VIRGINIA: IN THE CIRCUIT COURT FOR THE COUNTY OF ALBEMARLE

COMMONWEALTH OF VIRGINIA

V. **Case Nos.: CR15000052-00 & CR15000053-00**

JESSE LEROY MATTHEW, JR.

STATEMENT OF FACTS

The parties stipulate that had this matter gone to trial, the Commonwealth would have presented evidence to prove each of these facts beyond a reasonable doubt. The parties stipulate this evidence is sufficient for a finding of guilt beyond a reasonable doubt to the charges as set forth in the plea agreement.

The evidence at trial would have proven that on or about September 13, 2014, Jesse Leroy Matthew, Jr. (hereinafter "the defendant") did abduct with the intent to defile and, with malice and premeditation, kill and murder 18-year-old University of Virginia (hereinafter "University") student Hannah Elizabeth Graham (hereinafter "Hannah") in Albemarle County.

Hannah was a high-achieving second year student at the University. She was a student-athlete and by all accounts trusting, sociable and enthusiastic for life. The evidence at trial would have proven that the 32-year-old defendant was a stranger to Hannah before she encountered him on September 13, 2014 on the downtown mall (hereinafter "mall") in the city of Charlottesville (hereinafter "Charlottesville").

Around 7 p.m. on Friday, September 12, 2014, Hannah met up with some of her friends and fellow ski team members to socialize and get ready for the evening. Hannah began drinking around 7 p.m. and continued to consume alcohol throughout the night. Hannah and her friends left to go to Fig, a restaurant on the Corner across from the University, for a ski team function.

After leaving Fig around 11 p.m., Hannah attended a college party at an apartment in Charlottesville. Hannah left shortly after arriving with a friend from high school and went to another apartment party. Witnesses would have testified that Hannah continued to consume alcohol and became increasingly intoxicated. Around midnight, Hannah said that she was not feeling well and wanted to go home. One of Hannah's friends walked her outside. Hannah turned down her friend's offer to walk her home, and she left on her own. This was the last time that Hannah was seen alive by her friends.

Throughout the night, Hannah had been communicating with various friends by text message. As the night wore on, her text messages became increasingly difficult to understand and peppered with misspellings, consistent with an increasing level of impairment. After leaving the party at midnight, Hannah continued to text her friends. In the last text messages that she sent, she indicated that she was lost, first referencing 14th and Wertland Streets in Charlottesville

Defendant's Initials: JMM DCR

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CWK judge

and moments later referencing 14th Street and the mall. The last communication from Hannah's phone was a text sent to a friend at 1:00 a.m. stating: "I got stuck down tho."

On Sunday, September 14, 2014, Hannah's friends reported her missing after no one had seen her or heard from her since 1:00 a.m. on September 13, 2014. Hannah had plans to volunteer at the Beta Bridge early on Saturday morning and did not arrive or respond to multiple attempts to contact her. Friends and family attempted to reach her with no response. This was out-of-character for Hannah. She had always remained in regular contact with her friends and family. She had no medical or mental health issues. She had been making plans for her future, discussing those plans just days earlier with her parents. Her total lack of contact with friends, family, or others known to Hannah was highly unusual, prompting the police report.

Immediately, Charlottesville police began searching for Hannah. State and federal law enforcement agencies soon became involved and the case garnered extensive local, national, and international attention. Through extensive police investigation, police discovered video surveillance footage and eyewitness accounts that helped piece together what happened after Hannah was last seen by her friends.

Around 12:45 a.m. on September 13, 2014, Hannah was spotted at McGrady's Pub at the intersection of Grady and Preston Avenues in Charlottesville. The bouncer working the door that night noticed Hannah walk by once, turn around and pass by him again. The bouncer observed that Hannah was impaired and asked Hannah if she was okay or if she needed help. Hannah replied that she was okay and did not need help. Hannah then left walking east on Preston Avenue.

From there, Hannah traveled east down Preston Avenue (hereinafter "Preston") to the mall. Video surveillance footage from the Preston Shell Station at 12:55 a.m. on September 13, 2014, showed Hannah walking east down Preston then breaking into a short jog as she passed beneath the railway bridge on her way toward the downtown mall. Hannah was next seen on surveillance footage continuing east on Preston from Reid's Supermarket and The Crossings apartment complex located at Preston and 4th Street N.W. At 1:01 a.m., Hannah was captured on Fellini's Restaurant's surveillance video walking east on the south side of Market Street. Hannah turned right and walked south down 2nd Street N.W. toward the mall. In this video footage, Hannah appeared unable to walk in a straight line.

The evidence at trial would have proven that Hannah had never come into contact with the defendant before encountering him in the early morning of September 13, 2014. The defendant was a large man, standing at 6'2" tall and weighing 270 pounds. He was much larger than Hannah, who was 5'11" tall and had a slim build. Having been born and raised in the area and having driven a taxi cab locally for years, the defendant also was very familiar with Albemarle County.

The evidence would have shown that during the evening of September 12, 2014, and the early morning of September 13, 2014, the defendant visited a number of local bars and began a pattern of physically invasive and inappropriate behavior toward women. Several women later

Defendant's Initials: JM DR

informed investigators the defendant made them feel uncomfortable and made unwanted sexual advances toward them, including persistent offensive and inappropriate touching.

The defendant began his evening at the Lazy Parrott bar and restaurant in Albemarle County. A witness would have testified that he approached a woman sitting by herself at the bar. Evidence would have shown that after rebuffing the defendant's initial advances and telling him she had a boyfriend, the defendant requested her telephone number, told her how nice her lips were, repeatedly touched her hands, and persisted in unwanted advances and physical touching that made her uncomfortable enough to sit on her hands to prevent further touching. Another witness would have testified that when confronted about the defendant's offensive behavior, the defendant replied that he was just trying to "meet girls."

