## **Edward Honaker**

Honaker was tried and convicted in February 1985 in Nelson County, Virginia, on seven charges: two counts of rape, and one each of using a pistol while committing rape, forcible sodomy, aggravated sexual battery, abduction, and using a pistol while committing abduction. Elmer Gist, Jr., of the Virginia Bureau of Forensic Science testified about both the serology and the hair evidence.

The serology example consisted primarily of a vaginal swab; Gist was unable to determine either secretion or blood type. Cigarette butts were also collected at the scene of the rape, and Gist typed the saliva on the butts as type O. The victim was type O, but Gist was unable to determine her secreter status.

The hair evidence consisted of hair and fibers collected from the victim's body/clothing or the defendant's car. Gist used microscopic hair comparison to compare at least ten hairs, only one of which was consistent with the defendant:

- V's pubic hair combings: 1 Caucasian hair, 2 fragments (of which 1 hair + 1 fragment consistent w/ V, 1 fragment too short for comparison)
- V's shorts: 2 Caucasian head hairs (of which 1 was consistent w/ D, 1 consistent w/ V), one animal hair, one animal hair fragment
- V's blouse: 2+ Caucasian head hairs (of which 1 was consistent w/ V, others were inconsistent with both V and D)
- Clothing in D's vehicle: multiple Caucasian hairs (of which none were consistent w/ V; not compared w/ D); multiple animal hairs
- Vacuum sweepings of D's vehicle: multiple Caucasian hairs (of which none were consistent w/ V; not compared w/ D); multiple animal hairs

Nonetheless, Gist testified that the hair found on the victim matched the defendant: "One of the Caucasian head hairs found on the shorts was consistent with the head hairs reportedly from the defendant. That means the hair either originated from him or from another person of the exact same race who had the same color, the same, physical visual characteristics and the same microscopic characteristics. It is unlikely that that hair would match anyone other than the defendant; but it is possible." (TT 215–16, HON-001088.pdf)

On cross, defense counsel asked Gist whether hair evidence was as exact as fingerprinting. Gist replied, "It's a guaranteed and precise analysis but we cannot pinpoint the source of the hair." (TT 223, HON-001088.pdf)

The prosecutor referenced the hair match in both his opening and closing statements:

[Opening]: "She gave Deputy Hill the shorts and fortunately they matched them up at the lab. There was one of his hairs right on the shorts in addition to her hair. Absolutely puts him there at the scene. Now hair identification is not a positive, absolute. It's just the best that we could come up with under the circumstances. It's a piece of circumstantial evidence, but you give the weight to it. The chemist will tell you that it's highly unlikely that anybody else left that combination hair there." (TT 55–56, HON-001503.pdf)

[Closing]: "What do the facts show? The shorts, and the chemist came in and told you that those hairs on those shorts matched his hair." (TT 387, HON-001296.pdf)

In denying defendant's post-trial motion to strike, the judge also relied on the hair evidence: "In the opinion of the court the evidence against you was overwhelming. You couldn't get around the scientific evidence that one of your hairs was found on her person. With all of the other evidence. Now, that alone would not have convicted you but that with all of the other evidence there is no way the jury could have gotten around it. So that's the reason I say the evidence was clearly beyond a reasonable doubt that you are guilty." (ST 29, HON-001296.pdf)

		Nichols - Direct 213
	1	A These are my shorts, my Op shorts.
ı	2	Q These are the ones you gave to Deputy Hill?
	3	A Yes. And this is my shirt, the shirt I had
	1	on.
1	5	Q I don't have any further questions.
,	6	MR. FARRAR: No questions.
	7	WITNESS STOOD ASIDE
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	9	ELMER GIST, JR., Having been duly sworn was
	10	called on behalf of the Commonwealth and testified as follows:
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i.	12	DIRECT EXAMINATION
	13	By: Mr. Turpin
	14	Q Would you tell us who you are, please?
	15	A Yes, sir, my name is Elmer Gist, Jr.
	16	Q And, where are you employed?
	6	A I am employed by the Commonwealth of Virginia
	LØ .	Roanoke, Virginia. I work for the Bureau of Forensic Science,
	19	which is the State Laboratory for the Commonwealth.
	20	Q How long have you been so employed?
	21	A Just under eleven years.
	22	Q And, during the course of that employment
	23	have you had occasion to - well, let me get a little bit of your
	21	educational background. What is your educational background?
	25	A I hold a Bachelor of Science Degree in Law

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Enforcement from the American University in Washington, D. C. I hold a Masters of Science Degree in Special Studies in forensic, or crim laboratory science, from George Washington University, also Washington, D. C.

