EXHIBIT S-1: STATE'S SUPPLEMENTAL RESPONSE TO REQUEST FOR DISCOVERY REGARDING PENALTY PHASE EXPERTS
Veena Singh

Please note, additions to the expert disclosure filed on December 18, 2024, are italicized below.

The State has disclosed Veena Singh, Spokane County Chief Medical Examiner and Forensic Pathologist in this Supplemental Discovery Response. It is anticipated that the State will call Dr. Singh to testify as an expert regarding the autopsies performed at Spokane County Medical Examiner's Office on November 16, 2022, on the following individuals: Ethan Chapin; Kaylee Goncalves; Xana Kernodle; and Madison Mogen.

This response serves to supplement the information in the Autopsy Reports for Ethan Chapin, Kaylee Goncalves, Xana Kernodle, and Madison Mogen attached as Exhibits S-1(a)-(d), photographs and/or video, and related reports as previously discovered to defense. The below is a summary of Dr. Singh's anticipated testimony but does not repeat all specific findings that are detailed in her reports.

Based on Dr. Singh's education, training, and experience as a Chief Medical Examiner and a Forensic Pathologist, Dr. Singh will testify to performing postmortem examinations on Ethan Chapin, Kaylee Goncalves, Xana Kernodle, and Madison Mogen.

It is expected Dr. Singh will testify that Kaylee Goncalves, Xana Kernodle, and Madison Mogen endured a high degree of pain and/or suffering prior to their deaths as a result of the injuries inflicted. It is expected Dr. Singh will testify Ethan Chapin also experienced a high degree of pain and/or suffering prior to his death as a result of the injuries inflicted but to a lesser degree than the other decedents.

Dr. Singh will testify regarding chain of custody, observations, examinations, evidence collected, tests performed, and cause of death.

It is Dr. Singh's expert opinion that Ethan Chapin's cause of death is multiple sharp force injuries. Dr. Singh's postmortem examination showed a well-developed adult male with stab and incised wounds of the scalp, face, and neck; a stab wound of the upper chest; incised wounds of the upper extremities; stab and incised wounds of the lower extremities; associated injuries to include perforations of the jugular vein, subclavian vein, and subclavian artery. Dr. Singh will testify there was no evidence of natural disease that would have contributed to Chapin's death. Postmortem toxicology showed Chapin had a blood alcohol concentration of 0.122 g/100 mL and an amphetamine level of 260 ng/ML. In addition, Dr. Singh will provide testimony regarding evidence that the knife used on Chapin showed indications that there was a blade guard. Dr. Singh will provide her opinion that Chapin's wounds are consistent with a single-edged knife as the source of the wounds. Dr. Singh will provide her opinion that the use of a Ka-Bar Full Size US Marine Corps Fighting Knife is consistent with the injuries observed.

It is Dr. Singh's expert opinion that Kaylee Goncalves' cause of death is multiple sharp force injuries. In addition, blunt force injuries of the head and asphyxial injuries are a significant contributor to her death. Dr. Singh's postmortem examination showed a well-developed adult female with stab and incised wounds of the scalp, face and neck; stab and incised wounds of the chest; and stab and incised wounds of the upper extremities. Associated injuries include punctures of the outer table of the skull; injuries to the teeth and tongue; perforations of the subclavian artery and vein; and hemorrhage into the chest cavities. Dr. Singh observed blunt force injuries including scalp laceration, bleeding

around the brain, and nasal fracture, as well as scrapes on the nose and cheeks, bruising around the eyes, and patterned bruises extending across the lower face. Dr. Singh will testify that an unidentified object was pressed across Goncalves' mouth. Dr. Singh observed petechial hemorrhages in the eyes and mouth. Dr. Singh will testify there was no evidence of natural disease that would have caused or contributed to Goncalves' death. Postmortem toxicology showed Goncalves had a blood alcohol concentration of 0.107 g/100 mL. Dr. Singh will provide her opinion that Goncalves' wounds are consistent with a single-edged and/or double-edged knife being the source of the wounds. Dr. Singh will provide her opinion that the use of a Ka-Bar Full Size US Marine Corps Fighting Knife is consistent with the injuries observed.

It is Dr. Singh's expert opinion that Xana Kernodle's cause of death is multiple sharp force injuries. Dr. Singh's postmortem examination showed a well-developed adult female with stab and incised wounds of the scalp, face, and neck; stab wounds of the chest and abdomen; incised puncture wounds of the back; incised wounds of the upper extremities; and incised wounds of the lower extremities. Dr. Singh also observed associated injuries including punctures of the outer table of the skull; perforations of the jugular vein, heart, lung, and pulmonary blood vessels; hemorrhage into the chest cavities; and wounds extending into the bones of the hand. Dr. Singh will testify that some of the injuries sustained are defensive injuries. In addition, Kernodle's injuries included scrapes and bruises on the face, torso, and extremities. There was no evidence that natural disease would have caused or contributed to Kernodle's death. Postmortem toxicology showed Kernodle had a blood alcohol concentration of 0.229 g/100 mL and an amphetamine level of 12 ng/ML. Dr. Singh will provide her opinion that Kernodle's wounds are consistent

with a single-edged and/or double-edged knife being the source of the wounds. In addition, the handle and/or tip of the knife could account for the appearance of serration on some of Kernodle's face wounds. Dr. Singh will opine that this serration could be caused by Kernodle fighting and/or holding/touching the knife and/or hand that is holding the knife causing the injury. Dr. Singh will provide her opinion that the use of a Ka-Bar Full Size US Marine Corps Fighting Knife is consistent with the injuries observed.

It is Dr. Singh's expert opinion that Madison Mogen's cause of death is multiple sharp force injuries. Dr. Singh's postmortem examination showed a well-developed adult female with stab and incised wound of the scalp, face, and neck; stab wounds of the chest; and incised wounds of the upper extremities. Dr. Singh also observed associated injuries including wounds of the lung and liver as well as perforations of the subclavian vein, subclavian artery, and blood vessels of the chest wall. There was no evidence of natural disease that would have caused or contributed to Mogen's death. Postmortem toxicology testing showed Mogen had a blood alcohol concentration of 0.282 g/100 mL. Dr. Singh will provide her opinion that Mogen's wounds are consistent with a single-edged knife as the source of the wounds. Dr. Singh will provide her opinion that the use of a Ka-Bar Full Size US Marine Corps Fighting Knife is consistent with the injuries observed.

Dr. Singh will testify that a single large blade (single or double-edged) knife could be responsible for all wounds observed on Chapin, Goncalves, Kernodle, and Mogen.

Dr. Singh's opinion/testimony will be based on her experience, education, and trainings as detailed in his curriculum vitae which is included with this response as Exhibit S-1(e).

Spokane County
WASHINGTON

OFFICE OF THE
MEDICAL EXAMINER

CHIEF MEDICAL EXAMINER
VEENA D. SINGH, MD, MPH
FORENSIC PATHOLOGIST

DEPUTY MEDICAL EXAMINER
SEAN RICCIARDO, MD
FORENSIC PATHOLOGIST

DEPUTY MEDICAL EXAMINER
MAKINZIE MOTT, MD
FORENSIC PATHOLOGIST

AUTOPSY REPORT

AUTOPSY NO:	**221114-506**
NAME OF DECEDENT:	**CHAPIN, ETHAN J.**
DATE OF BIRTH:	10/29/2002 SEX: MALE
DATE PRONOUNCED/FOUND:	11/13/2022
DATE OF AUTOPSY:	11/16/2022 @ 8:00 AM
LOCATION:	SPOKANE COUNTY MEDICAL EXAMINER; SPOKANE, WA.
RESPONSIBLE PARTY:	CATHERINE MABBUTT, LATAH COUNTY CORONER
PROSECTOR:	VEENA D. SINGH, M.D., M.P.H.
ASS'T PROSECTOR:	KATIE SKIBITSKI / KATE SIRE / HEATHER ACRES

NOTICE: THIS REPORT IS CONFIDENTIAL IN THE STATE OF WASHINGTON

You are being given this report because you are named in the statute below as being authorized to have a copy of the autopsy or postmortem report, either of which may include other reports and records. These are highly confidential documents! You may not give or show any of these documents to anyone except as authorized by law.

RCW 68.50.105Autopsies, postmortems - Reports and records confidential – Exceptions. (Effective January 1, 2014.) (1) Reports and records of autopsies or postmortems shall be confidential, except that the following persons may examine and obtain copies of any such report or record: The personal representative of the decedent as defined in RCW11.02.005, any family member, the attending physician or advanced registered nurse practitioner, the prosecuting attorney or law enforcement agencies having jurisdiction, public health officials, the department of labor and industries in cases in which it has an interest under RCW 68.50.103, or the secretary of the department of social and health services or his or her designee in cases being reviewed under RCW74.13.640. (2)(a) Notwithstanding the restrictions contained in this section regarding the dissemination of records and reports of autopsies or postmortems, nor the exemptions referenced under RCW42.56.240(1), nothing in this chapter prohibits a coroner, medical examiner, or his or her designee, from publicly discussing his or her findings as to any death subject to the jurisdiction of his or her office where actions of a law enforcement officer or corrections officer have been determined to be a proximate cause of the death, except as provided in (b) of this subsection. (b) A coroner, medical examiner, or his or her designee may not publicly discuss his or her findings outside of formal court or inquest proceedings if there is a pending or active criminal or civil action, concerning a death that has commenced prior to January 1, 2014. (3) The coroner, the medical examiner, or the attending physician shall, upon request, meet with the family of the decedent to discuss the findings of the autopsy or postmortem. For purposes of this selection, the term "family" means the surviving spouse, state registered domestic partner, or any child, parent, grandparent, grandchild, brother, or sister of the decedent, or any person who was guardian of the decedent at the time of death. [2013 c 295 § 1:2011 c 61 § 1. Prior:2007 c 439 § 1; 2007 c 156 § 23; 1987 c 331 § 58; 1985 c 300 § 1; 1977 c 79 § 2; 1953 c 188 § 9. Formerly RCW 68.08.105]

Website: https://www.spokanecounty.org/807/Medical-Examiner
102 S. Spokane St. Spokane, Washington 99202 (509) 477-2296 FAX: (509) 455-3954
Email: medexam@spokanecounty.org

SUMMARY OF CASE FINDINGS

I. Multiple sharp force injuries
II. Toxicology: See separate report

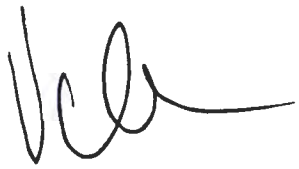
OPINION:

Investigative reports indicate that this 20 year old male, Ethan Chapin, was found deceased at his girlfriend's shared home. Three other occupants of the home were also found deceased.

Postmortem examination showed a well-developed adult male with stab and incised wounds of the scalp, face, and neck (4); a stab wound of the upper chest (1); incised wounds of the upper extremities (6); and stab and incised wounds of the lower extremities (6). Associated injuries included perforations of the jugular vein, subclavian vein, and subclavian artery. There was no evidence of natural disease that would have caused or contributed to death.

Postmortem toxicology testing showed a blood alcohol concentration of 0.122 g/100 mL and an amphetamine level of 260 ng/mL.

The cause of death is multiple sharp force injuries.



12/15/2022

Veena D. Singh, M.D., M.P.H. (date signed)
Forensic Pathologist

VDS/skb

BACKGROUND INFORMATION: Briefly, this 20-year-old male was found deceased at his girlfriend's home. Three other occupants of the home were also found deceased. The Latah County Coroner's Office requested an autopsy to further investigate the death.

INITIAL OBSERVATIONS: The body is found supine in a body bag sealed by tag number "0773078." The name "Ethan Chapin" and the tag number are written on a piece of blue tape affixed to the outside of the body bag. A piece of green tape bears the medicolegal case number and a notation indicating the body has been x-rayed. An identification band bearing the decedent's name, dates of birth and death, and tag number encircles the right ankle. An identification band bearing the decedent's first name and last initial encircles the left ankle.

EXTERNAL EVIDENCE OF MEDICAL INTERVENTION: None.

CLOTHING AND PERSONAL EFFECTS: The body is received clad in a pair of white athletic style socks. A brown paper bag is secured over each hand by means of silver duct tape.

Jewelry includes a white metal pendant on a black cord around the neck and a black bracelet on the left wrist.

EXTERNAL EXAMINATION: The body is that of a well-developed, well-nourished, adult light-complected male who weighs 228 pounds (as received), measures approximately 75 inches in length, and appears compatible with the reported age. The body has been refrigerated and is cool to the touch. Rigor mortis is receding in the muscles of the jaw and extremities. Fixed dark pink livor mortis is present over the posterior and right-sided surfaces of the body, except in areas exposed to pressure. When first viewed, blood is caked over the neck and in the left ear, and dried in smears and rivulets over the face, chest, and arms.

HEAD AND NECK
The scalp hair is brown, wavy, and measures up to approximately 5 inches in length over the crown. The irides appear hazel. The corneas are translucent. The sclerae are white and the conjunctivae are clear. No petechial hemorrhages are identified on the sclerae, conjunctivae, facial skin, or oral mucosa. The nose and ears are normally formed. The anterior teeth are natural and in good condition. Facial hair includes a trimmed mustache and long stubble in the beard distribution.

The neck is symmetrical, without masses. The trachea is midline.

THORAX AND ABDOMEN
The thorax is well developed and symmetrical. The chest is slightly concave. The abdomen is flat. The surface of the back is free of lesions.

The external genitalia are those of a normal adult male. The penis is circumcised. On the right shaft of the penis is an approximately 1/8 inch, bloodless area of skin erosion.

EXTREMITIES
The upper and lower extremities are well developed and symmetrical, without absence of digits. The fingernails are short, with smooth edges. The toenails range from short to medium length and are somewhat irregularly trimmed.

IDENTIFYING MARKS AND SCARS
Scars include an approximately 1/4 inch diameter, circular, hypopigmented scar on the upper right chest.

EVIDENCE OF INJURY:

(NOTE: The wounds are described in an arbitrary order which does not imply sequence or severity. Wound tracks are described for a body at rest in the anatomic position.)

STAB AND INCISED WOUNDS OF HEAD AND NECK (4)

(1) Entrance: On the right parietal scalp, above the right ear, is an approximately 1-1/2 x 1/4 inch, linear stab wound oriented from 7 o'clock to 1 o'clock. The 7 o'clock end is squared and the 1 o'clock end is sharp. Discontinuous, 1/16 inch red marginal abrasion is present. An approximately 1-1/2 x up to 1/2 inch, triangular, abraded red contusion is present at the posterior and superior margins of the wound, widest superiorly. At the 7 o'clock end, a 1/8 inch laceration extends inferiorly from the anterior corner of the wound.

Path: The hemorrhagic wound track travels along the skull, involving the scalp, subcutaneous tissue, temporalis muscle, and temporoparietal galea.

Associated findings: There is moderate associated subscalpular, subgaleal, and temporalis muscle hemorrhage. There is a thin film of blood in the subdural space, overlying the left cerebral convexity.

Depth and direction: The wound track travels from the decedent's back to front and downward, to a depth of approximately 7 inches.

(2) Entrance: On the left parietal scalp, above and behind the left ear, is an approximately 2 x 3/16 inch, curvilinear incised wound with undermining extending anteriorly and 1/16 inch, red marginal abrasion.

Path: The hemorrhagic wound track travels along the skull, involving the scalp, subcutaneous tissue, and left temporalis muscle.

Associated findings: There is moderate associated subscalpular, subgaleal, and temporalis muscle hemorrhage. There is a thin film of blood in the subdural space, overlying the left cerebral convexity.

Depth and direction: The wound track travels from the decedent's left to right and back to front, to a depth of approximately 1 inch.

(3) Entrance: On the lateral left cheek, anterior to the left ear, is an approximately 1 x 3/16 inch, linear stab wound oriented from 12 o'clock to 6 o'clock. The 12 o'clock end is sharp and the 6 o'clock end is squared. 1/16 to 3/8 inch, dark red abrasion is present at the margins of this wound, widest inferiorly and continuous with a 1/4 inch linear abrasion extending anteriorly from the inferior end of this wound.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, and musculature of

the left cheek, passing between the mandible and zygomatic arch to enter the oral cavity.

Associated findings: None.

Depth and direction: The wound track travels from the decedent's left to right and downward. Depth cannot be accurately assessed due to the wound track entering the oral cavity.

(4) Entrance: On the left neck is a gaping, 1-1/4 x 1/2 inch, linear stab wound, oriented from 10 o'clock to 4 o'clock. The 10 o'clock end is squared and the 4 o'clock end is sharp.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, superficial and deep musculature, and left internal jugular vein.

Associated findings: There is abundant associated soft tissue hemorrhage. The left jugular vein is perforated.

Depth and direction: The wound track travels from the decedent's front to back and downward, to a depth of approximately 1-1/2 inches.

STAB WOUND OF TORSO (1)

Entrance: On the left supraclavicular skin is a gaping, 2-1/2 x 1 inch, linear stab wound oriented from 9 o'clock to 3 o'clock. The 9 o'clock end is sharp and the 3 o'clock end is rounded, showing an approximately 4-1/4 inch, linear, incised and abraded tail extending laterally to the anterior left axilla.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, superficial and deep musculature, confluence of the left internal jugular and subclavian veins, and left subclavian artery.

Associated findings: There is abundant associated soft tissue hemorrhage. Clotted blood is visible at the base of the wound. The left internal jugular and subclavian veins and left subclavian artery are perforated.

Depth and direction: The wound track travels from the decedent's front to back and downward, to a depth of approximately 4 inches.

INCISED WOUNDS OF UPPER EXTREMITIES (6)

(1-3) Entrance: On the dorsal aspect of the right hand, at the base of the index, 4th, and 5th fingers, are superficial incised wounds measuring 1/8 inch, 1/2 inch, and 1/2 inch respectively. The wounds on the 4th and 5th fingers show irregular edges.

Path: The hemorrhagic wound tracks involve the skin and subcutaneous tissue.

Associated findings: None.

Depth and direction: The wound tracks travel from the decedent's back to front, to a depth of 1/16 to 1/8 inch.

(4) Entrance: On the palmar aspect of the right hand, at the hypothenar eminence, is a superficial, 3/8 inch, linear incised wound.

Path: The hemorrhagic wound track involves the skin.

Associated findings: None.

Depth and direction: The wound track travels from the decedent's front to back, to a depth of approximately 1/16 inch.