The defendant subsequently traveled to the mall where he began going from bar to bar. The defendant opened tabs at three different bars that evening, purchasing drinks at each location. At each bar, the defendant engaged in physically inappropriate behavior that made women highly uncomfortable. The defendant first opened a tab at 11:18 p.m. at Rapture, 303 E. Main Street, and purchased three house rums. Next, the defendant made two purchases, each for a single drink, at the Blue Light Grill & Raw Bar (hereinafter "Blue Light"), 120 E. Main Street, at 11:39 p.m. and 11:57 p.m., respectively. At 12:18 a.m., the defendant purchased three house bourbons at Tempo, 117 5th Street S.E.

At around 11:30 – 11:45 p.m., the defendant met two women for the first time at Blue Light. Shortly after meeting them, the defendant easily and without warning picked both women up at the same time without their consent by cradling them underneath their buttocks, making them both uncomfortable. He began to dance side to side while the women tried to push away from him. The defendant agreed to put them down but continued to make inappropriate physical contact with one of the women. The women then left Blue Light and went to Tempo, where they again encountered the defendant.

At Tempo, the two women observed the defendant dancing with another woman. The defendant again touched these women in an inappropriate and unwanted manner. One of the women would have testified that the defendant immediately approached her after she took off her boots because her feet were hurting. She would have testified that the defendant, ignoring her protests, grabbed her leg, took off her sock, and touched her foot. She would have testified that the defendant told her: "A woman that takes care of her feet takes care of everything else." The defendant then approached the other woman and grabbed her leg. This woman would have testified that the defendant looked at her in a "crazy way" when she warned him not to touch her. The defendant's behavior made both women extremely uncomfortable, so they left Tempo.

The defendant next returned to Rapture where he signed a receipt time stamped 12:51 a.m. on September 13, 2014. At this location, the defendant engaged in additional unwanted sexual advances, including grabbing the buttocks of a former acquaintance without her consent. After this acquaintance hid from the defendant behind a person standing nearby, the defendant tried to grab her again. After being confronted about this behavior by another individual, credit card records reflect that the defendant closed out his tab at 1:03 a.m.

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Minutes later, the defendant was seen on camera walking westbound on the mall. Video footage shows the defendant walk past an apparently impaired and unsteady Hannah, who was walking eastbound on the mall in the area of Sal's Cafe Italia (hereinafter "Sal's), 221 E. Main Street. Immediately after passing Hannah, the defendant crossed the mall and began walking eastbound behind Hannah. Video surveillance shows the defendant crossing the mall and walking behind Hannah, and two witnesses observed the defendant catch up with Hannah and put his arm around her.

Earlier that evening, these witnesses had encountered the defendant, a stranger to them as well, when the defendant held up his hand to offer a "high five" as he walked by them on the mall. One returned the high five while the other did not. One of these witnesses would have testified that when she first saw Hannah, Hannah appeared highly impaired as she walked down the mall. The witness would have testified that she observed the defendant walk past, turn around, and then catch up to Hannah to put his arm around her. After observing the defendant's behavior, the witness would have testified that she told the defendant: "You don't even know her," to which the defendant replied: "Hush."

These witnesses then followed the defendant and Hannah to Tempo, and the group sat at the bar when they arrived. Hannah's cell phone was in her back pocket. The defendant ordered two drinks, one for himself and one for Hannah. Credit card receipts show that this transaction occurred at 1:10 a.m. One of the witnesses who followed the defendant and Hannah to Tempo asked that he buy her a drink, but the defendant refused. These witnesses would have testified that as they were leaving Tempo, one witness commented to the other that "He's gonna fuck her up," referring to the defendant and Hannah.

The defendant and Hannah left Tempo together and walked arm in arm, turning north up 4th Street. They passed by Red Pump Kitchen (hereinafter "Red Pump") at the corner of 4th and Main Streets at 1:18 a.m. and were captured on Red Pump's surveillance video. After the defendant and Hannah walked just out of view of Red Pump's surveillance video, the defendant appeared to pause for about 10 seconds as indicated by the shadow on the surveillance video. While it is unclear whether Hannah paused as well, a witness who spotted both walking would have testified that he observed that around this time Hannah had separated from the defendant and began walking ahead of him.

This witness, the last known to have seen Hannah alive, observed Hannah on 4th Street. He watched Hannah cross E. Market Street in the crosswalk. As Hannah was almost across E. Market Street, the witness observed the defendant following Hannah. He then observed the defendant catch up to Hannah, place his arm around her, and observed that the defendant "did not look friendly." Hannah walked up 4th Street in the roadway in front of the defendant and stopped at the passenger rear tire of the defendant's 1998 orange Chrysler Sebring. The witness would have testified that the defendant unlocked the passenger door with keys, opened the door and stood in the entryway to the vehicle. Hannah was standing at the passenger rear tire facing the defendant. Hannah then exclaimed, "I'm not getting in that car with you! What is it, stolen?" The witness would have testified that Hannah's voice sounded elevated, rapid and

frightened, as if she did not know the defendant. The witness kept walking up 4th Street, heard nothing else despite continuing to listen, and did not see the defendant or Hannah after looking back twice. Less than two minutes later, the witness would have testified that he drove past 4th Street and did not see the defendant or Hannah.