Q Now, in the course of your occupation what is your actual duties?

A I am responsible for the isolation, identification and typing of blood, body fluid stains, the isolation and identification and comparison of hairs and natural fibers.

Q Now, do you work for any other crime lab?

A Yes, sir, I work for the F.B.I. Crime

Laboratory in the serology of blood and body fluid testing unit
for a period of approximately eight years.

Q How about training?

A I received approximately six months training at the F.B.I. and I received two years of training with the Commonwealth of Virginia, especially in the area involving hair and fiber identification comparisons.

Q Have you previously testified as an expert in any of the Circuit Courts in this State?

A I have testified in western Virginia, in northern Virginia, the Tidewater area, approximately a hundred and eighty times total.

Q Is that concerning the field of blood, body fluids and hair identification?

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A That is correct.

Q Do you also teach in this field some?

A Yes, I teach forensic serology, blood, body fluid identification at Virginia Western Community College in Roanoke, Virginia. I also teach forensic serology in New River Community College in Dublin, Virginia. I also teach a course in hair and fiber identification at Virginia Western Community College and also at New River Community College in Dublin.

Q Your Honor, at this time I am going to move to qualify him as an expert.

THE COURT: He is a qualified expert. You may ask him his opinion in his field.

Q Now, in the course of your employment were certain samples, I am going to ask you to come and look at them right here. They have been identified by Deputy Hill, exhibits one(1) through eighteen(18). Were these items brought to your lab for analysis?

A Yes, sir, items were brought out...

Q Did you mark each one of the items and was there a request sheet submitted for those?

A Yes, sir, there was a request sheet, which I have copies of.

Q In addition to that did you return some microscopic slides?

A Yes, sir, I did and these are the slides.

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 $\ensuremath{\mathtt{Q}}$  I move that they be called Commonwealth's Exhibit thirty-two(32).

THE COURT: They will be received in evidence

COMMONWEALTH'S EXHIBIT Number thirty-two(32) so received by the Court and marked at this time by the Clerk.

Q In the course of your employment did you perform certain standardized tests on these various items that were submitted to you?

A Yes, sir, I did.

Q Are these the recognized tests within your

field?

A That's correct, they are.

 $\ensuremath{\mathtt{Q}}$  Now, would you tell us what samples were submitted to you and what your test results were?

A Yes, sir. I received first of all an initial submission, items one(1) through three(3), as I have them labeled. A physical evidence recovery kit reportedly from Angela Nichols. A pair of shorts and a blouse. I subsequently received a sleeping bag, pants and shirt, blanket, jacket, another blanket, pillow case, a blood sample, reportedly from the defendant. Hair samples reportedly from the defendant, two cigarette butts, a match stem, two pieces of cloth, vacuum sweepings reportedly from

a vehicle, and then subsequently I received a hair sample reportedly from Angela Nichols. The physical evidence recovery kit was examined by me. I found the following: Spermatozoa which are male reproductive cells were found on the vaginal slides reportedly from Angela D. Nichols. I found no semen in the mouth rinse. I found one caucasian hair and two caucasian hair fragments in the pubic hair combings, reportedly from Angela D. Nichols. I found the blood sample that was included in the physical evidence recovery kit to be type 0. In further testing I found that the two hairs, excuse me, on further testing I found the results of testing to determine the secretion of blood type of the material on the vaginal swab was inconclusive. I could not determine the secretion or blood type from the vaginal specimens. I found the caucasian hair and one caucasian hair fragment in the pubic hair combings consistent with the pubic hair reportedly from Angela Nichols; and I found the other hair fragment to short for meaningful comparison purposes.

In reference the shorts that I listed as item two(2) I found the following: I found two caucasian head hairs on the shorts. I found one animal hair, one animal hair fragment. I found no semen, no male reproductive fluid. On a subsequent examination the comparison of the hair on the shorts I found the following: One of the caucasian head hairs found on the shorts was consistent with the head hairs reportedly from the defendant. That means the hair either originated from him or

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from another person of the exact same race, who had the same color, the same physical visual characteristics and the same microscopic characteristics. It is unlikely that that hair would match anyone, other than the defendant; but it is possible. Hairs do not possess sufficient microscopic characteristics to identify the source. So, the hairs were consistent with the sample reportedly from the defendant.

The other caucasian head hair was consistent with the head hair reportedly from Angela D. Nichols. In regard to the animal hair and animal hair fragment on the shorts I found one animal hair to be a reddish brown, black hair. In other words, it was reddish brown and also black. That hair is consistent with a young canine, or commonly referred to as dog hair. One animal hair fragment was black in color. It was not possible to determine the species, whether or not it was canine or some other animal.