(5) Entrance: On the ventral left wrist is a transversely oriented, 1-3/4 x 3/8 inch, linear incised wound with a superficial, 1/2 inch incised tail extending medially and a 1/2 x 1-3/4 inch, incised and abraded tail extending proximally from the lateral end of the wound.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, superficial musculature, and flexor tendons.

Associated findings: There is moderate associated soft tissue hemorrhage.

Depth and direction: The wound track travels from the decedent's front to back, to a depth of approximately 1/2 inch.

(6) Entrance: On the dorsal aspect of the left hand, at the base of the left index finger, is a 1/2 inch, superficial incised wound.

Path: The hemorrhagic wound track involves the skin.

Associated findings: None.

Depth and direction: The wound track travels from the decedent's front to back, to a depth of approximately 1/16 inch.

STAB AND INCISED WOUNDS OF LOWER EXTREMITIES (6)

(1) Entrance: On the medial right thigh is a 9/16 x 1/16 inch stab wound oriented from 9 o'clock to 3 o'clock. Both ends are sharp. Yellow abrasion is present at the margins of the wound, extending up to 1/2 inch from the 9 o'clock end of the wound, and a 1/4 inch, superficial incised tail extends laterally from the 3 o'clock end of this wound.

Path: The minimally hemorrhagic wound track involves the skin, subcutaneous tissue, and superficial musculature of the medial thigh.

Associated findings: The skin superior to this wound shows a linear, 4 inch, linear abrasion.

Depth and direction: The wound track travels from the decedent's left to right and back to front, to a depth of approximately 1 inch.

(2) Entrance: At the lateral right knee is a gaping, 4 x 1 inch, linear incised wound (5 inches when reapproximated).

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, and musculature.

Associated findings: There is moderate associated soft tissue hemorrhage.

Depth and direction: The wound track travels from the decedent's right to left and slightly back to front, to a depth of approximately 1-1/4 inches.

(3) Entrance: On the lateral right calf is a gaping, 2-1/2 by 3/4 inch linear stab wound (3 inches when reapproximated), oriented from 12 o'clock to 6 o'clock. The 12 o'clock end is squared and the 6 o'clock end is sharp.

Path: The minimally hemorrhagic wound track involves the skin, subcutaneous tissue, and musculature.

Associated findings: None.

Depth and direction: The wound track travels from the decedent's right to left and back to front, to a depth of approximately 3-1/2 inches.

(4-6) Entrance: On the posterior left thigh is a gaping wound complex consisting of at least three intersecting stab wounds, measuring 1-1/4 inches, 2-1/2 inches, and 2-1/4 inches in length from lateral to medial with a combined width of up to 2 inches.

Path: The hemorrhagic wound tracks involve the skin, subcutaneous tissue, and musculature.

Associated findings: There is abundant associated soft tissue hemorrhage.

Depth and direction: The wound tracks travel from the decedent's back to front, to a depth of approximately 4 inches.

CLOTHING
Not applicable.

WEAPON
Based on characteristics of the least distorted wound, the findings are consistent with a blade approximately 5/32 to 3/16 in thickness.

BLUNT FORCE INJURIES

Head and neck: None.

Thorax and abdomen: None.

Extremities: A curvilinear, discontinuous red abrasion extends transversely over the right deltoid, measuring 2 inches in length. On the dorsal left hand is a 1/8 inch, irregular red abrasion. On the dorsal left wrist is a faint, linear, 1/2 inch red contusion.

INTERNAL EXAMINATION:

BODY CAVITIES
The body is entered with the standard coronal and Y-shaped thoraco-abdominal incisions. An intact diaphragm separates the thoracic and abdominal cavities. All body organs are in normal and anatomic position. There are filmy adhesions between the left lung and chest wall. There are approximately 5 ml of serosanguinous fluid in the pericardial sac. The serous surfaces are smooth and glistening.

HEAD
Reflection of the scalp reveals injuries, as described above. The skull is intact and of normal thickness. The brain weighs 1600 grams. The dura mater and falx cerebri are intact, and not adherent to the brain. The leptomeninges are thin and transparent. There is no epidural or subarachnoid hemorrhage. The cerebral hemispheres are symmetrical, with mild diffuse flattening of the gyri and narrowing of the sulci.

The cranial nerves and blood vessels at the base of the brain are free of abnormality. The cerebral ventricles are of normal caliber. Serial coronal sections of cerebral hemispheres show a uniform cortical ribbon and no focal lesions of the cortex, white matter, or deep nuclei. There is no gross evidence of infection or mass lesion. Sections through the brainstem and cerebellum show no focal lesions. The pituitary gland is normally positioned in the sella turcica and is unremarkable. The dura is stripped from the inner table of the cranial fossae and no basilar fractures are identified. The spinal cord is not removed.

NECK
The neck is dissected in layers showing normal anatomic relations. The left neck musculature shows injuries, as described above. The hyoid bone and thyroid cartilage are intact. The cricoid cartilage and the rings of the trachea are intact. The cervical spine shows normal alignment. Palpation and manipulation reveal no fractures. The larynx shows no evidence of obstruction or edema. The vocal cords are symmetrical and free of abnormalities. The epiglottis is normal. The carotid vessels are intact. The tongue is normally formed.

CARDIOVASCULAR SYSTEM
The pericardial surfaces are smooth and glistening. The pericardial sac is intact and free of significant adhesions.

The heart weighs 420 grams. The coronary arteries arise normally and follow the distribution of a right-dominant pattern. Serial cross-sectioning reveals no significant atherosclerosis.

Serial sections of the myocardium are taken from the apex and the base of the heart is opened along lines of blood flow. The chambers and valves are proportionate. The valves are normally formed, thin and pliable, and free of vegetations and degenerative changes.

The myocardium is pale red-brown, firm, and free of focal or regional fibrosis, erythema, pallor or softening. The atrial and ventricular septa are intact, and the septum and free walls are free of muscular bulges.

The aorta and its major branches arise normally and follow the usual course, without coarctation or aneurysmal dilation. There is no significant atherosclerosis.

The venae cavae and their major tributaries are normally distributed and are free of gross abnormalities.

RESPIRATORY SYSTEM
Upon opening the chest cavity, the lungs are fully expanded. The right and left lungs weigh 390 and 290 grams, respectively. The upper and lower airways contain a small amount of foamy white fluid. The mucosal surfaces are smooth and yellow-tan.

The pleural surfaces are smooth, glistening, and unremarkable, save for adhesions as noted above. The pulmonary parenchyma is light pink and free of masses; there is an approximately 1.5 cm bleb in the right middle lobe of the lung. The cut surfaces exude minimal blood and frothy fluid. There is no evidence of thromboembolism, infarction, or neoplasia. The pulmonary vasculature is normally developed, patent, and free of gross abnormalities.

LIVER AND BILIARY SYSTEM
The liver weighs 1760 grams. The hepatic capsule is smooth, glistening, and intact, covering pale red-brown parenchyma. There are no masses or gross abnormalities of the biliary tree. The gallbladder contains a moderate amount of watery bile without stones.

ALIMENTARY TRACT
The esophagus is lined by gray-white smooth mucosa. The gastric mucosa is arranged in the usual rugal folds, and the lumen contains approximately 100 ml of watery tan fluid without food or pill fragments. The stomach courses to the small bowel in the usual fashion. The mucosal and serosal surfaces of the small and large bowel are unremarkable. The appendix is present and is grossly unremarkable. The pancreas has a normal tan lobulated appearance.

GENITOURINARY TRACT
The right and left kidneys weigh 120 and 130 grams, respectively. The renal capsules are smooth, thin, semitransparent, and strip with ease from the underlying smooth, pale tan, firm, cortical surfaces. The cortices are of normal thickness and are sharply delineated from the medullary pyramids. The calyces, pelves, and ureters are non-dilated and free of stones. The urinary bladder contains a moderate amount of clear yellow urine; the mucosa is gray-tan and smooth.

The bilaterally descended testes are of normal size and consistency. The prostate is not enlarged.

LYMPHATIC SYSTEM
The spleen weighs 180 grams and has a smooth intact capsule covering red-purple, moderately firm parenchyma. The splenic white pulp is grossly indiscernible. The exposed bone marrow (rib) is red-purple and homogenous. The lymph nodes, where visualized, show normal anatomic features. The thymus is atrophic and replaced by fat.

ENDOCRINE SYSTEM
The pituitary gland is of normal size. The thyroid gland is of normal position, size, and texture. The parathyroid glands are not identified grossly. The adrenal glands have normal cut surfaces with yellow cortex and gray medulla.

MUSCULOSKELETAL SYSTEM
The bony framework, supporting musculature, and soft tissues are not unusual, except as noted above.

OBSERVERS: Representatives of the Moscow Police Department, Idaho State Police, and Latah County Coroner's Office are present at examination.

PHOTOGRAPHS: Photographs are taken at the time of examination.

X-RAYS: A full body anteroposterior radiograph is obtained. No spine, rib, or limb fractures are identified. No metallic foreign bodies are identified.

EVIDENCE COLLECTION: Evidence collected at autopsy and released to Moscow Police Department includes the decedent's clothing; swabs of multiple body surfaces; oral, anal, and penile swabs; fingernail clippings; DNA card, and hair. Please see separate inventory sheet.

MATERIALS TAKEN FOR TOXICOLOGY: Peripheral blood samples are submitted to NMS Labs. Toxicology results are reported separately.

TISSUE BIOPSY SPECIMENS TAKEN: Representative biopsy samples of major organs and structures are retained in fixative.

WHOLE ORGANS RETAINED FOR FURTHER STUDY AFTER RELEASE OF THE BODY: None.

MICROSCOPIC EXAMINATION: No specimens were submitted for microscopic examination.

MICROBIOLOGY: No studies are performed.

OTHER LABORATORY TESTS:

Postmortem screening for glucose and ketones is negative.
Postmortem urinary toxicology screening is positive for amphetamines and ethanol.

VDS/skb
dt: 11/16/22

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RETENTION:

Blood, body fluids, tissues, organs (partial portions of routinely, or under some circumstances whole), and physical/trace materials collected (the exact samples vary by case as needed for diagnostic or evidentiary purposes, and by availability) during the examination are routinely held for a period of time after release of the body and will undergo biohazard disposal unless transferred to a laboratory or other agency, or otherwise released by special arrangement.

Body Fluid/Organs, Evidence Retention Summary Chart

6 Months	**Refrigerated** – blood, urine, vitreous **Frozen** – gastric **Frozen** – liver
1 Year	Bullets Ligatures Other items of physical evidence Hair
3 Years	**Frozen** – red top

	Frozen – purple top
3 Years	Formalin fixed tissue including whole organs fixed in formalin
10 Years	Histology blocks
Indefinite	Microscopic slides
Indefinite or Archive	Fingerprint cards Blood cards

RCW 68.50.106

Autopsies, post-mortems – Analyses – Opinions – Evidence – Costs

In any case in which an autopsy or post-mortem is performed, the coroner or medical examiner, upon his/her own authority or upon the request of the prosecuting attorney or other law enforcement agency having jurisdiction, may make or cause to be made an analysis of the stomach contents, blood, or organs, or tissues of a deceased person and secure professional opinions thereon and retain or dispose of any specimens or organs of the deceased which in his/her discretion are desirable or needful for anatomic, bacteriological, chemical, or toxicological examination or upon lawful request are needed or desired for evidence to be presented in court. Costs shall be borne by the county.

[1993 c 228 § 19; 1987 c 331 § 59; 1975-'76 2nd ex.s. c 28 § 1; 1953 c 188 § 10. Formerly RCW 68.08.106]

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Robert A. Middleberg, PhD, F-ABFT, DABCC-TC, Laboratory Director

CONFIDENTIAL

Toxicology Report

Report Issued 12/05/2022 09:01

To: **150341**
Latah County Coroner
P.O. Box 8068

Moscow, ID 83843

Patient Name	Chapin, Ethan J
Patient ID	221114-506
Chain	221114-506
DOB	10/29/2002
Sex	Male
Workorder	22428504

Positive Findings:

Analyte	Result	Units	Matrix Source
Ethanol	**122**	**mg/dL**	**001 - Cardiac Blood**
Blood Alcohol Concentration (BAC)	**0.122**	**g/100 mL**	**001 - Cardiac Blood**
Amphetamine	**260**	**ng/mL**	**001 - Cardiac Blood**

See Detailed Findings section for additional information

Testing Requested:

Test	Test Name
8051B	Postmortem, Basic, Blood (Forensic)

Specimens Received:

ID	Tube/Container	Volume/ Mass	Collection Date/Time	Matrix Source	Labeled As
001	Gray Stopper Glass Tube	9 mL	Not Given	Cardiac Blood	221114-506

All sample volumes/weights are approximations.

Specimens received on 11/18/2022.

Detailed Findings:

Analysis and Comments	Result	Units	Rpt. Limit	Specimen Source	Analysis By
Ethanol	122	mg/dL	10	001 - Cardiac Blood	Headspace GC
Blood Alcohol Concentration (BAC)	0.122	g/100 mL	0.010	001 - Cardiac Blood	Headspace GC
Amphetamine	260	ng/mL	5.0	001 - Cardiac Blood	LC-MS/MS
Ethanol	Confirmed	mg/dL	10	001 - Cardiac Blood	Headspace GC

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. 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).

2. Ethanol (Ethyl Alcohol) - Cardiac Blood:

   Ethyl alcohol (ethanol, drinking alcohol) is a central nervous system depressant and can cause effects such as impaired judgment, reduced alertness and impaired muscular coordination. Ethanol can also be a product of decomposition or degradation of biological samples.

Sample Comments:

001 Physician/Pathologist Name: Veena Singh

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 22428504 was electronically signed on 12/05/2022 08:27 by:

Daniel T. Anderson, M.S., D-ABFT-FT, ABC-GKE
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 50010B - 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	5.0 ng/mL
MDEA	5.0 ng/mL		

Test 52250B - Alcohols and Acetone Confirmation, Blood - Cardiac Blood

-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

Test 8051B - Postmortem, Basic, 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	1.0 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

Spokane County
WASHINGTON

OFFICE OF THE
MEDICAL EXAMINER

CHIEF MEDICAL EXAMINER
VEENA D. SINGH, MD, MPH
FORENSIC PATHOLOGIST

DEPUTY MEDICAL EXAMINER
SEAN RICCIARDO, MD
FORENSIC PATHOLOGIST

DEPUTY MEDICAL EXAMINER
MAKINZIE MOTT, MD
FORENSIC PATHOLOGIST

AUTOPSY REPORT

AUTOPSY NO:	**221114-558**
NAME OF DECEDENT:	**GONCALVES, KAYLEE J.**
DATE OF BIRTH:	06/08/2001 SEX: FEMALE
DATE PRONOUNCED/FOUND:	11/13/2022
DATE OF AUTOPSY:	11/16/2022 @ 4:50 PM
LOCATION:	SPOKANE COUNTY MEDICAL EXAMINER; SPOKANE, WA.
RESPONSIBLE PARTY:	CATHERINE MABBUTT, LATAH COUNTY CORONER
PROSECTOR:	VEENA D. SINGH, M.D., M.P.H.
ASS'T PROSECTOR:	KATIE SKIBITSKI / KATE SIRE / HEATHER ACRES / FERNANDO CALDERON

NOTICE: THIS REPORT IS CONFIDENTIAL IN THE STATE OF WASHINGTON

You are being given this report because you are named in the statute below as being authorized to have a copy of the autopsy or postmortem report, either of which may include other reports and records. These are highly confidential documents! You may not give or show any of these documents to anyone except as authorized by law.

RCW 68.50.105Autopsies, postmortems - Reports and records confidential – Exceptions. (Effective January 1, 2014.) (1) Reports and records of autopsies or postmortems shall be confidential, except that the following persons may examine and obtain copies of any such report or record: The personal representative of the decedent as defined in RCW11.02.005, any family member, the attending physician or advanced registered nurse practitioner, the prosecuting attorney or law enforcement agencies having jurisdiction, public health officials, the department of labor and industries in cases in which it has an interest under RCW 68.50.103, or the secretary of the department of social and health services or his or her designee in cases being reviewed under RCW74.13.640. (2)(a) Notwithstanding the restrictions contained in this section regarding the dissemination of records and reports of autopsies or postmortems, nor the exemptions referenced under RCW42.56.240(1), nothing in this chapter prohibits a coroner, medical examiner, or his or her designee, from publicly discussing his or her findings as to any death subject to the jurisdiction of his or her office where actions of a law enforcement officer or corrections officer have been determined to be a proximate cause of the death, except as provided in (b) of this subsection. (b) A coroner, medical examiner, or his or her designee may not publicly discuss his or her findings outside of formal court or inquest proceedings if there is a pending or active criminal or civil action, concerning a death that has commenced prior to January 1, 2014. (3) The coroner, the medical examiner, or the attending physician shall, upon request, meet with the family of the decedent to discuss the findings of the autopsy or postmortem. For purposes of this selection, the term "family" means the surviving spouse, state registered domestic partner, or any child, parent, grandparent, grandchild, brother, or sister of the decedent, or any person who was guardian of the decedent at the time of death. [2013 c 295 § 1:2011 c 61 § 1. Prior:2007 c 439 § 1; 2007 c 156 § 23; 1987 c 331 § 58; 1985 c 300 § 1; 1977 c 79 § 2; 1953 c 188 § 9. Formerly RCW 68.08.105]

Website: https://www.spokanecounty.org/807/Medical-Examiner
102 S. Spokane St. Spokane, Washington 99202 (509) 477-2206 FAX: (509) 455-3954
Email: medexam@spokanecounty.org

SUMMARY OF CASE FINDINGS

I. Multiple sharp force injuries
II. Blunt force injuries of head
III. Asphyxial injuries
IV. Toxicology: See separate report

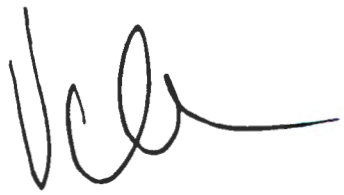
OPINION:

Investigative reports indicate that this 21 year old female, Kaylee Goncalves, was found deceased at her shared home. Three other occupants of the home were also found deceased.

Postmortem examination showed a well-developed adult female with stab and incised wounds of the scalp, face, and neck (24+); stab and incised wounds of the chest (11); and stab and incised wounds of the upper extremities (3). Associated injuries included punctures of the outer table of the skull; injuries to the teeth and tongue; perforations of the subclavian artery and vein; and hemorrhage into the chest cavities. Blunt force injuries included scalp laceration, bleeding around the brain, and nasal fracture, as well as scrapes on the nose and cheeks, bruising around the eyes, and patterned bruises extending across the lower face. Petechial hemorrhages were present in the eyes and mouth. There was no evidence of natural disease that would have caused or contributed to death.