An expert would have testified that efforts to utilize the defendant's cell phone to track his location at the time of Hannah's abduction and murder were fruitless because his cell phone was likely in airplane mode at the time the defendant committed these offenses. The defendant's cell phone records establish the last call made from his phone was at 12:31 a.m. on September 13, 2014. From that time until 4:26 p.m. on September 13, 2014, his cell phone was not powered off and did not communicate with any cell towers. Moreover, at 4:26 p.m., his phone made an outgoing phone call and received multiple text messages at the same time, including a text from his girlfriend that read: "Morning hope the day goes well."

Law enforcement conducted an extensive search for Hannah for over a month. It was not until October 18, 2014, that Hannah's skeletonized remains were discovered in a remote part of Albemarle County. A search and rescue team located Hannah's remains near 3193 Old Lynchburg Road in a densely wooded slight ravine behind a vacant home. Forensic evidence technicians and law enforcement personnel began a comprehensive effort to locate the rest of Hannah's physical remains and belongings. As a result of this search, almost all of Hannah's skeleton was recovered in the area.

The "crop top" that Hannah was seen wearing the night of her abduction was found near the majority of her skeletal remains. The crop top was inside out and unzipped. Hannah's jeans were nearby as well. One leg was inside out. The jeans contained a hole in the knee of one leg and a hole in the hamstring of the other that had not been present when Hannah was observed on September 13, 2014. Hannah's watch was also found nearby. However, Hannah's undergarments, shoes, and cell phone were never recovered.

The defendant was familiar with this part of Albemarle County, having lived approximately five miles away from the location where Hannah's body was recovered and driven a taxi in the area for many years. Investigators subsequently located a resident of the area who reported seeing the defendant's car near 3193 Old Lynchburg Road on the morning of Saturday, September 13, 2014, between 6:30 a.m. and 7:30 a.m. A gate known as "Garland's Gate" blocks an access road just north of 3193 Old Lynchburg Road. The access road behind the gate leads directly behind the property where Hannah's remains were recovered. The witness would have testified that the defendant's car was just off of Old Lynchburg Road backed into Garland's Gate. No one was in the defendant's car, and Garland's Gate was closed.

Additionally, a botany expert from Virginia Tech would have testified that plant material investigators recovered from the chassis of the defendant's vehicle was consistent with the vegetation at the location of Hannah's remains. Moreover, the defendant, who had been coaching football at Covenant High School, missed a 7:30 a.m. coaches' meeting that morning.

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Hannah's remains were transported to the Office of the Chief Medical Examiner in Richmond for autopsy. The medical examiner, Dr. Kevin Whaley, concluded that Hannah's cause of death was "Homicidal Violence of Undetermined Etiology" and that Hannah's manner of death was "Homicide." Dr. Whaley consulted with a forensic anthropologist, Dr. Elayne Pope, regarding the condition of Hannah's skeleton. Dr. Pope studied Hannah's remains and determined that Hannah's left nasal bone had a piece of bone that was broken away. Dr. Whaley opined that in the absence of significant skeletal trauma, the most likely specific cause of death is either strangulation or suffocation.

The Commonwealth obtained an opinion regarding Hannah's nasal break from forensic anthropologists Dr. Cliff Boyd and Dr. Donna Boyd (hereinafter "Drs. Boyd"), professors at Radford University and co-directors of Radford University's Forensic Science Institute. Drs. Boyd obtained police reports, photographs, and video associated with the recovery of Hannah's skull and spoke with law enforcement about the manner of retrieval. Drs. Boyd reached the conclusion that Hannah had two nasal fractures, one in the left anterior nasal bone and one in the right anterior nasal bone, that were consistent with perimortem fractures (occurring at or near the time of death).

Witnesses would have testified in the days following Hannah's disappearance on September 13, the defendant exhibited highly unusual behavior, including: reporting to work late, not acknowledging co-workers, indicating when asked that he was "not okay," and otherwise acting in a manner that was "very, very not himself and very weird." Others would have testified that the defendant had a swollen jaw, complained of tooth pain, rarely left his apartment, and was unresponsive to phone calls. The defendant also received and deleted a text asking why police were looking for a black rather than white suspect in connection with Hannah Graham's disappearance and asked the person who saw the text whether they had seen it after doing so.

On Friday, September 19, 2014, law enforcement obtained a search warrant for the defendant's vehicle. Later, the police obtained search warrants for his apartment and for his mother's home. The following noteworthy items were recovered as a result of those searches:

1. A box of hospital gloves and hospital-grade antiseptic wipes had been moved from the defendant's apartment to his mother's home;

2. The defendant's cell phone that had been in service until September 13, 2014, was recovered from the defendant's apartment with its SIM card removed;

3. A swab recovered from the interior passenger side door frame of the defendant's car by a black latch (Item 50) that was that was examined by forensic scientist Shelly Edler at the Commonwealth of Virginia's Department of Forensic Science. A DNA profile was developed from this swab. Hannah could not be eliminated as a contributor to the DNA profile. The probability of someone other than Hannah being a contributor to this DNA profile is 1 in greater than 7.2 billion, or greater than the entire world's population. See attached Certificate of Analysis; and

Defendant's Initials: JM DR

4. A pair of shorts (Item 271) recovered from the floor of the defendant's bedroom that contained a stain on the left front thigh area near the hem (stain designated A). Forensic scientist Shelley Edler examined the stain and determined that it contained both sperm and a DNA mixture profile. The defendant could not be eliminated as a major contributor to the DNA mixture profile, and the probability of someone other than the defendant being a major contributor to the mixture profile is 1 in greater than 7.2 billion, or greater than the entire world's population. Hannah could not be eliminated as a minor contributor to the DNA mixture profile, and the probability of someone other than Hannah being a minor contributor to the mixture profile is 1 in greater than 7.2 billion, or greater than the entire world's population. The defendant could not be eliminated as a contributor to the sperm fraction of the stain. The probability of someone other than the defendant contributing to the sperm fraction is 1 in greater than 7.2 billion, or greater than the entire world's population. See attached Certificate of Analysis.

