Davis, Dewey

Testimony of Dr. Elbert G. Warren, III

1 follows within the hearing of the 2 jury:) 3 MR. FRAIL: At this time Doctor ... Warren will be referring to medical reports which are from the hospital. At the first trial, the 6 trial of Jerry Davis, a duly appointed 7 representative of the hospital actually brought 8 forth, pursuant to our subpoena, these medical 9 reports. And just for purposes of the record, we 10 would like to show that these are the same 11 reports. We do not have that person back, 12 because they were given to the court reporter at 13 that time. 14 THE COURT: I'm sure Mr. Lester has 15 no objection to that, those are the records. 16 MR. LESTER: I remember that. 17 have no objection to that. 18 The point of that is MR. REVERCOMB: 19 they are admissible under that new statute. ELBERT G WARREN 20 Thereupon came DR. ALBERT WARREN GRAHAM, 21 III., a witness on behalf of the state, who after 22 being duly sworn, was examined and testified as 23 follows: 24 DIRECT EXAMINATION

1	BY MR. FRAIL:
2	Q Would you state your full name for the
3	record, please?
4	A Albert Warren Granam, III.
5	Q What is your profession?
6	A I am a medical doctor.
7	Q And are you currently practicing here in
8	Kanawha County?
9	A I am currently completing my residency at
10	Charleston Area Medical Center.
11	Q I want to direct your attention to
12	February of 1986 and ask you if you were
13	practicing at that time?
14	A I was in my residency at CAMC.
15	Q What year of your residency were you in at
16	that time?
17	A I was in my third year.
18	Q Doctor Warren, again directing your
19	attention more specifically to February 19, 1986,
20	did you have the occasion to perform a sexual
21	assault exam on a patient by the name of Ethel
22	May Ward?
23	A Yes, I did.
24	Q Would you have prepared some type of

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1	report pursuant to that examination?
2	A My general practice is to dictate a report
3	at the time, immediately after doing the
	_
4	examination.
5	Q Doctor Warren, I am going to hand you what
6	has previously been marked for identification as
7	State's Exhibit 31 and State's Exhibit 32, and I
8	would ask you to examine both of these exhibits,
9	including the contents, and state whether or not
10	you recognize them?
11	A Yes, I do.
12	Q What are those two documents?
13	A The single paper here is just a copy of
14	the dictation I had made the night following the
15	examination.
16	Q Would that be State's Exhibit Number 32?
17	A Right. And the other one is apparently a
18	copy of the emergency room record from the same
19	exam.
20	Q Doctor Warren, how did you come to be
21	involved in this particular sexual assault exam?
22	A Well I was on call that night. And the
23	way we have it worked out is that the third year
24	resident in the hospital, at the time that one of

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1	these exams is required, is the person who does
2	it. So they paged me about 2:25 a.m. to do the
3	exam and I went down to do it.
4	Q Prior to this date, had you had occasion
5	to perform other sexual assaults exams?
6	A Yes, I had.
7	Q Could you estimate how many such exams you
8	had made up to that point?
9	A Twenty.
10	Q Have you had occasion to make exams since
11	that day of this nature?
12	A Yes, I have.
13	Q What procedure do you as a doctor follow
14	in making a sexual assault examination?
15	A The procedure I normally go through is a
16	nurse in the emergency room generally obtains a
17	fairly detailed history from the patient. What I
18	do prior to seeing the patient is review that and
19	corroborate the history with the patient not as
20	in a great detail as the nurse has just done, but
21	particular emphasis for what I need to look for
22	on my physical examination.
23	Q Is it your testimony then you have some
24-	type of interview with the patient herself?

1 Yes, I do. A 2 Did you have such an interview with a 3 patient in this particular case, Ethel Ward? 4 Α Yes, I did. 5 What if anything did the patient tell you 6 about the alleged assault? 7 Well it's pretty much as I dictated. Α 8 Would you like for me to just read that? 9 Sure. 10 As I dictated at the time: "It was a 21 11 year old, single, white female, gravida 1, para 12 O, ABl, one previous pregnancy and one 13 miscarriage, whose last period was around the end 14 of December 1985. She said that on February 18 15 at about 8:30 she went to the house of Dewey 16 Davis to wash clothes. She said she was there 17 approximately 15 minutes and left. She stated 18 she then returned at approximately 10:15 p.m. to 19 get her clothes. She said when she entered the 20 house, a male she named as Jerry Davis was there. 21 She said that she talked to him for a few minutes 22 and he then told her to go into the bedroom and 23 remove her clothes. She said she refused to do 24 According to her, at that time he struck

her in the face with his fist several times. She said he then made her go into the bedroom, made her touch his penis and he 'stuck it all the way in.' She wasn't sure as to whether he had ejaculated or not. There was not an attempt at either oral or anal intercourse. She told him she had to go to the bathroom and had to get away at that point."