Postmortem toxicology testing showed a blood alcohol concentration of 0.107 g/100 mL.

The cause of death is multiple sharp force injuries. Blunt force injuries of the head and asphyxial injuries were listed as significant contributors to death.



12/15/2022

Veena D. Singh, M.D., M.P.H. (date signed)
Forensic Pathologist

VDS/skb

BACKGROUND INFORMATION: Briefly, this 21-year-old female was found deceased at her shared home. Three other occupants of the home were also found deceased. The Latah County Coroner's Office requested an autopsy to further investigate the death.

INITIAL OBSERVATIONS: The body is found supine in a body bag sealed by tag number "0773079." The name "Kaylee Goncalves" and the tag number are written on a piece of blue tape affixed to the outside of the body bag. A piece of green tape bears the medicolegal case number and a notation indicating the body has been x-rayed. An identification band bearing the decedent's name, dates of birth and death, and tag number encircles the right ankle.

EXTERNAL EVIDENCE OF MEDICAL INTERVENTION: None.

CLOTHING AND PERSONAL EFFECTS: The body is received clad in a black short-sleeve graphic t-shirt, a pair of gray and black plaid fleece pajama bottoms, and a gray footie style sock which is partially on the left foot (over the forefoot and toes only). The t-shirt is blood-stained. A brown paper bag is secured over each hand by means of silver duct tape.

Jewelry includes a white metal "daith" piercing in the left ear.

EXTERNAL EXAMINATION: The body is that of a well-developed, well-nourished, adult light-complected female who weighs 168 pounds (as received), measures approximately 64 inches in length, and appears compatible with the reported age. The body has been refrigerated and is cool to the touch. Rigor mortis is receding in the muscles of the jaw and extremities. Fixed dark pink livor mortis is present over the posterior surfaces of the body, except in areas exposed to pressure. Blood is congealed on the face and in the right ear and matted within the hair. Dried rivulets and smears of blood are present on the chest and left hand.

HEAD AND NECK
The scalp hair is brown and blonde, straight, and measures up to approximately 24 inches in length over the crown. Extensions have been applied to the hair and upper eyelashes. The irides appear brown. The corneas are clouded. The sclerae are white and the conjunctivae are clouded. The nose and ears are normally formed. White foam is present within the mouth and dried around the lips and over the right cheek. The anterior teeth are natural and in good condition, except for injuries to be described below. There appears to have been a fixed retainer in the mouth, now resting on the tongue due to traumatic disruption of the teeth.

The neck is symmetrical, without masses. The trachea is midline.

THORAX AND ABDOMEN
The thorax is well developed and symmetrical. The abdomen is mildly protuberant. The surface of the back shows focal injury, to be described below, and is otherwise free of lesions.

The breasts are symmetrical, without palpable masses. The external genitalia are those of a normal adult female.

EXTREMITIES
The upper and lower extremities are well developed and symmetrical, without absence of digits. The skin shows patchy tan-orange coloration, more prominent over the lower extremities. The fingernails are short and neatly trimmed, with irregular small patches of clear and white polish on some of the nails. The toenails range from short to medium length. The great and second toenails

on both feet show polish in a French tip pattern; the remaining nails are without polish.

IDENTIFYING MARKS AND SCARS
Identifying marks and scars include a tattoo reading "wish you were here" over the anterior left biceps, as well as numerous parallel, linear scars over the left forearm.

EVIDENCE OF INJURY:

(NOTE: The wounds are described in an arbitrary order which does not imply sequence or severity. Wound tracks are described for a body at rest in the anatomic position.)

STAB AND INCISED WOUNDS OF HEAD AND NECK (24+)

(1) Entrance: On the right frontal scalp, extending posteriorly and medially across the midline from the hairline, is a gaping, approximately 2-1/2 x 3/4 inch, linear incised wound with undermining extending posteriorly and laterally. The anterolateral end is branched and shows irregular red abrasion at the margins as well as parallel linear red abrasions extending inferiorly from this end of the wound.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, galea, and outer table of the skull.

Associated findings: There is moderate associated subscalpular and subgaleal hemorrhage. The outer table of the skull shows an approximately 1/8 x 3/16 inch, roughly triangular defect.

Depth and direction: The wound track travels from the decedent's front to back and slightly left to right, to a depth of approximately 1 inch.

(2) Entrance: On the right superior parietal scalp is an approximately 1/2 x 1/16 inch, linear incised wound with discontinuous, 1/16 inch red marginal abrasion and undermining extending laterally.

Path: The hemorrhagic wound track involves the scalp, subcutaneous tissue, and galea.

Associated findings: There is abundant associated subscalpular and subgaleal hemorrhage.

Depth and direction: The wound track travels from the decedent's front to back, slightly left to right, and downward, to a depth of approximately 3/8 inch.

(3) Entrance: On the left frontoparietal scalp is an approximately 1-3/4 x up to 1/16 inch, "J" shaped incised wound with 1/16 to 1/4 inch red marginal abrasion and slight undermining extending medially.

Path: The hemorrhagic wound track involves the scalp, subcutaneous tissue, galea, and outer table of the skull.

Associated findings: There is moderate associated subscalpular and subgaleal hemorrhage. The outer table of the skull shows a superficial, curvilinear, 3/4 inch incised defect.

Depth and direction: The wound track travels from the decedent's front to back and slightly left

to right, to a depth of approximately 3/4 inch.

(4) Entrance: On the left temporoparietal scalp is an approximately 2-1/2 x up to 3/8 inch, linear incised wound.

Path: The minimally hemorrhagic wound track involves the scalp, subcutaneous tissue, and the left temporalis muscle.

Associated findings: There is an approximately 1-1/4 inch linear defect at the superior aspect of the left temporalis muscle, with scant associated subgaleal and intramuscular hemorrhage.

Depth and direction: The wound track travels from the decedent's left to right and slightly back to front, to a depth of approximately 1/2 inch.

(5) Entrance: On the left superior parietal scalp is an approximately 1/2 x 1/16 inch, linear incised wound.

Path: The hemorrhagic wound track involves the scalp, subcutaneous tissue, and galea.

Associated findings: There is scant associated subscapular and subgaleal hemorrhage.

Depth and direction: The wound track travels from the decedent's front to back and downward, to a depth of approximately 1/4 inch.

(6) Entrance: On the left superior occipital scalp is an approximately 3/4 x 1/32 inch, linear incised wound with undermining extending medially. Faint purple ecchymosis surrounds this wound.

Path: The hemorrhagic wound track involves the scalp, subcutaneous tissue, and galea.

Associated findings: Focal subscalpular and subgaleal hemorrhage surrounds this wound.

Depth and direction: The wound track travels from the decedent's back to front and slightly downward, to a depth of approximately 1/4 inch.

(7) Entrance: On the medial left forehead is an approximately 1-1/4 x up to 3/8 inch, curvilinear incised wound with undermining extending medially. Irregular tan abrasion is present at the margins of this wound, more prominent superiorly. The medial wound edge shows dark brown discoloration.

Path: The hemorrhagic wound track involves the skin and subcutaneous tissue of the forehead, the galea, and the outer table of the skull.

Associated findings: Focal subscalpular and subgaleal hemorrhage surrounds this wound. The outer table of the skull shows an approximately 1 x 3/8 inch cluster of linear and curvilinear defects resulting in a posteriorly displaced segment of bone.

Depth and direction: The wound track travels from the decedent's front to back and left to right, to a depth of approximately 1 inch.

(8-9) Entrance: Within the left eyebrow is a wound complex consisting of 2 perpendicularly

intersecting incised wounds, each measuring 9/16 x up to 3/8 inch. 2 parallel, linear, 1/4 inch tan abrasions extend superiorly from the superior edge of this wound complex.

Path: The minimally hemorrhagic wound tracks involve the skin and subcutaneous tissue.

Associated findings: None.

Depth and direction: The wound tracks travel from the decedent's front to back, to a depth of approximately 1/8 inch.

(10) Entrance: On the central forehead is an approximately 2 x up to 1/4 inch, curvilinear incised wound with undermining extending leftward. Discontinuous dark red marginal abrasion is present, most prominently at the right lateral and inferior margins.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, and musculature of the forehead.

Associated findings: None.

Depth and direction: The wound track travels from the decedent's front to back and right to left, to a depth of approximately 1/2 inch.

(11-12) Entrance: On the right medial forehead is an approximately 1 x 1/4 inch wound complex consisting of at least 2 intersecting incised wounds, with 1/16 to 1/8 inch, dark red marginal abrasion.

Path: The hemorrhagic wound tracks involve the skin and subcutaneous tissue superiorly, and the skin, subcutaneous tissue, and musculature inferiorly.

Associated findings: None.

Depth and direction: The wound tracks travel from the decedent's front to back and downward, to a depth of approximately 1/4 inch.

(13) Entrance: On the right forehead, partially following the contour of the right eyebrow, is an approximately 3-1/4 x up to 1/2 inch, curvilinear incised wound with scalloped edges and undermining extending inferiorly. The skin at the inferomedial wound edge shows dark brown discoloration.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, and peri-orbital musculature.

Associated findings: None.

Depth and direction: The wound track travels from the decedent's front to back and downward, to a depth of approximately 1/2 inch.

(14) Entrance: At the right temple is an approximately 3/4 x 3/16 inch, linear stab wound oriented from 12 o'clock to 6 o'clock. The 12 o'clock end is squared and the 6 o'clock end is sharp. An approximately 1/2 inch, linear abraded tail extends inferiorly from the 6 o'clock end.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, and periorbital musculature.

Associated findings: Purple ecchymosis surrounds this wound, more prominent anteriorly and inferiorly to the wound.

Depth and direction: The wound track travels from the decedent's right to left and downward, to a depth of approximately 1 inch.

(15) Entrance: At the tip of the nose is a 5/16 x 1/32 inch, superficial, linear incised wound.

Path: The hemorrhagic wound track involves the skin.

Associated findings: None.

Depth and direction: The wound track travels from the decedent's front to back, to a depth of approximately 1/16 inch.

(16) Entrance: On the upper right lip is an approximately 1 x 1/16 inch, linear incised wound with slight undermining extending inferiorly.

Path: The hemorrhagic wound track involves the skin and subcutaneous tissue.

Associated findings: None.

Depth and direction: The wound track travels from the decedent's right to left and slightly downward, to a depth of approximately 1/8 inch.

(17-21) Entrance: On the left cheek is a cluster of at least 5 stab wounds, ranging from 1/4 to 1 inch in length and 1/8 to 3/16 inch in width, oriented in various directions. At least 3 of these wounds show one squared end and one sharp end.

Path: The hemorrhagic wound tracks converge, involving the skin, subcutaneous tissue, subcutaneous blood vessels, and musculature of the left cheek. Two wound tracks penetrate the maxillary bone and enter the left maxillary sinus.

Associated findings: Dark brown marginal abrasion is present at the edges of these wounds. A set of parallel, curvilinear dark brown abrasions extend from the lateral corner of the left eye over the left cheek, connecting the edges of four of these wounds. Blue and purple ecchymosis surrounds this wound complex. Blood drains from the left naris. There is a patchy hemoaspiration pattern.

Depth and direction: The wound tracks travel from the decedent's front to back and left to right, to a depth of up to 2 inches.

(22*) Entrance: The lower labial mucosa shows multiple, parallel and intersecting, superficial and deep incised wounds, resulting in curled strips of oral mucosa and exposed oral musculature. *Because these wounds coalesce, an exact count cannot be determined.

Path: The hemorrhagic wound track involves the oral mucosa, oral musculature, teeth, and

tongue.

Associated findings: The right maxillary cuspid, lateral incisor, and central incisor and left maxillary central incisor (teeth 6-9 by the "Universal" dental numbering system) are sharply divided, with the right maxillary cuspid avulsed from its socket. Additionally, the right mandibular cuspid, lateral incisor, and central incisor and left mandibular central incisor (teeth 27-24 by the "Universal" dental numbering system) are sharply divided. The tongue shows numerous sharp force defects, extending up to 3/4 inch into the muscle. Tooth fragments and clotted blood are admixed within the oral cavity. A wire appearing to be part of a fixed retainer has been displaced and is resting on the tongue.

Depth and direction: The wound tracks travel overall from the decedent's front to back. Depth cannot be accurately assessed due to the wound track entering the oral cavity.

(23-24) Entrance: On the anterior neck are 2 gaping, curvilinear incised wounds with somewhat irregular edges and undermining extending inferiorly, each measuring approximately 4 inches in length and up to 1 inch in width. The superior wound shows focal, irregular dark brown abrasion at the superior and inferior wound edges. The inferior wound shows focal, yellow-tan abrasion at the inferior wound edge.

Path: The hemorrhagic wound tracks involve the skin, subcutaneous tissue, and superficial musculature of the anterior neck.

Associated findings: None.

Depth and direction: The wound tracks travel from the decedent's front to back and downward, to a depth of approximately 1 inch.

STAB AND INCISED WOUNDS OF TORSO (11)

(1-2) Entrance: On the medial upper left chest, above the left clavicle, is a gaping, 3/4 x 1/2 inch stab wound oriented from 12 o'clock to 6 o'clock. Both ends are rounded. The underlying soft tissue shows 2 distinct linear defects.

Path: The hemorrhagic wound tracks converge, involving the skin, subcutaneous tissue, musculature of the supraclavicular fossa, and the left subclavian artery and vein.

Associated findings: There are approximately 1000 mL of blood and blood clot within the left chest cavity.

Depth and direction: The wound tracks travel from the decedent's front to back and downward, to a depth of approximately 4 inches.

(3-4) Entrance: Extending from the upper left chest over the anterior left shoulder are 2 parallel, curvilinear incised wounds, measuring 3-3/4 x up to 1 inch (superior) and 5-1/2 x up to 1-1/4 inches (inferior), with undermining extending superiorly.

Path: The wound tracks involve the skin at the medial ends, and the skin, subcutaneous tissue, and musculature at the lateral ends.

Associated findings: There is moderate associated soft tissue hemorrhage. At the lateral end of the inferior wound, the left shoulder joint capsule is exposed.

Depth and direction: The wound tracks travel from the decedent's front to back and slightly upward, to a depth of approximately 2 inches.

(5) Entrance: On the anterior left chest, above the left breast, is an approximately 1-1/4 x 5/16 inch stab wound oriented from 10 o'clock to 4 o'clock. The 10 o'clock end is squared and the 4 o'clock end is sharp.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, musculature, and left 1st intercostal space.

Associated findings: The intercostal artery and vein are incised. There is abundant associated soft tissue hemorrhage.

Depth and direction: The wound track travels from the decedent's front to back, slightly left to right, and downward. Depth cannot be accurately assessed due to the wound track entering the pleural cavity.

(6-7) Entrance: On the anterior left chest, at the superior aspect of the left breast, are two approximately 1-1/4 x 3/16 inch stab wounds, oriented from 10 o'clock to 4 o'clock (superior) and 9 o'clock to 3 o'clock (inferior). The 4 o'clock and 3 o'clock ends are squared and the 10 o'clock and 9 o'clock ends are sharp.

Path: The hemorrhagic wound tracks involve the skin, subcutaneous tissue, breast tissue, and musculature of the left chest.

Associated findings: None.

Depth and direction: The wound tracks travel from the decedent's front to back and downward, to a depth of approximately 3 inches.

(8) Entrance: On the anterior left chest, at the medial aspect of the left breast, is an approximately 1-1/4 x 3/8 inch, linear stab wound oriented from 9 o'clock to 3 o'clock. The 9 o'clock end is sharp and the 3 o'clock end is squared.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, and musculature of the left chest, the left 3rd rib and intercostal space, and the upper and lower lobes of the left lung.

Associated findings: The intercostal artery and vein are incised.

Depth and direction: The wound track travels from the decedent's front to back, to a depth of approximately 5 inches.

(9-11) Entrance: On the anterior right chest, at the medial aspect of the right breast, is a gaping, approximately 1-1/4 x 1/2 inch stab wound oriented from 11 o'clock to 5 o'clock. Both ends are rounded. The underlying soft tissue shows 3 intersecting linear defects.
Path: The hemorrhagic wound tracks converge, involving the 3rd intercostal space, 4th rib, and 4th intercostal space; the lower lobe of the right lung; the right diaphragmatic leaflet; and the

liver.

Associated findings: There are approximately 400 mL of blood and blood clot within the right chest cavity. The right lung shows associated parenchymal hematoma. The liver shows an approximately 1-1/4 x 3-1/2 inch wound track.

Depth and direction: The wound tracks travel from the decedent's left to right and downward, to a depth of approximately 7 inches.

STAB AND INCISED WOUNDS OF UPPER EXTREMITIES (3)

(1) Entrance: On the lateral left upper arm is an approximately 3 x 5/16 inch, linear incised wound.

Path: The minimally hemorrhage wound track involves the skin and subcutaneous tissue of the left upper arm.

Associated findings: None.

Depth and direction: The wound track travels from the decedent's left to right, to a depth of approximately 3/8 inch.

(2) Entrance: On the posterior left upper arm is an approximately 1/2 x 1/8 inch, linear stab wound oriented from 8 o'clock to 2 o'clock. The 8 o'clock end is squared and the 2 o'clock end is sharp.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, and musculature of the upper arm.

Associated findings: None.

Depth and direction: The wound track travels from the decedent's back to front, to a depth of approximately 3/4 inch.

(3) Entrance: On the left elbow is an approximately 7/16 x 1/8 inch, linear incised wound with irregular edges. Rectangular red contusion extends medially from the medial end of this wound.

Path: The hemorrhagic wound track involves the skin and subcutaneous tissue of the left elbow.

Associated findings: None.

Depth and direction: The wound track travels from the decedent's back to front, to a depth of approximately 1/8 inch.

CLOTHING
The shirt worn by the decedent shows defects corresponding with the stab wounds of the torso.

WEAPON
Based on characteristics of the least distorted wounds, the findings are consistent with a blade

approximately 1-3/16 to 1-1/4 inch in width and approximately 5/32 to 3/16 in thickness, with a double-edged segment and a single-edged segment.

BLUNT FORCE, ASPHYXIAL, AND OTHER INJURIES

Head and neck: Petechial hemorrhages are prominently visible on the bulbar conjunctivae and oral mucosa. Confluent purple contusion extends over the mandibular alveolar and lower labial mucosa.

