

**STATE OF SOUTH CAROLINA  
COUNTY OF COLLETON**

State of South Carolina,

v.

Richard Alexander Murdaugh,

Defendant.

**COURT OF GENERAL SESSIONS  
FOURTEENTH JUDICIAL CIRCUIT**

Indictment Nos. 2022-GS-15-00592, -593,  
-594, and -595

**MOTION TO EXCLUDE FALSE  
TESTIMONY ABOUT EVIDENCE  
DESTROYED BY THE STATE**

Defendant Richard Alexander Murdaugh (Murdaugh), by and through his undersigned counsel, hereby moves the Court for an order compelling the State to produce exculpatory *Brady* material it has intentionally withheld and prohibiting the State from presenting manipulated opinion testimony contradicted by exculpatory evidence that the State has destroyed in bad faith.

**I. Introduction**

On June 7, 2021, Alex Murdaugh's wife Maggie and son Paul were brutally murdered near the dog kennels at a family home on Moselle Road in Colleton County. As Mr. Murdaugh has noted in previous motions, the State immediately decided Alex was guilty, before anyone collected, investigated, or reviewed any evidence and, unable to build a solid case against Mr. Murdaugh to present in court, instead engaged in a campaign of selective and deceptive leaks to news media to convince the public that Murdaugh is guilty before he is tried. The leak most relevant to this motion occurred in April 2022:

A shirt worn by Alex Murdaugh on the night his wife and son were murdered was found to have a significant amount of high-velocity impact spatter on it from at least one of their bodies, sources familiar with the investigation recently told FITSNews.

The presence of this forensic evidence on his clothing "could have only come from one thing," according to sources close to the investigation.

Specifically, the spatter indicates that Murdaugh was physically close to one or more of his family members when they were shot.

...

[M]ultiple sources have told this news outlet that the high-velocity impact spatter has been independently analyzed and confirmed by multiple forensic experts — including by at least one out-of-state laboratory.

Mandy Matney, *High-Velocity Impact Spatter Directly Ties Alex Murdaugh To Double Homicide, Sources Say*, FITSNews (Apr. 26, 2022).

The forensic “evidence” leaked in the news report quoted above is the opinion of Tom Bevel of Bevel, Gardner & Associates, Inc., (BGA) in Oklahoma. Mr. Bevel is a retired Oklahoma City police officer with a degree in administration of criminal justice but no academic credentials in any scientific discipline. The State retained Mr. Bevel to opine that the white cotton T-shirt Mr. Murdaugh wore the night Maggie and Paul were murdered is stained with high-velocity blood spatter, most likely resulting from shooting Paul. However, the South Carolina Law Enforcement Division (SLED)’s confirmatory blood testing results were negative for human blood in the areas of the shirt where Mr. Bevel opines blood spatter is present. SLED’s DNA reports for the shirt do not identify Paul’s DNA anywhere on the shirt where Bevel claims blood spatter from Paul is present, and in fact exclude Paul as a contributor of DNA found on two such sections of the shirt. Neither the defense nor Mr. Bevel have been able to perform any tests on the shirt because the State destroyed it. Mr. Bevel’s *first* report to the State emphatically said the shirt contained no stains consistent with back spatter resulting from a gunshot. Yet for some reason, without any additional evidence he changed his opinion entirely after an in-person visit from lead SLED investigator David Owen, and now opines that the shirt has over 100 stains consistent with back spatter from a gunshot.

## II. Background

On the night of the murders, SLED collected the white cotton T-shirt Mr. Murdaugh was wearing when he discovered Maggie and Paul's bloody bodies. **Exhibit A.** The murder scene was gruesome; there was a large amount of blood on and around their bodies which transferred onto Mr. Murdaugh's hands and clothing when he frantically checked them for signs of life. On or before June 9, 2021, SLED tested a portion of the shirt, near the hem, with phenolphthalein, a presumptive test for blood. Hemoglobin catalyzes the oxidation of phenolphthalin into phenolphthalein, which is visible as a bright pink color. SLED then cut the portion from the shirt and tested it for DNA. A report dated June 25th states the cutting tested positive for DNA from Maggie but Paul was excluded as a possible DNA contributor. **Exhibit B.**

Later, on July 21, 2021, SLED treated the shirt with another presumptive test for blood: leuco-crystal violet (LCV). LCV oxidizes with hemoglobin in blood to produce a blue or violet color. LCV is also known to oxidize with bleach and other clothing laundry detergents to produce false positive results. Certain portions of the shirt turned blue. **Exhibit C.** SLED identified and labeled areas of interest which had reacted with the LCV. **Exhibit D.** SLED then cut those areas from the shirt. **Exhibit E.**

The cuttings were tested for DNA. . In a report dated July 25, 2021, one cutting from the back of the shirt tested positive for Maggie's DNA. **Exhibit F.** Paul was excluded as a DNA contributor for that cutting. Of the cuttings from the front bottom portion of the shirt (which the State admits are not spatter) tested, one tested positive for Paul's DNA while excluding Maggie as a contributor, one tested positive for Maggie's DNA while excluding Paul, and a third tested positive for Maggie without excluding Paul. The cuttings from the upper two-thirds of the front of the shirt (which the State claims are spatter) generally tested positive for Maggie's DNA with

Paul either excluded or not considered because of his relatedness to the other contributors. None tested positive for Paul's DNA. *Id.*

SLED also conducted HemaTrace tests on the cuttings to confirm the presence of human blood. The LCV test relies on an oxidative reaction that occurs with nonhuman blood or various household cleaners. It therefore cannot confirm the presence of human blood. The HemaTrace test is an immunochromatographic test that detects a reaction between dye-conjugated antibodies and a form of hemoglobin found only in humans and higher primates. It is commonly used to confirm the presence of human blood (or any other human tissue containing traces of blood or hemoglobin). It is highly sensitive, able to detect as little as four micrograms of blood in a sample.

For some reason SLED conducted the HemaTrace tests on August 10, 2022—two weeks after issuing the DNA report on the cuttings. *Every cutting tested negative for human blood.* **Exhibit G.** The DNA tests cannot distinguish DNA contained in a stain on the shirt cutting from DNA under the stain present before the stain was deposited, or from DNA deposited after the stain was deposited. Like the HemaTrace test, the DNA test is highly sensitive and can detect “trace” DNA amounts as low as one nanogram or less, which can be transferred between persons through casual touch or even merely by being in close proximity. Given that the stains are not human blood, there is no reason to believe the positive DNA tests are related to the stains at all.

The “no human blood identified” results regarding the shirt cuttings were reported on a supplemental report dated November 10, 2021. **Exhibit H.** The HemaTrace test results from the shirt cuttings were not produced to the defense with the other DNA reports. It was produced with the entire DNA lab file, as an appendix to the previously produced June 25th and July 25th reports, only after the defense moved to compel production of the lab file.

On or about January 4, 2022, SLED sent materials to Mr. Bevel for him to review in forming his opinions regarding “crime scene reconstruction and BSA [blood spatter analysis].” On February 4th, Senior Special Agent David Owen received and reviewed Mr. Bevel’s draft report, dated February 3rd. **Exhibit I.** The report states:

**IQ [Investigative Question]-4:** Are the bloodstains on Alex’s white t-shirt consistent with back spatter from a gunshot?

**Data IQ-4:**

1. Two (2) areas that are positive for blood using LCV (See PP #42-43)
2. No misting size blood spatter
3. Edges of stains appear diffuse

**Opinion IQ-4:** The stains on the white t-shirt are consistent with transfers and *not* back spatter from a bullet wound.

Ex. I at 8 (*italics and boldface in original*).<sup>1</sup> Agent Owen met with his supervisor, Lieutenant Charles Ghent, and his supervisor’s supervisor, Captain Ryan Neill, and others to discuss the report on February 7th. **Exhibit J.** The next day they had a Zoom meeting with Mr. Bevel about the report. The same day (presumably after the Zoom meeting), Lt. Ghent told Lieutenant Kukila Wallace, who has a supervisory role over evidence at the SLED laboratory, that Mr. Bevel had requested the shirt and its cuttings for further examination for blood pattern analysis. On February 15th, Lt. Wallace and another crime scene investigation lieutenant, Todd Schenk, “visually examined” the shirt “to determine the condition of the item post LCV processing.” A photograph

---

<sup>1</sup> This draft of Mr. Bevel’s report was mislabeled as notes from an interview of Kenny Hughes on November 9, 2021, when produced to defense counsel. The references “PP #” within it are to slides in an accompanying PowerPoint presentation Mr. Bevel created that has not been produced. Mr. Bevel’s final report however was labeled “BGA Homicide Investigation Report” when produced. It contains similar references to a different PowerPoint presentation which the State has produced. None of the other draft reports and PowerPoint presentations have been produced. It therefore appears the State did not intend to disclose the initial draft report to the defense and did so only by mistake.

of the shirt was taken with a cell phone and provided to Lt. Ghent. After viewing the condition of the shirt, Lt. Ghent “advised that he would follow-up with Mr. Bevel to determine how to proceed.”

The “condition of the shirt” was that it was destroyed. **Exhibit K.** It turned completely blue; all stains were blue, fuzzy, diffuse, and bled out, their features lost forever. This is a well-known, documented issue with LCV tests. There are methods to prevent the LCV from staining the entire substrate over time. There are also alternatives to using LCV to enhance blood stains in a laboratory setting. But SLED elected to conduct its tests in a manner that would prevent anyone else from conducting subsequent tests.

On February 23, 2022, Agent Owen made travel arrangements “to meet with BGA to examine evidence.” He traveled to Oklahoma on March 9th, meeting with Mr. Bevel the next day. Mr. Bevel’s final report states the shirt was examined at the Norman, Oklahoma police laboratory on March 10th. Agent Owen returned to South Carolina and communicated with Mr. Bevel about their “pending report” on March 14th, receiving a draft PowerPoint presentation from Mr. Bevel the same day. This second draft PowerPoint has not been produced to the defense. On March 22nd, Agent Owen received another draft report and PowerPoint presentation, which also has not been produced. The next day, Agent Owen again spoke with Mr. Bevel about his report, and again on March 28th. On March 29th, Mr. Bevel finally produced a final report acceptable to Agent Owen. **Exhibit L.**

The final report states

**IQ-4:** Are the bloodstains on Alex’s white t-shirt consistent with back spatter from a gunshot?

**Data IQ-4:**

1. Eight (8) areas that are positive for blood using LCV on front of t-shirt (See PP #30-32)
2. Approximately 40+ misting size blood spatter
3. Edges of stains appear slightly diffuse from the application LCV and or body sweat

**Opinion IQ-4:** Some of the stains on the white t-shirt are consistent with transfers and 100+ stains are consistent with spatter on the front of the t-shirt (See PP #30-32).

*Id.* at 8. It also states:

**\*IQ-9: Above** The t-shirt has been evaluated by six (6) recognized Bloodstain Pattern experts all agreeing the best explanation for the stains on the shirt are spatter from approximately the bottom third up to the top of the shirt and transfers on the bottom third down to the hem of the t-shirt. All agree they cannot identify some other mechanism to create the distribution and sizes of the questioned stain spatter.

*Id.* at 12. In other words, the final report states exactly the opposite opinion regarding blood spatter that is in the initial report, even though no additional evidence was available that was not available in January when the State sent its evidence to Mr. Bevel. Certainly, examination of the shirt did not provide Mr. Bevel any additional evidence. Mr. Waters has admitted to defense counsel that Mr. Bevel could not obtain any information from an examination of the destroyed shirt in March 2022, and that his final report relies on the same SLED laboratory photographs taken before January 4, 2022, that were the basis for his initial report.

On November 4, 2022, Mr. Murdaugh's counsel, unaware of the destruction of the shirt, requested that the State send the shirt to an outside laboratory so that microscopic photographs could be taken of the areas where Mr. Bevel claims blood spatter is present. This would enable Murdaugh's consulting experts to examine the features and details of the stains to assess whether the stains are characteristic of high-velocity blood spatter, whether they are characteristic of other means by which small droplets of blood may be deposited on a shirt, or whether (as SLED has already confirmed) they are not blood or blood-containing tissue at all. After a subsequent follow up request on November 11th, the State finally responded on November 17th, stating that the shirt has "turned black" and suggesting that microscopic examination would not be possible. Murdaugh's counsel then asked to see the shirt and it was made available on November 21st in a

room at SLED's laboratory facilities in Columbia. After viewing the condition of the shirt, *see* Ex. K, this motion followed.

### III. Legal Standard

“To establish a due process violation, a defendant must demonstrate (1) that the State destroyed the evidence in bad faith, or (2) that the evidence possessed an exculpatory value apparent before the evidence was destroyed and the defendant cannot obtain other evidence of comparable value by other means.” *State v. Cheeseboro*, 346 S.C. 526, 538–39, 552 S.E.2d 300, 307 (2001). When evidence has been lost or destroyed in violation of the defendant's due process rights, the remedies include barring further prosecution and suppressing evidence. *See, e.g., California v. Trombetta*, 467 U.S. 479, 487 (1984) (noting that “when evidence has been destroyed in violation of the Constitution, the court must choose between barring further prosecution or suppressing . . . the State's most probative evidence”).

### IV. Argument

SLED's destruction of Mr. Murdaugh's shirt may well have happened in bad faith, but it could also be mere gross negligence. *Cf. State v. Reaves*, 414 S.C. 118, 127–28, 777 S.E.2d 213, 217–18 (2015) (doubting negligence is sufficient to satisfy the *Cheeseboro* standard). At this point, the defense does not have sufficient evidence to determine whether the chemical destruction of the shirt was done in bad faith. However, the defense is entitled to a pretrial hearing where counsel can question the lab analysts and others who tested the shirt under oath to determine why particular tests were performed, the foreseeable consequences of using LCV on the shirt, and the effect of LCV on subsequent testing. *See, e.g., State v. Phillips*, 430 S.C. 319, 343, 844 S.E.2d 651, 663 (2020) (noting, in the context of a challenge to DNA evidence, that by not conducting a hearing, “the trial court left itself without a meaningful opportunity to exercise its discretion”).



But the bad faith here is not merely the destruction of the shirt. Manifest bad faith occurred in SLED's dishonest concealment of the destruction when obtaining a false report from Mr. Bevel stating Mr. Murdaugh's shirt has over a hundred high-velocity impact spatter bloodstains consistent with a gunshot—when SLED knows the shirt does not have any human blood on it at all—based on Mr. Bevel's purported examination of a shirt on March 10, 2022, that in fact was already destroyed.