Q Doctor Warren, in addition to the interview, what else could you as a doctor do in a sexual assault exam? What type of examination do you make?

As I say, the exam, other than the pelvic exam, I do is more directed toward if there is anything in the history which would suggest trauma, I generally do a directed exam towards those areas. She had said -- Do you want me do go into that exam.

Q Yes, please.

A She had said, as I had said, that he had struck her in the face. She did have some abrasions about her face, on her right upper lip and right cheek, and she also had some reddened areas about her neck, and that was the only

1	existence of evidence of trauma, other than on
2	pelvic examination.
3	Q Did you do a pelvic examination?
4	A Yes, I did.
5 .	Q What would that have consisted of?
6	A That consisted of, again, carefully
7	looking externally for any evidence of trauma.
8	And following the completion of that exam, we do
9	a vaginal examination where, again, in this
10	particular case she had reported having some
11	vaginal bleeding following what she described as
12	a sexual assault. So in situations like that
13	it's important to look closely at the vagina for
14	any evidence of bleeding points or around the
15	cervix for any evidence of bleeding points.
16	Q During the pelvic examination that you
17	testified that you did on Ethel May Sissy Ward,
18	did you note any injuries at that time?
19	A What she had was a small abrasion on her
20	right vulva, which I described was about half a
21	centimeter, about a forth of an inch. And other
22	than that, I didn't see any other evidence of
23	trauma, either externally or from her vagina or
24	on her vagina or around her cervix.

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1	Q Doctor, did you do any tests or make any
2	determination as to whether or not the patient
3	had any motile sperm in her vagina?
4	A Yes, I did.
5	Q What type of test did you do?
6	A Just generally a collection of immediately
7	behind the cervix of whatever fluid has collect
8	there and we do what is called a wet mount. It's
9	placed in fluid and then looked at under the
10	microscope immediately following the exam.
11	Q Explain to the ladies and gentlemen of the
12	jury what a motile sperm is?
13	A It's a sperm When a male would
14	ejaculate, there would be millions of sperm in
15	his ejaculate. A motile sperm is a sperm that is
16	still moving.
17	Q Do you know how long a sperm can remain
18	motile in a vagina?
19	A Generally the quoted time would be around
20	6 or 12 hours, although studies vary as far as
21	what they say how long a sperm will survive.
22	Generally you would suspect it to survive
23	somewhere between three and six hours, depending
24	on the vagina and the circumstances.

1	Q Did you find the presence of any motile
2	sperm in the vagina of Ethel May Sissy Ward?
3	A No, I didn't.
4	Q Doctor Warren, do you recall what time you
5	began this examination?
6	A It's recorded that I was paged round 2:25.
7	The examination would have started somewhere
8	around 2:45 a.m. I don't have it recorded, so I
9	couldn't say exactly.
10	Q Do you have any recollection of how long
11	the examination would have taken?
12	A The entire pelvic exam or physical exam?
13	Q Yes.
14	A Somewhere between 5 and 10 minutes.
15	Q What about the entire time you would have
16	spent with the patient from your initial contact
17	with her until the time you concluded your
18	studies?
19	A With her I think it was around 25 minutes.
20	MR. FRAIL: Your Honor, if I could
21	have just a moment.
22	(Brief Pause)
23	MR. FRAIL: That's all the questions I
24	have.

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1	THE COURT: Mr. Lester.
2	CROSS EXAMINATION
3	MR. LESTER:
4	Q Doctor Warren, did you take any slide
5	mounts of the material that you withdrew from the
6	vagina?
7	A Yes.
8	Q And of what nature were they? Did you
9	take two or more different kinds of slides or
10	what?
11	A They are slides that are sent down to the
12	pathologist for examination for sperm and also
13	the acid phosphatase.
14	Q Did you make a wet mount for yourself?
15	A Yes, I did.
16	Q And did you find anything?
17	A As far as what?
18	Q Well were you looking for motile or
19	immotile sperm on the slide?
20	A I did not see any evidence of sperm on the
21	slide.
22	Q What about the slides that you sent to the
,23	pathology department? Were they reviewed by a
24	pathologist?