The bridge of the nose shows irregular, dark red abrasion measuring 1/2 inch in greatest dimension. Rectangular, 1/16 x 3/4 inch, dark red abrasion extends along the left inferior peri-orbital skin. Palpation and manipulation reveal nasal bone fracture. There are bilateral periorbital ecchymoses. Punctate red abrasions and a linear, 3/4 inch abrasion extend across the anterior aspect of the nose. Curvilinear brown abrasions extend over the left cheek, described above. Blue contusion is present over the lateral left cheek.

Parallel, linear purple contusions extend transversely from the right peri-oral skin across the right cheek, intersecting with an approximately 3 inch, rectangular abraded contusion extending diagonally over the right cheek to the right preauricular skin. The skin superior to this set of injuries shows a set of delicate, transverse, superficial, red-tan abrasions ranging in length from 1/8 to 1/4 inch. Superior to these is a deeper, transverse, 3/4 inch linear red abrasion with irregular edges.

A rectangular purple contusion with central sparing extends transversely from the left peri-oral skin across the left cheek. The skin inferior to this contusion shows a transverse, 1/2 inch linear red abrasion with irregular edges.

The occipital scalp shows two linear, partial thickness lacerations, measuring approximately 1-1/2 inches (superiorly) and 1-3/4 inches (inferiorly). The inferior wound shows surrounding red-tan abrasion, extending up to 1/2 inch from the wound edges and more prominent inferiorly. There is associated subscalpular and subgaleal hemorrhage.

Intracranial examination reveals a thin film of subdural hemorrhage, more prominent at the inferior aspects of the frontal lobes and right temporal lobe. There is patchy subarachnoid hemorrhage, most prominent at the inferior aspects of the frontal and temporal lobes and cerebellum. Parenchymal contusions involve the inferior frontal lobes and left temporal pole.

Thorax and abdomen: On the midline upper back is an approximately 1/2 x 1/8 inch, curvilinear, superficial abrasion with surrounding purple contusion.

Extremities: On the dorsal left hand are 3 red abrasions: at the base of the index finger, a vertically oriented, 3/4 inch linear abrasion with underlying blue contusion; proximal to the 4th finger, a transversely oriented, 3/4 inch linear abrasion; and proximal to the 5th finger, a 1/4 inch diameter, roughly circular abrasion. At the medial base of the left 5th finger is a bloodless, circular, superficial skin defect resembling a deroofed blister.

INTERNAL EXAMINATION:

BODY CAVITIES
The body is entered with the standard coronal and Y-shaped thoraco-abdominal incisions. A

normally formed diaphragm separates the thoracic and abdominal cavities. All body organs are in normal and anatomic position. No adhesions are in any of the body cavities. Bilateral hemothoraces are described above. The serous surfaces are smooth and glistening.

HEAD
Reflection of the scalp reveals injuries, as described above. The skull is of normal thickness. The brain weighs 1350 grams. The dura mater and falx cerebri are intact, and not adherent to the brain. The leptomeninges are thin and transparent. The cerebral hemispheres are symmetrical, with diffuse flattening of the gyri and narrowing of the sulci.

The cranial nerves and blood vessels at the base of the brain are free of abnormality. The cerebral ventricles are mildly compressed. Serial coronal sections of cerebral hemispheres show a uniform cortical ribbon and no focal lesions of the cortex, white matter, or deep nuclei. There is no gross evidence of infection or mass lesion. Sections through the brainstem and cerebellum show no focal lesions. The pituitary gland is normally positioned in the sella turcica and is unremarkable. The dura is stripped from the inner table of the cranial fossae and no basilar fractures are identified. The spinal cord is not removed.

NECK
The neck is dissected in layers showing normal anatomic relations. The neck musculature shows injuries, as described above. The hyoid bone and thyroid cartilage are intact. The cricoid cartilage and the rings of the trachea are intact. The cervical spine shows normal alignment. Palpation and manipulation reveal no fractures. The larynx shows no evidence of obstruction or edema. The vocal cords are symmetrical and free of abnormalities. The epiglottis is normal. The carotid vessels are intact. The tongue is normally formed.

CARDIOVASCULAR SYSTEM
The pericardial surfaces are smooth and glistening. The pericardial sac is intact and free of significant fluid or adhesions.

The heart weighs 240 grams. The coronary arteries arise normally and follow the distribution of a right-dominant pattern. Serial cross-sectioning reveals no significant atherosclerosis.

Serial sections of the myocardium are taken from the apex and the base of the heart is opened along lines of blood flow. The chambers and valves are proportionate. The valves are normally formed, thin and pliable, and free of vegetations and degenerative changes.

The myocardium is pale red-brown, firm, and free of focal or regional fibrosis, erythema, pallor or softening. The atrial and ventricular septa are intact, and the septum and free walls are free of muscular bulges.

The aorta and its major branches arise normally and follow the usual course, without coarctation or aneurysmal dilation. There is no significant atherosclerosis.

The venae cavae and their major tributaries are normally distributed and are free of gross abnormalities.

RESPIRATORY SYSTEM
Upon opening the chest cavity, the lungs are fully expanded and are anteriorly displaced by hemothoraces, more prominent on the left. The right and left lungs weigh 330 and 190 grams, respectively. The upper and lower airways contain a moderate amount of hemorrhagic, mucoid

material. The mucosal surfaces are smooth and yellow-tan.

The pleural surfaces are smooth, glistening, and show a patchy hemoaspiration pattern. The pulmonary parenchyma is light pink and free of masses. The cut surfaces exude minimal blood and frothy fluid, except for injured areas. There is no evidence of thromboembolism, infarction, or neoplasia. The pulmonary vasculature is normally developed, patent, and free of gross abnormalities.

LIVER AND BILIARY SYSTEM
The liver weighs 930 grams. The hepatic capsule is smooth and glistening, covering pale tan parenchyma. There are no masses or gross abnormalities of the biliary tree. The gallbladder contains a small amount of viscid bile without stones.

ALIMENTARY TRACT
The esophagus is lined by gray-white smooth mucosa. The gastric mucosa is arranged in the usual rugal folds, and the lumen contains abundant dark brown fluid and partially digested food fragments. The stomach courses to the small bowel in the usual fashion. The mucosal and serosal surfaces of the small and large bowel are unremarkable. The appendix is present and is grossly unremarkable. The pancreas has a normal tan lobulated appearance.

GENITOURINARY TRACT
The right and left kidneys weigh 90 grams, each. The renal capsules are smooth, thin, semitransparent, and strip with ease from the underlying smooth, red-brown, firm, cortical surfaces. The cortices are of normal thickness and are sharply delineated from the medullary pyramids. The calyces, pelves, and ureters are non-dilated and free of stones. The urinary bladder contains abundant pale yellow urine; the mucosa is gray-tan and smooth.

The uterus, cervix, fallopian tubes, ovaries, and vagina are without abnormality. There is a tampon in the vaginal vault. The uterus contains a correctly positioned contraceptive device (intrauterine device), the strings of which protrude through the cervical os. The endometrium is thin and dark brown. There is no gross evidence of pregnancy. The breast tissue has the normal fibrous and adipose mixture.

LYMPHATIC SYSTEM
The spleen weighs 100 grams and has a smooth intact capsule covering red-purple, moderately firm parenchyma. The splenic white pulp is grossly indiscernible. The exposed bone marrow (rib) is red-purple and homogenous. The lymph nodes, where visualized, show normal anatomic features. The thymus is atrophic and replaced by fat.

ENDOCRINE SYSTEM
The pituitary gland is of normal size. The thyroid gland is of normal position, size, and texture. The parathyroid glands are not identified grossly. The adrenal glands have normal cut surfaces with yellow cortex and gray medulla.

MUSCULOSKELETAL SYSTEM
The bony framework, supporting musculature, and soft tissues are not unusual, except as noted above.

OBSERVERS: Representatives of the Moscow Police Department, Idaho State Police, and Latah County Coroner's Office are present at examination.

PHOTOGRAPHS: Photographs are taken at the time of examination.

X-RAYS: A full body anteroposterior radiograph is obtained. Facial bones are incompletely visualized due to body position. No spine, rib, or limb fractures are identified. A T-shaped device projects over the pelvis. No metallic foreign bodies are identified.

EVIDENCE COLLECTION: Evidence collected at autopsy and released to Moscow Police Department includes the decedent's clothing; swabs of multiple body surfaces; oral, anal, and vaginal swabs; fingernail clippings; DNA card, and hair. Please see separate inventory sheet.

MATERIALS TAKEN FOR TOXICOLOGY: Peripheral blood samples are submitted to NMS Labs. Toxicology results are reported separately.

TISSUE BIOPSY SPECIMENS TAKEN: Representative biopsy samples of major organs and structures are retained in fixative.

WHOLE ORGANS RETAINED FOR FURTHER STUDY AFTER RELEASE OF THE BODY: None.

MICROSCOPIC EXAMINATION: No specimens were submitted for microscopic examination.

MICROBIOLOGY: No studies are performed.

OTHER LABORATORY TESTS:

Postmortem screening for ketones shows 5 mg/dl in the urine and is negative in the vitreous fluid.
Postmortem screening for glucose is negative in the urine and vitreous fluid.
Postmortem urinary toxicology screening is positive for ethanol.

VDS/skb
dt: 11/16/22
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RETENTION:

Blood, body fluids, tissues, organs (partial portions of routinely, or under some circumstances whole), and physical/trace materials collected (the exact samples vary by case as needed for diagnostic or evidentiary purposes, and by availability) during the examination are routinely held for a period of time after release of the body and will undergo biohazard disposal unless transferred to a laboratory or other agency, or otherwise released by special arrangement.

Body Fluid/Organs, Evidence Retention Summary Chart

6 Months	**Refrigerated** – blood, urine, vitreous **Frozen** – gastric **Frozen** – liver
1 Year	Bullets Ligatures Other items of physical evidence Hair
3 Years	**Frozen** – red top **Frozen** – purple top
3 Years	Formalin fixed tissue including whole organs fixed in formalin
10 Years	Histology blocks

Indefinite	Microscopic slides
Indefinite or Archive	Fingerprint cards Blood cards

RCW 68.50.106
Autopsies, post-mortems – Analyses – Opinions – Evidence – Costs

In any case in which an autopsy or post-mortem is performed, the coroner or medical examiner, upon his/her own authority or upon the request of the prosecuting attorney or other law enforcement agency having jurisdiction, may make or cause to be made an analysis of the stomach contents, blood, or organs, or tissues of a deceased person and secure professional opinions thereon and retain or dispose of any specimens or organs of the deceased which in his/her discretion are desirable or needful for anatomic, bacteriological, chemical, or toxicological examination or upon lawful request are needed or desired for evidence to be presented in court. Costs shall be borne by the county.

[1993 c 228 § 19; 1987 c 331 § 59; 1975-'76 2nd ex.s. c 28 § 1; 1953 c 188 § 10. Formerly RCW 68.08.106]

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NMS Labs
200 Welsh Road, Horsham, PA 19044-2208
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e-mail: nms@nmslabs.com
Robert A. Middleberg, PhD, F-ABFT, DABCC-TC, Laboratory Director

CONFIDENTIAL

Toxicology Report

Report Issued 12/12/2022 11:05

To: **150341**
Latah County Coroner
P.O. Box 8068

Moscow, ID 83843

Patient Name	Goncalves, Kaylee J
Patient ID	221114-558
Chain	221114-558
DOB	06/08/2001
Sex	Female
Workorder	22428510

Positive Findings:

Analyte	Result	Units	Matrix Source
Ethanol	**107**	**mg/dL**	**001 - Cavity Blood**
Blood Alcohol Concentration (BAC)	**0.107**	**g/100 mL**	**001 - Cavity Blood**

See Detailed Findings section for additional information

Testing Requested:

Test	Test Name
8051B	Postmortem, Basic, Blood (Forensic)

Specimens Received:

ID	Tube/Container	Volume/ Mass	Collection Date/Time	Matrix Source	Labeled As
001	Gray Stopper Glass Tube	8.75 mL	Not Given	Cavity Blood	221114-558

All sample volumes/weights are approximations.

Specimens received on 11/18/2022.

Detailed Findings:

Analysis and Comments	Result	Units	Rpt. Limit	Specimen Source	Analysis By
Ethanol	107	mg/dL	10	001 - Cavity Blood	Headspace GC
Blood Alcohol Concentration (BAC)	0.107	g/100 mL	0.010	001 - Cavity Blood	Headspace GC
Ethanol	Confirmed	mg/dL	10	001 - Cavity Blood	Headspace GC

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. Ethanol (Ethyl Alcohol) - Cavity Blood:

   Ethyl alcohol (ethanol, drinking alcohol) is a central nervous system depressant and can cause effects such as impaired judgment, reduced alertness and impaired muscular coordination. Ethanol can also be a product of decomposition or degradation of biological samples.

Sample Comments:

001 Physician/Pathologist Name: Veena Singh

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 22428510 was electronically signed on 12/12/2022 10:17 by:

Daniel T. Anderson, M.S., D-ABFT-FT, ABC-GKE
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 52250B - Alcohols and Acetone Confirmation, Blood - Cavity Blood

-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

Test 8051B - Postmortem, Basic, Blood (Forensic) - Cavity Blood

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

Analyte	Rpt. Limit	Analyte	Rpt. Limit
Amphetamines	20 ng/mL	Buprenorphine / Metabolite	0.50 ng/mL
Barbiturates	0.040 mcg/mL	Cannabinoids	10 ng/mL
Benzodiazepines	100 ng/mL	Cocaine / Metabolites	20 ng/mL

Analysis Summary and Reporting Limits:

Analyte	Rpt. Limit	Analyte	Rpt. Limit
Fentanyl / Acetyl Fentanyl	1.0 ng/mL	Opiates	20 ng/mL
Methadone / Metabolite	25 ng/mL	Oxycodone / Oxymorphone	10 ng/mL
Methamphetamine / MDMA	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

Spokane County
WASHINGTON

OFFICE OF THE
MEDICAL EXAMINER

CHIEF MEDICAL EXAMINER
VEENA D. SINGH, MD, MPH
FORENSIC PATHOLOGIST

DEPUTY MEDICAL EXAMINER
SEAN RICCIARDO, MD
FORENSIC PATHOLOGIST

DEPUTY MEDICAL EXAMINER
MAKINZIE MOTT, MD
FORENSIC PATHOLOGIST

AUTOPSY REPORT

AUTOPSY NO:	**221114-532**
NAME OF DECEDENT:	**MOGEN, MADISON**
DATE OF BIRTH:	05/25/2001 SEX: FEMALE
DATE PRONOUNCED/FOUND:	11/13/2022
DATE OF AUTOPSY:	11/16/2022 @ 2:25 PM
LOCATION:	SPOKANE COUNTY MEDICAL EXAMINER; SPOKANE, WA.
RESPONSIBLE PARTY:	CATHERINE MABBUTT, LATAH COUNTY CORONER
PROSECTOR:	VEENA D. SINGH, M.D., M.P.H.
ASS'T PROSECTOR:	KATIE SKIBITSKI / KATE SIRE / HEATHER ACRES

NOTICE: THIS REPORT IS CONFIDENTIAL IN THE STATE OF WASHINGTON

You are being given this report because you are named in the statute below as being authorized to have a copy of the autopsy or postmortem report, either of which may include other reports and records. These are highly confidential documents! You may not give or show any of these documents to anyone except as authorized by law.

RCW 68.50.105Autopsies, postmortems - Reports and records confidential – Exceptions. (Effective January 1, 2014.) (1) Reports and records of autopsies or postmortems shall be confidential, except that the following persons may examine and obtain copies of any such report or record: The personal representative of the decedent as defined in RCW11.02.005, any family member, the attending physician or advanced registered nurse practitioner, the prosecuting attorney or law enforcement agencies having jurisdiction, public health officials, the department of labor and industries in cases in which it has an interest under RCW 68.50.103, or the secretary of the department of social and health services or his or her designee in cases being reviewed under RCW74.13.640. (2)(a) Notwithstanding the restrictions contained in this section regarding the dissemination of records and reports of autopsies or postmortems, nor the exemptions referenced under RCW42.56.240(1), nothing in this chapter prohibits a coroner, medical examiner, or his or her designee, from publicly discussing his or her findings as to any death subject to the jurisdiction of his or her office where actions of a law enforcement officer or corrections officer have been determined to be a proximate cause of the death, except as provided in (b) of this subsection. (b) A coroner, medical examiner, or his or her designee may not publicly discuss his or her findings outside of formal court or inquest proceedings if there is a pending or active criminal or civil action, concerning a death that has commenced prior to January 1, 2014. (3) The coroner, the medical examiner, or the attending physician shall, upon request, meet with the family of the decedent to discuss the findings of the autopsy or postmortem. For purposes of this selection, the term "family" means the surviving spouse, state registered domestic partner, or any child, parent, grandparent, grandchild, brother, or sister of the decedent, or any person who was guardian of the decedent at the time of death. [2013 c 295 § 1:2011 c 61 § 1. Prior:2007 c 439 § 1; 2007 c 156 § 23; 1987 c 331 § 58; 1985 c 300 § 1; 1977 c 79 § 2; 1953 c 188 § 9. Formerly RCW 68.08.105]

Website: https://www.spokanecounty.org/807/Medical-Examiner
102 S. Spokane St. Spokane, Washington 99202 (509) 477-2296 FAX: (509) 455-3954
Email: medexam@spokanecounty.org

SUMMARY OF CASE FINDINGS

I. Multiple sharp force injuries
II. Toxicology: See separate report

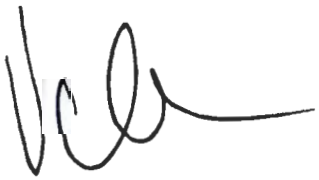
OPINION:

Investigative reports indicate that this 21 year old female, Madison Mogen, was found deceased at her shared home. Three other occupants of the home were also found deceased.

Postmortem examination showed a well-developed adult female with stab and incised wound of the scalp, face, and neck (13); stab wounds of the chest (5); and incised wounds of the upper extremities (10). Associated injuries included wounds of the lung and liver as well as perforations of the subclavian vein, subclavian artery, and blood vessels of the chest wall. There was no evidence of natural disease that would have caused or contributed to death.

Postmortem toxicology testing showed a blood alcohol concentration of 0.282 g/100 mL.

The cause of death is multiple sharp force injuries.



