

Department of General Services  
 Division of Consolidated Laboratory Services  
**BUREAU OF FORENSIC SCIENCE**

**November 12, 1982**

**CERTIFICATE OF ANALYSIS**

Central Laboratory  
 P. O. Box 999  
 Richmond, Virginia 23208  
 Tel. No. (804) 786-4707

TO: **Newport News Police Department**  
**Attention: Detective C. N. Pruitt & Lt. B. Campbell**  
**224 26th Street**  
**Newport News, VA 23607**

Your Case # **174996**

82-1743  
 FS Lab # **82T-0977**

Victim(s): **[REDACTED]**

Examiner: **Peter M. Marone**

Suspect(s): **PHILMON, William**

Date Received **9-7-82**

Evidence Submitted By: **Specialist L. M. Hudson**

- Item #1 - One (1) pair of underpants.
- Item #2 - One (1) black slip.
- Item #3 - One (1) purple dress.
- Item #4 - One (1) pair of panty hose.
- Item #5 - One (1) black bra.
- Item #6 - One (1) plastic straw.
- Item #7 - One (1) brown seat cushion cover.
- Item #8 - One (1) brown pillow.
- Item #10- Physical Evidence Recovery Kit from **[REDACTED]**.
- Item #11- Clothing from **William Philmon**.
- Item #12- Physical Evidence Recovery Kit from **William Philmon**.

**RESULTS OF EXAMINATION:**

- Items #1, #2, #3, #4, #7, #8 - No seminal stains, tears or characteristically Caucasian hairs were found on the underpants (Item #1), black slip (Item #2), purple dress (Item #3), panty hose (Item #4), brown cushion cover (Item #7) or brown pillow (Item #8).
- Item #5 - Small tears were found on the front of the black bra. No characteristically Caucasian hairs or stains were found.
- Item #6 - No blood group factors were found on the plastic straw.

IN FUTURE CORRESPONDENCE REFERENCE THIS MATTER PLEASE REFER TO THE FS LAB # ABOVE

RESULTS OF EXAMINATION: (continued)

Item #10- Spermatozoa were identified on the vaginal and thigh-vulva smears. No spermatozoa were found on the lip-oral cavity smear or on a smear made from the vaginal washings. Results of tests on the saliva swabs and the blood sample of [redacted] identify her as an A secretor. Results of typing tests on the vaginal swabs indicate the secretions are type A. Results of tests on the thigh-vulva swabs and vaginal washings were inconclusive. No blood group substances were found on the swabs from the lips.

One (1) hair in the pubic combings were consistent with the pubic hair sample of William Philmon (Item #12). The remaining hairs were consistent with the pubic hair sample of [redacted] (Item #10).

Item #11- No stains or characteristically Negroid hairs were found on the blue cap, black T-shirt or blue pants.

Results of chemical tests on a stain in the front of the white brief style underpants indicate the presence of seminal fluid, however no spermatozoa were found in an extract of the stain. Results of typing tests were inconclusive.

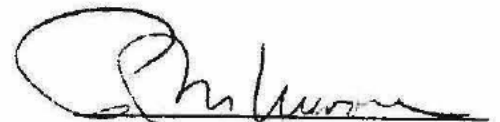
Item #12- Results of tests on the saliva swabs and blood sample from William Philmon identify him as an A secretor. No blood group substances were found on the pubic area swabs. No characteristically Negroid hairs were found in the pubic combings.

The evidence has been returned to the Tidewater Regional Laboratory where you may pick it up.

PMM:smp

cc: Tidewater Regional Laboratory

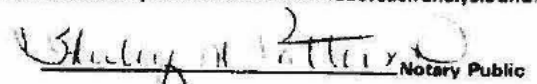
STATE OF VIRGINIA  
CITY/COUNTY OF Richmond, to-wit:



Forensic Scientist

THIS day personally appeared before me, Shirley M. Patterson, a notary public, in and for said city/county in the Commonwealth of Virginia, Peter M. Marone, who signed the foregoing Certificate of Analysis, before me, and after being duly sworn, made oath (1) that he performed the analysis and/or examination the results of which are herein contained, (2) that said analysis and/or examination was performed in a laboratory operated by the Division of Consolidated Laboratory Services of the Commonwealth or authorized by such Division to conduct such analysis and/or examination and (3) that this Certificate of Analysis is true and correct.