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1		A They are read by a pathologist.
2		Apparently, what they found was two poorly
3		preserved sperm heads.
4		Q Now who was the pathologist who prepared
5		and provided you with that information?
6		A I don't know. I would have to go back and
7		review There is a report on file at the
8		hospital.
9		Q With regard to the poorly preserved sperm
10		heads, when were they discovered by the
11		pathologist, if you know?
12]	A Again, I would have to review it. I would
13		assume he would have looked at the slides the
14		next day or that day, as it came in early in the
15		morning.
16		Q What would be the significance of finding
17		these sperm heads on the mounts that was made?
18		A Well, what is in my dictation also is, she
19		had apparently a boyfriend with whom she had
20	***************************************	intercourse approximately two or three days prior
21		to this incident. The sperm heads could have
22)	been present from intercourse as long as that or
23	Contracting the second	even longer. It could have been a week before,
24		two sperm heads could still be present in her

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1	vagina.
2	Q When we are talking about motile sperm,
3	we're meaning moving sperm?
4	A Right.
5	Q And when we are talking immotile sperm, we
6	are talking about no moving sperm?
7	A Right.
8	Q So what is the range? Give it to me once
9	again. About how long can sperm stay motile in a
10	vagina?
11	A Well it depends on, as I said, the
12	circumstances of the vagina, how long she would
13	have stayed, you know, prone or supine. The
14	general range would be somewhere around 3 to 10
15	hours. There are other reports that give shorter
16	time periods than that. As I said, there was a
17	small amount of blood in her vagina. What
18	studies also say is the sperm can stay moving for
19	a longer period of time if there is blood there,
20	but they are harder to site because there is red
21	blood cells in the microscopic field.
22	Q Have you had occasion to see or treat Mrs.
23	Ward since February the 18th, 19th, 1986?
24	A Yes, I have.

1	Q On what occasions?
2	MR. FRAIL: Your Honor, I'm going to
3	object as being beyond the scope of direct
4	examination.
5	THE COURT: Let's see where we are
6	going with it. Overruled.
7	Q For what reasons have you seen her?
8	A She subsequently became pregnant.
9	Q And?
10	A And she has had a child since then.
11	Q And you were the treating physician?
12	A What she did, we have a clinic system at
13	our hospital and her pregnancy was cared for
14	through the clinic system. I saw her myself, but
15	there were other physicians who were treating her
16	during her pregnancy.
17	Q Doctor, can you state with a reasonable
18	degree of medical certainty that the pregnancy
19	that resulted with regard to Mrs. Barker was not
20	a result of the activity of February the 18th,
21	February the 19th, 1986?
22	A Yes.
23	MR. LESTER: Thank you, Doctor,
24	that's all the questions I have. I realize you

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1	have a busy schedule. I would like to thank you
2	for coming down.
3	THE COURT: Redirect?
4	MR. FRAIL: No.
5	THE COURT: Thank you, Doctor, you
6	may step down and be excused.
7	(Witness Warren stood aside.)
8	THE COURT: Call your next witness.
9	MR. REVERCOMB: The state would call
10	Rose Shaffer.
11	Thereupon came ROSE SHAFFER, who was
12	called as a witness on behalf of the state, who
13	after being first sworn according to law, was
14	examined and testified as follows:)
15	DIRECT EXAMINATION
16	BY MR. REVERCOMB:
17	Q Please state your name?
18	A Rose Anna Shaffer.
19	Q Rose, where do you live?
20	A At the present time?
21	Q No. Strike that. Where did you live in
22	February of 1986?
23	A Coal River Road in St. Albans.
24	Q Where on Coal River Road?