Regarding the blouse...

Q Do animal hairs have a tendency to adhere for a longer period of time to clothing?

A Yes, sir, they do. Longer than human hair would because all hairs have an outer wrapping of scales and the scales protrude a great deal on animal hair and so they cling more to clothing, carpet and this sort of thing. They do have a tendency to stay on your clothing longer than a human hair would.

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Q All right, go ahead.

A In regarding the blouse that I have listed as item three(3). I found several caucasian head hairs and I found no semen, no male reproductive fluid present on the blouse.

I found the following: One of the caucasian head hairs found on the blouse was consistent with the head hairs reportedly from Angela Nichols. The other caucasian head hair was consistent,

I am sorry, the other caucasian head hairs were dissimilar to the submitted head hair samples from either, reportedly either from the defendant or from Angela D. Nichols. There was one hair on the blouse that was consistent with Angela Nichols' head hair. There were other caucasian head hairs dissimilar to either sample that I tested.

Regarding the next item that I have listed as item four(4), which was the sleeping bag. No semen was identified on the sleeping bag, no hairs were found.

Regarding items five(5) through nine(9) I found the following: No semen, or male reproductive fluid, was found on the pants, the shirt, either of the blankets, jacket or the pillow. I found caucasian hairs dissimilar to the submitted hair samples, some reportedly from Angela Nichols on these items. I made no comparison with the samples reportedly from the defendant. It was my understanding it was the defendant's vehicle from which these articles originated. So, I only compared the

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hairs reportedly from Angela D. Nichols, with the hairs from these various items, from the vehicle.

Subsequent examination of the animal hair from these various items I found the following: Animal hairs found on the pants, shirt, the blankets, jacket and pillow consisted of black hairs, white hairs, white and reddish brown hairs consistent with known canine, or basically dog hairs present.

 $\label{eq:Regarding} \mbox{ item ten(10) I found the following:}$  The blood sample reportedly from the defendant was type B.

Regarding item thirteen(13) I found the following: The test indicated the presence of saliva on each of the cigarette butts. The test indicated that the secretion type, or the blood type, if you will, of the person who smoked these cigarettes is type O.

Item sixteen(16) were two pieces of cloth that I was asked to see if they could have originated from any of the other items reportedly from the vehicle. I found that the two pieces of cloth were dissimilar to any of the other items that I examined. In other words, they did not originate from any of these items that I just mentioned, short, shirt, bag, pants, blankets, pillow.

The vacuum sweepings reported from the vehicle I found the following: I found caucasian hairs dissimilar to

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the submitted hair samples reportedly from Angela D. Nichols present in the vacuum sweepings. I found no hairs that were consistent with the hairs reportedly from Angela D. Nichols in the vacuum sweepings of the vehicle. I did however find several animal hairs. The animal hairs in the vacuum sweepings consisted of white hairs, black hairs, white and black hairs, and white and reddish brown hairs consistent with known canine hairs.

Q I don't have any further questions.

## CROSS EXAMINATION

By: Mr. Farrar

Q Mr. Gist, sort of going backwards. The hair samples, the vacuum sweepings from the vehicle that had some hair samples and I believe that was submitted to you around January 4th had the dog hair samples. These samples that you found from the vehicle that were submitted to you from the vehicle were dissimilar to the canine hair samples found on the shorts, or blouse of Angela Nichols, is that correct?

A The intact hairs were dissimilar, that's correct.

- Q And, the hair samples that you found on the blouse of Angela Nichols were likewise dissimilar to the submitted hair samples from Mr. Honaker, the defendant?
  - A That's correct.
  - Q Now, you have indicated that on the test that

you did on the cigarette butt, that it indicated the secretion type O, or blood type O. Would you explain to the jury how you can establish secretion type from the saliva?

A Most people, approximately eight out of ten people, are better known to serologist in my field as secreters which means that if you are in fact a secreter that your blood type can be determined from your prespiration, from your semen fluid if you are a male, from your vaginal fluid if you are a female. A non-secreter is a person whose blood type factors cannot be detected in the saliva, semen fluid or vaginal material. The way that's done is to take a cutting of the stain and, such as a saliva swab, or in this case a cigarette butt. You cut the butt of the cigarette into three pieces and you add an antibody to each of the three stains, you have anti-A, anti-B and anti-H, anti-H detects type O. Anti-A detects type A and anti-B detects type B and then you allow that to sit over night and then you add known cells, known type A cells to the tube, you add an anti-A to it. If you get a negative result that means there had to be type A substance in that sample that inhibited or negated or neutralized the anti-A. So, you determine the blood type by either finding that the anti-A is still viable and working or it has been neutralized. And, by the reactions and running standard tests of known samples of type O, type AB and a known nonsecreter sample you can determine the blood type, much like you would with a dried blood stain.