SLED did not like Mr. Bevel's initial report because it said the stains on Mr. Murdaugh's shirt were *not* consistent with blood spatter. The Zoom call with him was meant to get him to change his opinion. In response, he apparently asked to examine the shirt. It is reasonable that when changing his opinion to be what the State wanted it to be, Mr. Bevel would at least want the cover of saying he reviewed additional evidence before changing his opinion. SLED then discovered it had destroyed the shirt when it went to retrieve it for Mr. Bevel.

The good-faith response would have been to simply accept Mr. Bevel's report because no additional evidence was available. But the State *needs* blood-spatter evidence because it is exceedingly difficult to explain how Mr. Murdaugh could have murdered Paul with multiple 12-gauge shotgun blasts at pointblank range in a small closet without getting at least some blood spattered on his shirt. After all, blood was spattered all over the closet door, walls, and ceiling. So instead of accepting an honest exculpatory report, the State changed it into a false inculpatory report. Six "recognized Bloodstain Pattern experts" did not examine the shirt seen in Exhibit H in an Oklahoma police laboratory and determine "the stains on the shirt are spatter from approximately the bottom third up to the top of the shirt." Ex. I at 12.<sup>2</sup> At most, Mr. Bevel and

---

<sup>2</sup> Mr. Waters to his credit did not join SLED and Mr. Bevel in the lie. He was not obliged to answer questions from defense counsel at the November 21, 2022, examination of the shirt, but when asked if Mr. Bevel examined the shirt, Mr. Waters did not hesitate to state that examination was

his associates looked at photographs taken almost eight months earlier. The same photographs that originally led him to say there was no blood spatter on the T-shirt caused by a gunshot. Which happened to be consistent with the fact that there is no human blood is on the shirt, and with the fact that Paul's DNA is not on the shirt.

The only thing that changed from that report to the final March 29, 2022, report is relentless pressure from SLED and a personal visit from Agent Owen. But even that was insufficient to change Mr. Bevel's opinion. SLED also had to lie to him. SLED never told Mr. Bevel that no human blood was on the shirt. The November 10, 2021, supplemental DNA report is not on the list of information considered in the final report. It was never given to him, which is why his final report repeatedly refers to the stains on the shirt as "bloodstains." This is the very definition of a lie of omission.

But even without considering SLED's deceitful, bad-faith conduct, Mr. Murdaugh meets the *Cheeseboro* standard for a violation of his due process rights because the shirt possessed an exculpatory value apparent before it was destroyed, and he cannot obtain other evidence of comparable value by other means. *See* 346 S.C. at 538–39. The shirt possessed exculpatory value: it had no human blood on it even though the murders occurred in a manner certain to spatter human blood on the shooter. The exculpatory value apparently was apparent before the shirt was destroyed. The blood tests occurred on August 10, 2021. The LCV was applied shortly before then, but the resulting oxidative destruction of the shirt took weeks if not months and could have been prevented in that period had SLED intervened (perhaps by something as simple as rinsing with distilled water). The absence of Paul's DNA on the shirt is similarly exculpatory and was

---

not possible because of the condition of the shirt, and that Mr. Bevel's final report relied on photographs taken before the shirt was destroyed.

apparent even earlier. And the defense of course cannot obtain replacement clothing of comparable probative value by any means.

The Court will be in a better position to fashion a remedy after an evidentiary hearing on this issue, but at a minimum it should prohibit the State from offering risible testimony about blood spatter patterns on Mr. Murdaugh's bloodless shirt at trial. Further, in advance of an evidentiary hearing, the Court should order the State to produce all draft reports and PowerPoint presentations from Mr. Bevel and all communications with Mr. Bevel, and to ensure Mr. Bevel is personally present at the evidentiary hearing on this motion.

**V. Conclusion**

For the foregoing reasons, the Court should order the State to produce all communications with Mr. Bevel, including all draft reports and presentations, forthwith; conduct an evidentiary hearing on the testing and chemical destruction of Mr. Murdaugh's shirt; order the State to ensure Mr. Bevel's presence at the hearing; prohibit the State from offering testimony at trial about blood spatter patterns on Mr. Murdaugh's shirt; and order any other relief it finds appropriate after considering argument and evidence presented at a hearing.

Respectfully submitted,



---

Richard A. Harpootlian, SC Bar No. 2725  
Phillip D. Barber, SC Bar No. 103421  
RICHARD A. HARPOOTLIAN, P.A.  
1410 Laurel Street (29201)  
Post Office Box 1090  
Columbia, South Carolina 29202  
(803) 252-4848  
rah@harpootlianlaw.com  
pdb@harpootlianlaw.com

James M. Griffin, SC Bar No. 9995  
Margaret N. Fox, SC Bar No. 76228  
GRIFFIN DAVIS LLC

NOV 23 2022 PM 12:03  
COLLETON CO GS, REBECCA H. HILL

4408 Forest Drive (29206)  
Post Office Box 999  
Columbia, South Carolina 29202  
(803) 744-0800  
jgriffin@griffindavislaw.com  
mfox@griffindavislaw.com

Attorneys for Richard Alexander Murdaugh

November 23, 2022  
Columbia, South Carolina.

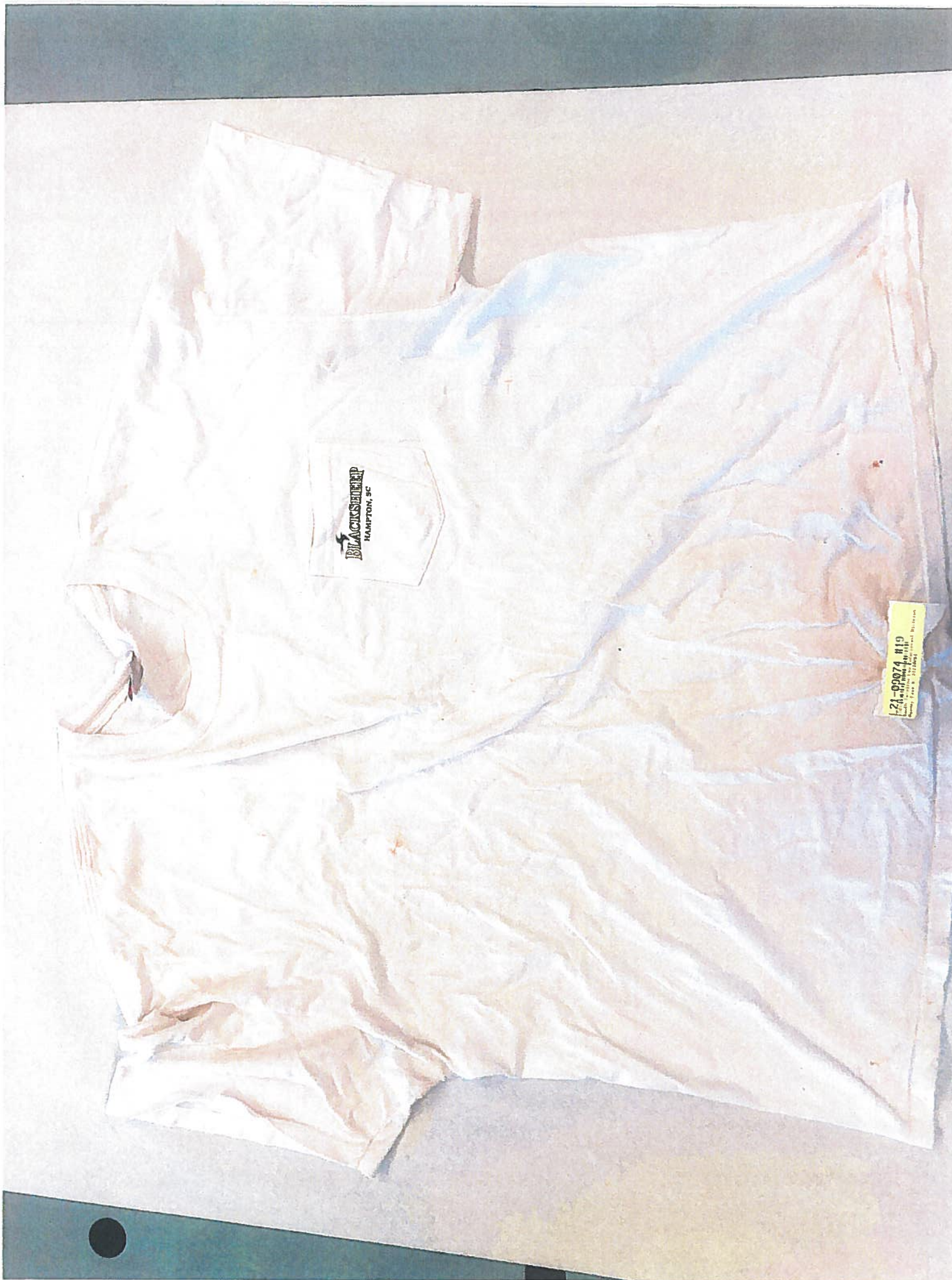
NOV 23 2022 PM 12:03  
COLLETON CO GS, REBECCA H. HILL

*State of South Carolina v. Richard Alexander Murdaugh*  
Indictment Nos. 2022-GS-15-00592, -593, -594, and -595  
Motion to Exclude False Testimony about Evidence Destroyed by the State

# **EXHIBIT A**

(Photo, white cotton T-shirt)





**BLACKSHEEP**  
HAMPTON, SC

L21-0087A M19  
LAW ENFORCEMENT AGENCY

*State of South Carolina v. Richard Alexander Murdaugh*  
Indictment Nos. 2022-GS-15-00592, -593, -594, and -595  
Motion to Exclude False Testimony about Evidence Destroyed by the State

# **EXHIBIT B**

(SLED DNA analysis report, June 25, 2021)

## SOUTH CAROLINA LAW ENFORCEMENT DIVISION FORENSIC SERVICES LABORATORY REPORT

HENRY D. MCMASTER  
*Governor*



MARK A. KEEL  
*Chief*

June 25, 2021

David Owen, III  
South Carolina Law Enforcement Division  
4400 Broad River Road  
Columbia, SC 29210

### DNA ANALYSIS

SLED LAB: L21-09074  
Your Case No: 31210061  
Incident Date: 6/7/2021  
[V-Deceased] Paul Murdaugh  
[V-Deceased] Margaret Murdaugh  
[W] Richard Murdaugh

---

This is an official report of the South Carolina Law Enforcement Division Forensic Services Laboratory and is to be used in connection with an official criminal investigation. These examinations were conducted under your assurance that no previous examinations of person(s) or evidence submitted in this case have been or will be conducted by any other laboratory or agency.  
Mark A. Keel, Chief  
South Carolina Law Enforcement Division

---

### COMPARISON STANDARDS

- 23 Buccal swabs from Margaret Murdaugh**
- RESULTS:**
- The DNA profile developed is suitable for use as a known standard.
- 24 Buccal swabs from Paul Murdaugh**
- RESULTS:**
- The DNA profile developed is suitable for use as a known standard.
- 26 Buccal swabs from Anthony Cook**
- RESULTS:**
- The DNA profile developed is suitable for use as a known standard.
- 27 Buccal swabs from Roger Davis**
- RESULTS:**
- The DNA profile developed is suitable for use as a known standard.



P.O. Box 21398, Columbia, South Carolina 29221-1398 Phone (803) 896-7300 Fax (803) 896-7351



SLED LAB No. L21-09074  
June 25, 2021

Page 2 of 18

28 Buccal swabs from Rogan Gibson

**RESULTS:**

- The DNA profile developed is suitable for use as a known standard.

29 Buccal swabs from Claude (C.B.) Rowe

**RESULTS:**

- The DNA profile developed is suitable for use as a known standard.

74 Buccal swabs from Connor Cook

**RESULTS:**

- The DNA profile developed is suitable for use as a known standard.

75 Known standard from Phillip Beach

**RESULTS:**

- The DNA profile developed is suitable for use as a known standard.

76 Known standard from Renee Beach

**RESULTS:**

- The DNA profile developed is suitable for use as a known standard.

77 Known standard from Robin Beach

**RESULTS:**

- The DNA profile developed is suitable for use as a known standard.

78 Buccal swabs from John Murdaugh

**RESULTS:**

- The DNA profile developed is suitable for use as a known standard.

79 Buccal swabs from Richard Alexander Murdaugh, Jr. (Buster)

**RESULTS:**

- The DNA profile developed is suitable for use as a known standard.



P.O. Box 21398, Columbia, South Carolina 29221-1398 Phone (803) 896-7300 Fax (803) 896-7351

SLED LAB No. L21-09074  
June 25, 2021

Page 3 of 18

80 Buccal swabs from Richard Alexander Murdaugh

**RESULTS:**

- The DNA profile developed is suitable for use as a known standard.

81 Buccal swabs from Randy Murdaugh

**RESULTS:**

- The DNA profile developed is suitable for use as a known standard.

82 Buccal swabs from Miley Altman

**RESULTS:**

- The DNA profile developed is suitable for use as a known standard.

83 Buccal swabs from Morgan Doughty

**RESULTS:**

- The DNA profile developed is suitable for use as a known standard.

**ITEMS OF EVIDENCE**

2 Cartridge case headstamped "S&B .300 AAC BLK" from Marker 2

3 Cartridge case headstamped "S&B .300 AAC BLK" from Marker 3

4 Cartridge case headstamped "S&B .300 AAC BLK" from Marker 4

5 Cartridge case headstamped "S&B .300 AAC BLK" from Marker 5

6 Cartridge case headstamped "S&B .300 AAC BLK" from Marker 6

7 Cartridge case headstamped "S&B .300 AAC BLK" from Marker 7

7.1 M-Vac collection from items 2-7

**RESULTS:**

- A partial DNA profile suitable for comparison was developed.
- Paul Murdaugh, Anthony Cook, Roger Davis, Rogan Gibson, Claude (C.B.) Rowe, Connor Cook,



P.O. Box 21398, Columbia, South Carolina 29221-1398 Phone (803) 896-7300 Fax (803) 896-7351

SLED LAB No. L21-09074  
June 25, 2021

Page 4 of 18

Phillip Beach, Renee Beach, Robin Beach, John Murdaugh, Richard Alexander Murdaugh, Jr. (Buster), Richard Alexander Murdaugh, Randy Murdaugh, Miley Altman, and Morgan Doughty are excluded as the contributor.

- Likelihood Ratios (LR) for this profile were calculated using STRmix™.