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Davis, Dewey

Testimony of Fred Zain

1	DIRECT EXAMINATION
2	BY MR. REVERCOMB:
3	Q Please state your name?
4	A Fred Salem Zain.
5	Q Where are you employed?
6	A I am a member of the Department of Public
7	Safety, stationed at the Criminal Identification
8	Bureau in South Charleston, West Virginia, where
9	I am in charge of the section which receives and
10	examines physical evidence for the presence of
11	blood, body fluids, and hair examinations.
12	Q What is your title?
13	A I am sergeant and section supervisor of
14	the section that deals with serology. I have
15	been with the department a little over ten and a
16	half years.
17	Q Would you tell us about your educational
18	background?
19	A I have a Bachelor of Science degree in
20	biology and a minor in chemistry. I have an
21	associate degree in applied sciences from
22	Marshall. I have also got a master's degree in
23	biological sciences from Marshall University. I
24	have worked in this specific capacity with the

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Department of Public Safety a little over 10 Prior to the employment with the Department of Public Safety, I was employed by the Department of Natural Resources as a chemist. I have trained other people in the section in forensic sciences and given lectures and seminars at the WVU Medical Center. Other specialized classes and seminars around the country that I have attended that have been at the FBI Academy in Virginia. I have given lectures at the bar and medical association meetings, prosecuting attorney association meetings and other public I am a member of the Southern engagements. Association of Forensic Scientists. I am a member of the Canadian Society of Forensic I am a member of the American Scientists. Academy of Forensic Scientists, also a member of the International Society of Haemogenetics, the International Society of Electrophoresis, and a member of the American Blood Banking Association. I also have several papers that are and have been submitted for publication as of the first of the That basically is it.

1	qualified as a expert in forensic serology in
2	circuit court before?
3	A Yes, sir. I have. I have testified in
4	approximately 44 counties in the State of West
5	Virginia, as well as testified in Florida and
6	Virginia.
7	Q You have testified in this circuit before?
8	A Yes, sir. I have.
9	MR. REVERCOMB: Your Honor, I would
10	submit this witness as an expert in forensic
11	serolody.
12	THE COURT: Any questions regarding
13	his qualifications, Mr. Lester?
14	MR. LESTER: No, sir. I will except
15	Sergeant Zain's qualifications.
16	THE COURT: You made proceed.
17	BY MR. REVERCOMB:
18	Q Does your field of expertise require you
19	to make blood groupings?
20	A Yes, sir. Part of the examinations which
21	are performed at the bureau deal with: One, the
22	examination of items for the presence of blood or
23	other body fluids; such as seminal fluid, saliva,
24	urine, fecal material, biological materials and

1		substances, also hair examinations; not only the
2		examination for the presence of these types of
3		secretions, but also the identification of
4		possible blood characteristics from the
5		secretions we may identify.
6		Q And these blood groupings, do you break
7	·	them down into genetic markers?
8		A Blood characteristics are synonymous with
9		genetic markers or blood typings.
10		Q What types of articles do you conduct
11		these analyses on?
12		A Excuse me.
13		Q What kinds of articles do you conduct
14		these tests on?
15		A Types of materials would range from, for
16		example, carpet, clothing, all sorts of clothing,
17		samples from any types of materials where blood
18		or any other body fluid may have been deposited.
19		Common items of examination would be sex crime
20		evidence kits. These are kits which are used by
21		examining physicians in sexual assault cases
22		where evidence is taken at the time of the
23		examination by the examining physician.
24		Q Could you explain the difference between

1 what you do as a forensic serologist and a clinical pathologist? 2 3 Basically in the realm of biological examinations, pathologists primarily deal with, 4 5 clinical pathologists, for example, deal with samples needed for clinical analysis. You go to 6 7 a hospital, you have blood drawn, they will do 8 what is called a blood work up on you. 9 blood workups are to check your electrolytes. 10 A forensic pathologist deals with applications of 11 evidence in criminal cases that may apply to 12 information that may be helpful in an 13 investigation. Say, for example, medical 14 examiners are forensic pathologist really, doing 15 autopsies to try to obtain information that may 16 be helpful in a criminal investigation. 17 In other words you are required to take 18 the samples of articles as they are, rather than 19 having a perfectly preserved sample? 20 That's correct. The types of materials 21 which are examined by myself and other members in 22 the serology section, there's no way to control 23 what type of evidence we may receive. 24 Sergeant Zain, I want to recall your

1 attention to February 20th, 1986, and ask you if 2 you had occasion to receive articles from one 3 Randy West? 4 Yes, sir. I did. On February 20, 1986, I 5 received from Detective West of the Kanawha 6 County Sheriff's Department a sex crime evidence 7 kit. Also listed on the submission is clothing 8 of the victim; such as a shirt, jeans, bra and 9 panties. Also marked is a pair of jeans of the 10 accused, shirt of the accused, briefs of the 11 accused, blue blanket, white bed pad, the white 12 sheet and towel, two pillow cases, white shirt 13 and T-shirt, and another towel. 14 And for what purposes did you receive 15 these articles? 16 The items were submitted to me by standard 17 protocol to examine them for presence of blood, 18 body fluid or any hair specimens that may be 19 apparent, also compare any of the unknown 20 secretions or blood that may be identified with 21 the known blood specimen of the victim, which was 22 stated as being Ethel May Ward. 23 Where were these articles kept while you 24 were not examining them?

