown-red and firm. The left and right ventricular walls are of normal thickness. The endocardium is thin and glistening. The atrial and ventricular septa are intact. The aorta and its major branches arise normally, follow the usual course, and have no atherosclerosis.

RESPIRATORY SYSTEM:

The right and left lungs are 255 grams and 186 grams, respectively. The pleural surfaces have moderate anthracotic pigmentation. The pulmonary parenchyma is red-purple and has no focal lesions. The pulmonary arteries are patent and have no thrombi or emboli.

GASTROINTESTINAL SYSTEM:

The esophagus is lined by gray-white, smooth mucosa. The gastroesophageal junction is well defined. The stomach is normal in size and shape and contains a minimal amount of green digested food. The gastric mucosa has no ulcerations or masses. The small and large intestines and appendix have normal external surfaces. The pancreas is pink-tan, normal in size, and the lobular architecture is intact.

HEPATOBILIARY SYSTEM:

The 936 gram liver has brown parenchyma with no focal lesions. The gallbladder contains a minimal amount of yellow-green bile and has a 1 centimeter yellow-green calculus. The gallbladder’s mucosa is green and velvety.

GENITOURINARY SYSTEM:

The right and left kidneys are 96 grams, each. The renal capsules are smooth, thin, and semi-transparent and cover smooth, red-brown cortical surfaces. The renal cortices are normal in thickness, slightly congested, and have well delineated corticomedullary junctions. The calyces, pelves, and ureters are not dilated. The urinary bladder contains no urine and the bladder’s mucosa is gray-tan and wrinkled. The uterus and ovaries are unremarkable.

ENDOCRINE SYSTEM:

The thyroid gland and adrenal glands are unremarkable.

HEMATOPOIETIC SYSTEM:

The 68 gram spleen has smooth, intact capsules covering red-purple, firm parenchyma. The lymph nodes of the neck, chest, abdomen, and pelvis are unremarkable.

ADDITIONAL PROCEDURES:

Toxicology: Samples of postmortem blood from the heart, and the vitreous fluid and liver are submitted to toxicology. See separate toxicology report.

Radiographs: Whole body x-rays are obtained.

Evidence Collected: FTA blood spot cards, fingerprints, right and left hand fingernail clippings and clippers, and pulled head hair.

Clothing and Personal Effects: Green and white shirt, pink shirt, black bra, black pants, two brown shoes, black knee brace, one white metal watch, one brown beaded bracelet, one clear beaded bracelet, purple lighter, and black hair tie.

SUMMARY AND INTERPRETATION:

This 22 year old white female, identified as Hailey Silas, was found unresponsive on a barge that was traveling on the Mississippi river and death was pronounced at the scene. Per the police investigation, the decedent had been staying in the Midsouth for a few days before her death and had a history of drug use with recent odd behavior of saying she wanted to “fly” from a landing located inside the Bass Pro Shop. No known suicide attempts or suicidal ideation was reported and no foul play discovered on police investigation.

Autopsy had findings of multiple blunt traumatic injuries to the head and neck, torso, and extremities with the most severe injuries being to the head and torso. Toxicology was positive for methamphetamine and marijuana and negative for all other substances tested. Based on all known and available information, the cause of death is multiple blunt traumatic injuries and the manner of death could not be determined although suicide is favored based on the current police investigation.

The facts stated herein are correct to the best of my knowledge and belief.

Electronically Signed by **Erica Curry, M.D. Forensic Pathologist** on 05/20/2024 at 09:33

NMS Labs
200 Welsh Road, Horsham, PA 19044-2208
Phone: (215) 657-4900 Fax: (215) 657-2972
e-mail: nms@nmslabs.com
Robert A. Middleberg, PhD, F-ABFT, DABCC-TC, Laboratory Director

CONFIDENTIAL

Toxicology Report

Report Issued 11/06/2023 13:02

To: **10505**
University of Tennessee Forensic Center
Attn: Marco Ross
637 Poplar Avenue
Memphis, TN 38105

Patient Name	Unknown, Unknown
Patient ID	231021-534
Chain	231021-534
DOB	Not Given
Sex	Female
Workorder	23415030

Positive Findings:

Analyte	Result	Units	Matrix Source
Amphetamine	**250**	**ng/mL**	**001 - Cardiac Blood**
Methamphetamine	**3000**	**ng/mL**	**001 - Cardiac Blood**
11-Hydroxy Delta-9 THC	**1.0**	**ng/mL**	**001 - Cardiac Blood**
Delta-9 Carboxy THC	**14**	**ng/mL**	**001 - Cardiac Blood**
Delta-9 THC	**3.7**	**ng/mL**	**001 - Cardiac Blood**

See Detailed Findings section for additional information

Agency Case Number: 2023-2491

Testing Requested:

Test	Test Name
8083B	Postmortem, Basic w/Vitreous Alcohol and 6-MAM Confirmation, Blood (Forensic)

Specimens Received:

ID	Tube/Container	Volume/ Mass	Collection Date/Time	Matrix Source	Labeled As
001	Gray Stopper Glass Tube	2 mL	10/23/2023 10:30	Cardiac Blood	231021-534
002	Red Stopper Glass Tube	1.75 mL	10/23/2023 10:30	Vitreous Fluid	231021-534
003	White Cap Plastic Container	31 g	10/23/2023 10:30	Liver Tissue	231021-534

All sample volumes/weights are approximations.

Specimens received on 10/24/2023.

Detailed Findings:

Analysis and Comments	Result	Units	Rpt. Limit	Specimen Source	Analysis By
Amphetamine	250	ng/mL	5.0	001 - Cardiac Blood	LC-MS/MS
Methamphetamine	3000	ng/mL	50	001 - Cardiac Blood	LC-MS/MS
11-Hydroxy Delta-9 THC	1.0	ng/mL	1.0	001 - Cardiac Blood	LC-MS/MS
Delta-9 Carboxy THC	14	ng/mL	5.0	001 - Cardiac Blood	LC-MS/MS
Delta-9 THC	3.7	ng/mL	0.50	001 - Cardiac Blood	LC-MS/MS

Other than the above findings, examination of the specimen(s) submitted did not reveal any positive findings of toxicological significance by procedures outlined in the accompanying Analysis Summary.

Reference Comments:

1. 11-Hydroxy Delta-9 THC (Active Metabolite) - Cardiac Blood:

   11-hydroxy-THC is a psychoactive THC metabolite. 11-OH-THC was detectable in blood, with a 0.5 ng/mL cutoff, for 1.5 hours (range: 0.25-3.5) when cannabis was smoked by occasional users. 11-OH-THC may be present over 72 hours in chronic, frequent cannabis users.

   In occasional cannabis users, median (range) peak blood concentrations after smoking of 6.9% (50 mg) THC were 1.9 (0.5-8.7) ng/mL with median times of maximum concentrations at approximately 11 minutes. In chronic, frequent cannabis users, median (range) peak blood concentrations after smoking 6.9% THC were 7.2 (1.9-30.9) ng/mL, with median times of maximum concentrations at approximately 12 minutes. Usual peak levels are less than 10% of THC levels after smoking.

2. Amphetamine - Cardiac Blood:

   Amphetamine (Adderall, Dexedrine) is a central nervous system stimulant. Amphetamine is also a metabolite of methamphetamine, benzphetamine and selegiline. It is used therapeutically in the treatment of narcolepsy and obesity and also in the treatment of attention-deficit hyperactivity disorder (ADHD). Amphetamine has a high potential for abuse. At low doses, amphetamine causes mild stimulation, offset of fatigue, and increase in alertness. It also causes changes in attitude, judgment and impulsivity. At higher doses, amphetamine causes euphoria, excitation, agitation, hypervigilance, rapid speech, dilated pupils which react slowly to light and increased motor restlessness. Pulse and blood pressure may be elevated. Withdrawal from amphetamine following abuse can result in extreme fatigue and uncontrollable sleepiness, agitation, and depression. In the treatment of narcolepsy, amphetamine is administered in daily divided doses of 5 to 60 mg. In abuse doses of several grams may be used on a daily basis in 'runs' lasting a week or more.

   Following a single oral dose of 10 mg amphetamine sulfate, a reported peak blood concentration of 40 ng/mL was reached at 2 hr. Following a single 30 mg dose to adults, an average peak plasma level of 100 ng/mL was reported at 2.5 hr. A steady-state blood level of 2000-3000 ng/mL was reported in an addict who consumed approximately 1000 mg daily.

   Overdose with amphetamine can produce restlessness, hyperthermia, convulsions, hallucinations, respiratory and/or cardiac failure. Reported blood concentrations in amphetamine-related fatalities ranged from 500-41000 ng/mL (mean 9000 ng/mL).