• **Proposition Set:**

- The DNA profile was interpreted as single source.
- Hp = Margaret Murdaugh contributed the DNA profile.
- Hd = An unidentified unrelated individual contributed the DNA profile.
- The DNA profile is approximately 510 billion (5.1E11) times more likely if Margaret Murdaugh contributed the profile than if an unidentified unrelated individual contributed the profile.

9 Fired shotshell headstamped "12 GA FEDERAL" from Marker 9

10 Fired shotshell headstamped "WINCHESTER 12 GA" from Marker 10

10.1 Swabs from entire exterior of items 9 & 10

**RESULTS:**

- Presumptive testing for blood was positive.
- A DNA profile suitable for comparison was developed.
- Margaret Murdaugh, Anthony Cook, Roger Davis, Rogan Gibson, Claude (C.B.) Rowe, Connor Cook, Phillip Beach, Renee Beach, Robin Beach, John Murdaugh, Richard Alexander Murdaugh, Jr. (Buster), Richard Alexander Murdaugh, Randy Murdaugh, Miley Altman, and Morgan Doughty are excluded as the contributor.

- Likelihood Ratios (LR) for this profile were calculated using STRmix™.

• **Proposition Set:**

- The DNA profile was interpreted as single source.
- Hp = Paul Murdaugh contributed the DNA profile.
- Hd = An unidentified unrelated individual contributed the DNA profile.
- The DNA profile is approximately 15 octillion (1.5E28) times more likely if Paul Murdaugh contributed the profile than if an unidentified unrelated individual contributed the profile.



P.O. Box 21398, Columbia, South Carolina 29221-1398 Phone (803) 896-7300 Fax (803) 896-7351

SLED LAB No. L21-09074  
June 25, 2021

Page 5 of 18

15 Swabs from camo Benelli 12 GA shotgun from receiver forward of the loading port

**RESULTS:**

- Presumptive testing for blood was positive.
- A DNA profile suitable for comparison was developed.
- Paul Murdaugh, Anthony Cook, Roger Davis, Rogan Gibson, Claude (C.B.) Rowe, Connor Cook, Phillip Beach, Renee Beach, Robin Beach, John Murdaugh, Richard Alexander Murdaugh, Jr. (Buster), Randy Murdaugh, Miley Altman, and Morgan Doughty are excluded as contributors.
- Likelihood Ratios (LR) for this profile were calculated using STRmix™.
- **Proposition Set I:**
  - The DNA profile was interpreted as a mixture originating from two individuals.
  - Hp = Margaret Murdaugh and an unidentified unrelated individual contributed to the mixture.
  - Hd = Two unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 670 octillion (6.7E29) times more likely if Margaret Murdaugh and an unidentified unrelated individual contributed to the mixture than if two unidentified unrelated individuals contributed to the mixture.
- **Proposition Set II:**
  - The DNA profile was interpreted as a mixture originating from two individuals.
  - Hp = Richard Alexander Murdaugh and an unidentified unrelated individual contributed to the mixture.
  - Hd = Two unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 10 quintillion (1.0E19) times more likely if Richard Alexander Murdaugh and an unidentified unrelated individual contributed to the mixture than if two unidentified unrelated individuals contributed to the mixture.
- **Proposition Set III:**
  - The DNA profile was interpreted as a mixture originating from two individuals.
  - Hp = Margaret Murdaugh and Richard Alexander Murdaugh contributed to the mixture.
  - Hd = Two unidentified unrelated individuals contributed to the mixture.



P.O. Box 21398, Columbia, South Carolina 29221-1398 Phone (803) 896-7300 Fax (803) 896-7351

SLED LAB No. L21-09074  
June 25, 2021

Page 6 of 18

- The DNA profile is approximately 48 quidecillion (4.8E49) times more likely if Margaret Murdaugh and Richard Alexander Murdaugh contributed to the mixture than if two unidentified unrelated individuals contributed to the mixture.

16 Swabs from barrel of camo Benelli 12 GA shotgun

**RESULTS:**

- Presumptive testing for blood was negative.
- The partial DNA profile developed is insufficient for interpretation.

17 Swabs from ext. door knob of storage room door

**RESULTS:**

- A DNA profile suitable for comparison was developed.
- Margaret Murdaugh, Anthony Cook, Roger Davis, Rogan Gibson, Claude (C.B.) Rowe, Connor Cook, Phillip Beach, Renee Beach, Robin Beach, John Murdaugh, Richard Alexander Murdaugh, Jr. (Buster), Richard Alexander Murdaugh, Randy Murdaugh, Miley Altman, and Morgan Doughty are excluded as the contributor.
- Likelihood Ratios (LR) for this profile were calculated using STRmix™.
- **Proposition Set:**
  - The DNA profile was interpreted as single source.
  - Hp = Paul Murdaugh contributed the DNA profile.
  - Hd = An unidentified unrelated individual contributed the DNA profile.
- The DNA profile is approximately 15 octillion (1.5E28) times more likely if Paul Murdaugh contributed the profile than if an unidentified unrelated individual contributed the profile.

19 White shirt from Richard Murdaugh

19.2 Cutting from exterior front, bottom edge of white shirt from Richard Murdaugh

**RESULTS:**

- Presumptive testing for blood was positive.
- A DNA profile suitable for comparison was developed.



P.O. Box 21398, Columbia, South Carolina 29221-1398 Phone (803) 896-7300 Fax (803) 896-7351

SLED LAB No. L21-09074  
June 25, 2021

Page 7 of 18

- Paul Murdaugh, Anthony Cook, Roger Davis, Rogan Gibson, Claude (C.B.) Rowe, Phillip Beach, Renee Beach, Robin Beach, Richard Alexander Murdaugh, Jr. (Buster), Randy Murdaugh, Miley Altman, and Morgan Doughty are excluded as contributors.

- Due to the relatedness of the contributors, no conclusions will be offered regarding John Murdaugh and Richard Alexander Murdaugh as possible contributors to the mixture.

- Likelihood Ratios (LR) for this profile were calculated using STRmix™.

- **Proposition Set:**

- The DNA profile was interpreted as a mixture originating from two individuals.

- Hp = Margaret Murdaugh and an unidentified unrelated individual contributed to the mixture.

- Hd = Two unidentified unrelated individuals contributed to the mixture.

- The DNA profile is approximately 460 octillion (4.6E29) times more likely if Margaret Murdaugh and an unidentified unrelated individual contributed to the mixture than if two unidentified unrelated individuals contributed to the mixture.

- **Proposition Set II:**

- The DNA profile was interpreted as a mixture originating from two individuals.

- Hp = Connor Cook and an unidentified unrelated individual contributed to the mixture.

- Hd = Two unidentified unrelated individuals contributed to the mixture.

- The DNA profile is approximately 9 (1/1.1E-1) times more likely if two unidentified unrelated individuals contributed to the mixture than if Connor Cook and an unidentified unrelated individual contributed to the mixture.

20 **Pair of green shorts from Richard Murdaugh**

20.2 **Cutting from front, left interior pocket of pair of green shorts from Richard Murdaugh**

**RESULTS:**

- Presumptive testing for blood was positive.

- A DNA profile suitable for comparison was developed.

- Anthony Cook, Roger Davis, Rogan Gibson, Claude (C.B.) Rowe, Connor Cook, Phillip Beach, Renee Beach, Robin Beach, John Murdaugh, Randy Murdaugh, Miley Altman, and Morgan Doughty are excluded as contributors.



P.O. Box 21398, Columbia, South Carolina 29221-1398 Phone (803) 896-7300 Fax (803) 896-7351



SLED LAB No. L21-09074  
June 25, 2021

Page 8 of 18

- Likelihood Ratios (LR) for this profile were calculated using STRmix™.
- **Proposition Set I:**
  - The DNA profile was interpreted as a mixture originating from three individuals.
  - Hp = Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.
  - Hd = Three unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 140 quadrillion (1.4E17) times more likely if Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture than if three unidentified unrelated individuals contributed to the mixture.
- **Proposition Set II:**
  - The DNA profile was interpreted as a mixture originating from three individuals.
  - Richard Alexander Murdaugh is contributing to the mixture.
  - Hp = Richard Alexander Murdaugh, Richard Alexander Murdaugh, Jr. (Buster), and an unidentified unrelated individual contributed to the mixture.
  - Hd = Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.
- Richard Alexander Murdaugh, Jr. (Buster) is excluded as a contributor to the mixture under the listed propositions.
- **Proposition Set III:**
  - The DNA profile was interpreted as a mixture originating from three individuals.
  - Richard Alexander Murdaugh is contributing to the mixture.
  - Hp = Richard Alexander Murdaugh, Margaret Murdaugh, and an unidentified unrelated individual contributed to the mixture.
  - Hd = Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 5.1 sextillion (5.1E21) times more likely if Richard Alexander Murdaugh, Margaret Murdaugh, and an unidentified unrelated individual contributed to the mixture than if Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.



P.O. Box 21398, Columbia, South Carolina 29221-1398 Phone (803) 896-7300 Fax (803) 896-7351

SLED LAB No. L21-09074  
June 25, 2021

Page 9 of 18

• **Proposition Set IV:**

- The DNA profile was interpreted as a mixture originating from three individuals.
  - Richard Alexander Murdaugh is contributing to the mixture.
  - Hp = Richard Alexander Murdaugh, Paul Murdaugh, and an unidentified unrelated individual contributed to the mixture.
  - Hd = Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 25 quintillion (2.5E19) times more likely if Richard Alexander Murdaugh, Paul Murdaugh, and an unidentified unrelated individual contributed to the mixture than if Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.

• **Proposition Set V:**

- The DNA profile was interpreted as a mixture originating from three individuals.
  - Richard Alexander Murdaugh is contributing to the mixture.
  - Hp = Richard Alexander Murdaugh, Margaret Murdaugh, and Paul Murdaugh contributed to the mixture.
  - Hd = Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 2 quindecillion (2.0E48) times more likely if Richard Alexander Murdaugh, Margaret Murdaugh, and Paul Murdaugh contributed to the mixture than if Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.

21 **Pair of red, yellow, and white tennis shoes from Richard Murdaugh**

21.2 **Cutting from left shoelace of pair of red, yellow, and white tennis shoes from Richard Murdaugh**

**RESULTS:**

- Presumptive testing for blood was positive.
- A DNA profile suitable for comparison was developed.
- Margaret Murdaugh, Paul Murdaugh, Anthony Cook, Roger Davis, Rogan Gibson, Claude (C.B.) Rowe, Connor Cook, Phillip Beach, Renee Beach, Robin Beach, John Murdaugh, Richard



P.O. Box 21398, Columbia, South Carolina 29221-1398 Phone (803) 896-7300 Fax (803) 896-7351



SLED LAB No. L21-09074  
June 25, 2021

Page 10 of 18

Alexander Murdaugh, Jr. (Buster), Randy Murdaugh, Miley Altman, and Morgan Doughty are excluded as the contributor.

- Likelihood Ratios (LR) for this profile were calculated using STRmix™.

• **Proposition Set:**

- The DNA profile was interpreted as single source.
- Hp = Richard Alexander Murdaugh contributed the DNA profile.
- Hd = An unidentified unrelated individual contributed the DNA profile.
- The DNA profile is approximately 410 septillion (4.1E26) times more likely if Richard Alexander Murdaugh contributed the profile than if an unidentified unrelated individual contributed the profile.

**22.1 Swabs from trigger of Item 22 shotgun (camo Benelli Super Black Eagle 3 SN:US73210E17)**

**RESULTS:**

- The partial DNA profile developed is insufficient for interpretation.

**22.2 Swabs from rear stock, front stock and ejection lever on Item 22 shotgun (camo Benelli Super Black Eagle 3 SN:US73210E17)**

**RESULTS:**

- A DNA profile was developed.
- Due to the inability to determine the number of contributors, no further interpretation will be offered.

**22.3 Swabs from head stamps of two (2) unfired shotgun shells with Item 22 shotgun (camo Benelli Super Black Eagle 3 SN:US73210E17)**

**RESULTS:**

- No DNA profile was developed.

**22.4 Debris from the right side of the Item 22 receiver (camo Benelli Super Black Eagle 3 SN:US73210E17)**

**RESULTS:**

- Presumptive testing for blood was positive.



P.O. Box 21398, Columbia, South Carolina 29221-1398 Phone (803) 896-7300 Fax (803) 896-7351

SLED LAB No. L21-09074  
June 25, 2021

Page 11 of 18

- A DNA profile suitable for comparison was developed.
- Paul Murdaugh, Anthony Cook, Roger Davis, Rogan Gibson, Claude (C.B.) Rowe, Connor Cook, Phillip Beach, Renee Beach, Robin Beach, Richard Alexander Murdaugh, Jr. (Buster), Miley Altman, and Morgan Doughty are excluded as contributors.
- Due to the relatedness of the contributors, no conclusions will be offered regarding John Murdaugh, Richard Alexander Murdaugh, and Randy Murdaugh as possible contributors to the mixture.
- Likelihood Ratios (LR) for this profile were calculated using STRmix™.
- **Proposition Set:**
  - The DNA profile was interpreted as a mixture originating from two individuals.
  - Hp = Margaret Murdaugh and an unidentified unrelated individual contributed to the mixture.
  - Hd = Two unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 480 octillion (4.8E29) times more likely if Margaret Murdaugh and an unidentified unrelated individual contributed to the mixture than if two unidentified unrelated individuals contributed to the mixture.

**22.5 Debris from the left side of the Item 22 receiver, above manufacturer information (camo Benelli Super Black Eagle 3 SN:US73210E17)**

**RESULTS:**

- Presumptive testing for blood was positive.
- A DNA profile suitable for comparison was developed.
- Anthony Cook, Roger Davis, Rogan Gibson, Claude (C.B.) Rowe, Connor Cook, Phillip Beach, Renee Beach, Robin Beach, Richard Alexander Murdaugh, Jr. (Buster), Miley Altman, and Morgan Doughty are excluded as contributors.
- Due to the relatedness of the contributors, no conclusions will be offered regarding Paul Murdaugh, John Murdaugh, Richard Alexander Murdaugh, and Randy Murdaugh as possible contributors to the mixture.
- Likelihood Ratios (LR) for this profile were calculated using STRmix™.
- **Proposition Set:**
  - The DNA profile was interpreted as a mixture originating from two individuals.



P.O. Box 21398, Columbia, South Carolina 29221-1398 Phone (803) 896-7300 Fax (803) 896-7351

SLED LAB No. L21-09074  
June 25, 2021

Page 12 of 18

- Hp = Margaret Murdaugh and an unidentified unrelated individual contributed to the mixture.