Given under my hand this 12th day of November, 19 82.

  
Notary Public

My commission expires September 4, 19 83

1 MR. KERNS: Judge, I need  
2 Detective Hudson first, but I'm calling  
3 Peter Marone out of order to get him to  
4 testify and I'll be moving to introduce  
5 a certificate of analysis after I've  
6 put on Detective Hudson.

7 MR. AILSWORTH: I don't have  
8 any objection.

9 MR. KERNS: Or subject  
10 to cross examination of Detective Hudson.

11 MR. AILSWORTH: I would only  
12 ask that the certificate be withheld  
13 from introduction until such time as  
14 the chain has been established.

15 THE COURT: All right.

16  
17  
18  
19 PETER M. MARONE, after being  
20 first duly sworn, testified in behalf of the  
21 Commonwealth, as follows:

22 DIRECT EXAMINATION

23 BY MR. KERNS:

24 Q Mr. Marone, tell us your full name.  
25

1 A My name is Peter Marone.

2 Q Could you give us the benefit  
3 of your education from high school on? Exclude high  
4 school, but start with college.

5 A Surely. I've got a background --

6  
7 MR. AILSWORTH: Your Honor,  
8 I'd stipulate that the witness is  
9 qualified to testify with respect to  
10 certain scientific evidence.

11 MR. KERNS: I'd ask that he  
12 be qualified as an expert in serology  
13 and in the analysis of hair samples.

14 THE COURT: Stipulate that?

15 MR. AILSWORTH: Yes, we will  
16 stipulate that.

17 THE COURT: Qualified as an  
18 expert in urology?

19 MR. KERNS: Serology.

20 THE COURT: That's the blood,  
21 isn't it?

22 MR. KERNS: Right.

23 THE COURT: And hair samples?

24 MR. KERNS: Right.  
25  
26

1 THE COURT: All right.

2  
3 BY MR. KERNS:

4 Q Did you analyze two PERK kits,  
5 one done on a [REDACTED] and one on William  
6 Philmon?

7 A Yes, I did.

8 Q Can you identify that document?

9 A Yes. This is my report on  
10 the tests I conducted. It bears my signature.

11 Q All right. What do the  
12 tests show, specifically the results of the analyses  
13 of Item 10 and Item 11?

14 A Item 10 is the physical evidence  
15 recovery kit from [REDACTED]. Spermatozoa were found  
16 on the vaginal smear and the thigh and vulva smear.  
17 I took the swabs, which were also in the kit, and  
18 conducted secretion typing tests on them. The  
19 secretions on the vaginal swab and the thigh and  
20 vulva swab were Type A secretions. The saliva sample  
21 from her was also Type A. And that in conjunction  
22 with the blood sample identified her as a Type A  
23 secretor. So she's Type A blood and she secretes that  
24 type in her fluids. The pubic combings contained one  
25

1 hair which was different from hers and was consistent  
2 with that of Mr. Philmon. It was a red hair.

3 Q And consistent in how many  
4 characteristics that you used to analyze hair?

5 A Well, we don't specifically  
6 count the number of characteristics the comparison  
7 is made. It's not a certain number. The comparison  
8 is made based on the fact of a number of characteristics.

9 Q What exactly in this case,  
10 with this hair, what did you look at to find that  
11 you concluded that it was consistent with Mr. Philmon's?

12 A All right. The comparisons  
13 are specifically made in conjunction with known, in  
14 this case, pubic hair samples. The human hair will  
15 exhibit many, many different characteristics. All  
16 of the hairs of the particular sample will not have  
17 all the same characteristics, so what we're talking  
18 about are ranges of characteristics, that is, the  
19 diameter of the hair, the actual coloration of the  
20 hair, whether it appears to be blond or brown or red  
21 or what-have-you, the inner structure of the hair,  
22 what the pigment granules themselves look like, what  
23 the inner core, referred to as the medulla, looks  
24 like, its diameter, whether it is continuous, whether  
25

1 it's interrupted. All of these things are  
2 characteristics that are taken into account with  
3 the examination. Again, the known sample of hairs -- I'm  
4 looking at fifteen hairs -- all of them may or may  
5 not have the same characteristics. It's just the  
6 way a person's hair grows. So when we're looking  
7 at all these various characteristics, an unknown hair,  
8 to be considered consistent or exhibiting the same  
9 microscopic characteristics, must have characteristics  
10 which fall into that known sample with no significant  
11 differences. Doesn't have to have all of them, but  
12 most of them have to be there.