A All items, when they are received in the bureau, are assigned a particular number. This number designates the time and the analyst who may be working and examining the particular items. And in this particular case the number which was assigned by me was S-8675. The items remain in the sole care and custody of the individual analyst. They are preserved in the best means possible, either by freezing or by air drying, if they are wet, for example. Then they are retained in individual evidence lockers which only the individual analyst has keys to.

Q Sergeant Zain, I am now handing you what has been marked for identification purposes as State's Exhibits 11, 11A, B, C, D, E, and F, and ask you to examine those exhibits?

A These items all have the case number, which I spoke of earlier, of S-8675 on the outside of the envelopes. These items would be the standard items found in a sex crime evidence kit. For the jury's information, the blue marking is the laboratory case number and below that are my initials FSZ. These appear to be in the same condition or similar condition anyway

1	than the last time I saw them.
2	Q And you received those from Randy West on
3	February 20th?
4	A These are the items which were listed as a
5	sex crime kit.
6	Q Who did you return them to?
7	A They were returned to Detective West.
8	Q I likewise hand you what has been marked
9	for identification purpoes as 9A and ask you to
10	examine first the container and ask you if you
11	can identify that for us?
12	A On the outside of the container, there
13	again, briefly it has the same case number, my
14	initials. This was the paper bag which was
15	marked as containing clothing of Miss Ward, which
16	was the shirt, jeans, bra and underwear or
17	panties. The jeans, and likewise on the other
18	items, will be marked with the same case number
19	and my initials. These items appear to be in the
20	same condition as the last time I saw them.
21	Q You got these from Randy West?
22	A Yes, I did. And after the examination was
23	complete, these items were returned to Detective
24	West after the examinations were complete.

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1	Q I am now handing you what has been marked
2	for purposes of identification as State's Exhibi-
3	26A and ask you if you can identify that for us?
4	A There again on the outside of that in blue
5	lettering is the same case number and my
6	initials. This was the container which was
7	marked as being a pair of pants from the accused
8	The blue jeans are also marked in the inside with
9	the same case number and initials. They also
10	appear to be in the same condition which the las-
11	time I saw them and were returned to Detective
12	West at the same time as the other items.
13	Q I now hand you what has been marked for
14	identification purposes as State's Exhibit
15	27A, and inside I believe is 27.
L 6	A This was the container which was marked as
L 7	having a shirt belonging to the accused; there
L8	again, the same case number and initials.
.9	Jean fatigue type shirt also was marked the same
20	case number and initials. It also appears to be
21	in similar condition which the last time I saw it
22	before I returned it to Detective West with the
23	other evidence.
4	Q I now hand you what has been marked for

1 purposes of identification as State's Exhibit 2 18A, and inside State's Exhibit 18 and 19 for 3 identification. This container which is marked with the 4 5 case number and initials on the outside is marked 6 containing two pillow cases which were submitted. 7 They both are marked, a little bit easier to see 8 on this background, with the blue lettering of 9 the case number and my initials. The pillow 10 cases were also returned to Detective West with 11 the other items as the examinations were 12 complete. 13 I now hand you what has been marked as 14 State's Exhibit 16A, and inside State's 15 Exhibit 15 and 16 for identification. 16 This container, marked with my initials 17 and case number, is marked containing a sheet and 18 towel. They also after examination were returned 19 to Detective West and appear to be in a similar 20 condition which I returned them to him. 21 I likewise hand you what has been marked 22 as State's Exhibit 21A for identification and 23 inside State's Exhibit 21. 24 Α There again, my initials and case number