Additionally, prior to the execution of this search warrant, several detectives asked to speak to the defendant. The defendant initially refused to let the detectives inside his home, indicating instead that they could speak at the door. When asked, the defendant admitted that he had heard about the missing woman the police were investigating. When asked about talking to Hannah inside of a restaurant on the downtown mall on the night of her disappearance, the defendant told investigators that he was really drunk and did not remember talking to her inside of a restaurant. When asked to clarify whether he did not remember talking to Hannah or he did not remember being downtown with her, the defendant stated that he remembered being downtown. The defendant responded to a request to tell the detectives what happened because Hannah had been missing for seven days by telling the detectives he was going to get some socks. The defendant indicated he would come back outside. He shut his front door and went inside before coming back out. He subsequently allowed detectives to do a cursory walk through of his home to see if Hannah was physically present, but no evidence was collected at this time.

After being informed of the search warrant for his vehicle, the defendant was asked by a detective: "Did she leave with you? Was she in the car?" and the defendant replied, "umm." The detective then stated: "Because we're going to find that out, and I'd rather hear it from you." When asked, the detective then told the defendant that he was not under arrest and that obtaining a lawyer was a decision that he had to make. The defendant then stated he was going inside his house.

The defendant continued to enter and exit his apartment as investigators were present outside his apartment near his car. At one point, the defendant admitted watching the news. The defendant's roommate confirmed that the defendant had seen surveillance video of Hannah that the Charlottesville Police had released to the public in the hope that it would assist in finding her. Despite this and the fact that he had been explicitly asked for information regarding his interactions with Hannah, who was still considered a missing person at this point, the defendant refused to provide any information to police.

Defendant's Initials: ✓ DR

When the defendant's vehicle was being hooked up to a tow truck, the defendant approached multiple detectives and inquired about getting paperwork for a passport out of his vehicle. After being informed that he could not retrieve the paperwork because there might be fingerprints on it, the defendant noted that he got the paperwork that day instead of protesting that there would be no fingerprints in his car because he did not abduct Hannah. The defendant also refused to provide his cell phone number to detectives when asked to do so.

The defendant was given a ride to the defendant mother's home by his roommate. The defendant was quiet on the ride but asked the roommate to send him the surveillance video that had been released from Sal's showing the defendant with Hannah, and the defendant's roommate sent the video as requested. Later that morning, the defendant obtained a new license from the DMV to replace a "lost license" and withdrew almost all of his money from his bank account, leaving a balance of less than $30.00.

On Saturday, September 20, 2014, the defendant contacted a detective with the Charlottesville Police Department. At 3:49 p.m., the defendant showed up at the Charlottesville Police Department to meet the detective, but decided against speaking with the police. Later in the evening of September 20, 2014, the defendant was being trailed by FBI agents when he drove recklessly through Albemarle County to evade the FBI agents. At 9:10 p.m. that evening, two misdemeanor warrants charging the defendant with reckless driving were obtained.

On September 21, 2014, aware that he was a suspect in the disappearance of Hannah, the defendant fled Virginia in a car registered to his sister. On September 23, 2014, an abduction charge was obtained against the defendant, and a national manhunt ensued. The defendant was subsequently located in Galveston, Texas. Upon his arrest, the defendant provided police a false identity. The defendant did not provide identifying information until he was booked at the jail.

A 2015 Rand McNally Road Atlas and a Texas state travel guide were recovered from the defendant's sister's car. The travel guide contained multiple markings that corresponded to coordinates from the road atlas. Those coordinates were for several border towns in western Texas as well as for Gulf Coast towns close to the Mexican border. It was also discovered that while the defendant was on the run, he checked into Village Creek State Park in Lumberton, TX, using the false name John Carr and a false address in "Cville, Md."

JESSE LEROY MATTHEW, Jr., acknowledges that the purpose of the foregoing statement of facts is to provide an independent factual basis for his guilty plea.

Respectfully submitted,

Defendant's Initials: JLM JM

Robert N. Tracci
Commonwealth's Attorney

Carrene L. Walker
Assistant Commonwealth's Attorney

After consulting with my attorney and pursuant to the plea agreement entered into this day, I stipulate that, had the matter proceeded to trial, the Commonwealth would have proven the above facts beyond a reasonable doubt, and that they are sufficient for a finding of guilt.

Jesse Leroy Matthew, Jr.

I am Jesse Leroy Matthew, Jr's attorney. I have carefully reviewed the above Statement of Facts with him. To my knowledge, his decision to stipulate to these facts is an informed and voluntary one.

Date: 2/24/15

Douglas Ramseur, Esq.
Counsel for Defendant

Defendant's Initials:

Commonwealth of Virginia
DEPARTMENT OF FORENSIC SCIENCE

ORIGINAL

CERTIFICATE OF ANALYSIS

Central Laboratory
700 North 5th Street
Richmond, VA 23219

Tel. No.: (804) 786-4707
Fax: (804) 786-6907

September 23, 2014

TO: JIM MOONEY
CHARLOTTESVILLE POLICE DEPARTMENT
606 EAST MARKET STREET
CHARLOTTESVILLE, VA 22902

FS Lab # C14-11914

Your Case #: C2014-05179

Victim(s): GRAHAM, Hannah Elizabeth

Suspect(s): MATTHEW, Jesse Leroy Jr.