- Hd = Two unidentified unrelated individuals contributed to the mixture.

- The DNA profile is approximately 570 octillion (5.7E29) times more likely if Margaret Murdaugh and an unidentified unrelated individual contributed to the mixture than if two unidentified unrelated individuals contributed to the mixture.

**25.1 Swabs from sides of Item 25 cell phone**

**RESULTS:**

- A partial DNA profile was developed.

- Due to the limited information obtained and the inability to determine the number of contributors, no further interpretation will be offered.

**30 Mossberg Model 835 Ulti-Mag shotgun (S/N: UM613411) (previously on pool table) with one (1) unfired 12GA shotshell**

**RESULTS:**

- Presumptive testing for blood was negative.

**31 Browning Auto-5 Light Vector + Special Steel 12GA shotgun (S/N: 03867NV211)**

**RESULTS:**

- No apparent bloodstains present.

**32 Benelli Super Black Eagle 2 12GA shotgun (S/N: U391148) with strap and two (2) unfired shotshells headstamped "WINCHESTER 12 GA" and "12 GA FEDERAL"**

**RESULTS:**

- No apparent bloodstains present.

**33 Palmetto State Armory PSA PA-15 MULTI rifle (S/N: PA068237) with "Pulsar" night vision scope**

**RESULTS:**

- No apparent bloodstains present.



P.O. Box 21398, Columbia, South Carolina 29221-1398 Phone (803) 896-7300 Fax (803) 896-7351

SLED LAB No. L21-09074  
June 25, 2021

Page 13 of 18

- 51 Swabs collected from lock/unlock buttons on driver's door (Chevy Suburban)
- RESULTS:**
- No human blood identified.
- 52 Swabs collected from driver's door arm rest (Chevy Suburban)
- RESULTS:**
- No human blood identified.
- 53 Swabs collected from driver's side running board below driver's door (Chevy Suburban)
- RESULTS:**
- No human blood identified.
- 54 Swabs collected from driver's floorboard (Chevy Suburban)
- RESULTS:**
- No human blood identified.
- 55 Swabs collected from front edge of driver's seat (Chevy Suburban)
- RESULTS:**
- No human blood identified.
- 56 Swabs collected from steering wheel (Chevy Suburban)
- RESULTS:**
- Blood identified.
  - A DNA profile suitable for comparison was developed.
  - Paul Murdaugh, Anthony Cook, Roger Davis, Rogan Gibson, Claude (C.B.) Rowe, Connor Cook, Phillip Beach, Renee Beach, Robin Beach, John Murdaugh, Richard Alexander Murdaugh, Jr. (Buster), Randy Murdaugh, Miley Altman, and Morgan Doughty are excluded as contributors.
  - Likelihood Ratios (LR) for this profile were calculated using STRmix™.



P.O. Box 21398, Columbia, South Carolina 29221-1398 Phone (803) 896-7300 Fax (803) 896-7351

SLED LAB No. L21-09074  
June 25, 2021

Page 14 of 18

• **Proposition Set I:**

- The DNA profile was interpreted as a mixture originating from two individuals.
  - Hp = Margaret Murdaugh and an unidentified unrelated individual contributed to the mixture.
  - Hd = Two unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 35 (3.5E1) times more likely if Margaret Murdaugh and an unidentified unrelated individual contributed to the mixture than if two unidentified unrelated individuals contributed to the mixture.

• **Proposition Set II:**

- The DNA profile was interpreted as a mixture originating from two individuals.
  - Hp = Richard Alexander Murdaugh and an unidentified unrelated individual contributed to the mixture.
  - Hd = Two unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 100 quadrillion (1.0E17) times more likely if Richard Alexander Murdaugh and an unidentified unrelated individual contributed to the mixture than if two unidentified unrelated individuals contributed to the mixture.

• **Proposition Set III:**

- The DNA profile was interpreted as a mixture originating from two individuals.
  - Hp = Margaret Murdaugh and Richard Alexander Murdaugh contributed to the mixture.
  - Hd = Two unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 240 quintillion (2.4E20) times more likely if Margaret Murdaugh and Richard Alexander Murdaugh contributed to the mixture than if two unidentified unrelated individuals contributed to the mixture.
- The LR for Proposition Set III was calculated to confirm that the mixture could be explained by the contribution of DNA from all individuals listed under Hp. Due to the disparity in the individual LRs between the contributors for this item, it is recommended to put more weight on the results of Proposition Set I rather than the results of Proposition Set III when considering Margaret Murdaugh as a possible contributor to the mixture.



P.O. Box 21398, Columbia, South Carolina 29221-1398 Phone (803) 896-7300 Fax (803) 896-7351

SLED LAB No. L21-09074  
June 25, 2021

Page 15 of 18

- 57 Swabs collected from center of driver's seat back (Chevy Suburban)  
**RESULTS:**  
• No human blood identified.
- 58 Swabs collected from front passenger door above arm rest (Chevy Suburban)  
**RESULTS:**  
• No human blood identified.
- 59 Swabs collected from front passenger seat bottom (Chevy Suburban)  
**RESULTS:**  
• No human blood identified.
- 60 Swabs collected from front passenger seat back (Chevy Suburban)  
**RESULTS:**  
• No human blood identified.
- 61 Swabs collected from driver's door above arm rest (Ford F250)  
**RESULTS:**  
• No human blood identified.
- 62 Swabs collected from door side corner of driver's seat bottom (Ford F250)  
**RESULTS:**  
• No human blood identified.
- 63 Swabs collected from door side edge of front passenger seat bottom (Ford F250)  
**RESULTS:**  
• No human blood identified.
- 64 Swabs collected from front passenger side seat back (Ford F250)  
**RESULTS:**  
• No human blood identified.



P.O. Box 21398, Columbia, South Carolina 29221-1398 Phone (803) 896-7300 Fax (803) 896-7351

SLED LAB No. L21-09074  
June 25, 2021

Page 16 of 18

**70 Left fingernail clippings from Margaret Murdaugh**

**RESULTS:**

- A DNA profile suitable for comparison was developed.
- Paul Murdaugh, Anthony Cook, Roger Davis, Rogan Gibson, Connor Cook, Phillip Beach, Renee Beach, Robin Beach, John Murdaugh, Richard Alexander Murdaugh, Jr. (Buster), Richard Alexander Murdaugh, Randy Murdaugh, Miley Altman, and Morgan Doughty are excluded as contributors.
- Likelihood Ratios (LR) for this profile were calculated using STRmix™.
- **Proposition Set:**
  - The DNA profile was interpreted as a mixture originating from two individuals.
  - Margaret Murdaugh is contributing to the mixture.
  - Hp = Margaret Murdaugh and Claude (C.B.) Rowe contributed to the mixture.
  - Hd = Margaret Murdaugh and an unidentified unrelated individual contributed to the mixture.
- The DNA profile is approximately 11 (1/9.0E-2) times more likely if Margaret Murdaugh and an unidentified unrelated individual contributed to the mixture than if Margaret Murdaugh and Claude (C.B.) Rowe contributed to the mixture.

**71 Right fingernail clippings from Margaret Murdaugh**

**RESULTS:**

- The DNA profile developed is attributable to Margaret Murdaugh.

**72 Left fingernail clippings from Paul Murdaugh**

**RESULTS:**

- The DNA profile developed is attributable to Paul Murdaugh.

**73 Right fingernail clippings from Paul Murdaugh**

**RESULTS:**

- The DNA profile developed is attributable to Paul Murdaugh.



P.O. Box 21398, Columbia, South Carolina 29221-1398 Phone (803) 896-7300 Fax (803) 896-7351



SLED LAB No. L21-09074  
 June 25, 2021

Page 17 of 18

**NOTES:**

Serology and sample preparation performed by Forensic Serologist Rachel Nguyen.

DNA analysis was performed using Short Tandem Repeat (STR) PCR DNA analysis.

The following kits/loci were utilized in the analysis of this case:

GlobalFiler™: D3S1358, vWA, D16S539, CSF1PO, TPOX, Yindel, AMELOGENIN, D8S1179, D21S11, D18S51, DYS391, D2S441, D19S433, TH01, FGA, D22S1045, D5S818, D13S317, D7S820, SE33, D10S1248, D1S1656, D12S391, D2S1338

Any remaining evidence and/or packaging will be returned to the requesting agency.

The verbal scales listed in the tables below were implemented by SLED for use with STRmix™ results only.

Verbal scales are designed to assist in conveying the weight of likelihood ratios.

Supported Proposition	Likelihood Ratio	Verbal Wording
First proposition (Hp) is supported against the alternative proposition (Hd)	1	Uninformative
	2 to 99	Weak support
	100 to 9,999	Moderate support
	10,000 to 999,999	Strong support
	≥ 1,000,000	Very strong support

Supported Proposition	Likelihood Ratio	Verbal Wording
The alternative proposition (Hd) is supported against the first proposition (Hp)	1	Uninformative
	2 to 99	Moderate support for Hd
	≥100	Exclusion

Reported likelihood ratios are based on the stated propositions. Alternate propositions may require calculation of additional likelihood ratios. If interpretation based on propositions other than those reported is needed, please contact the analyst listed below and allow up to **30 business days** for calculation and reporting of additional likelihood ratios.

**Definitions:**

Proposition: A statement, based on case circumstances and genetic results, that expresses an opinion

Hp: First proposition

Hd: Alternative proposition

Likelihood ratio: The comparison of the probabilities of Hp and Hd

Person of interest: An individual whose known standard has been submitted for comparison

*This report contains the conclusions, opinions and interpretations of the analyst whose signature appears below.*



P.O. Box 21398, Columbia, South Carolina 29221-1398 Phone (803) 896-7300 Fax (803) 896-7351



SLED LAB No. L21-09074  
June 25, 2021

Page 18 of 18

*Technical records supporting the conclusions in this report are available upon request. Afford sufficient time for production.*



Sarah Zapata

Forensic Scientist



P.O. Box 21398, Columbia, South Carolina 29221-1398 Phone (803) 896-7300 Fax (803) 896-7351

*State of South Carolina v. Richard Alexander Murdaugh*  
Indictment Nos. 2022-GS-15-00592, -593, -594, and -595  
Motion to Exclude False Testimony about Evidence Destroyed by the State

# **EXHIBIT C**

(Photo, white cotton T-shirt treated with  
LCV)

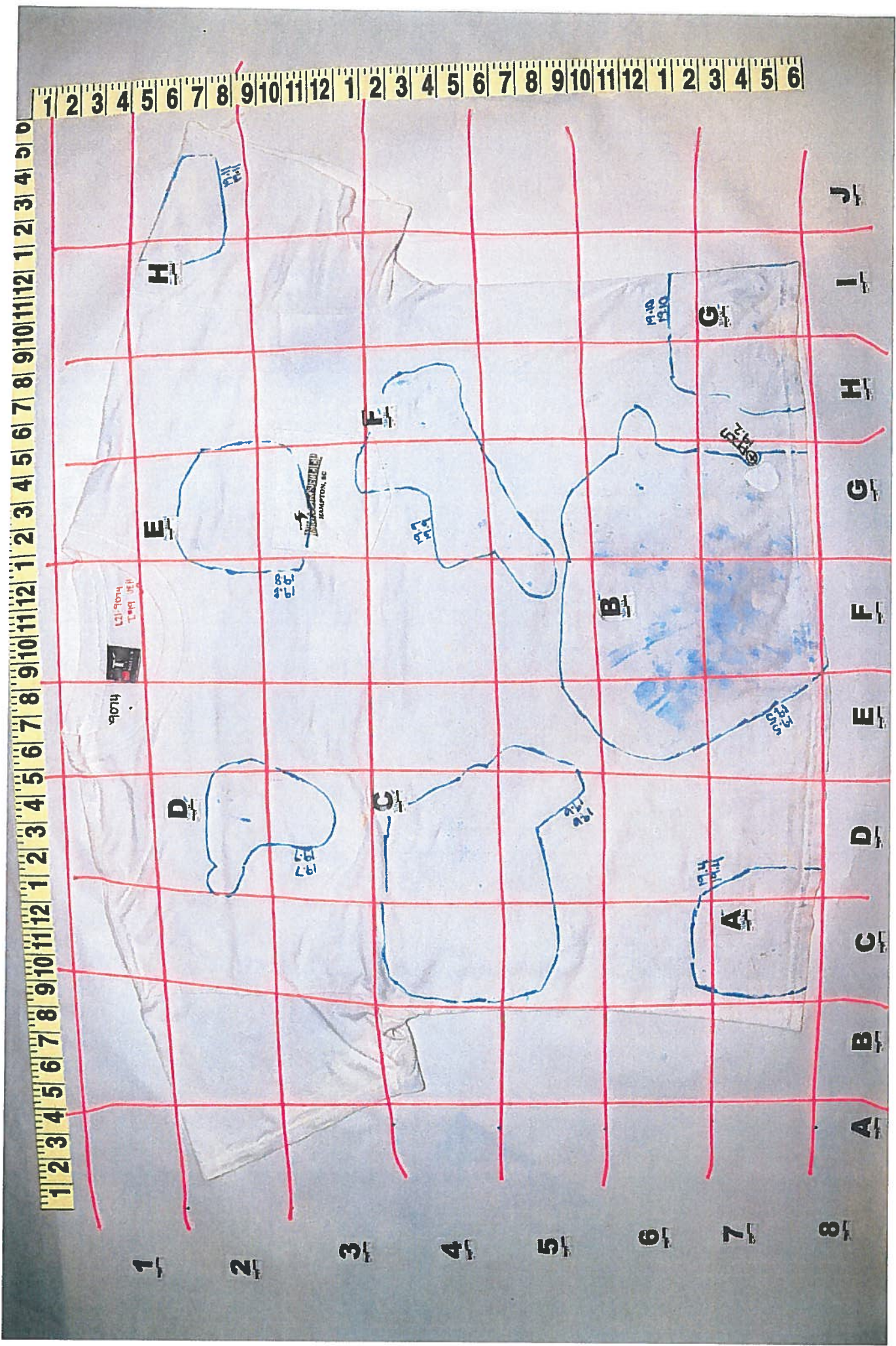


*State of South Carolina v. Richard Alexander Murdaugh*  
Indictment Nos. 2022-GS-15-00592, -593, -594, and -595  
Motion to Exclude False Testimony about Evidence Destroyed by the State

# **EXHIBIT D**

(Photo, white cotton T-shirt with areas of  
interest identified and labeled)