3. Delta-9 Carboxy THC (Inactive Metabolite) - Cardiac Blood:

   Delta-9 THC is the principle psychoactive ingredient of marijuana/hashish. Delta-9 carboxy THC (THCC) is the inactive metabolite of THC. The usual peak concentrations in serum for 1.75% or 3.55% THC marijuana cigarettes are 10-101 ng/mL attained 32 to 240 minutes after beginning smoking, with a slow decline thereafter. The ratio of whole blood concentration to plasma concentration is unknown for this analyte. THCC may be detected for up to one day or more in blood. Both delta-9-THC and THCC may be present substantially longer in chronic users. THCC is usually not detectable after passive inhalation.

Reference Comments:

4. Delta-9 THC (Active Ingredient of Marijuana) - Cardiac Blood:

   Delta-9 THC is the principle psychoactive ingredient of marijuana (cannabis, hashish). It is also the active component of the prescription medication Marinol®. Marijuana use causes relaxation, distorted perception, euphoria and feelings of well being, along with confusion, dizziness, somnolence, ataxia, speech difficulties, lethargy and muscular weakness.

   After smoking a user-preferred 300 mcg/kg dose average plasma THC concentrations at 35 minutes were reported at 16.1 (range 4.7-30.9) ng/mL, and had declined to 1.5 (range 0.4-3.2) ng/mL after 190 minutes. Usual peak levels in serum for 1.75% or 3.55% THC marijuana cigarettes: 50-270 ng/mL at 6 to 9 minutes after beginning smoking, decreasing to less than 5 ng/mL by 2 hrs. Whole blood THC concentrations are typically half those in a corresponding plasma sample.

5. Methamphetamine - Cardiac Blood:

   d-Methamphetamine is a DEA schedule II stimulant drug capable of causing hallucinations, aggressive behavior and irrational reactions. Chemically, there are two forms (isomers) of methamphetamine: l- and d-methamphetamine. The l-isomer is used in non-prescription inhalers as a decongestant and has weak CNS-stimulatory activity. The d-isomer has been used therapeutically as an anorexigenic agent in the treatment of obesity and has potent CNS-, cardiac- and circulatory-stimulatory activity. Amphetamine and norephedrine (phenylpropanolamine) are metabolites of methamphetamine. d-Methamphetamine is an abused substance because of its stimulatory effects and is also addictive.

   A peak blood concentration of methamphetamine of 20 ng/mL was reported at 2.5 hr after an oral dosage of 12.5 mg. Blood levels of 200-600 ng/mL have been reported in methamphetamine abusers who exhibited violent and irrational behavior. High doses of methamphetamine can also elicit restlessness, confusion, hallucinations, circulatory collapse and convulsions.

   *In this case, the level of methamphetamine determined has not been differentiated according to its isomeric forms. Differentiation of the isomers of methamphetamine is available upon request.

Unless alternate arrangements are made by you, the remainder of the submitted specimens will be discarded one (1) year from the date of this report; and generated data will be discarded five (5) years from the date the analyses were performed.

Workorder 23415030 was electronically signed on 11/06/2023 12:49 by:

William M. Schroeder, M.S., D-ABFT-FT
Forensic Toxicologist

Analysis Summary and Reporting Limits:

All of the following tests were performed for this case. For each test, the compounds listed were included in the scope. The Reporting Limit listed for each compound represents the lowest concentration of the compound that will be reported as being positive. If the compound is listed as None Detected, it is not present above the Reporting Limit. Please refer to the Positive Findings section of the report for those compounds that were identified as being present.

Test 50002B - Amphetamines Confirmation, Blood - Cardiac Blood

-Analysis by High Performance Liquid Chromatography/ Tandem Mass Spectrometry (LC-MS/MS) for:

Analyte	Rpt. Limit	Analyte	Rpt. Limit
Amphetamine	5.0 ng/mL	MDMA	5.0 ng/mL
MDA	5.0 ng/mL	Methamphetamine	50 ng/mL

Test 52198B - Cannabinoids Confirmation, Blood - Cardiac Blood

Analysis Summary and Reporting Limits:

-Analysis by High Performance Liquid Chromatography/ Tandem Mass Spectrometry (LC-MS/MS) for:

Analyte	Rpt. Limit	Analyte	Rpt. Limit
11-Hydroxy Delta-9 THC	1.0 ng/mL	Delta-9 THC	0.50 ng/mL
Delta-9 Carboxy THC	5.0 ng/mL		

Test 8083B - Postmortem, Basic w/Vitreous Alcohol and 6-MAM Confirmation, Blood (Forensic) - Cardiac Blood

-Analysis by Enzyme-Linked Immunosorbent Assay (ELISA) for:

Analyte	Rpt. Limit	Analyte	Rpt. Limit
Amphetamines	20 ng/mL	Fentanyl / Acetyl Fentanyl	0.50 ng/mL
Barbiturates	0.040 mcg/mL	Methadone / Metabolite	25 ng/mL
Benzodiazepines	100 ng/mL	Methamphetamine / MDMA	20 ng/mL
Buprenorphine / Metabolite	0.50 ng/mL	Opiates	20 ng/mL
Cannabinoids	10 ng/mL	Oxycodone / Oxymorphone	10 ng/mL
Cocaine / Metabolites	20 ng/mL	Phencyclidine	10 ng/mL

-Analysis by Headspace Gas Chromatography (GC) for:

Analyte	Rpt. Limit	Analyte	Rpt. Limit
Acetone	5.0 mg/dL	Isopropanol	5.0 mg/dL
Ethanol	10 mg/dL	Methanol	10 mg/dL

Case Report

Hailey Silas (2023-2491)

Shelby County Medical Examiner's Office 637 Poplar Ave., Memphis, TN 38105
Work: 901-222-4600
Cell: 901-305-4968

Case Brief
22 years old, White, Female investigated on 10/21/2023 at 10:22AM. Suspected COD is Blunt/Sharp Force, Fall Trauma, Decedent possibly jumped from an unknown bridge and landed on a barge down below, suffering fatal blunt force/fall trauma. with a suspected manner of Suicide.

Last name	First	Middle	Date of Death	Time of Death	Pronounced By
Silas	Hailey	Nickole	10/21/2023	12:16	Kelly Antrum

Decedent's Address (Number and Street)							

City	State	Zip

Date of Birth	Age	Gender	Race	Height	Weight	Hair Color	Eye Color
08/12/2001	22	Female	White	60 inches	131 pounds		

Facility or Address of Death	Place of Death
1 Riverside Drive	Other

City	State	Zip
Memphis	TN	38103

Next of Kin	Phone	Relationship
Larena Darrow		Mother

Next of Kin Address		

City	State	Zip

Funeral Home	Phone
Mid Soouth	615-477-9359

CAUSE AND MANNER OF DEATH	
Immediate Cause Multiple Blunt Traumatic Injuries	**Time Interval**
As a Consequence Of	**Time Interval**
As a Consequence Of	**Time Interval**
As a Consequence Of	**Time Interval**
Other Significant Conditions	

Manner	Autopsy	Date Examined	Time Examined
Undetermined	Full	10/23/2023	11:15

Name, Title and Address of Person Who Completed Cause of Death
Erica Curry, M.D.
637 Poplar Ave
Memphis , TN 38105

Name, Title and Address of Person Who Performed Examination and or Reviewed Medical Records
Erica Curry, M.D.
637 Poplar Ave
Memphis , TN 38105

Investigating Agency	Incident Number	Officer
Shelby County Sheriff's Office	2310001023SH	Det. Hunter Black

Date of Injury	Time of Injury	Injury at Work?
10/21/2023	00:00	No
Address of Injury unknown		**Place of Injury** Other
City	**State**	**Zip**

How Injury Occurred
Descended from height and landed on barge

Investigator Narrative

On 10/21/2023 at 1022 hours, this office was notified of a death, that occurred on a barge out in the Mississippi River, by Det. Hunter Black of the Shelby County Sheriffs Office for this unknown white female. Reportedly, the decedent may have possibly jumped from an unknown bridge and landed on a barge passing and was discovered unresponsive by crew members at 0700 hours. 911 Emergency Services were contacted and Shelby County Sheriffs Office was notified. Due to the circumstances, jurisdiction was accepted by the Medical Examiner's Office and Investigator Antrum along with Shelby County Sheriffs Office, responded to the scene together by boat to perform a brief body exam and to document the scene and decedent with photographs. The decedent was transported to the West Tennessee Regional Forensic Center for further examination, positive identification and disposition.
Kelly Antrum, Investigator
10/21/2023