12/15/2022

Veena D. Singh, M.D., M.P.H. (date signed)
Forensic Pathologist

VDS/skb

BACKGROUND INFORMATION: Briefly, this 21-year-old female was found deceased at her shared home. Three other occupants of the home were also found deceased. The Latah County Coroner's Office requested an autopsy to further investigate the death.

INITIAL OBSERVATIONS: The body is found supine in a body bag sealed by tag number "0773080." The name "Madison Mogen" and the tag number are written on a piece of blue tape affixed to the outside of the body bag. A piece of green tape bears the medicolegal case number and a notation indicating the body has been x-rayed. Two identification bands encircle the right ankle, one bearing the decedent's name, dates of birth and death, and tag number, and the other bearing the decedent's first name.

EXTERNAL EVIDENCE OF MEDICAL INTERVENTION: None.

CLOTHING AND PERSONAL EFFECTS: The body is received clad in a pink one-shoulder camisole and a pair of black athletic style pants. The tank top is blood stained. The pants are wet in areas. A brown paper bag is secured over each hand by means of silver duct tape.

Jewelry includes a white metal ring with a blue stone on the right third finger; what appears to be a black hair tie encircling the right wrist; interlocking white metal rings on the left thumb; and a white metal ring on the left index finger.

EXTERNAL EXAMINATION: The body is that of a well-developed, well-nourished, adult light-complected female who weighs 132 pounds (as received), measures approximately 68 inches in length, and appears compatible with the reported age. The body has been refrigerated and is cool to the touch. Rigor mortis is receding in the muscles of the jaw and extremities. Fixed dark pink livor mortis is present over the posterior surfaces of the body, except in areas exposed to pressure. When first viewed, blood is dried within the hair and in rivulets and smears over the face, chest, and upper extremities.

HEAD AND NECK
The scalp hair is blonde and brown, straight, and measures up to approximately 15 inches in length over the crown. Extensions have been applied to the hair and upper eyelashes. The irides appear hazel. The corneas are clouded. The sclerae are white and the conjunctivae are clouded. No petechial hemorrhages are identified on the sclerae, conjunctivae, facial skin, or oral mucosa. The nose and ears are normally formed. The anterior teeth are natural and in good condition.

The neck is symmetrical, without masses. The trachea is midline.

THORAX AND ABDOMEN
The thorax is well developed and symmetrical. The abdomen is flat. The surface of the back is free of lesions. Lumbar lordosis is prominent.

The breasts are symmetrical, without palpable masses. The external genitalia are those of a normal adult female.

EXTREMITIES
The upper and lower extremities are well developed and symmetrical, without absence of digits. The fingernails and toenails are short with smooth edges and patchy pink polish on all of the nails.

IDENTIFYING MARKS AND SCARS
Identifying marks include a small tattoo of wings on the posterior left upper arm.

EVIDENCE OF INJURY:

(NOTE: The wounds are described in an arbitrary order which does not imply sequence or severity. Wound tracks are described for a body at rest in the anatomic position.)

STAB AND INCISED WOUNDS OF HEAD AND NECK (13)

(1) Entrance: On the right parietal scalp, above and in front of the right ear, is an approximately 1 x 3/16 inch, linear stab wound oriented from 7 o'clock to 2 o'clock. The 7 o'clock end is squared and the 2 o'clock end is sharp. Dark red abrasion is present at the wound edges, extending up to 1/8 inch from the anterior and posterior wound edges.

Path: The hemorrhagic wound track travels along the skull, involving the right parietal scalp, subcutaneous tissue, and right temporalis muscle.

Associated findings: There is associated subscapular and temporalis muscle hemorrhage.

Depth and direction: The wound track travels from the decedent's back to front and slightly downward, to a depth of approximately 1-1/4 inches.

(2) Entrance: On the left parietal scalp, above the left ear, is an approximately 1/2 x 1/16 inch, linear stab wound with irregular edges, oriented from 9 o'clock to 3 o'clock. Both ends are sharp. Irregular, up to 1/8 inch, red marginal abrasion is present, widest superiorly.

Path: The hemorrhagic wound track travels along the skull, involving the left parietal scalp, subcutaneous tissue, and left temporalis muscle.

Associated findings: There is associated subscapular and temporalis muscle hemorrhage.

Depth and direction: The wound track travels from the decedent's left to right and slightly downward, to a depth of approximately 3/4 inch.

(3) Entrance: On the right forehead, at the hairline, is an approximately 5/16 x 1/8 inch, linear incised wound with undermining extending inferiorly, 1/16 inch red-tan marginal abrasion at the superior edge of the wound, and a 1/8 inch, linear incised tail extending inferiorly from the midpoint of the wound. Rectangular, red-brown abrasion extends inferiorly and laterally from the inferior wound edges; the inferior edge of this abrasion shows fine striations.

Path: The hemorrhagic wound track involves the skin and subcutaneous tissue of the forehead.

Associated findings: None.

Depth and direction: The wound track travels from the decedent's right to left and downward, to a depth of approximately 1/4 inch.

(4-6) Entrance: On the upper right cheek, extending from the right temporal fossa over the zygomatic arch to the right naris, is a wound complex consisting of at least 3 intersecting incised

wounds, altogether measuring approximately 4 x 1" in greatest dimension. Undermining extends superiorly to the right lower eyelid.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, and facial and periorbital musculature. At the medial end of the wound, the wound track enters the nasal cavity.

Associated findings: Blood is present in the right nostril. Purple ecchymosis is present at the superior margin of the wound. An approximately 1/2 x 1/8 inch, pale tan abrasion is associated with the lateral end of the wound complex. The skin inferior to the wound shows a 1/8 inch diameter, circular, tan abrasion. The nasal septum is incised.

Depth and direction: The wound tracks travel from the decedent's front to back and upward, to a depth of up to 1-1/2 inches.

(7) Entrance: On the lower right cheek, overlying the mandible, is an approximately 1 x up to 1/8 inch, linear stab wound oriented from 10 o'clock to 4 o'clock. The 10 o'clock end is squared and the 4 o'clock end is sharp. Irregular red abrasion is present at the margins of this wound, extending up to 3/8 inches from the 10 o'clock end of the wound. Pink ecchymosis is present at the wound edges.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, and musculature of the right cheek, entering the oral cavity.

Associated findings: The oral mucosa and tongue are perforated. There is a moderate amount of hemorrhagic fluid within the oral cavity.

Depth and direction: The wound track travels from the decedent's right to left and upward. Depth cannot be accurately assessed due to the wound track entering the oral cavity.

(8-9) Entrance: On the right side of the chin is an approximately 3/4 x 1/16 inch, linear incised wound with undermining extending inferiorly and medially.

Path: The hemorrhagic wound track involves the skin and subcutaneous tissue.

Associated findings: The skin medial and superior to this wound shows an approximately 1-1/4 x 1/16 inch, linear, superficial incised wound.

Depth and direction: The wound track travels from the decedent's front to back and downward, to a depth of approximately 1/4 inch.

(10) Entrance: On the upper left cheek is an approximately 1/2 x 1/16 inch, curvilinear incised wound with undermining extending medially. Purple ecchymosis surrounds this wound, extending up to approximately 5/8 inches from the lateral wound edge.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, and periorbital musculature.

Associated findings: None.

Depth and direction: The wound track travels from the decedent's left to right and upward, to a

depth of approximately 3/8 inch.

(11) Entrance: On the left mid cheek is an approximately 1 x 1/8 inch, linear stab wound oriented from 11 o'clock to 7 o'clock. Both ends are sharp. Purple ecchymosis is present at the 7 o'clock end.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, and musculature of the left cheek, entering the oral cavity.

Associated findings: The oral mucosa and tongue are perforated. There is a moderate amount of hemorrhagic fluid within the oral cavity.

Depth and direction: The wound track travels from the decedent's left to right. Depth cannot be accurately assessed due to the wound track entering the oral cavity.

(12-13) Entrance: On the anterior neck are two parallel, linear incised wounds with somewhat irregular edges, each measuring approximately 5 inches in length and up to 1-1/8 inch in width.

Path: The minimally hemorrhagic wound tracks involve the skin, subcutaneous tissue, and superficial musculature of the neck.

Associated findings: None.

Depth and direction: The wound tracks travel from the decedent's front to back, up to a depth of approximately 3/4 inch.

STAB WOUNDS OF TORSO (5)

(1) Entrance: On the lateral left upper chest, just below the left clavicle, is a gaping, approximately 3/4 x 3/16 inch, linear stab wound oriented from 10 o'clock to 4 o'clock. The 10 o'clock end is sharp and the 4 o'clock end is squared.

Path: The hemorrhagic wound track involves the skin and subcutaneous tissue of the left chest, the left subclavian artery and vein, and the parietal pleura.

Associated findings: There are approximately 1000 mL of blood and blood clot within the left chest cavity.

Depth and direction: The wound track travels from the decedent's front to back, to a depth of approximately 2 inches.

(2) Entrance: On the medial left upper chest, just left of midline, is an approximately 1-1/4 x 3/16 inch, linear stab wound oriented from 9 o'clock to 3 o'clock. The 9 o'clock end is sharp and the 3 o'clock end is squared. Purple ecchymosis surrounds this wound. Rectangular pink-red abrasion extends superiorly from the superior wound margin; fine striations are visible within this abrasion.

Path: The hemorrhagic wound track involves the skin and subcutaneous tissue of the left chest, musculature and vessels of the 1st intercostal space, and left lung apex.

Associated findings: The upper lobe of the left lung shows focal parenchymal hematoma.

Depth and direction: The wound track travels from the decedent's front to back, to a depth of approximately 2 inches.

(3-4) Entrance: On the upper left breast are two gaping, linear stab wounds, measuring approximately 1-1/2 x 1/2 inches (inferior) and 2 x 7/8 inches (superior). The inferior wound is oriented from 10 o'clock to 4 o'clock, and the superior wound is oriented from 11 o'clock to 5 o'clock. The 10 o'clock and 11 o'clock ends are sharp, and the 4 o'clock and 5 o'clock ends are squared.

Path: The hemorrhagic wound tracks converge, involving the skin, subcutaneous tissue, and musculature of the left chest, the 2nd and 3rd intercostal spaces anteriorly, the upper and lower lobes of the left lung, the inferior pericardial sac, and the 4th intercostal space posteriorly.

Associated findings: The 2nd rib is fractured anteriorly. The left lung lobes are perforated anteriorly and posteriorly, with associated parenchymal hematoma. The intercostal vessels are disrupted.

Depth and direction: The wound tracks travel from the decedent's front to back and downward, to a depth of approximately 8 inches.

(5) Entrance: On the lower right chest is an approximately 2 x 5/16 inch, linear stab wound oriented from 2 o'clock to 8 o'clock. The 2 o'clock end is squared and the 8 o'clock end is sharp. There is focal dark purple ecchymosis at the 2 o'clock end of the wound.

Path: The hemorrhagic wound track involves the skin and subcutaneous tissue of the chest; the right 2nd intercostal space, 3rd rib, and 3rd intercostal space; the lower lobe of the right lung; the right diaphragmatic leaflet; and the liver.

Associated findings: There are approximately 300 mL of blood and blood clot within the right chest cavity. The right lung shows associated parenchymal hematoma. The liver shows an approximately 2-1/2 x 3-1/2 inch wound track.

Depth and direction: The hemorrhagic wound track travels from the decedent's front to back, left to right, and downward, to a depth of approximately 7-1/2 inches.

INCISED WOUNDS OF UPPER EXTREMITIES (10)

(1) Entrance: On the lateral deltoid region of the left arm is an angled, 2-3/4 x 1/2 inch incised wound with undermining extending posteriorly.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, and musculature of the left shoulder.

Associated findings: None.

Depth and direction: The wound track travels from the decedent's left to right and front to back, to a depth of up to 1-1/4 inch.

(2) Entrance: On the anterior deltoid region of the left arm is a gaping, angled incised wound measuring approximately 4 x 1-1/2 inches in greatest dimension, with undermining extending posteriorly and a superficial, 1/2 inch incised tail extending laterally from the lateral wound edge.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, and musculature of the left shoulder.

Associated findings: None.

Depth and direction: The wound track travels from the decedent's front to back and slightly upward, to a depth of approximately 1 inch.

(3) Entrance: On the dorsal left forearm is a linear, 1/2 x 1/4 inch incised wound, with irregular edges, purple contusion at the margins, and a 1/8 inch, superficial incised tail extending medially.

Path: The hemorrhagic wound track involves the skin and subcutaneous tissue of the dorsal forearm.

Associated findings: None.

Depth and direction: The wound track travels from the decedent's back to front, to a depth of approximately 1/4 inch.

(4) Entrance: On the ventral left forearm is an angled, 2 x up to 1/2 inch incised wound, with a 1/8 inch, superficial incised tail extending medially.

Path: The hemorrhagic wound track involves the skin and subcutaneous tissue of the ventral forearm.

Associated findings: None.

Depth and direction: The wound track travels from the decedent's front to back, to a depth of approximately 3/16 inch.

(5) Entrance: On the dorsal left hand, at the base of the middle finger, is a 1/2 x 1/8 inch incised wound with irregular edges and red marginal abrasion extending up to 1/16 inch from the wound edges at the inferior aspect.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, and interosseus muscles.

Associated findings: On the dorsomedial hand is a crusted, linear, 1/2 inch yellow abrasion.

Depth and direction: The wound track travels from the decedent's back to front, to a depth of approximately 3/8 inch.

(6-10) Entrance: On the palmar aspect of the left hand, at the base of the left thumb, is a 2 x 3/16 inch, linear incised wound.

Path: The hemorrhagic wound track involves the skin and subcutaneous tissue of the left palm.

Associated findings: Four superficial, linear incised wounds are present on the central palm, ranging in length from 1/4 inch to 1 inch.

Depth and direction: The wound tracks travel from the decedent's front to back, to a depth of up to approximately 1/8 inch.

CLOTHING
The shirt worn by the decedent shows defects corresponding with the stab wounds of the torso.

WEAPON
Based on characteristics of the least distorted wound, the findings are consistent with a blade approximately 1-3/16 to 1-1/4 inch in width and approximately 5/32 to 3/16 in thickness.

INTERNAL EXAMINATION:

BODY CAVITIES
The body is entered with the standard coronal and Y-shaped thoraco-abdominal incisions. A normally formed diaphragm separates the thoracic and abdominal cavities. All body organs are in normal and anatomic position. No adhesions are in any of the body cavities. Bilateral hemothoraces are described above. The serous surfaces are smooth and glistening.

HEAD
Reflection of the scalp reveals injuries, as described above. The skull is intact and of normal thickness. The brain weighs 1400 grams. The dura mater and falx cerebri are intact, and not adherent to the brain. The leptomeninges are thin and transparent. There is no epidural, subdural, or subarachnoid hemorrhage. The cerebral hemispheres are symmetrical, with a normal gyral pattern.

The cranial nerves and blood vessels at the base of the brain are free of abnormality. The cerebral ventricles are of normal caliber. Serial coronal sections of cerebral hemispheres show a uniform cortical ribbon and no focal lesions of the cortex, white matter, or deep nuclei. There is no gross evidence of hemorrhage, infection, or mass lesion. Sections through the brainstem and cerebellum show no focal lesions. The pituitary gland is normally positioned in the sella turcica and is unremarkable. The dura is stripped from the inner table of the cranial fossae and no fractures are identified. The spinal cord is not removed.

NECK
The neck is dissected in layers showing normal anatomic relations The neck musculature shows injuries, as described above. The hyoid bone and thyroid cartilage are intact. The cricoid cartilage and the rings of the trachea are intact. The cervical spine shows normal alignment. Palpation and manipulation reveal no fractures. The larynx shows no evidence of obstruction or edema. The vocal cords are symmetrical and free of abnormalities. The epiglottis is normal. The carotid vessels are intact. The tongue is normally formed.

CARDIOVASCULAR SYSTEM
The pericardial surfaces are smooth and glistening, showing injury, as described above. The pericardial sac is free of adhesions.

The heart weighs 230 grams. The coronary arteries arise normally and follow the distribution of

a right-dominant pattern. Serial cross-sectioning reveals no significant atherosclerosis.

Serial sections of the myocardium are taken from the apex and the base of the heart is opened along lines of blood flow. The chambers and valves are proportionate. The valves are normally formed, thin and pliable, and free of vegetations and degenerative changes.

The myocardium is pale red-brown, firm, and free of focal or regional fibrosis, erythema, pallor or softening. The atrial and ventricular septa are intact, and the septum and free walls are free of muscular bulges.

The aorta and its major branches arise normally and follow the usual course, without coarctation or aneurysmal dilation. There is no significant atherosclerosis.

The venae cavae and their major tributaries are normally distributed and are free of gross abnormalities.

RESPIRATORY SYSTEM
Upon opening the chest cavity, the lungs are fully expanded and are anteriorly displaced by hemothoraces, more prominent on the left. The right and left lungs weigh 330 and 180 grams, respectively. The upper and lower airways contain serosanguinous fluid. The mucosal surfaces are smooth and yellow-tan.

The pleural surfaces are smooth and glistening. The pulmonary parenchyma is light pink and free of masses. The cut surfaces exude minimal blood and frothy fluid, except for injured areas. There is no evidence of thromboembolism, infarction, or neoplasia. The pulmonary vasculature is normally developed, patent, and free of gross abnormalities.

LIVER AND BILIARY SYSTEM
The liver weighs 1000 grams. The hepatic capsule is smooth and glistening, covering pale brown parenchyma. There are no masses or gross abnormalities of the biliary tree. The gallbladder contains a small amount of viscid bile without stones.

ALIMENTARY TRACT
The esophagus is lined by gray-white smooth mucosa. The gastric mucosa is arranged in the usual rugal folds, and the lumen contains a moderate amount of thick green-brown fluid and partially digested food fragments. The stomach courses to the small bowel in the usual fashion. The mucosal and serosal surfaces of the small and large bowel are unremarkable. The appendix is present and is grossly unremarkable. The pancreas has a normal tan lobulated appearance.

GENITOURINARY TRACT
The right and left kidneys weigh 140 and 110 grams, respectively. The renal capsules are smooth, thin, semitransparent, and strip with ease from the underlying smooth, pale tan, firm, cortical surfaces. The cortices are of normal thickness and are sharply delineated from the medullary pyramids. The calyces, pelves, and ureters are non-dilated and free of stones. The urinary bladder contains abundant pale yellow urine; the mucosa is gray-tan and smooth.