Evidence Submitted By: Ron Morgenegg Date Received: 09/20/2014

Item 3	Blue and white Oral B toothbrush from Hannah Graham's bathroom
Item 8	Buccal sample from John Graham, father of Hannah Graham
Item 9	Buccal sample from Susan Graham, mother of Hannah Graham
Item 30	White button up shirt
Item 32	Fuschia Oral B toothbrush from bathroom sink top
Item 33	Blue Oral B toothbrush from mirror of bathroom
Item 34	"Redskins" themed toothbrush from bathroom shower
Item 35	Cigar butt with a wooden tip
Item 40	Green toothbrush case with a toothbrush from shelf above toilet
Item 41	Swabs from driver side door
Item 42	Swabs from passenger headrest
Item 43	Swabs from passenger door handle
Item 44	Swabs from glove box
Item 45	Swabs from headliner
Item 46	Swabs from passenger sun visor
Item 47	Swabs from passenger inside windshield
Item 48	Swabs from passenger floor stain
Item 49	Swabs from passenger seat back
Item 50	Swabs from passenger frame bottom by black latch
Item 51	Swabs from dashboard passenger airbag
Item 52	Swabs from center console cover
Item 53	Swabs from passenger seat
Item 66	Gray leather-like seat cover from Jesse Leroy Matthew, Jr.'s vehicle
Item 67	Rug from front passenger floor of Jesse Leroy Matthew, Jr.'s vehicle
Item 68	Headliner from Jesse Leroy Matthew, Jr.'s vehicle

BODY FLUID DETECTION METHODS:

- The indication of blood and seminal fluid is based on physical characteristics innate, but not unique, to the body fluid tested. Therefore, the testing for these body fluids is not confirmatory.
    - The indication of blood is conducted through visual and chemical examinations.
    - The indication of seminal fluid is conducted through visual, chemical and immunological testing.
- The identification of spermatozoa is conducted through microscopic examinations and is confirmatory.

COMMONWEALTH'S EXHIBIT
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Commonwealth of Virginia
DEPARTMENT OF FORENSIC SCIENCE

ORIGINAL

CERTIFICATE OF ANALYSIS

Charlottesville Police Department
FS Lab # CI4-11914
Your Case # C2014-05179
September 23, 2014

DNA ANALYSIS METHODS:

- The method of deoxyribonucleic acid (DNA) analysis used was the Polymerase Chain Reaction (PCR).
- The PCR amplification kit used was the PowerPlex® 16 system.
- The PowerPlex® 16 system contains 16 genetic loci (D3S1358, TH01, D21S11, D18S51, Penta E, D5S818, D13S317, D7S820, D16S539, CSF1PO, Penta D, vWA, D8S1179, TPOX, FGA and Amelogenin, a gender determining locus which is not used for statistical purposes).

STATISTICAL ANALYSIS METHODS:

- The DNA statistics calculated herein used the population allele frequencies generated by the Virginia Department of Forensic Science.
- The statistical method addressed below has been applied in accordance with the Scientific Working Group on DNA Analysis Methods (SWGDAM) 2010 Interpretation Guidelines and Departmental procedures.

RESULTS:

Item 3 – Blue and white Oral B toothbrush from Hannah Graham's bathroom

- A DNA profile was developed from a sample of the bristle area.
    - This profile will be used as an alternate known DNA profile for Hannah Graham.

Item 8 – Buccal sample from John Graham, father of Hannah Graham
Item 9 – Buccal sample from Susan Graham, mother of Hannah Graham

- DNA profiles were developed.

Item 32 – Fuchsia Oral B toothbrush from bathroom sink top
Item 34 – "Redskins" themed toothbrush from bathroom shower
Item 35 – Cigar butt with a wooden tip

- DNA profiles consistent with having originated from a common male contributor were developed from samples of the bristle area of the fuchsia Oral B toothbrush from the bathroom sink top, the bristle area of the "Redskins" themed toothbrush from the bathroom shower, and from the wooden tip from the cigar butt.
    - The DNA profile developed from the wooden tip from the cigar butt will be used as an alternate known DNA profile for Jesse Leroy Matthew, Jr.

Item 50 – Swabs from passenger frame bottom by black latch

- The possible presence or absence of blood could not be determined due to insufficient information obtained from the chemical analysis.
- A DNA profile was developed.
    - Jesse Leroy Matthew, Jr.'s alternate known DNA profile is eliminated as a contributor.
    - Hannah Graham's alternate known DNA profile cannot be eliminated as a contributor.
        - The probability of randomly selecting an unrelated individual with a DNA profile matching that developed from the swabs from the passenger frame bottom by the black latch at the PowerPlex® 16 loci is 1 in greater than 7.2 billion (which is approximately the world population) in the Caucasian, Black, and Hispanic populations.

Commonwealth of Virginia
DEPARTMENT OF FORENSIC SCIENCE

ORIGINAL

CERTIFICATE OF ANALYSIS

Charlottesville Police Department
FS Lab # C14-11914
Your Case # C2014-05179
September 23, 2014

Item 41 – Swabs from driver side door
Item 42 – Swabs from passenger headrest
Item 43 – Swabs from passenger door handle
Item 44 – Swabs from glove box
Item 45 – Swabs from headliner
Item 46 – Swabs from passenger sun visor
Item 47 – Swabs from inside windshield
Item 48 – Swabs from passenger floor stain
Item 49 – Swabs from passenger seat back
Item 51 – Swabs from dashboard passenger airbag
Item 52 – Swabs from center console cover
Item 53 – Swabs from passenger seat
Item 66 – Gray leather-like seat cover from Jesse Leroy Matthew, Jr.'s vehicle
Item 68 – Headliner from Jesse Leroy Matthew, Jr.'s vehicle

- No blood was indicated.