13 Q So one of the hairs in [REDACTED]  
14 [REDACTED]'s pubic combings was consistent with the  
15 known sample of the defendant?

16 A Yes. It was a Caucasian hair  
17 noticeably different from hers, also consistent  
18 with his sample.

19 Q Was there sufficient amount  
20 of spermatozoa or seminal fluid for you to tell what  
21 the contributor of that was in relationship to type?

22 A Well, there's a problem  
23 whenever we're looking at vaginal swabs or, in this  
24 case, the thigh and vulva swabs. The problem is  
25

1 that although I have identified seminal fluid as  
2 being present, the type that we're getting from  
3 these secretions is a mixture; that is, we know there  
4 is vaginal fluid there since the swab came from  
5 the vaginal area, we know seminal fluid is there since  
6 we identified spermatozoa. So the type I'm picking  
7 up could be a mixture of the two fluids. We know  
8 she is a secretor. From the saliva swab from Mr.  
9 Philmon, I also determined he's a Type A secretor.  
10 So to say the secretions I typed are from the male  
11 as opposed to the female, I really can't say.

12 Q A male A secretion and female A  
13 secretion would create what?

14 A A.

15 Q What about with respect to  
16 Item 11? What did your analysis find there?

17 A The white underpants, the  
18 brief style underpants indicated -- the tests on the  
19 stain indicated the presence of seminal fluid.  
20 However, in attempting to observe spermatozoa, I  
21 was unable to, so I extracted the stain and no  
22 spermatozoa were found on it.

23 Q And that stain was from  
24 the undershorts of the suspect, Mr. Philmon?



1                   A           That's correct.

2  
3                   MR. KERNS: Answer any  
4                   questions --

5  
6           BY THE COURT:

7                   Q           You found what there, please?

8                   A           Tests for identifying seminal  
9                   fluid are two-fold: one is the color test, looking  
10                  for the components of seminal fluid; and following  
11                  it up by confirmatory test, actually trying to  
12                  identify spermatozoa. The color test, seminal fluid  
13                  was present, but in trying to extract spermatozoa,  
14                  I was unable to do so.

15                  Q           Is that because of the lack,  
16                  it wasn't there or --

17                  A           The amount of stain would be  
18                  one thing. The fact I have to mechanically try to  
19                  extract these from the stains, that's another as  
20                  opposed to a vaginal smear, where the material is  
21                  placed right on the slide.

22                  Q           So you couldn't say  
23                  it wasn't there, you just couldn't get it?

24                  A           I couldn't find it.  
25

1 MR. KERNS: Answer any  
2 questions Mr. Ailsworth may have.

3  
4 CROSS EXAMINATION

5 BY MR. AILSWORTH:

6 Q Doctor, is it Mar one or Mar oney?

7 A Mar one.

8 Q My name is Mr. Ailsworth.

9 I'm the lawyer appointed by the Court to represent  
10 the defendant in this matter and I have a few  
11 questions for you. Do you—in the course of  
12 conducting the investigation or course of examining  
13 the physical evidence that was provided to you  
14 relative to this matter, you had twelve different  
15 items submitted to you; is that correct?

16 A Yes, sir.

17 Q Now, with respect to the  
18 underpants, the black slip, the dress, pantyhose,  
19 brown cushion cover and on the brown pillow that  
20 were submitted, you found no seminal stains, no tears  
21 or no characteristically Caucasian hairs; is that  
22 correct?

23 A Yes, sir.

24 Q And with respect to Item 11,  
25

1 you had occasion to examine a blue cap, black T-shirt  
2 and some blue pants. Correct?

3 A Yes, sir.

4 Q And is it not also correct  
5 that you found no stains nor any characteristically  
6 Negroid hairs on those items?

7 A Yes, sir. That's correct.

8 Q You also examined, by way  
9 of Item 12, the public combings that allegedly  
10 came from William Philmon and you found no  
11 characteristically Negroid hairs in that sample; is  
12 that correct?

13 A That's correct.

14 Q Going back to Item 10, you say  
15 you found one hair that was consistent with the  
16 sample -- I believe the exact language you used in  
17 the report was that one hair was consistent, one  
18 hair in the public combings was consistent with the  
19 hair of Mr. Philmon?