1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6

1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6

A B C D E F G H I J

1

2

3

4

5

6

7

8

H  
17.1  
17.1

E  
17.1  
17.1

D  
17.1  
17.1

C  
17.1  
17.1

F  
17.1  
17.1

B  
17.1  
17.1

A  
17.1  
17.1

G  
17.1  
17.1

L31-9014  
L-19 J-11

90714

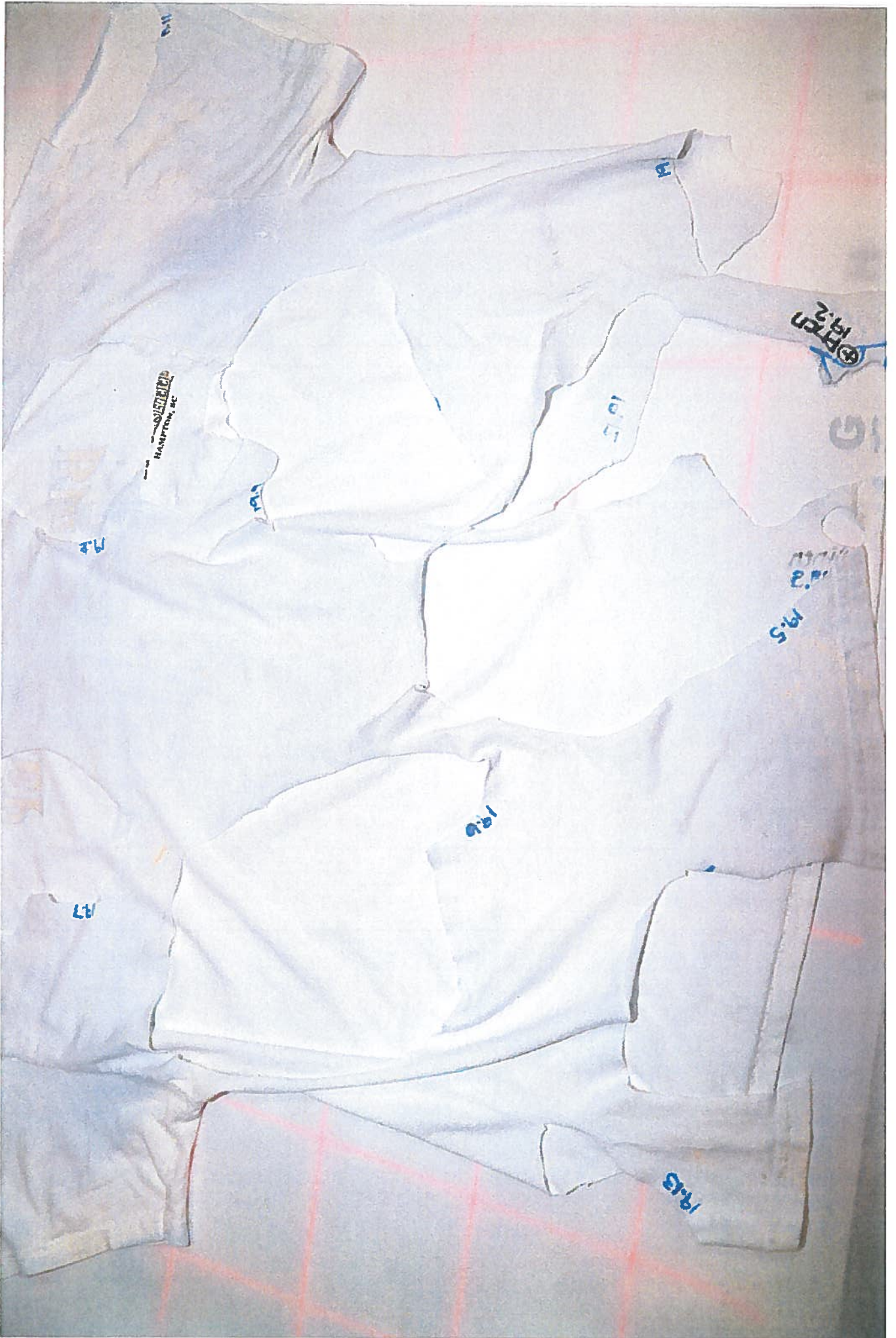
AMMERTON, NC

*State of South Carolina v. Richard Alexander Murdaugh*  
Indictment Nos. 2022-GS-15-00592, -593, -594, and -595  
Motion to Exclude False Testimony about Evidence Destroyed by the State

# **EXHIBIT E**

(Photo, white cotton T-shirt with cuttings)





MADE IN HAWAII, HI

A1

A12

A1

A2

A12  
A12  
A12

A6

A7

A13

*State of South Carolina v. Richard Alexander Murdaugh*  
Indictment Nos. 2022-GS-15-00592, -593, -594, and -595  
Motion to Exclude False Testimony about Evidence Destroyed by the State

# **EXHIBIT F**

(SLED DNA analysis report, July 25, 2021)



**SOUTH CAROLINA LAW ENFORCEMENT DIVISION  
FORENSIC SERVICES LABORATORY REPORT**

HENRY D. MCMASTER  
*Governor*



MARK A. KEEL  
*Chief*

July 25, 2021

David Owen, III  
South Carolina Law Enforcement Division  
4400 Broad River Road  
Columbia, SC 29210

**DNA ANALYSIS**

SLED LAB: L21-09074  
Your Case No: 31210061  
Incident Date: 6/7/2021  
[V-Deceased] Paul Murdaugh  
[V-Deceased] Margaret Murdaugh  
[W] Richard Murdaugh

---

This is an official report of the South Carolina Law Enforcement Division Forensic Services Laboratory and is to be used in connection with an official criminal investigation. These examinations were conducted under your assurance that no previous examinations of person(s) or evidence submitted in this case have been or will be conducted by any other laboratory or agency.

Mark A. Keel, Chief  
South Carolina Law Enforcement Division

---

**SUPPLEMENTAL**

**COMPARISON STANDARDS**

**138 Buccal swabs from Nolen Tuten**

**RESULTS:**

- The DNA profile developed is suitable for use as a known standard.

**ITEMS OF EVIDENCE**

**19.3 Cutting from exterior, back, bottom center of white shirt from Richard Murdaugh**

**RESULTS:**

- A DNA profile suitable for comparison was developed.
- Paul Murdaugh, John Murdaugh, Richard Alexander Murdaugh, Jr. (Buster), and Randy Murdaugh are excluded as contributors.
- Likelihood Ratios (LR) for this profile were calculated using STRmix™.



• **Proposition Set:**

- The DNA profile was interpreted as a mixture originating from two individuals.
- Richard Alexander Murdaugh is contributing to the mixture.
- Hp – Richard Alexander Murdaugh and Margaret Murdaugh contributed to the mixture.
- Hd – Richard Alexander Murdaugh and an unidentified unrelated individual contributed to the mixture.

• The DNA profile is approximately 360 quadrillion (3.6E17) times more likely if Richard Alexander Murdaugh and Margaret Murdaugh contributed to the mixture than if Richard Alexander Murdaugh and an unidentified unrelated individual contributed to the mixture.

**19.4 Cutting from stain "A" on white shirt from Richard Murdaugh**

**RESULTS:**

- A DNA profile suitable for comparison was developed.
- Margaret Murdaugh, John Murdaugh, Richard Alexander Murdaugh, Jr. (Buster), and Randy Murdaugh are excluded as contributors.
- Likelihood Ratios (LR) for this profile were calculated using STRmix™.

• **Proposition Set I:**

- The DNA profile was interpreted as a mixture originating from two individuals.
- Hp – Richard Alexander Murdaugh and an unidentified unrelated individual contributed to the mixture.
- Hd – Two unidentified unrelated individuals contributed to the mixture.

• The DNA profile is approximately 120 quadrillion (1.2E17) times more likely if Richard Alexander Murdaugh and an unidentified unrelated individual contributed to the mixture than if two unidentified unrelated individuals contributed to the mixture.

• **Proposition Set II:**

- The DNA profile was interpreted as a mixture originating from two individuals.
- Richard Alexander Murdaugh is contributing to the mixture.
- Hp – Richard Alexander Murdaugh and Paul Murdaugh contributed to the mixture



- Hd Richard Alexander Murdaugh and an unidentified unrelated individual contributed to the mixture.

- The DNA profile is approximately 7 octillion ( $7.0E27$ ) times more likely if Richard Alexander Murdaugh and Paul Murdaugh contributed to the mixture than if Richard Alexander Murdaugh and an unidentified unrelated individual contributed to the mixture.

**19.5 Cutting from stain "B" on white shirt from Richard Murdaugh**

**RESULTS:**

- A DNA profile suitable for comparison was developed.

- Paul Murdaugh, John Murdaugh, Richard Alexander Murdaugh, Jr. (Buster), and Randy Murdaugh are excluded as contributors.

- Likelihood Ratios (LR) for this profile were calculated using STRmix™.

- **Proposition Set:**

- The DNA profile was interpreted as a mixture originating from two individuals.

- Richard Alexander Murdaugh is contributing to the mixture.

- Hp Richard Alexander Murdaugh and Margaret Murdaugh contributed to the mixture.

- Hd Richard Alexander Murdaugh and an unidentified unrelated individual contributed to the mixture.

- The DNA profile is approximately 3,800 ( $3.8E3$ ) times more likely if Richard Alexander Murdaugh and Margaret Murdaugh contributed to the mixture than if Richard Alexander Murdaugh and an unidentified unrelated individual contributed to the mixture.

**19.6 Cutting from stain "C" on white shirt from Richard Murdaugh**

**RESULTS:**

- A DNA profile suitable for comparison was developed.

- John Murdaugh and Randy Murdaugh are excluded as contributors.

- Due to the relatedness of the contributors, no conclusions will be offered regarding Paul Murdaugh and Richard Alexander Murdaugh, Jr. (Buster) as possible contributors to the mixture.

- Likelihood Ratios (LR) for this profile were calculated using STRmix™.



• **Proposition Set:**

- The DNA profile was interpreted as a mixture originating from three individuals.
  - Richard Alexander Murdaugh is contributing to the mixture.
  - Hp = Richard Alexander Murdaugh, Margaret Murdaugh, and an unidentified unrelated individual contributed to the mixture.
  - Hd = Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 570 octillion (5.7E29) times more likely if Richard Alexander Murdaugh, Margaret Murdaugh, and an unidentified unrelated individual contributed to the mixture than if Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.

19.7 **Cutting from stain "D" on white shirt from Richard Murdaugh**

**RESULTS:**

- A DNA profile suitable for comparison was developed.
- John Murdaugh and Randy Murdaugh are excluded as contributors.
- Due to the relatedness of the contributors, no conclusions will be offered regarding Paul Murdaugh and Richard Alexander Murdaugh, Jr. (Buster) as possible contributors to the mixture.
- Likelihood Ratios (LR) for this profile were calculated using STRmix™.

• **Proposition Set I:**

- The DNA profile was interpreted as a mixture originating from four individuals.
  - Richard Alexander Murdaugh is contributing to the mixture.
  - Hp = Richard Alexander Murdaugh, Margaret Murdaugh, and two unidentified unrelated individuals contributed to the mixture.
  - Hd = Richard Alexander Murdaugh and three unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 1.9 quadrillion (1.9E15) times more likely if Richard Alexander Murdaugh, Margaret Murdaugh, and two unidentified unrelated individuals contributed to the mixture than if Richard Alexander Murdaugh and three unidentified unrelated individuals contributed to the mixture.



• **Proposition Set II:**

- The DNA profile was interpreted as a mixture originating from four individuals.
  - Richard Alexander Murdaugh is contributing to the mixture.
  - Hp = Richard Alexander Murdaugh, Nolen Tuten, and two unidentified unrelated individuals contributed to the mixture.
  - Hd = Richard Alexander Murdaugh and three unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 48 septillion ( $4.8E25$ ) times more likely if Richard Alexander Murdaugh, Nolen Tuten, and two unidentified unrelated individuals contributed to the mixture than if Richard Alexander Murdaugh and three unidentified unrelated individuals contributed to the mixture.

• **Proposition Set III:**

- The DNA profile was interpreted as a mixture originating from four individuals.
  - Richard Alexander Murdaugh is contributing to the mixture.
  - Hp = Richard Alexander Murdaugh, Margaret Murdaugh, Nolen Tuten, and an unidentified unrelated individual contributed to the mixture.
  - Hd = Richard Alexander Murdaugh and three unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 450 duodecillion ( $4.5E41$ ) times more likely if Richard Alexander Murdaugh, Margaret Murdaugh, Nolen Tuten, and an unidentified unrelated individual contributed to the mixture than if Richard Alexander Murdaugh and three unidentified unrelated individuals contributed to the mixture.

**19.8 Cutting from stain "E" on white shirt from Richard Murdaugh**

**RESULTS:**

- A DNA profile suitable for comparison was developed.
- Paul Murdaugh, John Murdaugh, Richard Alexander Murdaugh, Jr. (Buster) and Randy Murdaugh are excluded as contributors.
- Likelihood Ratios (LR) for this profile were calculated using STRmix™.



• **Proposition Set:**

- The DNA profile was interpreted as a mixture originating from three individuals.
  - Richard Alexander Murdaugh is contributing to the mixture.
  - Hp = Richard Alexander Murdaugh, Margaret Murdaugh, and an unidentified unrelated individual contributed to the mixture.
  - Hd = Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 590 million (5.9E8) times more likely if Richard Alexander Murdaugh, Margaret Murdaugh, and an unidentified unrelated individual contributed to the mixture than if Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.

**19.9 Cutting from stain "F" on white shirt from Richard Murdaugh**

**RESULTS:**

- A DNA profile was developed.
- Due to the inability to determine the number of contributors, no further interpretation will be offered.

**19.10 Cutting from stain "G" on white shirt from Richard Murdaugh**

**RESULTS:**

- A DNA profile suitable for comparison was developed.
- John Murdaugh, Richard Alexander Murdaugh, Jr. (Buster) and Randy Murdaugh are excluded as contributors.
- Likelihood Ratios (LR) for this profile were calculated using STRmix™.

• **Proposition Set I:**

- The DNA profile was interpreted as a mixture originating from three individuals.
- Richard Alexander Murdaugh is contributing to the mixture.
- Hp = Richard Alexander Murdaugh, Margaret Murdaugh, and an unidentified unrelated individual contributed to the mixture.