Item 67 – Rug from front passenger floor of Jesse Leroy Matthew, Jr.'s vehicle

- No blood was indicated in stains on the brown paper packaging or on the rug.

Item 30 – White button up shirt

- No blood or seminal fluid was indicated.

Item 33 – Blue Oral B toothbrush from mirror of bathroom
Item 40 – Green toothbrush case with a toothbrush from shelf above toilet

- No examinations were conducted on these items.

Refer to Appendix 1 for the PowerPlex 16® typing results and Appendix 2 for the Abbreviations.

The results of other requested examinations will be reported separately.

The evidence will be available at the Central Laboratory after you have received the results of all requested examinations.

Attest:

I certify that I performed the above analysis or examination as an employee of the Department of Forensic Science and that the above is an accurate record of the results and interpretations of that analysis or examination.

Shelley S. Edler
Forensic Scientist

SSE

COMMONWEALTH of VIRGINIA

DEPARTMENT OF FORENSIC SCIENCE

Appendix 1: Table of Typing Results
FS Lab # C14-11914
September 23, 2014

Description	D3S1358		TH01		D21S11		D18S51		Penta E		D5S818		D13S317		D7S820	
50 Swabs from vehicle	16		6	7	28	29	15	16	5	12	11	12	12		12	13
32 Toothbrush	15	16	6	7	27	30	17	20	8	13	12	13	11	12	8	11
35 Cigar tip, J.M. Jr. alt known	15	16	6	7	27	30	17	20	8	13	12	13	11	12	8	11
34 Toothbrush	15	16	6	7	27	30	17	20	8	13	12	13	11	12	8	11
3 Toothbrush H.G. alt known	16		6	7	28	29	15	16	5	12	11	12	12		12	13
8 J. Graham, father of H.G.	16	17	6	9.3	28	29	14	16	8	12	11	12	11	12	10	13
9 S. Graham, mother of H.G.	16	18	7		28	31	13	15	5	15	11	12	11	12	8	12

Description	D16S539		CSF1PO		Penta D		AMEL		vWA		D8S1179		TPOX		FGA	
50 Swabs from vehicle	12	13	11		10	14	X	X	14	17	13	16	8	9	22	23
32 Toothbrush	9	11	7	12	5	7	X	Y	14	20	14	15	9	10	16.1	28
35 Cigar tip, J.M. Jr. alt known	9	11	7	12	5	7	X	Y	14	20	14	15	9	10	16.1	28
34 Toothbrush	9	11	7	12	5	7	X	Y	14	20	14	15	9	10	16.1	28
3 Toothbrush H.G. alt known	12	13	11		10	14	X	X	14	17	13	16	8	9	22	23
8 J. Graham, father of H.G.	9	13	11	12	10	13	X	Y	17		13	16	8		23	25
9 S. Graham, mother of H.G.	9	12	11	13	12	14	X	X	14	18	13		9		22	

( ), indicates minor types
INC, indicates no conclusive types detected
M, indicates variant allele detected
- - -, indicates no type detected

COMMONWEALTH of VIRGINIA

DEPARTMENT OF FORENSIC SCIENCE

Appendix 2: Abbreviations
FS Lab # C14-11914
September 23, 2014

ANO	Anorectal sample
BLD	Blood stain
ELIM	Elimination
ENV	Envelope
FNC	Finger Nail Clippings
FNS	Finger Nail Scrapings
K	Known
L	Left
LLA	Lips/Lip Area sample
MAT	Material
NSP	Non-sperm fraction
OR	Oral Rinse sample
PA	Pubic Area sample
PB	Perianal/Buttocks sample
PH	Pubic Hair
Q	Questioned
R	Right
SC	Stain Card
SMPL	Sample
SP	Sperm fraction
STN	Stain
STN'D	Stained
SUS	Suspect
SWB	Swab
TEG	Thighs/External Genitalia sample
UPS	Underpants
VC	Vaginal/Cervical sample
VIC	Victim

Commonwealth of Virginia
DEPARTMENT OF FORENSIC SCIENCE

ORIGINAL

CERTIFICATE OF ANALYSIS

Central Laboratory
700 North 5th Street
Richmond, VA 23219

Tel. No.: (804) 786-4707
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February 23, 2015

TO: M. BELEW
ALBEMARLE COUNTY POLICE DEPARTMENT
1600 5TH STREET, SUITE D
CHARLOTTESVILLE, VA 22902

FS Lab # C14-11914

Your Case #: 2014-08700

Victim(s): GRAHAM, Hannah Elizabeth

Suspect(s): MATTHEW, Jesse Leroy Jr.

Evidence Submitted By: M. Belew Date Received: 02/05/2015

Item 120	Dark elastic hair band
Item 243	Exterior passenger side door handle
Item 250	Carpet squares from under passenger seat
Item 254	Interior passenger side door handle
Item 265	Passenger side headrest from Jesse Matthew, Jr.'s vehicle
Item 269	Black Tac-force knife
Item 270	Cross necklace from Jesse Matthew, Jr.
Item 271	Shorts from Jesse Matthew, Jr.'s bedroom
Item 272	Maroon shirt from Jesse Matthew, Jr.'s bedroom
Item 310	Cigarette butt
Item 370	Cigarette butt

BODY FLUID DETECTION METHODS:

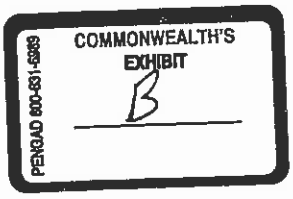
- The indication of blood and seminal fluid is based on physical characteristics innate, but not unique, to the body fluid tested. Therefore, the testing for these body fluids is not confirmatory.
  - The indication of blood is conducted through visual and chemical examinations.
  - The indication of seminal fluid is conducted through visual, chemical and immunological testing.
- The identification of spermatozoa is conducted through microscopic examinations and is confirmatory.