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Q Now, you determined, I believe, that Ms. Nichols was a secreter, which you refer to in the trade as a

A lo, I didn't comment on the fact of her being a secreter. I said she was type O. In the samples that I had reportedly from Angela Nichols I was not able to determine her secreter status. Secreter status is most always determined from a blood sample, but not always. And, in the case of the blood sample reportedly from Angela Nichols this was not possible.

Q I noted your remark, the results conducted on the vaginal swabs from the victim to determine secretion type were inconclusive. So, you were not able to determine it from the vaginal swabs. You also received in the Perk Kit though a mouth rinse, and I take it that was because you had stated to the physician that the assailant had ejaculated in her mouth. Were you able to determine anything about the secretion type or whether she was a secreter or not from that?

- A That would be impossible.
- Q Why is that?
- A Because the amount of saliva in comparison to the amount of saline, which as I recall would have been about eight milliliters, almost a full tube of saline and very little saliva so there would be no way that it would be sufficient. In fact, the known saliva swab that I received that was supposed to have had known concentrated saliva was insufficient to determine

a known secreter status.

Q If you received a pure saliva sample from a person could you determine secreter status from that?

A Yes, if you have a saturated well preserved saliva sample you can determine secreter status, that's right.

Q But, you didn't receive that from the Sheriff's Department in the course of making your investigation?

A I received a saliva sample which was either from a non-secreter, or was insufficent in saliva, and the only way I could determine anything further would be to ask for an additional blood sample, and an additional saliva sample. I saw no need in doing that in this case, since I was unable to detect a secretion type in the vaginal specimens anyway.

Q Now, when you and I talked back on January 30th I believe and we were discussing the characteristics of head hairs isn't it correct that the individuals will have several different types or your head hair will demonstrate several different characteristics in the same head?

A Yes, sir.

Q And, is that a common factor among all of us or is that just something that happens on occasion?

A It is very common. For instance, gray hair, gray hair is totally different from black hair or brown hair, and reddish hair is totally different from brown hair. Black hair is different from brown hair. That is why when we do a hair

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24 25 determine the range of characteristics. Can't take just one hair from a person and another hair from the same person and put them together as you would a tool match or a facture match, you have to have a number of them to look at.

Q I guess that is one of the reasons that this is not as exact as perhaps fingerprints have been determined to be. You said yourself that it is not an exact or precise, or a guaranteed analysis that you all make, isn't that correct?

A It's a guaranteed and precise analysis but we cannot pinpoint the source of the hair.

Q All right. Now, you indicated that on one of the swabs that you looked at that you found the presence of spermatozoa?

- A Spermatozoa, that's right.
- Q Could you tell anything, whether it was motile when you got it?
- A No, the sperm was dead. It is always dead when I receive it.
- Q Now, you were submitted a pair of pants and a shirt, camouflage pants. Do you recall examining them?
  - A Yes, sir, I do.
- $\ensuremath{\mathtt{Q}}$  And, did you examine them for semen as well as for hair samples?
  - A Yes, I did. I believe that's item five(5),

as I recall, pants and shirt. I believe that's what you are referring to? Q Five(5) through nine(9) which are pants and shirt, a blanket, do you recall the color of that blanket? A It's a pink, orange and white. -5 Q And, a jacket, do you recall what kind of 6 jacket that was? A I can check my notes. I see on the sub-8 mission form it's a camouflage jacket, but I will check my notes 9 to see what further I have on it. 10 Q I think that's correct. П A It is a camouflage jacket according to my 12 notes. 13 Q Do you recall the color of the other blanket? 14 A Let's see, the other one was a light pink 15 blanket. 16 Q And, the other item was a pillow, all of 17 which, I believe, has been testified to as coming from the 18 vehicle of Mr. Honaker. Now, from your evaluation and examina-10 tion there was no semen on the pants, shirt, blankets, jacket 20 and pillow. Caucasian hairs were found but were dissimilar to 21 the submitted hair samples from the victim, is that correct? 22 A That is correct. 23 Q Did you check to determine whether or not 21

these hair samples were consistent with the hair samples

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submitted from Mr. Honaker?

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A No, sir. I testified that I didn't and I testified that it was my understanding that it was his vehicle

Q Now, you also testified that animal hairs were also found on these items, shirt, pant, blanket, jacket, blanket and pillow, correct?

and therefore it was no need to check his hairs on his belongings.