- Hd Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 430 octillion (4.3E29) times more likely if Richard Alexander Murdaugh, Margaret Murdaugh, and an unidentified unrelated individual contributed to the mixture than if Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.
- **Proposition Set II:**
  - The DNA profile was interpreted as a mixture originating from three individuals.
  - Richard Alexander Murdaugh is contributing to the mixture.
  - Hp Richard Alexander Murdaugh, Paul Murdaugh, and an unidentified unrelated individual contributed to the mixture.
  - Hd Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.
- Paul Murdaugh is excluded as a contributor to the mixture under the listed propositions.

19.11 **Cutting from stain "H" on white shirt from Richard Murdaugh**

**RESULTS:**

- A DNA profile suitable for comparison was developed.
- Paul Murdaugh, John Murdaugh, Richard Alexander Murdaugh, Jr. (Buster), and Randy Murdaugh are excluded as contributors.
- Likelihood Ratios (LR) for this profile were calculated using STRmix™.
- **Proposition Set:**
  - The DNA profile was interpreted as a mixture originating from two individuals
  - Richard Alexander Murdaugh is contributing to the mixture.
  - Hp Richard Alexander Murdaugh and Margaret Murdaugh contributed to the mixture.
  - Hd Richard Alexander Murdaugh and an unidentified unrelated individual contributed to the mixture.
- An uninformative statistical result was obtained. No conclusion can be made regarding Margaret Murdaugh as a possible contributor to the mixture under the listed propositions.



**19.12 Cutting from stain "I" on white shirt from Richard Murdaugh**

**RESULTS:**

- A DNA profile suitable for comparison was developed.
- Paul Murdaugh, John Murdaugh, Richard Alexander Murdaugh, Jr. (Buster), and Randy Murdaugh are excluded as contributors.
- Likelihood Ratios (LR) for this profile were calculated using STRmix™.
- **Proposition Set:**
  - The DNA profile was interpreted as a mixture originating from two individuals.
  - Richard Alexander Murdaugh is contributing to the mixture.
  - Hp Richard Alexander Murdaugh and Margaret Murdaugh contributed to the mixture.
  - Hd Richard Alexander Murdaugh and an unidentified unrelated individual contributed to the mixture.
- The DNA profile is approximately 1.3 nonillion (1.3E30) times more likely if Richard Alexander Murdaugh and Margaret Murdaugh contributed to the mixture than if Richard Alexander Murdaugh and an unidentified unrelated individual contributed to the mixture.

**19.13 Cutting from stain "J" on white shirt from Richard Murdaugh**

**RESULTS:**

- A DNA profile suitable for comparison was developed.
- John Murdaugh, Richard Alexander Murdaugh, Jr. (Buster) and Randy Murdaugh are excluded as contributors.
- Likelihood Ratios (LR) for this profile were calculated using STRmix™.
- **Proposition Set I:**
  - The DNA profile was interpreted as a mixture originating from three individuals.
  - Hp Margaret Murdaugh and two unidentified unrelated individuals contributed to the mixture.
  - Hd Three unidentified unrelated individuals contributed to the mixture.



- The DNA profile is approximately 1.5 sextillion ( $1.5E21$ ) times more likely if Margaret Murdaugh and two unidentified unrelated individuals contributed to the mixture than if three unidentified unrelated individuals contributed to the mixture.

• **Proposition Set II:**

- The DNA profile was interpreted as a mixture originating from three individuals.
- Hp Paul Murdaugh and two unidentified unrelated individuals contributed to the mixture.
- Hd Three unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 24 quintillion ( $2.4E19$ ) times more likely if Paul Murdaugh and two unidentified unrelated individuals contributed to the mixture than if three unidentified unrelated individuals contributed to the mixture.

• **Proposition Set III:**

- The DNA profile was interpreted as a mixture originating from three individuals.
- Hp Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.
- Hd Three unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 29 ( $2.9E1$ ) times more likely if Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture than if three unidentified unrelated individuals contributed to the mixture.

• **Proposition Set IV:**

- The DNA profile was interpreted as a mixture originating from three individuals.
- Hp Margaret Murdaugh, Paul Murdaugh, and Richard Alexander Murdaugh contributed to the mixture.
- Hd Three unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 260 quindecillion ( $2.6E50$ ) times more likely if Margaret Murdaugh, Paul Murdaugh, and Richard Alexander Murdaugh contributed to the mixture than if three unidentified unrelated individuals contributed to the mixture.
- The LR for Proposition Set IV was calculated to confirm that the mixture could be explained by the contribution of DNA from all individuals listed under Hp. Due to the disparity in the individual LRs between the contributors for this item, it is recommended to put more weight on the results of Proposition Set III rather than the results of Proposition Set IV when considering Richard Alexander Murdaugh as a possible contributor to the mixture.



**20.3 Cutting from stain "A" on pair of green shorts from Richard Murdaugh**

**RESULTS:**

- A DNA profile suitable for comparison was developed.
- John Murdaugh and Randy Murdaugh are excluded as contributors.
- Due to the relatedness of the contributors, no conclusions will be offered regarding Paul Murdaugh and Richard Alexander Murdaugh, Jr. (Buster) as possible contributors to the mixture.
- Likelihood Ratios (LR) for this profile were calculated using STRmix™.
- **Proposition Set:**
  - The DNA profile was interpreted as a mixture originating from three individuals.
  - Richard Alexander Murdaugh is contributing to the mixture.
  - Hp – Richard Alexander Murdaugh, Margaret Murdaugh, and an unidentified unrelated individual contributed to the mixture.
  - Hd – Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 94 septillion (9.4E25) times more likely if Richard Alexander Murdaugh, Margaret Murdaugh, and an unidentified unrelated individual contributed to the mixture than if Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.

**20.4 Cutting from stain "G" on pair of green shorts from Richard Murdaugh**

**RESULTS:**

- A DNA profile suitable for comparison was developed.
- John Murdaugh and Randy Murdaugh are excluded as contributors.
- Due to the relatedness of the contributors, no conclusions will be offered regarding Paul Murdaugh and Richard Alexander Murdaugh, Jr. (Buster) as possible contributors to the mixture.
- Likelihood Ratios (LR) for this profile were calculated using STRmix™.



• **Proposition Set:**

- The DNA profile was interpreted as a mixture originating from three individuals.
  - Richard Alexander Murdaugh is contributing to the mixture.
  - Hp = Richard Alexander Murdaugh, Margaret Murdaugh, and an unidentified unrelated individual contributed to the mixture.
  - Hd = Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 24 sextillion (2.4E22) times more likely if Richard Alexander Murdaugh, Margaret Murdaugh, and an unidentified unrelated individual contributed to the mixture than if Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.

**20.5 Cutting from stain "C" on pair of green shorts from Richard Murdaugh**

**RESULTS:**

- A DNA profile suitable for comparison was developed.
  - Margaret Murdaugh, John Murdaugh, Richard Alexander Murdaugh, Jr. (Buster), and Randy Murdaugh are excluded as contributors.
  - Likelihood Ratios (LR) for this profile were calculated using STRmix™.
- **Proposition Set:**
- The DNA profile was interpreted as a mixture originating from two individuals.
  - Richard Alexander Murdaugh is contributing to the mixture.
  - Hp = Richard Alexander Murdaugh and Paul Murdaugh contributed to the mixture.
  - Hd = Richard Alexander Murdaugh and an unidentified unrelated individual contributed to the mixture.
- The DNA profile is approximately 4.1 septillion (4.1E24) times more likely if Richard Alexander Murdaugh and Paul Murdaugh contributed to the mixture than if Richard Alexander Murdaugh and an unidentified unrelated individual contributed to the mixture.



20.6 Cutting from stain "D" on pair of green shorts from Richard Murdaugh

**RESULTS:**

- A DNA profile suitable for comparison was developed.
- John Murdaugh, Richard Alexander Murdaugh, Jr. (Buster) and Randy Murdaugh are excluded as contributors.
- Likelihood Ratios (LR) for this profile were calculated using STRmix™.
- **Proposition Set I:**
  - The DNA profile was interpreted as a mixture originating from three individuals.
  - Hp Margaret Murdaugh and two unidentified unrelated individuals contributed to the mixture.
  - Hd Three unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 930 quintillion (9.3E20) times more likely if Margaret Murdaugh and two unidentified unrelated individuals contributed to the mixture than if three unidentified unrelated individuals contributed to the mixture.
- **Proposition Set II:**
  - The DNA profile was interpreted as a mixture originating from three individuals.
  - Hp Paul Murdaugh and two unidentified unrelated individuals contributed to the mixture.
  - Hd Three unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 38 quintillion (3.8E19) times more likely if Paul Murdaugh and two unidentified unrelated individuals contributed to the mixture than if three unidentified unrelated individuals contributed to the mixture.
- **Proposition Set III:**
  - The DNA profile was interpreted as a mixture originating from three individuals.
  - Hp Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.
  - Hd Three unidentified unrelated individuals contributed to the mixture.





- The DNA profile is approximately 190 (1.9E2) times more likely if Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture than if three unidentified unrelated individuals contributed to the mixture.

• **Proposition Set IV:**

- The DNA profile was interpreted as a mixture originating from three individuals.
- Hp Margaret Murdaugh, Paul Murdaugh, and Richard Alexander Murdaugh contributed to the mixture.
- Hd Three unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 8.7 quidecillion (8.7E48) times more likely if Margaret Murdaugh, Paul Murdaugh, and Richard Alexander Murdaugh contributed to the mixture than if three unidentified unrelated individuals contributed to the mixture.
- The LR for Proposition Set IV was calculated to confirm that the mixture could be explained by the contribution of DNA from all individuals listed under Hp. Due to the disparity in the individual LRs between the contributors for this item, it is recommended to put more weight on the results of Proposition Set III rather than the results of Proposition Set IV when considering Richard Alexander Murdaugh as a possible contributor to the mixture.

**20.7 Cutting from stain "E" on pair of green shorts from Richard Murdaugh**

**RESULTS:**

- A DNA profile was developed.
- Due to the inability to determine the number of contributors, no further interpretation will be offered.

**20.8 Cutting from stain "F" on pair of green shorts from Richard Murdaugh**

**RESULTS:**

- A DNA profile suitable for comparison was developed.
- John Murdaugh and Randy Murdaugh are excluded as contributors.
- Likelihood Ratios (LR) for this profile were calculated using STRmix™.

• **Proposition Set I:**

- The DNA profile was interpreted as a mixture originating from three individuals.



- Hp Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.
- Hd = Three unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 320 million (3.2E8) times more likely if Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture than if three unidentified unrelated individuals contributed to the mixture.
- **Proposition Set II:**
  - The DNA profile was interpreted as a mixture originating from three individuals.
  - Richard Alexander Murdaugh is contributing to the mixture.
  - Hp Richard Alexander Murdaugh, Margaret Murdaugh, and an unidentified unrelated individual contributed to the mixture.
  - Hd Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 2.6 sextillion (2.6E21) times more likely if Richard Alexander Murdaugh, Margaret Murdaugh, and an unidentified unrelated individual contributed to the mixture than if Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.
- **Proposition Set III:**
  - The DNA profile was interpreted as a mixture originating from three individuals.
  - Richard Alexander Murdaugh is contributing to the mixture.
  - Hp = Richard Alexander Murdaugh, Paul Murdaugh, and an unidentified unrelated individual contributed to the mixture.
  - Hd Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 17 quintillion (1.7E19) times more likely if Richard Alexander Murdaugh, Paul Murdaugh, and an unidentified unrelated individual contributed to the mixture than if Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.



• **Proposition Set IV:**

- The DNA profile was interpreted as a mixture originating from three individuals.
  - Richard Alexander Murdaugh is contributing to the mixture.
  - Hp = Richard Alexander Murdaugh, Margaret Murdaugh, and Paul Murdaugh contributed to the mixture.
  - Hd = Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.
- The DNA profile is approximately 93 quattuordecillion (9.3E46) times more likely if Richard Alexander Murdaugh, Margaret Murdaugh, and Paul Murdaugh contributed to the mixture than if Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.

• **Proposition Set V:**

- The DNA profile was interpreted as a mixture originating from three individuals.
  - Richard Alexander Murdaugh is contributing to the mixture.
  - Hp = Richard Alexander Murdaugh, Richard Alexander Murdaugh, Jr. (Buster), and an unidentified unrelated individual contributed to the mixture.
  - Hd = Richard Alexander Murdaugh and two unidentified unrelated individuals contributed to the mixture.
- Richard Alexander Murdaugh, Jr. (Buster) is excluded as a contributor to the mixture under the listed propositions.

**20.9 Cutting from stain "H" on pair of green shorts from Richard Murdaugh**

**RESULTS:**

- A partial DNA profile was developed.
- Due to the inability to determine the number of contributors, no further interpretation will be offered.



**NOTES:**

Sample preparation for DNA performed by Forensic Serologist Rachel Nguyen

DNA analysis was performed using Short Tandem Repeat (STR) PCR DNA analysis.

The following kits loci were utilized in the analysis of this case:

GlobalFiler™: D3S1358, vWA, D16S539, CSF1PO, TPOX, Yindel, AMELOGENIN, D8S1179, D21S11, D18S51, DYS391, D2S441, D19S433, TH01, FGA, D22S1045, D5S818, D13S317, D7S820, SE33, D10S1248, D1S1656, D12S391, D2S1338

No comparisons were performed with the following individuals at this time: Anthony Cook, Roger Davis, Rogan Gibson, Claude (C.B.) Rowe, Connor Cook, Phillip Beach, Renee Beach, Robin Beach, Miley Altman, Morgan Doughty, and Michael List.

Comparisons were only performed with Nolen Tuten for item 19.7

This report supplements the original testing performed in the report issued on June 25, 2021.

Any remaining evidence and/or packaging will be returned to the requesting agency.

The verbal scales listed in the tables below were implemented by SLED for use with STRmix™ results only. Verbal scales are designed to assist in conveying the weight of likelihood ratios.

Supported Proposition	Likelihood Ratio	Verbal Wording
First proposition (Hp) is supported against the alternative proposition (Hd)	1	Uninformative
	2 to 99	Weak support
	100 to 9,999	Moderate support
	10,000 to 999,999	Strong support
	> 1,000,000	Very strong support

Supported Proposition	Likelihood Ratio	Verbal Wording
The alternative proposition (Hd) is supported against the first proposition (Hp)	1	Uninformative
	2 to 99	Moderate support for Hd
	≥ 100	Exclusion

Reported likelihood ratios are based on the stated propositions. Alternate propositions may require calculation of additional likelihood ratios. If interpretation based on propositions other than those reported is needed, please contact the analyst listed below and allow up to **30 business days** for calculation and reporting of additional likelihood ratios.