DNA ANALYSIS METHODS:

- The method of deoxyribonucleic acid (DNA) analysis used was the Polymerase Chain Reaction (PCR).
- The PCR amplification kit used was the PowerPlex® 16 system.
- The PowerPlex® 16 system contains 16 genetic loci (D3S1358, TH01, D21S11, D18S51, Penta E, D5S818, D13S317, D7S820, D16S539, CSF1PO, Penta D, vWA, D8S1179, TPOX, FGA and Amelogenin, a gender determining locus which is not used for statistical purposes).

STATISTICAL ANALYSIS METHODS:

- The DNA statistics calculated herein used the population allele frequencies generated by the Virginia Department of Forensic Science.
- The statistical method addressed below has been applied in accordance with the Scientific Working Group on DNA Analysis Methods (SWGDAM) 2010 Interpretation Guidelines and Departmental procedures.



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Albemarle County Police Department
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RESULTS:

A DNA profile was previously developed from the buccal swabs from Jesse Leroy Matthew, Jr. (Item 141, reported in the Certificate of Analysis dated October 2, 2014 and addressed to Shawn Bayles, Charlottesville Police Department and agency case # C2014-05179).

An alternate known DNA profile was previously developed for Hannah Graham from the blue and white Oral B toothbrush from Hannah Graham's bathroom (Item 3, reported in the Certificate of Analysis dated September 23, 2014 and addressed to Jim Mooney, Charlottesville Police Department and agency case # C2014-05179).

Item 271 – Shorts from Jesse Matthew, Jr.'s bedroom

Stain designated A (left front thigh area on hem)

- Spermatozoa were identified.
- No blood was observed.

- A DNA mixture profile suitable for comparison was developed from the non-sperm fraction.
  - Jesse Matthew, Jr. cannot be eliminated as a major contributor.
  - Hannah Graham's alternate known DNA profile is eliminated as a major contributor.
    - Assuming this DNA profile is a mixture of a major contributor and a minor contributor, the probability of randomly selecting an unrelated individual with a DNA profile matching that developed as the major contributor of the DNA mixture profile from the non-sperm fraction of stain A from the shorts at the PowerPlex® 16 loci with the exception of D5S818 is 1 in greater than 7.2 billion (which is approximately the world population) in the Caucasian, Black, and Hispanic populations.
  - Hannah Graham's alternate known DNA profile cannot be eliminated as a minor contributor.
  - Jesse Matthew, Jr. is eliminated as a minor contributor.
    - Assuming this DNA profile is a mixture of a major contributor and a minor contributor, the probability of randomly selecting an unrelated individual who would be included as a contributor to the minor profile of the DNA mixture from the non-sperm fraction of stain A from the shorts at the PowerPlex® 16 loci with the exception of D3S1358, TH01, D5S818, and D13S317 is 1 in greater than 7.2 billion (which is approximately the world population) in the Caucasian, Black, and Hispanic populations.

- A DNA profile was developed from the sperm fraction.
  - Jesse Matthew, Jr. cannot be eliminated as a contributor.
  - Hannah Graham's alternate known DNA profile is eliminated as a contributor.
    - The probability of randomly selecting an unrelated individual with a DNA profile matching that developed from the sperm fraction of stain A from the shorts at the PowerPlex® 16 loci is 1 in greater than 7.2 billion (which is approximately the world population) in the Caucasian, Black, and Hispanic populations.

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Item 271 – Shorts from Jesse Matthew, Jr.'s bedroom (continued)

Stain designated D (left rear buttock area)

- Spermatozoa were identified.
- No blood was observed.

- DNA mixture profiles were developed from the sperm and non-sperm fractions.
  - Jesse Matthew, Jr. cannot be eliminated as a major contributor to each of these fractions.
  - Hannah Graham's alternate known DNA profile is eliminated as a major contributor to each of these fractions.
    - Assuming the DNA profile from the sperm fraction of stain D from the shorts is a mixture of a major contributor and minor contributor(s), the probability of randomly selecting an unrelated individual with a DNA profile matching that developed as the major contributor at the PowerPlex® 16 loci is 1 in greater than 7.2 billion (which is approximately the world population) in the Caucasian, Black, and Hispanic populations.

    - Assuming the DNA profile from the non-sperm fraction of stain D from the shorts is a mixture of a major contributor and minor contributor(s), the probability of randomly selecting an unrelated individual with a DNA profile matching that developed as the major contributor at the PowerPlex® 16 loci with the exception of D5S818 is 1 in greater than 7.2 billion (which is approximately the world population) in the Caucasian, Black, and Hispanic populations.
  - Due to the limited information obtained, the minor DNA type(s) developed from the sperm and non-sperm fractions of stain D from the shorts are not suitable for comparison.

Stain designated B (right front middle thigh area)
Stain designated C (left front middle thigh area)

- No seminal fluid was indicated.
- No blood was observed.
- DNA mixture profiles of no value were developed.
  - Due to the unknown number of potential contributors and the limited information obtained, these mixture profiles are not suitable for comparison.

Hairs designated A and B (recovered from the shorts)

- DNA types of no value were developed.
  - Due to the limited information obtained, these types are not suitable for comparison.
- Additional hairs/fibers were observed on the shorts and remain.

Stains (left front crotch area below the zipper and left rear upper thigh area)

- No blood was indicated.