1 on the outside of the container, which is marked 2 as being the bed pad, and it also appears to be 3 in a similar condition when I last saw it and 4 returned it to Detective West. 5 I now hand you what has been marked for 6 purposes of identification as State's Exhibit 7 I believe that's 29A? 8 Yes. Α 9 And inside State's Exhibit -- What 10 Exhibit Number is that exhibit? Number 29 for 11 identification. 12 This was a blanket which was submitted or 13 large towel. It also appears to be in a similar 14 condition which I returned it to Detective West 1.5 with the other items. 16 I now hand you what has been marked for 17 purposes of identification as State's Exhibit 18 20A and ask you to look inside that to State's 19 Exhibits 19 and 20 for identification. 20 Outside of this container, marked with the 21 same case number and my initials, is marked 22 containing two shirts of the accused. 23 items also appear to be in a similar condition 24 which the last time I saw them and returned them

1 to Detective West. 2 I now hand you what has been marked for 3 identification purposes as State's Exhibit 28A 4 and inside Exhibit 28 for identification. 5 Α Also again on the outside of the bag, the 6 same case number and my initials, which is marked 7 as being a pair of underwear and briefs from the 8 accused. It also has the case number and 9 initials on the item examined. This item was 10 also returned with the other items. It appears 11 to be in a similar condition which I last saw it. 12 I now hand you what has been marked as 13 State's Exhibit 14A, but it's been torn up. It's 14 reported to hold State's Exhibits 12, 13, and 14. 15 Okay. This particular bag, what is left 16 of it, also has the same case number and initials 17 on the outside. This is marked as containing the 18 blanket, which was submitted to me by Detective 19 I also have one of the sheets which were 20 submitted, and the second sheet which was 21 submitted. They appear to be in a similar 22 condition when I returned them to Detective West. 23 Finally, Sergeant Zain, I hand you what 24 has been marked for identification purposes as

1 State's Exhibit 31. 2 On this particular item it will have a 3 different case number. It will have a different 4 case number because the item was submitted to the 5 laboratory at a different time. The case number 6 on this styrofoam container is S-86340. 7 has my initials, FSZ, and this was marked as 8 being a vial of blood from Gerald Davis. And you 9 can't see it, but my name, my initials, and the 10 case number are also on the vial of blood. 11 Q When did you receive that? 12 7-14 of '86. 13 Do you remember where you went to obtain 14 that blood sample? 15 I believe it was Saint Francis Hospital 16 and I was present at the time the blood was 17 withdrawn. 18 Finally, also I hand you what has been 19 marked for identification purposes as State's 20 Exhibit 33 and ask you to examine that and tell 21 us just what it is? 22 State's Exhibit 33 is a subpoena duces 23 It's addressed to myself, F.S. Zain, 24 Forensic Biologist, Department of Public Safety,

1 Chemistry Laboratory, 725 Jefferson Road, South 2 Charleston, West Virginia, 25309, telephone 3 746-2175. This subpoena asks me to 4 bring to court any medical reports, records, 5 notes, memorandums or other written materials, 6 including forensic findings relating to Mr. 7 Gerald Wayne Davis, suspect, and Miss Ethel May 8 Ward, victim, report number S-8675. 9 Thank you, Sergeant. These articles that 10 you have just testified in a lengthy manner to, 11 did you examine them for the presence of seminal 12 fluid and blood? 13 Yes, sir. I did. Α 14 0 What were your findings? 15 In reference to the case number S-8675, I 16 identified seminal fluid on the vaginal swabs, 17 which were contained within the sex crime 18 evidence kit, the pair of panties, the T-shirt. 19 In particular, where I held up two shirts from 20 the accused, there was a T-shirt and a white 21 shirt - I identified seminal fluid on the T-shirt 22 and briefs of Gerald W. Davis, also on the purple 23 sheet and the bed pad. Seminal fluid and blood 24 were identified on the vaginal swabs, panties,

1	and the briefs of Gerald W. Davis.
2	Q I hand you again what has been marked for
3	identification purposes as State's Exhibit 19.
4	Is this the T-shirt you speak of?
5	A Yes, sir. That's it.
6	Q And again, I hand you what has been marked
7	for indentification purposes as State's Exhibit
8	28. Are those the briefs of the defendant that
9	you speak of?
10	A Yes, sir. That's correct.
11	Q And it's your testimony you found seminal
12	fluid and blood on these?
13	A On the pair of briefs there were smears of
14	blood, as well as seminal fluid.
15	Q Sergeant Zain, can you explain the
16	difference between seminal fluid and sperm?
17	A Quite frankly, and the most simple way of
18	explaining is that semen is the combination of
19	the seminal plasma or seminal fluid and the male
20	sperm cell. If an individual has had a
21	vasectomy, when ejaculation occurs, there will be
22	just the excretion of seminal fluid. If a person
23	were to say that semen is the total sum of the
24	mixture of the sperm cell and seminal fluid,