**Definitions:**

Proposition: A statement, based on case circumstances and genetic results, that expresses an opinion

Hp: First proposition

Hd: Alternative proposition

Likelihood ratio: The comparison of the probabilities of Hp and Hd

Person of interest: An individual whose known standard has been submitted for comparison

*This report contains the conclusions, opinions and interpretations of the analyst whose signature appears below.*

*Technical records supporting the conclusions in this report are available upon request. Afford sufficient time for production.*



Sarah Zapata

Forensic Scientist



*State of South Carolina v. Richard Alexander Murdaugh*  
Indictment Nos. 2022-GS-15-00592, -593, -594, and -595  
Motion to Exclude False Testimony about Evidence Destroyed by the State

# **EXHIBIT G**

(HemaTrace test results, August 10, 2021)





Department of Forensic  
DNA Analysis  
Evidence Worksheet



Lab #: L21-09074  
Examiner: Sarah Zapata  
Date: 08/10/2021  
Paul Murdaugh (Victim)  
Margaret Murdaugh (Victim)

Case Number(s): L21-09074

Operator(s): Sarah Zapata

Item #	Description	AP	Phe	p30	HS	Saliva	Other	Sample Remaining	Comments
19.2	Cutting from exterior front, bottom edge of white shirt from Richard Murdaugh				=			Yes	Cut small portions of stain
19.3	Cutting from exterior, back, bottom center of white shirt from Richard Murdaugh				=			Yes	Cut small portions of stain
19.4	Cutting from stain "A" on white shirt from Richard Murdaugh				=			Yes	Cut small portions of stain
19.5	Cutting from stain "B" on white shirt from Richard Murdaugh				=			Yes	Cut small portions of stain
19.6	Cutting from stain "C" on white shirt from Richard Murdaugh				=			Yes	Cut small portions of stain
19.7	Cutting from stain "D" on white shirt from Richard Murdaugh				=			Yes	Cut small portions of stain
19.8	Cutting from stain "E" on white shirt from Richard Murdaugh				=			Yes	Cut small portions of stain
19.9	Cutting from stain "F" on white shirt from Richard Murdaugh				=			Yes	Cut small portions of stain
19.10	Cutting from stain "G" on white shirt from Richard Murdaugh				=			Yes	Cut small portions of stain
19.11	Cutting from stain "H" on white shirt from Richard Murdaugh				=			Yes	Cut small portions of stain
19.12	Cutting from stain "I" on white shirt from Richard Murdaugh				=			Yes	Cut small portions of stain
19.13	Cutting from stain "J" on white shirt from Richard Murdaugh				=			Yes	Cut small portions of stain

S1 S12

SIZ



Department of Forensic  
DNA Analysis  
Evidence Worksheet



Lab #: L21-09074  
Examiner: Sarah Zapata  
Date: 08/10/2021

Case Number(s): L21-09074

Operator(s): Sarah Zapata

Item #	Description	AP	Phe	p30	HS	Saliva	Other	Sample Remaining	Comments
20.2	Cutting from front, left interior pocket of pair of green shorts from Richard Murdaugh								NAP
20.3	Cutting from stain "A" on pair of green shorts from Richard Murdaugh								NAP
20.4	Cutting from stain "G" on pair of green shorts from Richard Murdaugh								NAP
20.5	Cutting from stain "C" on pair of green shorts from Richard Murdaugh								NAP
20.6	Cutting from stain "D" on pair of green shorts from Richard Murdaugh								NAP
20.7	Cutting from stain "E" on pair of green shorts from Richard Murdaugh								NAP
20.8	Cutting from stain "F" on pair of green shorts from Richard Murdaugh								NAP
20.9	Cutting from stain "H" on pair of green shorts from Richard Murdaugh								NAP

332512

SIZ



Department of Forensic  
DNA Analysis  
Evidence Worksheet



Lab #: L21-09074  
Examiner: Sarah Zapata  
Date: 08/10/2021

Case Number(s): L21-09074

Operator(s): Sarah Zapata

Reagent	Barcode
Ethanol	N/A
Phenolphthalin	N/A
3% H2O2	N/A
AP Spot	N/A
Kernechtrot	N/A
Picroindigocarmine	N/A
Water	N/A
Water	N/A
Water	N/A
Water	N/A

Quality Control	Date
Phenolphthalin QC	
AP Spot QC	

Workspace decontaminated prior to analysis

SIZ

Comments: Photodocumentation by L.A. Hash and Maryann Boehm

33317

SIZ



**Department of Forensic  
DNA Analysis**  
**Blood/Semen/Saliva Card Result Sheet**



Date: 08/10/2021  
Examiner: Sarah Zapata  
Reviewer: *[Signature]*

Case Number(s): 1.21-09074

Operator(s): Sarah Zapata

	Case #	Item #	Blood	p30	Saliva	Comments
1	1.21-09074	19.2	=	N/A	N/A	
2	1.21-09074	19.3	=	N/A	N/A	
3	1.21-09074	19.4	=	N/A	N/A	
4	1.21-09074	19.5	=	N/A	N/A	
5	1.21-09074	19.6	=	N/A	N/A	
6	1.21-09074	19.7	=	N/A	N/A	
7	1.21-09074	19.8	=	N/A	N/A	
8	1.21-09074	19.9	=	N/A	N/A	
9	1.21-09074	19.10	=	N/A	N/A	
10	1.21-09074	19.11	=	N/A	N/A	
11	1.21-09074	19.12	=	N/A	N/A	
12	1.21-09074	19.13	=	N/A	N/A	

Reagent	Barcode
ABACard: (blood)	17809
SERATEC: (semen)	N/A
RSID: (saliva)	N/A

Comments: Hematrace 17809 used for samples 19.3-19.8

Hematrace 17989 exp. 12/31/22 used for samples 19.2 and ~~19.9~~-19.13

*19.9*  
*SIZ*  
*11/01/21*

*SIZ*

*334 SIZ*

*State of South Carolina v. Richard Alexander Murdaugh*  
Indictment Nos. 2022-GS-15-00592, -593, -594, and -595  
Motion to Exclude False Testimony about Evidence Destroyed by the State

# **EXHIBIT H**

(SLED DNA analysis report, November 10,  
2021)

**SOUTH CAROLINA LAW ENFORCEMENT DIVISION  
FORENSIC SERVICES LABORATORY REPORT**

HENRY D. MCMASTER  
*Governor*



MARK A. KEEL  
*Chief*

November 10, 2021

David Owen, III  
South Carolina Law Enforcement Division  
4400 Broad River Road  
Columbia, SC 29210

**DNA ANALYSIS**

SLED LAB: L21-09074  
Your Case No: 31210061  
Incident Date: 6 7 2021  
[V-Deceased] Paul Murdaugh  
[V-Deceased] Margaret Murdaugh  
[W] Richard Murdaugh

---

This is an official report of the South Carolina Law Enforcement Division Forensic Services Laboratory and is to be used in connection with an official criminal investigation. These examinations were conducted under your assurance that no previous examinations of person(s) or evidence submitted in this case have been or will be conducted by any other laboratory or agency.

Mark A. Keel, Chief  
South Carolina Law Enforcement Division

---

**SUPPLEMENTAL**

**COMPARISON STANDARDS**

143 Buccal swabs collected from Colleton CSO Deputy Daniel Greene

**RESULTS:**

- This item is being returned to the submitting agency without analysis and has not been inventoried.





**ITEMS OF EVIDENCE**

- 19.2 Cutting from exterior front, bottom edge of white shirt from Richard Murdaugh
- 19.3 Cutting from exterior, back, bottom center of white shirt from Richard Murdaugh
- 19.4 Cutting from stain "A" on white shirt from Richard Murdaugh
- 19.5 Cutting from stain "B" on white shirt from Richard Murdaugh
- 19.6 Cutting from stain "C" on white shirt from Richard Murdaugh
- 19.7 Cutting from stain "D" on white shirt from Richard Murdaugh
- 19.8 Cutting from stain "E" on white shirt from Richard Murdaugh
- 19.9 Cutting from stain "F" on white shirt from Richard Murdaugh
- 19.10 Cutting from stain "G" on white shirt from Richard Murdaugh
- 19.11 Cutting from stain "H" on white shirt from Richard Murdaugh
- 19.12 Cutting from stain "I" on white shirt from Richard Murdaugh
- 19.13 Cutting from stain "J" on white shirt from Richard Murdaugh

**ADDITIONAL RESULTS FOR ITEMS 19.2, 19.3, 19.4, 19.5, 19.6, 19.7, 19.8, 19.9, 19.10, 19.11, 19.12, AND 19.13:**

- No human blood identified.

- 173 **Blue raincoat from second floor hall closet**

**RESULTS:**

- Presumptive testing for blood was negative.
- No hair found.

- 173.2 **Swabs from interior cuffs, collar, and hood, interior and exterior zipper area, zipper, and zipper pull of blue raincoat from second floor hall closet**

**RESULTS:**

- No DNA profile was developed.

- 173.3 **Swabs from side openings, zipper area, and both interior portions of exterior pocket of blue raincoat from second floor hall closet**

**RESULTS:**

- A partial DNA profile was developed.
- Due to the limited information obtained and the inability to determine the number of contributors, no further interpretation will be offered.



**NOTES:**

Serology for item 173 and sample preparation of items 173.2 and 173.3 were performed by Forensic Scientist Rachel Nguyen.

DNA analysis was performed using Short Tandem Repeat (STR) PCR DNA analysis.

The following kits/loci were utilized in the analysis of this case:

GlobalFiler™: D3S1358, vWA, D16S539, CSF1PO, TPOX, Yindel, AMELOGENIN, D8S1179, D21S11, D18S51, DYS391, D2S441, D19S433, TH01, FGA, D22S1045, D5S818, D13S317, D7S820, SE33, D10S1248, D1S1656, D12S391, D2S1338

This report supplements the testing performed in the reports issued on June 25, 2021, and July 25, 2021.

Any remaining evidence and/or packaging will be returned to the requesting agency.

*This report contains the conclusions, opinions and interpretations of the analyst whose signature appears below.*

*Technical records supporting the conclusions in this report are available upon request. Afford sufficient time for production.*



Sarah Zapata

Forensic Scientist



*State of South Carolina v. Richard Alexander Murdaugh*  
Indictment Nos. 2022-GS-15-00592, -593, -594, and -595  
Motion to Exclude False Testimony about Evidence Destroyed by the State

# **EXHIBIT I**

(State's expert DRAFT report, February 3,  
2022)

Tom Bevel, President  
Ross M. Gardner, Vice President

Partners:  
Tom "Grif" Griffin  
Craig Gravel  
Jonathyn Priest



Associates:  
Kim Duddy  
Ken Martin  
Cele Rossi

Thursday, February 3, 2022

David Owen, III  
[dowen@sled.sc.gov](mailto:dowen@sled.sc.gov)

Charles Ghent  
[cghent@sled.sc.gov](mailto:cghent@sled.sc.gov)

Ref: Homicide Investigation of Paul and Margaret Murdaugh  
BGA Case 2022-01 SC

As requested by your office a physical evidence and scene analysis has been conducted on the above case.

Crime Scene Reconstruction is defined as the forensic science discipline, which employs the scientific method of analysis to identify the best explanation and sequence of objective actions for the incident in question. Information from all sources such as scene documentation, physical evidence, lab analysis, autopsy, photographs, and statements, are considered in identifying viable hypotheses that are possible within the context and limited universe of this crime scene. CSR provides for formal objective analysis versus subjective analysis of complex issues and in a holistic approach.

Should additional evidence or information become available, the analyst will consider its importance and may revise portions of the event analysis.

The physical evidence analysis is then used, as a benchmark, upon which any statements may be compared against.

**Victims:** Margaret Murdaugh  
WF, [REDACTED]  
DOD: 06-07-2021, DOB: [REDACTED]

Paul Murdaugh  
WM [REDACTED]  
DOD: 06-07-2021, DOB: [REDACTED]

**Husband/Father to victim's:** Alec Murdaugh  
DOB: [REDACTED]

**Location:** 4147 Moselle Road Islandton, SC 29929  
Near dog kennels on this property

**Incident Date:** June 07, 2021  
page 1 of 10

Murdaugh

**Brief Case Synopsis:**

Alec Murdaugh stated that he drove to the dog kennel on his property and found his son and wife shot and non-response. Alex touched both victims in checking them for life signs. Alec stated he tried to roll Paul but could not. He called 911 to report the deaths and drove to his house to get a shotgun for protection and drove back to the scene to wait for first responders to arrive.

**The following information was considered in this analysis:**

First interview with Alex Murdaugh – 34:45 mins.  
Crime Scene Investigation Summary – 46 pages  
Autopsy Report for Paul Murdaugh – 6 pages  
Autopsy Report for Margaret Murdaugh – 8 pages  
DNA Report of June 25, 2021 – 18 pages  
DNA Report of June 25, 2021 – 17 pages  
Evidence processing EP – 449 photos  
Evidence processing – 357 photos  
Paul autopsy photos – 34 photos  
Margaret autopsy photos – 38 photos  
L21-09074 Lab photos of Shotgun – 30 photos  
Firearms Report July 23, 2021, -10 pages  
Mercedes GLS processing – 138 photos  
Lab photos of victim's clothing – 200 photos  
Evidence processing – 25 photos  
Trace evidence report June 15, 2021 – 3 pages  
Trace evidence report June 18, 2021 – 2 pages  
Trace evidence report June 15, 2021 – 2 pages  
Trace evidence report October 25, 2021 – 2 pages  
David Greene body cam recording – 57 mins.  
L21-09074 Photos of inside feed room – 304 photos

**Evidence collected to include:**

- 1 - shotshell was located on floor in the feed room
- 2 - 1 cartridge case S&B .300 AAC BLK, on gravel between overhang and kennels
- 3 - 1 cartridge S&B, on gravel between overhang and kennels
- 4 - 1 cartridge S&B, where gravel meets grass between overhang and kennels
- 5 - 1 cartridge S&B, on the dirt near the female's right side
- 6 - 1 cartridge S&B, on the dirt near the female's right side
- 8 - Tire impressions consistent with dog's caretaker vehicle
- 12 - Brain matter in grass between gravel and female

Murdaugh page 3 of 10

- 13 - Possible bullet strike in gravel between the overhang and dog kennels with

metal fragments recovered  
#18 GSR kit from Richard Murdaugh  
#19 white t-shirt  
#20 pair of green shorts  
#21 pair of red/yellow/white Nike tennis shoes  
#8 one fired bullet near tire impression in dirt  
#9-10 two fired 12 GA shotshells  
#12 one fired bullet from dog bedding  
#13 One buckshot pellet from table storage room window  
#22 Benelli Model Super Black Eagle 3, semiautomatic 12 GA with one unfired shotshell  
Item 35-39 Five fired 300 Blackout cartridges from ground at side entrance door  
48 birdshot pellets from left shoulder and head of Paul  
One piece of plastic from shoulder and head of Paul  
One combination wad from left axilla of Paul  
Scene diagram (See PP #1)







[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

■ [REDACTED]

■ [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

[REDACTED]





[REDACTED]

Murdaugh page 9 of 10

[REDACTED]



In this double shooting I would always look for back spatter on the weapons and the clothing of the shooter if the clothing worn at the time of the shooting is known and available, and if the weapons are known and available. For there to be little to no back spatter on the shooter or they're clothing is certainly possible for this incident.