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Item 370 – Cigarette butt

- A DNA profile was developed.
  - Jesse Matthew, Jr. is eliminated as a contributor.
  - Hannah Graham's alternate known DNA profile is eliminated as a contributor.
  - This profile is indicative of a female contributor and will not be searched against the Virginia DNA Data Bank or submitted to the National DNA Data Bank at this time.
  - DNA comparisons can be conducted following the submission of two buccal (cheek) swabs from any individual of interest to the Laboratory.

Item 250 – Carpet squares from under passenger seat

- This item consisted of one (1) apparent piece of carpet and one (1) apparent piece of carpet padding.
- No blood was indicated on the carpet or the padding.
- No DNA typing results were developed from one (1) recovered hair.
- Additional hairs/fibers were observed on the pieces of carpet and padding and remain.

Item 269 – Black Tac-force knife

Blade and handle areas

- Blood was indicated.
- A DNA type of no value was developed from a combined sample of both sides of the handle and a separate DNA type of no value was developed from a combined sample of both sides of the blade, hilt area and inside portion of the knife that houses the blade.
  - Due to the limited information obtained, these types are not suitable for comparison.

Possible tissue (recovered from patterned area of the handle at the knife fold)

- No blood was observed.
- No DNA typing results were obtained.

No further testing was conducted on this item at this time.

Item 272 – Maroon shirt from Jesse Matthew, Jr.'s bedroom

- No blood was observed.
- No seminal fluid was indicated.
- DNA types of no value were developed from two (2) stains designated A and B from the front of the shirt.
  - Due to the limited information obtained, these types are no suitable for comparison.
- Hairs/fibers were observed on the shirt and remain.

Item 265 – Passenger side headrest from Jesse Matthew, Jr.'s vehicle

- No blood was indicated on the interior or exterior of the leather cover or the foam interior of the headrest.
- Due to the limited quantity of nuclear DNA obtained, a sample of the exterior area of the headrest is not suitable for PCR analysis and no further testing was conducted.

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FS Lab # C14-11914
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February 23, 2015

Item 120 – Dark elastic hair band (entire surface area)
Item 243 – Exterior passenger side door handle (outside surface area)
Item 254 – Interior passenger side door handle (combined sample of front and back areas)
Item 270 – Cross necklace from Jesse Matthew, Jr. (combined sample of the chain and all sides of the cross)

- No blood was indicated on the dark elastic hair band or on the interior or exterior passenger door handles.
- No blood was observed on the cross necklace.
- Due to the limited quantity of nuclear DNA obtained, the above-listed samples are not suitable for PCR analysis and no further testing was conducted.
- No hairs/fibers were observed on the dark elastic hair band.
- Hairs/fibers were observed on the cross necklace and remain.

Item 310 – Cigarette butt

- No DNA typing results were obtained.

Refer to Appendix 1 for the PowerPlex 16® typing results and Appendix 2 for the Abbreviations.

Supporting examination documentation is maintained in the case file.

The results of other requested examinations will be reported separately.

The evidence will be available at the Central Laboratory after you have received the results of all requested examinations.

Attest:

I certify that I performed the above analysis or examination as an employee of the Department of Forensic Science and that the above is an accurate record of the results and interpretations of that analysis or examination.

Shelley S. Edler
Forensic Scientist

SSE

COMMONWEALTH of VIRGINIA

DEPARTMENT OF FORENSIC SCIENCE

Appendix 1: Table of Typing Results
FS Lab # C14-11914
February 23, 2015

Description	D3S1358		TH01		D21S11		D18S51		Penta E		D5S818		D13S317		D7S820	
370 Cigarette butt	17	19	9.3		29	32.2	13	20	15		11	12	8	12	12	13
271 Shorts stain A-sp	15	16	6	7	27	30	17	20	8	13	12	13	11	12	8	11
271 Shorts stain A-nsp	15	16	6	7	27	28	15	16	5	8	11	12	11	12	8	11
					29	30	17	20	12	13	13				12	13
271 Shorts stain D-sp	15	16	6	7	27	30	17	19	8	13	12	13	11	12	8	11
							20									
271 Shorts stain D-nsp	15	16	6	7	27	29	15	17	8	13	12	13	11	12	8	11
					30		20								13	

Description	D16S539		CSF1PO		Penta D		AMEL		vWA		D8S1179		TPOX		FGA	
370 Cigarette butt	9	11	10	12	12	13	X	X	15	16	11	13	11		21	23
271 Shorts stain A-sp	9	11	7	12	5	7	X	Y	14	20	14	15	9	10	16.1	28
271 Shorts stain A-nsp	9	11	7	11	5	7	X	Y	14	17	13	14	8	9	16.1	22
	12	13	12		10	14			20		15	16	10		23	28
271 Shorts stain D-sp	9	11	7	12	5	7	X	Y	14	20	14	15	9	10	16.1	28
271 Shorts stain D-nsp	9	11	7	11	5	7	X	Y	14	17	14	15	9	10	16.1	28
	12	13	12						20		16					
	14															

INC, indicates no conclusive types detected
M, indicates variant allele detected
- - - , indicates no type detected

COMMONWEALTH of VIRGINIA

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February 23, 2015

ANO	Anorectal sample
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FNC	Finger Nail Clippings
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LLA	Lips/Lip Area sample
MAT	Material
NSP	Non-sperm fraction
OR	Oral Rinse sample
PA	Pubic Area sample
PB	Perianal/Buttocks sample
PH	Pubic Hair
Q	Questioned
R	Right
SC	Stain Card
SMPL	Sample
SP	Sperm fraction
STN	Stain
STN'D	Stained
SUS	Suspect
SWB	Swab
TEG	Thighs/External Genitalia sample
UPS	Underpants
VC	Vaginal/Cervical sample
VIC	Victim