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1	seminal fluid is primarily a transfer fluid for
2	the sperm cell.
3	Q And seminal fluid can only come from a
4	male?
5	A Basically, yes.
6	Q I hand you again what has been marked as
7	State's Exhibit 8, being the panties of the
8	victim. Is it your testimony you found seminal
9	fluid and blood on those?
10	A Yes, sir. That's correct.
11	Q I believe you have also testified you
12	found seminal fluid on the bed pad and on the
13	purple sheet?
14	A That's correct.
15	Q Sergeant Zain, were you ever able to get a
16	blood tying, genetic markers, from these seminal
17	fluid stains?
18	A Yes, sir. I was. As I reported in the
19	first report of S-8675 where I stated that
20	mixture of blood and seminal fluid identified on
21	the vaginal swabs and panties contained the
22	following genetic markers: The system list as,
23	one, the ABO blood type as being a blood type A
24	and O. I also have an H in parenthesis. The H

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in parenthesis designates the O came from a secretion and is designated as such because of what is called H antigens. The second blood type which I identified from the secretion was what we call a PGM blood type. PGM stands for phosphoglucomutase. And the type of PGM identified was two plus, one plus. I also identified seminal fluid on the T-shirt. There were a variety of staining on the T-shirt and the stains that were present on the T-shirt were seminal fluid. Also on the purple sheet and the bed bad the blood tying or findings identified from the these items was an ABO typing A and O, H in parenthesis. There again, that's just to designate that the O identified came from a secretion, not from a whole blood.

I also on the known blood specimen of Miss Ward identified that her ABO blood type from her known blood specimen was an O, that her PGM blood type was a two plus, one plus, and that she was a Lewis blood type of A minus, B plus. I will explain that the Lewis blood type is for the purpose of identifying whether an individual can be classified as a secretor or non-secretor.

That simply means that all individuals, everyone in this room, will secrete their known ABO blood type in their body fluids. The amount of your secretion of your ABO blood type varies. When an ABO blood type can be identified from your body fluids, you are classified as a secretor and are a part of 80 percent of the general population. If your ABO blood type cannot be identified in your body fluids, you are classified as a non-secretor, and would fall into 20 percent of the general population. No seminal fluid was identified on any of the remaining items which I have looked over here this afternoon.

Q Sergeant Zain, you received a known blood sample of Gerald Davis last summer?

A Yes, I did.

Q What is his genetic makers?

Davis the same tests and the results were recorded in a second report of S-86340. As stated in the results of the examination, that the known blood specimen of Gerald W. Davis contained the following genetic makers: His ABO was type O. His PGM was type two plus, one plus.

1 And his Lewis blood type was A minus B plus. So, 2 there again, he would be classified as a secretor 3 individual. The conclusion which I gave strictly 4 based on the blood findings was, one, that the 5 genetic makers of Gerald W. Davis were consistent 6 with the genetic markers previously identified 7 and reported on items previously submitted and 8 reported as S-8675. Gerald Davis and the victim, Sissy Ward, 10 have the same blood type as far as ABO and PGM, 11 is that true? 12 Α ABO blood type are both 0. Their PGM 13 blood type are both two plus, one plus, and they 14 are both secretor individuals. 15 Yet in your analysis you got an A factor? Q 16 Yes, sir. That's correct. Α 17 Can you explain? 0 18 In the initial examinations of the items which were submitted as S-8675, on the test 19 20 results there was an indication of an A blood 21 typing present on the secretions or body fluids 22 which were being examined. This was recorded. 23 Even though in my results or record sheets, which 24 have been previously submitted in State's Exhibit

1	33, I had indicated that the A could possibly be
2	a false positive and be due to bacterial
3	contamination because of the condition of the
4	evidence when it was submitted, not so much the
5	way it was submitted, but because of the
6	condition the materials were in and the stains
7	deposited on them. I did not exclude that in the
8	first report when I gave my results, simply
9	because I could not totally eliminate the
10	possibility of the A blood type as being either a
11	false positive or possibly from an A secretor
12	individual.
13	Q But you made those findings back in March
14	in your initial examination, the possibility
15	existed of a false A?
16	A Yes, sir. That's correct.
17	Q That's before you had the known blood
18	sample of Jerry Davis?
19	A Yes, sir.
20	Q Once again, I want to ask you to make it
21	clear to the jury. What could cause a false
22	positive on the A factor?
23	A In the examination of certain items in
24	forensics you use controls and standards of