A That's correct.

Q But, I take it that these animal hairs were dissimilar from the animal hairs found on the shorts and blouse that were worn by Ms. Nichols, is that correct?

A That's true but there was one black animal hair fragment that could have been, it was similar to the black canine hair that I found on several of the items that you mentioned from the vehicle, and also from the vacuum sweepings. I testified that I couldn't say that that black animal hair fragment was in fact canine; but it was a black animal hair, a black animal hair fragment and there were black animal hairs present on the articles you mentioned and also in the vacuum sweepings. There was no further comparison that I could make other than that.

Q When you say similar you mean, I guess, correct me if I am wrong, they were similar in color?

A That's right. That's basically all you could do with especially an animal hair fragment, is you say its

the same color.

Q And, did you check to see if the animal hair samples recovered from the vacuum sweepings matched the animal hair samples found on the items, five(5) through nine(9), the pants and shirt through the pillow?

A Yes, some of those were the same color. In other words, if I understand your question correctly, referring to my last report. The animal hairs found on items five(5) through nine(9) consisted of white animal hair from a canine, there were also black found in the vacuum sweepings. There was also black and white canine hairs and I found black/white animal hair, canine, in the vacuum sweepings. I also found white with brown hairs on some of the bedding and clothing. It was also found in vacuum sweepings. I believe that was all, white hairs, black hairs, black and white and white and reddish brown on the articles five(5) through nine(9), the pants, the shirt, blankets, jacket, pillow. Hair on those articles were - I did find hairs that were similar to those, color and so forth, in the vacuum sweepings that were reportedly from the vehicle.

Q Now, have you been involved in the past with the examination or the taking of evidence associated with a Perk Test?

- A Actually taking the evidence myself?
- Q Yes, sir.
- A No, sir.

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Q You have never done that. Yours has been limited to the evaluation of it?

A Yes, sir. That's why I testified the hair samples, the blood samples, the swabs, reportedly from either Angela Nichols, or reportedly from the defendant. I hadn't seen either one of them before and I certainly haven't taken any evidence from them, nor any other suspect or victim that I may have worked the case on.

Q Is it standard procedure to examine for the presence of sperm when you examine the Perk Kit?

A It certainly is, yes.

Q And, can you determine, or do you know, over what period of time the sperm would be present, or found?

A It's my opinion that spermatozoa would not be found after a period of about twenty-four hours, and probably much less than that. Probably not after a period of fourteen or sixteen hours. I would say twenty-four hours to be conservative. I would not expect, in my examinations, to find sperm after intercourse had taken place prior to twenty-four hours from the time the sample was taken from the reported victim.

Q Judge, I don't have any other questions.

## REDIRECT EXAMINATION

By: Mr. Turpin

Q Of the hair samples that you received, both

from the victim and from the defendant here, were they randomly selected hair samples, the best you could determine from the samples?

A I have no idea. I know they were representative, at least they all resembled basically one or more of the hairs. In other words, I can tell if a hair sample is not a good one if I find twelve to fifteen blonde hairs and two black hairs, and say a gray hair. Then I know that there were hairs present that I didn't get very many of.

Q Did these appear to be good samples?

A They certainly did. If they had appeared otherwise I would have asked for more samples.

Q In fact, you did ask for additional samples of the victim, I believe?

A That's right, because the initial evidence coming in, in the physical evidence recovery kit, contained too few hairs for what I thought to be a complete and thorough examination. So, I asked for additional. The practice is if the hairs are insufficient in quantity I don't make a comparison until I have additional hairs.

Q And, that's a safeguard, in your opinion, so you have got a representative sample, is that correct?

A That's correct.

Q And, so you can base your opinion based on the most represented samples that you can obtain?

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A That's correct.

Q I have no further questions.

MR. FARRAR: No further questions, Your Honor.

THE COURT: Do you want to excuse him.

MR. TURPIN: The chemist can be excused.

THE COURT: You can be excused.

WITNESS STOOD ASIDE

MR. TURPIN: Your Honor, that would be the Commonwealth's Case and I would move the admission of all of the evidence.

THE COURT: The exhibits have all been admitted and so marked. The Commonwealth rests. Call your first witness. We will go on for a little while longer. Go ahead.

BOBBY HONAKER, Having been duly sworn was called on behalf of the defendant and testified as follows:

## DIRECT EXAMINATION

By: Mr. Farrar

- Q You understand that you are still under oath?
- A Yes, sir.
- Q Would you state your name for the Court,

please?

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A Bobby Honaker.

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