The uterus, cervix, fallopian tubes, ovaries, and vagina are without abnormality. The uterus contains a correctly positioned contraceptive device (intrauterine device), the strings of which protrude through the cervical os. The endometrium is thin and tan. There is no gross evidence of pregnancy. The breast tissue has the normal fibrous and adipose mixture.

LYMPHATIC SYSTEM
The spleen weighs 90 grams and has a smooth intact capsule covering red-purple, moderately firm parenchyma. The splenic white pulp is grossly prominent. The exposed bone marrow (rib) is red-purple and homogenous. The lymph nodes, where visualized, show normal anatomic features. The 20 gram thymus is of normal position, size, and texture.

ENDOCRINE SYSTEM
The pituitary gland is of normal size. The thyroid gland is of normal position, size, and texture. The parathyroid glands are not identified grossly. The adrenal glands have normal cut surfaces with yellow cortex and gray medulla.

MUSCULOSKELETAL SYSTEM
The bony framework, supporting musculature, and soft tissues are not unusual, except as noted above.

OBSERVERS: Representatives of the Moscow Police Department, Idaho State Police, and Latah County Coroner's Office are present at examination.

PHOTOGRAPHS: Photographs are taken at the time of examination.

X-RAYS: A full body anteroposterior radiograph is obtained. No spine, rib, or limb fractures are identified. A T-shaped device projects over the pelvis. No metallic foreign bodies are identified.

EVIDENCE COLLECTION: Evidence collected at autopsy and released to Moscow Police Department includes the decedent's clothing; swabs of multiple body surfaces; oral, anal, and vaginal swabs; fingernail clippings; DNA card, and hair. Please see separate inventory sheet.

MATERIALS TAKEN FOR TOXICOLOGY: Peripheral blood samples are submitted to NMS Labs. Toxicology results are reported separately.

TISSUE BIOPSY SPECIMENS TAKEN: Representative biopsy samples of major organs and structures are retained in fixative.

WHOLE ORGANS RETAINED FOR FURTHER STUDY AFTER RELEASE OF THE BODY: None.

MICROSCOPIC EXAMINATION: No specimens were submitted for microscopic examination.

MICROBIOLOGY: No studies are performed.

OTHER LABORATORY TESTS:

Postmortem screening for glucose and ketones is negative.
Postmortem urinary toxicology screening is positive for ethanol.

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RETENTION:

Blood, body fluids, tissues, organs (partial portions of routinely, or under some circumstances whole), and physical/trace materials collected (the exact samples vary by case as needed for diagnostic or evidentiary purposes, and by availability) during the examination are routinely held for a period of time after release of the body and will undergo biohazard disposal unless transferred to a laboratory or other agency, or otherwise released by special arrangement.

Body Fluid/Organs, Evidence Retention Summary Chart

6 Months	**Refrigerated** – blood, urine, vitreous **Frozen** – gastric **Frozen** – liver
1 Year	Bullets Ligatures Other items of physical evidence Hair
3 Years	**Frozen** – red top **Frozen** – purple top
3 Years	Formalin fixed tissue including whole organs fixed in formalin
10 Years	Histology blocks
Indefinite	Microscopic slides
Indefinite or Archive	Fingerprint cards Blood cards

RCW 68.50.106
Autopsies, post-mortems – Analyses – Opinions – Evidence – Costs

In any case in which an autopsy or post-mortem is performed, the coroner or medical examiner, upon his/her own authority or upon the request of the prosecuting attorney or other law enforcement agency having jurisdiction, may make or cause to be made an analysis of the stomach contents, blood, or organs, or tissues of a deceased person and secure professional opinions thereon and retain or dispose of any specimens or organs of the deceased which in his/her discretion are desirable or needful for anatomic, bacteriological, chemical, or toxicological examination or upon lawful request are needed or desired for evidence to be presented in court. Costs shall be borne by the county.

[1993 c 228 § 19; 1987 c 331 § 59; 1975-'76 2nd ex.s. c 28 § 1; 1953 c 188 § 10. Formerly RCW 68.08.106]

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NMS Labs
200 Welsh Road, Horsham, PA 19044-2208
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e-mail: nms@nmslabs.com
Robert A. Middleberg, PhD, F-ABFT, DABCC-TC, Laboratory Director

CONFIDENTIAL

Toxicology Report

Report Issued 11/30/2022 19:12

To: **150341**
Latah County Coroner
P.O. Box 8068

Moscow, ID 83843

Patient Name	Mogen, Madison
Patient ID	221114-532
Chain	221114-532
DOB	05/25/2001
Sex	Female
Workorder	22428491

Positive Findings:

Analyte	Result	Units	Matrix Source
Ethanol	**282**	**mg/dL**	**001 - Cavity Blood**
Blood Alcohol Concentration (BAC)	**0.282**	**g/100 mL**	**001 - Cavity Blood**

See Detailed Findings section for additional information

Testing Requested:

Test	Test Name
8051B	Postmortem, Basic, Blood (Forensic)

Specimens Received:

ID	Tube/Container	Volume/ Mass	Collection Date/Time	Matrix Source	Labeled As
001	Gray Stopper Glass Tube	9 mL	Not Given	Cavity Blood	221114-532

All sample volumes/weights are approximations.

Specimens received on 11/18/2022.

Detailed Findings:

Analysis and Comments	Result	Units	Rpt. Limit	Specimen Source	Analysis By
Ethanol	282	mg/dL	10	001 - Cavity Blood	Headspace GC
Blood Alcohol Concentration (BAC)	0.282	g/100 mL	0.010	001 - Cavity Blood	Headspace GC
Ethanol	Confirmed	mg/dL	10	001 - Cavity Blood	Headspace GC

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. Ethanol (Ethyl Alcohol) - Cavity Blood:

   Ethyl alcohol (ethanol, drinking alcohol) is a central nervous system depressant and can cause effects such as impaired judgment, reduced alertness and impaired muscular coordination. Ethanol can also be a product of decomposition or degradation of biological samples.

Sample Comments:

001 Physician/Pathologist Name: Veena Singh

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 22428491 was electronically signed on 11/30/2022 17:01 by:

Chelsey Deisher

Chelsey N. Deisher, M.S.
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 52250B - Alcohols and Acetone Confirmation, Blood - Cavity Blood

-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

Test 8051B - Postmortem, Basic, Blood (Forensic) - Cavity Blood

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

Analyte	Rpt. Limit	Analyte	Rpt. Limit
Amphetamines	20 ng/mL	Buprenorphine / Metabolite	0.50 ng/mL
Barbiturates	0.040 mcg/mL	Cannabinoids	10 ng/mL
Benzodiazepines	100 ng/mL	Cocaine / Metabolites	20 ng/mL

Analysis Summary and Reporting Limits:

Analyte	Rpt. Limit	Analyte	Rpt. Limit
Fentanyl / Acetyl Fentanyl	1.0 ng/mL	Opiates	20 ng/mL
Methadone / Metabolite	25 ng/mL	Oxycodone / Oxymorphone	10 ng/mL
Methamphetamine / MDMA	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

Spokane County
WASHINGTON

OFFICE OF THE
MEDICAL EXAMINER

CHIEF MEDICAL EXAMINER
VEENA D. SINGH, MD, MPH
FORENSIC PATHOLOGIST

DEPUTY MEDICAL EXAMINER
SEAN RICCIARDO, MD
FORENSIC PATHOLOGIST

DEPUTY MEDICAL EXAMINER
MAKINZIE MOTT, MD
FORENSIC PATHOLOGIST

AUTOPSY REPORT

AUTOPSY NO:	**221114-454**
NAME OF DECEDENT:	**KERNODLE, XANA A.**
DATE OF BIRTH:	07/05/2002 SEX: FEMALE
DATE PRONOUNCED/FOUND:	11/13/2022
DATE OF AUTOPSY:	11/16/2022 @ 11:15 AM
LOCATION:	SPOKANE COUNTY MEDICAL EXAMINER; SPOKANE, WA.
RESPONSIBLE PARTY:	CATHERINE MABBUTT, LATAH COUNTY CORONER
PROSECTOR:	VEENA D. SINGH, M.D., M.P.H.
ASS'T PROSECTOR:	KATIE SKIBITSKI / KATE SIRE / HEATHER ACRES

NOTICE: THIS REPORT IS CONFIDENTIAL IN THE STATE OF WASHINGTON

You are being given this report because you are named in the statute below as being authorized to have a copy of the autopsy or postmortem report, either of which may include other reports and records. These are highly confidential documents! You may not give or show any of these documents to anyone except as authorized by law.

RCW 68.50.105Autopsies, postmortems - Reports and records confidential – Exceptions. (Effective January 1, 2014.) (1) Reports and records of autopsies or postmortems shall be confidential, except that the following persons may examine and obtain copies of any such report or record: The personal representative of the decedent as defined in RCW11.02.005, any family member, the attending physician or advanced registered nurse practitioner, the prosecuting attorney or law enforcement agencies having jurisdiction, public health officials, the department of labor and industries in cases in which it has an interest under RCW 68.50.103, or the secretary of the department of social and health services or his or her designee in cases being reviewed under RCW74.13.640. (2)(a) Notwithstanding the restrictions contained in this section regarding the dissemination of records and reports of autopsies or postmortems, nor the exemptions referenced under RCW42.56.240(1), nothing in this chapter prohibits a coroner, medical examiner, or his or her designee, from publicly discussing his or her findings as to any death subject to the jurisdiction of his or her office where actions of a law enforcement officer or corrections officer have been determined to be a proximate cause of the death, except as provided in (b) of this subsection. (b) A coroner, medical examiner, or his or her designee may not publicly discuss his or her findings outside of formal court or inquest proceedings if there is a pending or active criminal or civil action, concerning a death that has commenced prior to January 1, 2014. (3) The coroner, the medical examiner, or the attending physician shall, upon request, meet with the family of the decedent to discuss the findings of the autopsy or postmortem. For purposes of this selection, the term "family" means the surviving spouse, state registered domestic partner, or any child, parent, grandparent, grandchild, brother, or sister of the decedent, or any person who was guardian of the decedent at the time of death. [2013 c 295 § 1:2011 c 61 § 1. Prior:2007 c 439 § 1; 2007 c 156 § 23; 1987 c 331 § 58; 1985 c 300 § 1; 1977 c 79 § 2; 1953 c 188 § 9. Formerly RCW 68.08.105]

Website: https://www.spokanecounty.org/807/Medical-Examiner
102 S. Spokane St., Spokane, Washington 99202 (509) 477-2296, FAX: (509) 455-3954
Email: medexam@spokanecounty.org

SUMMARY OF CASE FINDINGS

I. Multiple sharp force injuries
II. Abrasions and contusions of head, torso, and extremities
III. Toxicology: See separate report

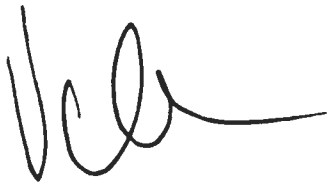
OPINION:

Investigative reports indicate that this 20 year old female, Xana Kernodle, was found deceased at her shared home. Three other occupants of the home were also found deceased.

Postmortem examination showed a well-developed adult female with stab and incised wounds of the scalp, face, and neck (23); stab wounds of the chest (7) and abdomen (4); incised and puncture wounds of the back (3); incised wounds of the upper extremities (25); and incised wounds of the lower extremities (5). Associated injuries included punctures of the outer table of the skull; perforations of the jugular vein, heart, lung, and pulmonary blood vessels; hemorrhage into the chest cavities; and wounds extending into the bones of the hand. Additional injuries included scrapes and bruises on the face, torso, and extremities. There was no evidence of natural disease that would have caused or contributed to death.

Postmortem toxicology testing showed a blood alcohol concentration of 0.229 g/100 mL and an amphetamine level of 12 ng/mL.

The cause of death is multiple sharp force injuries.



12/15/2022

Veena D. Singh, M.D., M.P.H. (date signed)
Forensic Pathologist

VDS/skb
dt:

BACKGROUND INFORMATION: Briefly, this 20-year-old female was found deceased at her shared home. Three other occupants of the home were also found deceased. The Latah County Coroner's Office requested an autopsy to further investigate the death.

INITIAL OBSERVATIONS: The body is found supine in a body bag sealed by tag number "0773077." The name "Xena Kernodle" and the tag number are written on a piece of blue tape affixed to the outside of the body bag; "Xena" has been crossed out and "Xana" has been written below. A piece of green tape bears the medicolegal case number and a notation indicating the body has been x-rayed. Two identification bands encircle the right ankle, one bearing the decedent's name, dates of birth and death, and tag number, and the other bearing the decedent's first name and last initial.

EXTERNAL EVIDENCE OF MEDICAL INTERVENTION: None.

CLOTHING AND PERSONAL EFFECTS: The body is received clad in a blue, long-sleeve, pullover sweatshirt and a pair of tan, thong-style underpants. The clothing is blood-stained. A brown paper bag is secured over each hand and the left foot by means of silver duct tape.

There is no jewelry on the body. A plastic lid with adherent orange and yellow material is found in the body bag.

EXTERNAL EXAMINATION: The body is that of a well-developed, well-nourished, adult light-complected female who weighs 150 pounds (as received), measures approximately 67 inches in length, and appears compatible with the reported age. The body has been refrigerated and is cool to the touch. Rigor mortis is receding in the muscles of the jaw and extremities. Minimally evident, fixed dark pink livor mortis is present over the posterior surfaces of the body, except in areas exposed to pressure. When first viewed, blood is dried within the hair and in droplets, rivulets, and smears over the body surfaces, more prominent anteriorly.

HEAD AND NECK
The scalp hair is dark brown, wavy, and measures up to approximately 24 inches in length over the crown. The irides appear brown. The corneas are clouded. The sclerae are white and the conjunctivae are clouded. No petechial hemorrhages are identified on the sclerae, conjunctivae, facial skin, or oral mucosa. The nose and ears are normally formed. The anterior teeth are natural and in good condition.

The neck is symmetrical, without masses. The trachea is midline.

THORAX AND ABDOMEN
The thorax is well developed and symmetrical. The abdomen is flat. The surface of the back is free of lesions, except for injuries to be described below.

The breasts are symmetrical, without palpable masses. The external genitalia are those of a normal adult female.

EXTREMITIES
The upper and lower extremities are well developed and symmetrical, without absence of digits. The fingernails are short and neatly trimmed. The toenails are short with smooth edges and patchy pink polish on all of the nails.

IDENTIFYING MARKS AND SCARS
No identifying marks or scars are readily apparent.

EVIDENCE OF INJURY:

(NOTE: The wounds are described in an arbitrary order which does not imply sequence or severity. Wound tracks are described for a body at rest in the anatomic position.)

STAB AND INCISED WOUNDS OF HEAD AND NECK (23)

(1) Entrance: On the superior frontoparietal scalp, just right of midline, is an approximately 3/4 x 1/8 inch, linear incised wound with 1/16 to 1/8 inch dark red marginal abrasion and a 1/8 inch, superficial incised tail extending anteriorly from the anterior end of the wound. The posterior end of the wound is angled.

Path: The hemorrhagic wound track involves the scalp, subcutaneous tissue, galea, and outer table of the skull.

Associated findings: There is associated subscapular and subgaleal hemorrhage. The outer table of the skull shows an approximately 9/16 inch linear defect.

Depth and direction: The wound track travels downward, to a depth of approximately 3/8 inch.

(2) Entrance: On the right posterior parietal scalp is an approximately 1 x 1/8 inch, linear incised wound with undermining extending medially, an irregular wound edge laterally, and a 1/2 inch, superficial incised tail extending anterolaterally from the anterolateral end of the wound. An approximately 1 x 1/8 inch, rectangular abrasion extends at an angle from the from the lateral wound edge; fine striations can be seen within this abrasion.

Path: The hemorrhagic wound track travels along the skull, involving the scalp, subcutaneous tissue, galea, and outer table of the skull.

Associated findings: There is associated subscapular and subgaleal hemorrhage. The outer table of the skull shows an approximately 1/8 x 3/16 inch, roughly triangular defect. The subjacent brain shows focal subarachnoid hemorrhage.

Depth and direction: The wound track travels from the decedent's left to right and downward, to a depth of approximately 5 inches.

(3) Entrance: On the right temporoparietal scalp, above the right ear, is an approximately 1 x 1/4 inch, gaping linear incised wound with undermining extending inferiorly, a 1/2 x 1/4 inch, triangular dark brown abrasion at the superior aspect of the wound, and dark brown marginal abrasion along the inferior aspect of the wound.

Path: The hemorrhagic wound track involves the scalp, subcutaneous tissue, galea and right temporalis muscle.

Associated findings: There is associated subscapular, subgaleal, and temporalis muscle hemorrhage.

Depth and direction: The wound track travels downward, to a depth of approximately 3/4 inch.

(4) Entrance: On the left posterior parietal scalp is an approximately 2 x 1/8 inch, curvilinear incised wound with irregular wound edges, undermining extending anteriorly, and discontinuous, dark brown dark red marginal abrasion.

Path: The hemorrhagic wound track involves the scalp, subcutaneous tissue, galea, and outer table of the skull.

Associated findings: There is associated subscapular and subgaleal hemorrhage. The outer table of the skull shows a discontinuous, superficial linear defect subjacent and slightly anterior to this wound.

Depth and direction: The wound track travels from the decedent's back to front and downward, to a depth of approximately 1/2 inch.

(5-6) Entrance: At the vertex, just left of midline, is a wound complex consisting of at least 2 intersecting, linear incised wounds ranging from 3/4 inch to 1 inch in length and up to 1/8 inch in width, with 1/16 to 1/8 inch dark red-brown marginal abrasion and undermining extending medially.

Path: The hemorrhagic wound tracks involve the scalp, subcutaneous tissue, and galea.

Associated findings: There is associated subscapular and subgaleal hemorrhage. The subjacent brain shows focal subarachnoid hemorrhage.

Depth and direction: The wound tracks travel from the decedent's left to right and downward, to a depth of approximately 1/2 inch.

(7-9) Entrance: On the left anterior parietal scalp is a set of at least 3 linear incised wounds ranging from 3/4 to 1-3/4 inches in length and up to 3/8 inch in width. These wounds show 1/16 to 1/4 inch dark red and dark brown marginal abrasion as well as dark brown abrasion spanning the skin between the wound edges.

Path: The hemorrhagic wound tracks involve the scalp, subcutaneous tissue, galea, and outer table of the skull.

Associated findings: There is associated subscapular and subgaleal hemorrhage. The outer table of the skull shows a cluster of linear and curvilinear defects.