If you have any questions on this report, please contact me at the above listed contact numbers.

Respectfully,

Tom Bevel  
Certified Crime Scene Reconstructionist (awaiting 2<sup>nd</sup> recertification test under development)

Technical review by Ken Martin

Attachment PP



*State of South Carolina v. Richard Alexander Murdaugh*  
Indictment Nos. 2022-GS-15-00592, -593, -594, and -595  
Motion to Exclude False Testimony about Evidence Destroyed by the State

# **EXHIBIT J**

**(SLED case narrative)**

# SOUTH CAROLINA LAW ENFORCEMENT DIVISION



## Narrative

### SLED Lab # L21-09074

---

Date: 02/14/2022	Time: 11:39 am	Conv With:	Email:
Type: Case Event		Phone:	Ext:
Analyst: Sarah Zapata		Affiliations:	

Extracts dried and prepared for return.

---

Date: 02/15/2022	Time: 3:58 pm	Conv With: Lt. Charles Ghent (SLED Low Country Region)	Email:
Type: Case Event		Phone:	Ext:
Analyst: Lt. Kukila N. Wallace		Affiliations:	

Per a verbal conversation with Lt. Ghent on 02/08/22, Item 19 and it's sub-items have been requested by Tom Bevel of Bevel, Gardner and Associates for further examination for BPA. Item 19 was visually examined by me and Lt. Todd Schenk on 02/15/22 to determine the condition of the item post LCV processing. A photo of the shirt was provided to Lt. Ghent via cell phone. Lt. Ghent advised that he would follow-up with Mr. Bevel to determine how to proceed. KNW 02/15/22

---

Date: 04/11/2022	Time: 10:46 am	Conv With:	Email:
Type: Email		Phone:	Ext:
Analyst: Emily B. Reinhart, Captain		Affiliations:	

Notified via email on 4/10/22 by Lt. Charles Ghent that he would like to schedule a meeting with DNA staff to discuss lab results with Creighton Waters from the SCAG Office. Lt. Hash has confirmed that she, Sarah Zapata and Rachel Nguyen are available on Wednesday, April 20th. I notified Lt. Ghent. EBR

---

Date: 04/27/2022	Time: 10:08 am	Conv With:	Email:
Type: Document Request		Phone:	Ext:
Analyst: Lorri M. Johnson		Affiliations:	

D 2022-089; L21-09074

Today, I sent 8 DNA STRmix files to Assistant Deputy Attorney General Creighton Waters, at the request of Sarah Zapata.

LMJ  
4/27/2022

---

Date: 08/11/2022	Time: 2:07 pm	Conv With:	Email:
Type: Case Event		Phone:	Ext:
Analyst: Lt. Jeffrey A. Crooks		Affiliations:	

Lt. Crooks approved the wording for the Item 105.4 and 105.6 results that includes specific item information to clarify items being referred to.

*State of South Carolina v. Richard Alexander Murdaugh*  
Indictment Nos. 2022-GS-15-00592, -593, -594, and -595  
Motion to Exclude False Testimony about Evidence Destroyed by the State

# EXHIBIT K

(Photo, white cotton T-shirt completely  
blue)





*State of South Carolina v. Richard Alexander Murdaugh*  
Indictment Nos. 2022-GS-15-00592, -593, -594, and -595  
Motion to Exclude False Testimony about Evidence Destroyed by the State

# **EXHIBIT L**

(State's expert report, March 29, 2022)



Tom Bevel, President  
Ross M. Gardner, Vice President

Partners:  
Tom "Grif" Griffin  
Craig Gravel  
Jonathyn Priest



Associates:  
Kim Duddy  
Ken Martin  
Cele Rossi

Tuesday, March 29, 2022

David Owen, III  
[dowen@sled.sc.gov](mailto:dowen@sled.sc.gov)

Charles Ghent  
[cghent@sled.sc.gov](mailto:cghent@sled.sc.gov)

Ref: Homicide Investigation of Paul and Margaret Murdaugh  
BGA Case 2022-01 SC

As requested by your office a physical evidence and scene analysis has been conducted on the above case.

Crime Scene Reconstruction (CSR) is defined as the forensic science discipline, which employs the scientific method of analysis to identify the best explanation and sequence of objective actions for the incident in question. Information from all sources such as scene documentation, physical evidence, lab analysis, autopsy, photographs, and statements, are considered in identifying viable hypotheses that are possible within the context and limited universe of this crime scene. CSR provides for formal objective analysis versus subjective analysis of complex issues and in a holistic approach.

Should additional evidence or information become available, the analyst will consider its importance and may revise portions of the event analysis.

The physical evidence analysis is then used, as a benchmark, upon which any statements may be compared against.

**Victims:** Margaret Murdaugh  
WF, [REDACTED]  
DOD: 06-07-2021, DOB: [REDACTED]

Paul Murdaugh  
WM [REDACTED]  
DOD: 06-07-2021, DOB: [REDACTED]

**Husband/Father to victims:** Richard Alexander Murdaugh  
DOB: [REDACTED]

**Location:** 4147 Moselle Road Islandton, SC 29929  
Near dog kennels on this property

**Incident Date:** June 07, 2021

Direct Mailing Address: Billing Address: 7601 Sunset Sail Ave. Edmond, OK 73034  
Voice: 405-447-4469 • Email: [bevelgardner@cox.net](mailto:bevelgardner@cox.net)

Murdaugh page 2 of 12

**Brief Case Synopsis:**

Alex Murdaugh stated that he drove to the dog kennel on his property and found his son and wife shot and non-responsive. Alex touched both victims in checking them for life signs. Alex stated he tried to roll Paul but could not. He called 911 to report the deaths and drove to his house to get a shotgun for protection and drove back to the scene to wait for first responders to arrive.

**The following information was considered in this analysis:**

First interview with Alex Murdaugh – 34:45 mins.  
Crime Scene Investigation Summary – 46 pages  
Autopsy Report for Paul Murdaugh – 6 pages  
Autopsy Report for Margaret Murdaugh – 8 pages  
DNA Report of June 25, 2021 – 18 pages  
DNA Report of July 25, 2021 – 17 pages  
Evidence processing EP – 449 photos  
Evidence processing – 357 photos  
Paul autopsy photos – 34 photos  
Margaret autopsy photos – 38 photos  
L21-09074 Lab photos of Shotgun – 30 photos  
Firearms Report July 23, 2021, -10 pages  
Mercedes GLS processing – 138 photos  
Lab photos of victim's clothing – 200 photos  
Evidence processing – 25 photos  
Trace evidence report June 15, 2021 – 3 pages  
Trace evidence report June 18, 2021 – 2 pages  
Trace evidence report September 2021 – 2 pages  
Trace evidence report October 25, 2021 – 2 pages  
David Greene body cam recording – 57 mins.  
L21-09074 Photos of inside feed room – 304 photos  
View Alex t-shirt, shorts & cuttings at Norman, OK Police Lab 1501 W Lindsey 03-10-2022  
Forensic mannequins with dowel rods placed corresponding to the autopsy for bullet paths were used for an understanding of possible body positions when deceased were shot

**Evidence collected to include:**

- 1 - shotshell wad located on floor in the feed room
- 2 - 1 cartridge case S&B .300 AAC BLK, on gravel between overhang and kennels
- 3 - 1 cartridge S&B, on gravel between overhang and kennels
- 4 - 1 cartridge S&B, where gravel meets grass between overhang and kennels
- 5 - 1 cartridge S&B, on the dirt near the female's right side
- 6 - 1 cartridge S&B, on the dirt near the female's right side



Murdaugh page 3 of 12

- 8 – Tire impressions consistent with dog’s caretaker’ vehicle
- 12 – Brain matter in grass between gravel and female
- 13 – Possible bullet strike in gravel between the overhang and dog kennels with metal fragments recovered
- #18 gunshot residue (GSR) kit from Richard Murdaugh
- #19 white t-shirt
- #20 pair of green shorts
- #21 pair of red/yellow/white Nike tennis shoes
- #8 one fired bullet near tire impression in dirt
- #9-10 two fired 12 GA shotshells
- #12 one fired bullet from dog bedding
- #13 One buckshot pellet from table storage room window
- #22 Benelli Model Super Black Eagle 3, semiautomatic 12 GA with one unfired shotshell
- Item 35-39 Five (5) fired 300 Blackout cartridges from ground at side entrance door
- 48 birdshot pellets from left shoulder and head of Paul
- One piece of plastic from shoulder and head of Paul
- One combination wad from left axilla of Paul
- Scene diagram (See PP #1)

[REDACTED]

[REDACTED]  
[REDACTED]

[REDACTED]  
[REDACTED]

[REDACTED]  
[REDACTED]

[REDACTED]  
[REDACTED]

Murdaugh page 4 of 12

5 [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED]

- [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED]

- [REDACTED]
  - [REDACTED]
  - [REDACTED]
  - [REDACTED]
  - [REDACTED]
  - [REDACTED]
  - [REDACTED]
  - [REDACTED]
  - [REDACTED]
  - [REDACTED]
  - [REDACTED]
  - [REDACTED]

- [REDACTED]
  - [REDACTED]
  - [REDACTED]
  - [REDACTED]
  - [REDACTED]







[REDACTED]

**IQ-4:** Are the bloodstains on Alex's white t-shirt consistent with back spatter from a gunshot?

**Data IQ-4:**

1. Eight (8) areas that are positive for blood using LCV on front of t-shirt (See PP #30-32)
2. Approximately 40+ misting size blood spatter
3. Edges of stains appear slightly diffuse from the application LCV and or body sweat

**Opinion IQ-4:** Some of the stains on the white t-shirt are consistent with transfers and 100+ stains are consistent with spatter on the front of the t-shirt (See PP #30-32)

**IQ-5:** Are the 100+ spatter stains on the front of t-shirt the result of using the t-shirt to wipe the face?

**Data IQ-5:**

1. In the Greene bodycam the front bottom of the t-shirt is observed to be pulled up over the face to wipe the face (See PP #33)
2. The front bottom of the t-shirt has transfer type blood staining consistent with wiping a sweaty face that has blood on the face, but spatter stains do not contact the face as the spatter stains areas folds over in contact with the t-shirt below the face
3. If the spatter areas did contact the face the transfer of blood onto the t-shirt would look very similar to the transfer on the front bottom of the shirt and they do not
4. If the t-shirt is raised high enough for the spatter stain areas to contact the face, then the front bottom edge of the t-shirt will not have transfer blood on it, and it is the only area with transfers in a large enough area to be consistent with wiping the face

**Opinion IQ-5:** The 100+ spatter stains on the front of the t-shirt are **not** from wiping the face with the t-shirt.

**IQ-6:** What type of blood staining would be expected to be on the face from checking two deceased bodies for a pulse or trying to roll one body over to its back but failing to do so?

**Data IQ-6:**

1. As neither person is alive, and no CPR is attempted there will be no expectorate blood forced out of the mouth, nose or wounds
2. In attempting to roll Paul's body over and letting go the blood on the cement or gravel when the body falls into any blood accumulated on the cement or gravel the impact will produce spinning type stains on the cement and none on the gravel and if any spatter stains occurred, they will be directed to the shoes, legs or shorts if kneeling and won't rise high enough to cover the front of the t-shirt  
In handling the bodies, the hands may get blood on them and would create transfer patterns if still wet  
blood onto anything they touch, but this will not create spatter stains







**Opinion IQ-8:** Many different factors can affect and alter bloodstains before they completely dry and become "set or fixed" on clothing. Once the stains are completely dry and are set, in most instances will look the same over time even after washing and handling them.

[Redacted]

[Redacted]

[Redacted]





[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]



Murdaugh page 12 of 12

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**\*IQ-9: Above** The t-shirt has been evaluated by six (6) recognized Bloodstain Pattern experts all agreeing the best explanation for the stains on the shirt are spatter from approximately the bottom third up to the top of the shirt and transfers on the bottom third down to the hem of the t-shirt. All agree they cannot identify some other mechanism to create the distribution and sizes of the questioned stain spatter.

If you have any questions on this report, please contact me at the above listed contact numbers.

Respectfully,

Tom Bevel  
Certified Crime Scene Reconstructionist (awaiting 2<sup>nd</sup> recertification test under development)

Technical review by Ken Martin

Attachment PP

NOV 23 2022 PM12:03  
COLLETON CO GS, REBECCA H. HILL

STATE OF SOUTH CAROLINA  
COUNTY OF COLLETON

) IN THE COURT OF GENERAL SESSIONS  
) FOURTEENTH JUDICIAL CIRCUIT  
)

The State of South Carolina,  
Plaintiffs,

vs.

Richard Alexander Murdaugh,  
Defendant.

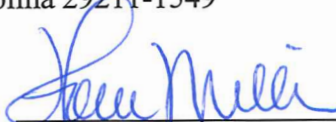
Indictment Nos. 2022GS1500592 – 00595

**CERTIFICATE OF SERVICE**

I, Holli Miller, paralegal to the attorney for the Defendant, Richard A. Harpootlian, P.A., with offices located at 1410 Laurel Street, Columbia, South Carolina 29201, hereby certify that on November 23, 2022, I did serve by placing in the U.S. mail, first class postage affixed thereto (with a courtesy copy sent electronically), the following documents to the below mentioned person:

Document: Motion to Exclude Testimony About Evidence Destroyed by the State

Served: Creighton Waters, Esquire  
Office of The Attorney General  
Rembert C. Dennis Building  
Post Office Box 11549  
Columbia South Carolina 29211-1549  
cwaters@scag.gov

  
\_\_\_\_\_  
Holli Miller