20 A That's correct.

21 Q It is true that hair could be  
22 consistent with any number of people?

23 A I could not limit it as to  
24 coming just from him.  
25

1 Q In fact, could be consistent  
2 with several thousand people, taking the world  
3 population at large?

4 A A specific number, I would  
5 hesitate to give.

6 Q Some experts have estimated  
7 any given hair sample can be consistent with two  
8 million people?

9 A That would depend on the  
10 particular color, red, as opposed to brown as,  
11 obviously, brown would be more common than blond,  
12 more common than red.

13 Q So in fact, what you're  
14 telling us is you found a hair that was not  
15 consistent with the sample from the female?

16 A That's correct.

17 Q And it was consistent with  
18 the hair that you had, sample that allegedly came  
19 from Mr. Philmon?

20 A That's correct.

21 Q But you cannot tell the Court  
22 that the hair you found in the pubic hair sample that  
23 came from [REDACTED] was, in fact, a hair from the  
24 body of Mr. Philmon?  
25

1                   A           That's correct. I cannot  
2                   say that.

3                   Q           In fact, it would be your  
4                   expert opinion that no one could say that conclusively?

5                   A           Yes. That's correct.

6                   Q           Irrespective of the scientific  
7                   devices that may be used to analyze or examine the  
8                   hair sample?

9                   A           That's correct.

10                  Q           Now, was your examination  
11                  strictly microscopic?

12                  A           Yes, sir.

13                  Q           There are other methods of  
14                  examining hair samples, are there not?

15                  A           Yes, sir.

16                  Q           In fact, you can use neutron  
17                  activation analysis to examine hair samples?

18                  A           That's a method of analysis  
19                  that was used some time ago. It's since been found  
20                  not to be reliable for examining biological samples  
21                  such as hair.

22                  Q           What about scanning electron  
23                  microscope?

24                  A           It's essentially a different  
25

1 type of microscopic examination. It's much more  
2 highly magnified.

3 Q What about gas chromatography?

4 A I couldn't think of any  
5 particular type of test that one would conduct with  
6 gas spectrograph.

7 Q What about mass spectrometer?

8 A I wouldn't be familiar with  
9 what you're looking for. You're looking at  
10 millions and millions of compounds. The mass spectrometer  
11 would be trying to identify one particular compound.

12 Q But there are methods, are  
13 there not, that can be more precise than mere  
14 microscopic examination, the electron microscope, for  
15 example; is that correct?

16 A All depends on what you're  
17 looking for, yes, sir.

18 Q Well, if you're trying to  
19 examine two hair samples and determine if, in  
20 fact, they're from one and the same person, there  
21 are methods that could be used, for example, with  
22 the electron microscope that would give you greater  
23 magnification that would enable you to make a better  
24 comparison?  
25

1                   A           Greater magnification  
2 doesn't necessarily mean better comparison.

3                   Q           But it would allow you to  
4 magnify the sample to a greater extent?

5                   A           Absolutely.

6                   Q           With respect to the stains  
7 that you found in the underwear sample, you don't  
8 have any way of comparing that stain to the fluids  
9 that were obtained from the swabs of the vagina of  
10 [REDACTED] [REDACTED]?

11                  A           That's correct, sir.

12                  Q           There's no way you can make  
13 a comparison on that; is that correct?

14                  A           That's correct.

15  
16                               MR. AILSWORTH: I don't have  
17 any other questions.

18  
19 BY THE COURT:

20                  Q           You did say it was red and  
21 Caucasian?

22                  A           Yes, sir.

23                  Q           My understanding, from listening  
24 to other experts in your field, the reason you can't  
25

1 say specifically that it came from this or that  
2 person is because you'd have to examine every redhead  
3 in the world, wouldn't you?

4 A Yes, sir.

5  
6 THE COURT: All right, Mr. Kerns?

7 MR. KERNS: I don't have any  
8 further questions.

9  
10 (Witness excused)

11  
12 MR. KERNS: It's my desire to  
13 introduce this, subject to the  
14 examination of Detectives Hudson and  
15 Pruitt.

16 THE COURT: All right. Leave  
17 it with the Clerk. What are they going  
18 to testify, they took the PERK kits to --

19 MR. KERNS: Yes, sir.

20  
21 (Whereupon, court was adjourned  
22 for luncheon recess at 12:20 o'clock  
23 p.m., to be reconvened at 1:30 o'clock p.m.)  
24  
25