Depth and direction: The wound tracks travels downward, to a depth of approximately 1/2 inch.

(10-12) Entrance: On the central forehead is a wound complex consisting of at least 3 intersecting, linear and curvilinear incised wounds ranging from 1 inch to 1-1/2 inches in length and up to 5/16 inch in width. The skin at the intersection of these wounds shows dark brown abrasion and blue-gray contusion.

Path: The hemorrhagic wound tracks involve the skin, subcutaneous tissue, galea, and outer table of the skull.

Associated findings: There is associated subcutaneous and subgaleal hemorrhage. The outer table of the skull shows 2 linear, 1/2 inch defects.

Depth and direction: The wound tracks travel from the decedent's front to back and upward, to a depth of approximately 1/2 inch.

(13) Entrance: On the left forehead is an approximately 1/2 x 1/8 inch, linear stab wound oriented from 10 o'clock to 4 o'clock. The 10 o'clock end is squared and the 4 o'clock end is sharp.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, galea, and outer table of the skull.

Associated findings: There is associated subcutaneous and subgaleal hemorrhage. The outer table of the skull shows an approximately 1/8 x 1/4 inch, roughly triangular defect.

Depth and direction: The wound track travels from the decedent's front to back, to a depth of approximately 3/4 inch.

(14) Entrance: On the glabella, medial to the left eyebrow, is an approximately 1/2 x 1/8 inch, linear stab wound oriented from 12 o'clock to 6 o'clock. The 12 o'clock end is squared and the 6 o'clock end is sharp. There is an approximately 1/16 by 1/8 inch, rectangular abrasion at the superior aspect.

Path: The hemorrhagic wound track involves the skin and subcutaneous tissue, frontal bone, and frontal sinus.

Associated findings: There is associated subcutaneous and subgaleal hemorrhage. The lungs show diffuse a diffuse hemoaspiration pattern.

Depth and direction: The wound track travels from the decedent's front to back and slightly downward. Depth cannot be accurately assessed due to the wound track entering the sinus cavity.

(15) Entrance: On the upper right cheek is an approximately 3/4 x 3/16 inch, linear incised wound.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, and musculature of the face.

Associated findings: There is associated subcutaneous and intramuscular hemorrhage. The skin superior to this wound shows an approximately 2 inch, superficial, linear incised wound extending from the temporal fossa to the periorbital skin.

Depth and direction: The wound track travels from the decedent's right to left, to a depth of approximately 3/8 inch.

(16) Entrance: On the lower right cheek is an approximately 1-1/4 x 3/16 inch, curvilinear stab wound with undermining extending anteriorly.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, musculature of the face, and oral cavity.

Associated findings: There is associated subcutaneous and intramuscular hemorrhage. The subjacent oral mucosa is hemorrhagic.

Depth and direction: The wound track travels from the decedent's right to left and back to front. Depth cannot be accurately assessed due to the wound track entering the oral cavity.

(17) Entrance: Extending laterally from the right side of the chin is a gaping, approximately 3 x 1/4 inch, curvilinear incised wound with discontinuous, 1/16 to 1/8 inch marginal abrasion along the inferior edge. The lateral end is angled and shows scalloped wound edges. A set of parallel, linear yellow abrasions extends laterally and inferiorly from the lateral end of the wound, with individual injuries ranging from punctate to 1/8 inch and altogether occupying an area of approximately 1 x 1/8 inch.

Path: The minimally hemorrhagic wound track involves the skin, subcutaneous tissue, and musculature of the face.

Associated findings: The mandible is exposed at the base of this wound. The skin lateral to the wound shows an approximately 1/8 x 1/16 inch yellow abrasion.

Depth and direction: The wound track travels from the decedent's front to back, right to left, and slightly downward, to a depth of up to 1 inch.

(18) Entrance: On the upper right neck is an approximately 1 x 3/16 inch, linear stab wound oriented from 10 o'clock to 4 o'clock. The 10 o'clock end is sharp and the 4 o'clock end is squared. An approximately 1 inch, superficial yellow abrasion extends anteriorly and superiorly from the superior edge of this wound.

Path: The hemorrhagic wound track involves the skin and subcutaneous tissue of the neck, the right external jugular vein, and the superficial and deep musculature of the neck.

Associated findings: There is moderate associated soft tissue. The external jugular vein is perforated.

Depth and direction: The wound track travels from the decedent's right to left and downward, to a depth of approximately 1-1/4 inches.

(19) Entrance: On the lower right neck is an approximately 9/16 x 3/16 inch, linear stab wound oriented from 11 o'clock to 5 o'clock. Both ends are sharp.

Path: The hemorrhagic wound track involves the skin and subcutaneous tissue, the superficial and deep musculature of the neck, and the right internal jugular vein.

Associated findings: There is abundant associated soft tissue hemorrhage. The internal jugular vein is perforated.

Depth and direction: The wound track travels from the decedent's right to left and front to back, to a depth of approximately 1-1/4 inches.

(20-22) Entrance: On the lower left cheek and upper left neck are at least 3 superficial, linear incised wounds, ranging from 3/4 to 1 inch in length and up to 1/16 inch in width. The wounds on the upper neck show associated yellow abrasion and purple contusion.

Path: The hemorrhagic wound tracks involve the skin and superficial subcutaneous tissue.

Associated findings: None.

Depth and direction: The wound tracks travel from the decedent's left to right, to a depth of up to 1/16 inch.

(23) Entrance: The right maxillary central incisor (tooth 8 by the "Universal" dental numbering system) has been sharply divided medially.

Path: The wound track involves the right maxillary central incisor.

Associated findings: There is a superficial, rectangular defect of the midline upper labial mucosa. The labial surface of the left maxillary central incisor (tooth 9 by the "Universal" dental numbering system) shows 2 incised defects.

Depth and direction: The wound track travels from the decedent's right to left and back to front. Depth cannot be accurately assessed due to the wound track entering the oral cavity.

STAB AND INCISED WOUNDS OF TORSO (14)

(1) Entrance: On the medial upper left chest is an approximately 3/4 x 3/16 inch, linear stab wound oriented from 12 o'clock to 6 o'clock. The 12 o'clock end is squared and the 6 o'clock end is sharp. The medial edge of the wound shows dark brown abrasion.

Path: The hemorrhagic wound track involves the skin and subcutaneous tissue, the anterior 2nd intercostal space, the anterior pericardial sac, the left atrium of the heart, the posterior pericardial sac, and the posterior 5th intercostal space.

Associated findings: The skin to the left of the wound shows an approximately 1-1/2 inch, linear, discontinuous superficial abrasion. There are approximately 100 mL of blood and blood clot within the pericardial sac and approximately 1000 mL of blood within the left chest cavity.

Depth and direction: The wound track travels from the decedent's front to back, right to left, and slightly downward, to a depth of approximately 6 inches.

(2-3) Entrance: On the medial upper right chest is an approximately 1/2 x 1/4 inch, gaping stab wound oriented from 9 o'clock to 3 o'clock. The 9 o'clock end is squared and shows a square, 1/16 x 3/16 inch yellow abrasion, and the 3 o'clock end is sharp and shows focal, 1/16 inch, purple marginal contusion. The superior wound edge is somewhat irregular. Yellow-tan, 1/16 inch marginal abrasion is present at the inferior edge of the wound. Two perpendicularly intersecting wound tracks underlie this wound.

Path: The minimally hemorrhagic wound tracks involve the skin, subcutaneous tissue, and musculature of the chest.

Associated findings: Two perpendicularly intersecting, 3/4 inch linear defects are present in the anteromedial right 2nd intercostal muscles. The mediastinal fat is hemorrhagic.

Depth and direction: The wound tracks travel from the decedent's front to back, right to left, and slightly upward, to a depth of approximately 4 inches.

(4) Entrance: On the lateral right chest is a gaping, approximately 2-1/4 x 1-1/2 inch, curvilinear stab wound oriented from 10 o'clock to 4 o'clock. Both ends are rounded. The wound edges are somewhat irregular and show discontinuous 1/16 inch, yellow marginal abrasion.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, right lateral fifth intercostal space, middle lobe of the right lung, and right lung hilum.

Associated findings: The right pulmonary artery and vein are perforated. There are approximately 500 mL of blood in the right chest cavity.

Depth and direction: The wound track travels from the decedent's front to back and right to left, to a depth of approximately 7 inches.

(5-7) Entrance: On the lower left chest is a gaping, approximately 2 x 1 inch stab wound oriented from 12 o'clock to 6 o'clock, with 1/8 inch, red and tan marginal abrasion and an approximately 1-3/4 inch, incised tail extending inferiorly from the 6 o'clock end of the wound. Both ends are rounded. At least three distinct linear defects are apparent on the underlying rib cage.

Path: The hemorrhagic wound tracks diverge. One track involves the skin and subcutaneous tissue, the 5th intercostal space anteriorly, the anterior pericardial sac, the right ventricle of the heart, the posterior pericardial sac, and the left leaflet of the diaphragm. At least two wound tracks involve the skin, subcutaneous tissue, costal cartilage at the 5th and 6th ribs, and the diaphragm.

Associated findings: There are approximately 100 mL of blood and blood clot within the pericardial sac and approximately 1000 mL of blood within the left chest cavity.

Depth and direction: The wound tracks travel from the decedent's front to back and right to left, to a depth of approximately six inches.

(8-9) Entrance: On the medial right abdomen is an approximately 1-1/4 by 3/4 inch, gaping stab wound oriented from 12 o'clock to 6 o'clock. The 12 o'clock end is squared and the 6 o'clock end is rounded. The wound edges show 1/16 to 1/8 inch, tan marginal abrasion. At least two distinct linear defects are apparent on the underlying rib cage.

Path: The hemorrhagic wound tracks converge, involving the skin, subcutaneous tissue, musculature, the 7th intercostal space, and the costal cartilage at the 8th rib.

Associated findings: There is moderate associated soft tissue hemorrhage.

Depth and direction: The wound tracks travel from the decedent's front to back, to a depth of approximately 3 inches.

(10-11) Entrance: On the lateral right abdomen is an approximately 1-1/4 x 9/16 inch, gaping stab wound oriented from 9 o'clock to 3 o'clock. Both ends are rounded. The wound edges are irregular and there is 1/16 to 1/8 inch, tan marginal abrasion. Dark purple contusion is present at the 9 o'clock end of the wound. At least two distinct wound tracks are apparent in the underlying soft tissue.

Path: The hemorrhagic wound tracks involve the skin, subcutaneous tissue, musculature, and ascending colon.

Associated findings: There is moderate associated soft tissue hemorrhage. The serosa of the ascending colon shows linear defects.

Depth and direction: The wound tracks travel from the decedent's right to left and slightly front to back, to a depth of approximately 3 inches.

(12-13) Entrance: On the upper right back are 2 gaping, linear incised defects. The medial wound is horizontally oriented, measures approximately 2 x 3/4 inches (3 inches when reapproximated) and shows an approximately 2-1/2 inch, curvilinear incised tail extending medially from the medial end of the wound. The lateral wound is vertically oriented, measures approximately 2-1/2 x 1 inch (3 inches when approximated), and shows undermining extending medially.

Path: The hemorrhagic wound tracks involve the skin, subcutaneous tissue, and musculature of the back.

Associated findings: The wound tracks intersect in the subcutaneous tissue.

Depth and direction: The wound tracks travel from the decedent's back to front and right to left, to a depth of up to 1-1/2 inches.

(14) Entrance: On the posterior left shoulder is an approximately 1/8 inch diameter, circular puncture wound at the medial aspect of 1/2 x 1-1/8 inch, rectangular red-brown abrasion.

Path: The hemorrhagic wound track involves the skin and subcutaneous tissue.

Associated findings: The skin superior to the wound shows an approximately 3/4 x 1/4 inch, elliptical red-brown abrasion.

Depth and direction: The wound track travels from the decedent's back to front and left to right, to a depth of approximately 1/2 inch.

INCISED WOUNDS OF RIGHT UPPER EXTREMITY (15)

(1) Entrance: On the anterior deltoid region of the right arm is a gaping, 3-1/4 x 1 inch, curvilinear incised wound with an approximately 1-1/4 inch, superficial incised tail extending medially from the medial end of the wound. The wound edges show discontinuous, 1/16 inch tan abrasion, more prominent at the inferior edge.

Path: The hemorrhagic wound track involves the skin and subcutaneous tissue medially and extends into the musculature laterally.

Associated findings: The right shoulder joint capsule is focally exposed at the base of this wound.

Depth and direction: The wound track travels from the decedent's front to back, to a depth of up to 1-1/2 inches.

(2) Entrance: On the posterior upper right arm, just above the right elbow, is an approximately 1 x 1/8 inch, linear incised wound with somewhat irregular edges.

Path: The hemorrhagic wound track involves the skin and subcutaneous tissue.

Associated findings: The skin proximal to this wound shows an approximately 1/2 x 3/8 inch, semicircular, superficial skin defect with surrounding yellow abrasion and an associated approximately 1/2 inch, linear abrasion.

Depth and direction: The wound track travels from the decedent's back to front, to a depth of approximately 1/2 inch.

(3) Entrance: At the inferior aspect of the right elbow is an approximately 1-1/4 inch x 1/8, curvilinear incised wound with irregular edges and undermining extending superiorly.

Path: The hemorrhagic wound track involves the skin and subcutaneous tissue.

Associated findings: The right elbow joint capsule is focally exposed at the base of this wound.

Depth and direction: The wound track travels from the decedent's back to front and upward, to a depth of approximately 3/4 inch.

(4) Entrance: On the ventral right forearm is a gaping, approximately 2 x 3/4 inch, linear incised wound with a linear, approximately 1/4 inch, abraded yellow tail extending medially from the medial end of this wound.

Path: The minimally hemorrhagic wound track involves the skin and subcutaneous tissue.

Associated findings: None.

Depth and direction: The wound track travels from the decedent's front to back, to a depth of approximately 3/8 inch.

(5) Entrance: On the dorsal right forearm is a gaping, approximately 1-1/4 x 1/2 inch, branched incised wound with undermining extending inferiorly.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, and musculature of the forearm.

Associated findings: None.

Depth and direction: The wound track travels from the decedent's back to front and downward, to a depth of approximately 1/2 inch.

(6) Entrance: On the lateral right wrist is an approximately 1-3/4 x up to 1/4 inch, linear incised wound.

Path: The minimally hemorrhagic wound track involves the skin laterally and medially, and the skin and subcutaneous tissue centrally.

Associated findings: None.

Depth and direction: The wound track travels from the decedent's right to left, to a depth of up to approximately 1/8 inch.

(7-8) Entrance: On the dorsal right hand are 2 gaping, curvilinear incised wounds with irregular edges and undermining extending superiorly, measuring 3 inches and 2-1/4 inches in length and up to 2 inches in width.

Path: The hemorrhagic wound tracks involve the skin and subcutaneous tissue, extensor tendons, and interosseous muscles of the hand.

Associated findings: There is moderate associated soft tissue hemorrhage.

Depth and direction: The wound tracks travel from the decedent's back to front and upward, to a depth of approximately 1-1/2 inches.

(9-14) Entrance: Six linear and curvilinear incised wounds are present on the dorsal aspects of the digits of the right hand (1 at the tip of the thumb, 2 on the dorsal index finger, 2 on the dorsal 3rd finger, and one on the dorsal 4th finger).

Path: The hemorrhagic wound tracks involve the skin and subcutaneous tissue; on the thumb, the wound track additionally involves the thumbnail and nail bed.

Associated findings: The tip of the thumb is partially amputated.

Depth and direction: The wound tracks travel from the decedent's back to front, up to a depth of approximately 1/4 inch.

(15) Entrance: On the right palm is an approximately 3/4 x 3/16 inch, serpentine incised wound with irregular edges.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, and interosseous muscles of the hand.

Associated findings: There is associated soft tissue hemorrhage.

Depth and direction: The wound track travels from the decedent's front to back and slightly left to right, to a depth of approximately 1/2 inch.

INCISED WOUNDS OF LEFT UPPER EXTREMITY (10)

(1) Entrance: In the left antecubital fossa is a gaping, approximately 2 x 1 inch (2-1/2 inch when approximated) linear incised wound with an approximately 1 inch, superficial incised tail extending superomedially from the medial end of this wound.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, and the cephalic and median cubital veins, extending into the musculature of the proximal forearm at the inferior aspect.

Associated findings: There is abundant associated soft tissue hemorrhage.

Depth and direction: The wound track travels from the decedent's front to back, up to a depth of approximately 1 inch.

(2) Entrance: On the ventrolateral left forearm is an approximately 3/4 x 3/16 inch, linear incised

wound.

Path: The hemorrhagic wound track involves the skin and subcutaneous tissue.

Associated findings: None.

Depth and direction: The wound track travels from the decedent's front to back and slightly left to right, to a depth of approximately 1/2 inch.

(3) Entrance: On the ventral left forearm is an approximately 1-1/2 x 1/4 inch, curvilinear incised wound with undermining extending superiorly and 1/16 inch, tan marginal abrasion along the inferior wound edge. An approximately 1/4 inch contused and abraded tail extends laterally from the lateral end of this wound.

Path: The hemorrhagic wound track involves the skin and subcutaneous tissue.

Associated findings: None.

Depth and direction: The wound track travels from the decedent's front to back and upward, to a depth of approximately 1/4 inch.

(4-5) Entrance: On the dorsal left forearm is a gaping, 2-1/2 x 1-1/2 inch wound complex consisting of at least 2 intersecting incised wounds. Red-tan abrasion is present at the wound edges and the ends of the wound.

Path: The hemorrhagic wound tracks involve the skin, subcutaneous tissue, and musculature of the forearm.

Associated findings: There is moderate associated soft tissue hemorrhage.

Depth and direction: The wound tracks travel from the decedent's back to front, to a depth of up to 1 inch.

(6-7) Entrance: On the dorsal left wrist are 2 incised wounds. The proximal wound is angled, measuring approximately 1-1/2 inches in length, with a 1/8 inch, linear incised tail extending medially from the medial end of the wound. The skin adjacent to this wound shows 2 punctate red abrasions, with surrounding purple contusion. The distal wound is linear, measuring approximately 1-1/2 inches in length, with an approximately 1/4 inch linear incised tail extending medially from the medial end of the wound. Focal red abrasion is present on the inferior wound edge at the medial end, within which can be seen delicate striations.

Path: The hemorrhagic wound tracks involve the skin and subcutaneous tissue.

Associated findings: None.

Depth and direction: The wound tracks travel from the decedent's back to front, to a depth of up to 1/4 inch.

(8) Entrance: At the base of the left thumb, extending into the webspace, is a gaping, 1 x 1-3/4 inch incised wound with irregular edges.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, and interosseous muscles.

Associated findings: There is abundant associated soft tissue hemorrhage.

Depth and direction: The wound track travels from the decedent's back to front, to a depth of approximately 3/4 inch.

(9) Entrance: On the proximal left palm is an approximately 3 x 1/8 inch, angled incised wound with irregular edges.

Path: The hemorrhagic wound track involves the skin, subcutaneous tissue, palmar aponeurosis, interosseous muscles, and hamate and capitate bones of the hand.

Associated findings: There is abundant associated soft tissue hemorrhage. The tendons and muscles of the hand are transected and the bones are incised.

Depth and direction: The wound track travels from the decedent's front to back and slightly downward, to a depth of up to 1 inch.

(10) Entrance: On the mid left palm is an approximately 1-1/4 x 1/4 inch, linear incised wound.

Path: The hemorrhagic track involves the skin, subcutaneous tissue, and interosseous muscles of the hand.

Associated findings: There is moderate associated soft tissue hemorrhage.

Depth and direction: The wound track travels from the decedent's front to back, to a depth of approximately 1/2 inch.

INCISED WOUNDS OF LOWER EXTREMITIES (5)

(1-2) Entrance: Overlying the right shin is an approximately 2 x up to 1/8 inch, linear incised wound with an approximately 1/2 inch, superficial incised tail extending superomedially from the medial end of this wound.

Path: The hemorrhagic wound track involves the skin at each end and the skin and subcutaneous tissue centrally.

Associated findings: The skin superior to this wound shows an approximately 1/2 inch, superficial, linear incised wound.

Depth and direction: The wound track travels from the decedent's front to back, to a depth of approximately 1/4 inch.

(3-4) Entrance: On the posterolateral right calf is an approximately 2 x 1/4 inch, curvilinear incised wound.

Path: The hemorrhagic wound track involves the skin anteriorly and the skin and subcutaneous tissue posteriorly.

Associated findings: The skin anterior to this wound shows an approximately 1/16 inch, superficial incised wound.

Depth and direction: The wound track travels from the decedent's right to left, up to a depth of approximately 1/4 inch.

(5) Entrance: On the anterior aspect of the left knee is an approximately 2 x 1/4 inch, linear incised wound with an approximately 1/2 inch, superficial incised tail extending superiorly from the superior end of this wound.

Path: The hemorrhagic wound track involves the skin and subcutaneous tissue.

Associated findings: None.

Depth and direction: The wound track travels from the decedent's front to back, to a depth of approximately 1/2 inch.

CLOTHING
The sweatshirt worn by the decedent shows defects corresponding with the stab wounds of the torso and upper extremities.

WEAPON
Based on characteristics of the least distorted wounds, the findings are consistent with a blade approximately 1-3/16 to 1-1/4 inch in width and approximately 5/32 to 3/16 in thickness, with a double-edged segment and a single-edged segment. Some wounds show findings consistent with a partly serrated blade.

BLUNT FORCE INJURIES

Head and neck: On the right forehead is an approximately 1 x 1-1/2 inch area of purple contusion, at the lateral and inferior aspects of which are red-brown abrasions. The skin inferior to this, at the right eyebrow, shows an approximately 1/2 inch diameter, roughly circular blue contusion. On the lateral left cheek is an approximately 1-1/2 x 1/2 inch, irregular dark brown abrasion with surrounding purple contusion. Purple contusions overlie the left mandible and left side of the chin, measuring 3/4 inch and 1 inch in greatest dimension respectively.

There is focal upper labial mucosal hemorrhage.

Thorax and abdomen: An approximately 1/2 x 1/4 inch, dark brown abrasion is present on the lateral left breast. An approximately 2 x 1 inch, roughly rectangular purple contusion overlies the lateral right buttock.

Extremities: An approximately 2 x 3/4 inch, roughly rectangular purple contusion is present on the dorsolateral right forearm. On the medial right forearm is irregular purple contusion interspersed with punctate and irregular, red-tan abrasions, altogether occupying an area of approximately 3 x 1-1/2 inches, with individual abrasions measuring up to 1/4 inch in greatest dimension.

A circular, 3/16 inch diameter, purple contusion is present on the anterior right thigh. Irregular yellow abrasions and purple contusions overlie the anterior right knee, altogether occupying an area of approximately 2 x 1-1/2 inches, with individual injuries measuring up to 1-1/8 inch in

greatest dimension. A circular, 1/8 inch diameter, purple contusion is present at the base of the left great toe.

INTERNAL EXAMINATION:

BODY CAVITIES
The body is entered with the standard coronal and Y-shaped thoraco-abdominal incisions. A normally formed diaphragm separates the thoracic and abdominal cavities. All body organs are in normal and anatomic position. No adhesions are in any of the body cavities. Hemopericardium and bilateral hemothoraces are described above. The serous surfaces are smooth and glistening.

HEAD
Reflection of the scalp and examination of the skull and brain reveal injuries, as described above. The skull is of normal thickness. The brain weighs 1310 grams. The dura mater and falx cerebri are intact, and not adherent to the brain. The leptomeninges are thin and transparent. The cerebral hemispheres are symmetrical, with a normal gyral pattern.

The cranial nerves and blood vessels at the base of the brain are free of abnormality. The cerebral ventricles are of normal caliber. Serial coronal sections of cerebral hemispheres show a uniform cortical ribbon and no focal lesions of the cortex, white matter, or deep nuclei. There is no gross evidence of infection or mass lesion. Sections through the brainstem and cerebellum show no focal lesions. The pituitary gland is normally positioned in the sella turcica and is unremarkable. The dura is stripped from the inner table of the cranial fossae and no basilar fractures are identified. The spinal cord is not removed.

NECK
The neck is dissected in layers showing normal anatomic relations. The neck musculature shows injuries, as described above. The hyoid bone and thyroid cartilage are intact. The cricoid cartilage and the rings of the trachea are intact. The cervical spine shows normal alignment. Palpation and manipulation reveal no fractures. The larynx shows no evidence of obstruction or edema. The vocal cords are symmetrical and free of abnormalities. The epiglottis is normal. The carotid vessels are intact. The tongue is normally formed.

CARDIOVASCULAR SYSTEM
The pericardial surfaces are smooth and glistening, showing injury, as described above. The pericardial sac is free of adhesions.

The heart weighs 220 grams. The coronary arteries arise normally and follow the distribution of a right-dominant pattern. Serial cross-sectioning reveals no significant atherosclerosis.

Serial sections of the myocardium are taken from the apex and the base of the heart is opened along lines of blood flow. The chambers and valves are proportionate. The valves are normally formed, thin and pliable, and free of vegetations and degenerative changes.

The myocardium is pale red-brown, firm, and free of focal or regional fibrosis. The atrial and ventricular septa are intact, and the septum and free walls are free of muscular bulges.

The aorta and its major branches arise normally and follow the usual course, without coarctation or aneurysmal dilation. There is no significant atherosclerosis.

The venae cavae and their major tributaries are normally distributed and are free of gross

abnormalities.

RESPIRATORY SYSTEM
Upon opening the chest cavity, the lungs are fully expanded and are anteriorly displaced by hemothoraces, more prominent on the left. The right and left lungs weigh 200 and 160 grams, respectively. The upper and lower airways contain abundant bloody, mucoid material. The mucosal surfaces are smooth and yellow-tan.

The pleural surfaces are smooth and glistening. The pulmonary parenchyma is light pink and shows a patchy hemoaspiration pattern. There are no masses. The cut surfaces exude minimal blood and frothy fluid, except for injured areas. There is no evidence of thromboembolism, infarction, or neoplasia. The pulmonary vasculature is normally developed and patent.

LIVER AND BILIARY SYSTEM
The liver weighs 980 grams. The hepatic capsule is smooth and glistening, covering pale brown parenchyma. There are no masses or gross abnormalities of the biliary tree. The gallbladder contains a moderate amount of watery bile without stones.

ALIMENTARY TRACT
The esophagus is lined by gray-white smooth mucosa. The gastric mucosa is arranged in the usual rugal folds, and the lumen contains abundant partially digested food fragments. The stomach courses to the small bowel in the usual fashion. The mucosal and serosal surfaces of the small and large bowel are unremarkable, except as noted above. The appendix is present and is grossly unremarkable. The pancreas has a normal tan lobulated appearance.

GENITOURINARY TRACT
The right and left kidneys weigh 100 grams, each. The renal capsules are smooth, thin, semitransparent, and strip with ease from the underlying smooth, pale tan, firm, cortical surfaces. The cortices are of normal thickness and are sharply delineated from the medullary pyramids. The calyces, pelves, and ureters are non-dilated and free of stones. The urinary bladder contains abundant clear yellow urine; the mucosa is gray-tan and smooth.

The uterus, cervix, fallopian tubes, ovaries, and vagina are without abnormality. The uterus contains a correctly positioned contraceptive device (intrauterine device), the strings of which protrude through the cervical os. The endometrium is thin and dark brown. There is no gross evidence of pregnancy. The breast tissue has the normal fibrous and adipose mixture.

LYMPHATIC SYSTEM
The spleen weighs 120 grams and has a smooth intact capsule covering red-purple, moderately firm parenchyma. The splenic white pulp is grossly prominent. The exposed bone marrow (rib) is red-purple and homogenous. The lymph nodes, where visualized, show normal anatomic features. The thymus is atrophic and replaced by fat.

ENDOCRINE SYSTEM
The pituitary gland is of normal size. The thyroid gland is of normal position, size, and texture. The parathyroid glands are not identified grossly. The adrenal glands have normal cut surfaces with yellow cortex and gray medulla.

MUSCULOSKELETAL SYSTEM
The bony framework, supporting musculature, and soft tissues are not unusual, except as noted above.

OBSERVERS: Representatives of the Moscow Police Department, Idaho State Police, and Latah County Coroner's Office are present at examination.

PHOTOGRAPHS: Photographs are taken at the time of examination.

X-RAYS: A full body anteroposterior radiograph is obtained. No spine, rib, or limb fractures are identified. A T-shaped device projects over the pelvis. No metallic foreign bodies are identified.

EVIDENCE COLLECTION: Evidence collected at autopsy and released to Moscow Police Department includes the decedent's clothing; swabs of multiple body surfaces; oral, anal, and vaginal swabs; fingernail clippings; DNA card, hair; and trace evidence. Please see separate inventory sheet.

MATERIALS TAKEN FOR TOXICOLOGY: Peripheral blood samples are submitted to NMS Labs. Toxicology results are reported separately.

TISSUE BIOPSY SPECIMENS TAKEN: Representative biopsy samples of major organs and structures are retained in fixative.

WHOLE ORGANS RETAINED FOR FURTHER STUDY AFTER RELEASE OF THE BODY: None.

MICROSCOPIC EXAMINATION: No specimens were submitted for microscopic examination.

MICROBIOLOGY: No studies are performed.

OTHER LABORATORY TESTS:

Postmortem screening for glucose and ketones is negative.
Postmortem urinary toxicology screening is positive for amphetamines and ethanol.

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dt: 11/16/22
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RETENTION:

Blood, body fluids, tissues, organs (partial portions of routinely, or under some circumstances whole), and physical/trace materials collected (the exact samples vary by case as needed for diagnostic or evidentiary purposes, and by availability) during the examination are routinely held for a period of time after release of the body and will undergo biohazard disposal unless transferred to a laboratory or other agency, or otherwise released by special arrangement.

Body Fluid/Organs, Evidence Retention Summary Chart

6 Months	**Refrigerated** – blood, urine, vitreous **Frozen** – gastric **Frozen** – liver
1 Year	Bullets Ligatures Other items of physical evidence Hair
3 Years	**Frozen** – red top **Frozen** – purple top
3 Years	Formalin fixed tissue including whole organs fixed in formalin

NMS Labs
200 Welsh Road, Horsham, PA 19044-2208
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e-mail: nms@nmslabs.com
Robert A. Middleberg, PhD, F-ABFT, DABCC-TC, Laboratory Director

CONFIDENTIAL

Toxicology Report

Report Issued 12/05/2022 09:01

To: **150341**
Latah County Coroner
P.O. Box 8068

Moscow, ID 83843

Patient Name	Kernodle, Xana A
Patient ID	221114-454
Chain	221114-454
DOB	07/05/2002
Sex	Female
Workorder	22428498

Positive Findings:

Analyte	Result	Units	Matrix Source
Ethanol	**229**	**mg/dL**	**001 - Peripheral Blood**
Blood Alcohol Concentration (BAC)	**0.229**	**g/100 mL**	**001 - Peripheral Blood**
Amphetamine	**12**	**ng/mL**	**001 - Peripheral Blood**

See Detailed Findings section for additional information

Testing Requested:

Test	Test Name
8051B	Postmortem, Basic, Blood (Forensic)

Specimens Received:

ID	Tube/Container	Volume/ Mass	Collection Date/Time	Matrix Source	Labeled As
001	Gray Stopper Glass Tube	5 mL	Not Given	Peripheral Blood	221114-454

All sample volumes/weights are approximations.

Specimens received on 11/18/2022.

Detailed Findings:

Analysis and Comments	Result	Units	Rpt. Limit	Specimen Source	Analysis By
Ethanol	229	mg/dL	10	001 - Peripheral Blood	Headspace GC
Blood Alcohol Concentration (BAC)	0.229	g/100 mL	0.010	001 - Peripheral Blood	Headspace GC
Amphetamine	12	ng/mL	5.0	001 - Peripheral Blood	LC-MS/MS
Ethanol	Confirmed	mg/dL	10	001 - Peripheral Blood	Headspace GC

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. Amphetamine - Peripheral 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).

2. Ethanol (Ethyl Alcohol) - Peripheral Blood:

   Ethyl alcohol (ethanol, drinking alcohol) is a central nervous system depressant and can cause effects such as impaired judgment, reduced alertness and impaired muscular coordination. Ethanol can also be a product of decomposition or degradation of biological samples.

Sample Comments:

001 Physician/Pathologist Name: Veena Singh

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 22428498 was electronically signed on 12/05/2022 08:27 by:

Daniel T. Anderson, M.S., D-ABFT-FT, ABC-GKE
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 50010B - Amphetamines Confirmation, Blood - Peripheral 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	5.0 ng/mL
MDEA	5.0 ng/mL		

Test 52250B - Alcohols and Acetone Confirmation, Blood - Peripheral Blood

-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

Test 8051B - Postmortem, Basic, Blood (Forensic) - Peripheral Blood

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

Analyte	Rpt. Limit	Analyte	Rpt. Limit
Amphetamines	20 ng/mL	Fentanyl / Acetyl Fentanyl	1.0 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

10 Years	Histology blocks
Indefinite	Microscopic slides
Indefinite or Archive	Fingerprint cards Blood cards

RCW 68.50.106
Autopsies, post-mortems – Analyses – Opinions – Evidence – Costs

In any case in which an autopsy or post-mortem is performed, the coroner or medical examiner, upon his/her own authority or upon the request of the prosecuting attorney or other law enforcement agency having jurisdiction, may make or cause to be made an analysis of the stomach contents, blood, or organs, or tissues of a deceased person and secure professional opinions thereon and retain or dispose of any specimens or organs of the deceased which in his/her discretion are desirable or needful for anatomic, bacteriological, chemical, or toxicological examination or upon lawful request are needed or desired for evidence to be presented in court. Costs shall be borne by the county.

[1993 c 228 § 19; 1987 c 331 § 59; 1975-'76 2nd ex.s. c 28 § 1; 1953 c 188 § 10. Formerly RCW 68.08.106]

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Veena Singh, MD, MPH

Forensic Pathologist
Chief Medical Examiner
Spokane County Medical Examiner's Office
102 S Spokane St
Spokane, WA 99202-1532
Work email: VSINGH@SpokaneCounty.org

Licensures (MD)

Washington (2021 to present; unrestricted)
Idaho (2021 to present; unrestricted)
Minnesota (inactive)
New Mexico (inactive)
Arizona (inactive)

Board Certification: American Board of Pathology

Forensic Pathology (2008, recertified 2017)
Anatomic Pathology (2007, recertified 2017)
Clinical Pathology (2007, recertified 2017)

Education

Office of the Medical Investigator
University of New Mexico Health Sciences Center
Albuquerque, NM
Forensic Pathology Fellowship
July 1, 2007 to June 30, 2008

Department of Pathology
University of New Mexico Health Sciences Center
Albuquerque, NM
Combined Anatomic and Clinical Pathology Residency
July 1, 2003 to June 30, 2007

Department of Surgery
Swedish Medical Center
Seattle, WA
General Surgery Residency
July 1, 2001 to June 30, 2003

School of Medicine
Oregon Health and Sciences University
Portland, OR
Doctor of Medicine
1996 to 2001

School of Public Health and Preventive Medicine
Oregon Health and Sciences University
Portland, OR
Master of Public Health, Epidemiology and Biostatistics
1998 to 2001

Portland State University
Portland, OR
Post Baccalaureate coursework
1994 to 1996

Willamette University
Salem, OR
Bachelor of Arts in Literature and Philosophy
1985 to 1989

Employment

Chief Medical Examiner, April 2021 to present
Spokane County Medical Examiner's Office
Spokane, WA

Clinical Instructor, Department of Laboratory Medicine & Pathology, July 2021 to present
University of Washington School of Medicine
Spokane, WA

Clinical Associate Professor, September 2021 to present
Washington State University | Elson S. Floyd College of Medicine,
Spokane, WA

Assistant Medical Examiner, May 2018 to April 2021
Midwest Medical Examiner's Office
Ramsey, MN

Adjunct Faculty, Department of Family Medicine and Biobehavioral Health, August 2020 to April 2021
University of Minnesota Medical School
Duluth, MN

Medical Investigator, September 2015 to May 2018
New Mexico Office of the Medical Investigator
Albuquerque, NM

Associate Professor of Pathology, September 2015 to May 2018
University of New Mexico School of Medicine
Albuquerque, NM

Forensic Pathologist, July 2008 to September 2015
Pima County Office of the Medical Examiner
Tucson, AZ

Assistant Professor of Pathology, July 2008 to September 2015
University of Arizona College of Medicine
Tucson, AZ

Membership in Professional Societies

National Association of Medical Examiners
American Academy of Forensic Sciences
American Society for Clinical Pathology
College of American Pathologists