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course on all examinations. Say, for example, the T-shirt, you use what we call as close a control as you can obtain from a certain item. If a T-shirt, for example, the one which I have shown you is in a soiled type of condition, as well as having certain particular stains on that shirt, you try to obtain a control as close to the stain which your analyzing, but yet not contain part of the stain which you are testing The results of the testing were that there was an indication of an A blood group substance or blood type substance, as well as a strong O type indication. There was no way at the time or now for me to eliminate the A as being a real or possibility as having been derived from the seminal fluid. I can state that the A control, that the control from the T-shirt, excuse me, did give a weak positive for A blood type. would have eliminated the A at the time of the examination, then the report would have simply read that the blood type identified, the ABO blood type identified would have been strictly an The PGM blood type would have been specifically two plus, one plus, and there would

1		have been no A in the report. I felt at the
2		time, even though with justification as I do now,
3		that due to certain possibilities, that it would
4		be an injustice not to give the information which
5		I had identified.
6	1	Q These controls you speak of, the area that
7	/	you cut outside the actual seminal fluid stain,
8		did you find any O factor in the control?
9		A No, sir. I did not.
10		Q But you did find a weak A factor?
11		A Yes, sir.
12		Q And you found the same weak A factor
13		inside the stain?
14		A That's correct.
15		Q And you have testified it's a possibility
16		that that A factor came from an A secretor?
17		A Yes, sir. It could be.
18		Q How probable is that?
19		A The indication of an A blood type from the
20		secretions on the items which I have mentioned
21		was a mild indication, say, on a scale of one to
22		ten, it would be a two. Whereas, the O
23		identified from the seminal fluid would be a 10.
24		Q Once again, the A factor, are you saying

1	it could have been a false positive because of
2	some sort of bacterial contamination?
3	A The A blood type which I identified and
4	reported could have been of two means: One, the
5	blood type A could have originated from the
6	articles of which the stains were deposited on
7	due to contamination; Secondly, the A could have
8	come from an A secretor individual.
9	Q You had the exact same results as far as
10	your analysis and the factors you found between
11	the defendant's underwear and the victim's
12	panties, is that true?
13	A Yes, sir. That's correct.
14	MR. REVERCOMB: May I have a moment,
15	your Honor?
16	(Brief Pause)
17	MR. REVERCOMB: I believe that's all
18	I have, your Honor.
19	THE COURT: Mr. Lester?
20	CROSS-EXAMINATION.
21	BY MR. LESTER:
22	Q Sergeant Zain, you might have to help me
23	out a little bit. Blood work is not exactly
24	something I deal with everyday. Now let me get

1 an idea because, you know, I appreciate your 2 testimony, but I don't know about everybody else, 3 but I kind of got left by the wayside about five 4 or ten minutes ago. Let's say for instance that 5 if I wanted to take a piece of this carpet and I 6 said a piece of this carpet had a hypothetical 7 body substance on it - we won't go into what 8 substance it might be - and I cut it out of the 9 floor and brought it down to South Charleston and 10 handed it over to you. Let's say I was a member 11 of a licensed police department or something like 12 that that you would do work for, how would you gd 13 about it anyway? What would you do? 14 It depends on the type of body fluid. 15 Since we are talking about seminal fluid, 16 let's talk about seminal fluid? 17 Okay. First of all, the item would be -18 after the case would be logged in, given a 19 specific number, go through the protocol which I 20 mentioned previously, the item would be examined 21 by UV light. 22 Ultraviolet light? 0 23 Α That's correct. The item would be held, 24 if it's small enough, underneath the UV light.

If it's too large to put under the UV light, we have a hand held light we have that can plug in.

We use it for crime scene identifications. If we see any type of florescence, it gives us one indication of the possiblity of seminal fluid.

First of all, you would look over the item individually with the naked eye, feeling the item for any type of secretions that might be present for chemical testing.

Q Let me ask you a question on all of this various stuff here. What led you to believe that when you were holding this stuff up to the florescent light, that this particular material that you were holding up, and maybe you were getting a reflection back or whatever you want to call it from the ultraviolet light, what was it that made you think that maybe this had something to do with the stuff on the T-shirt, had something to do with Gerald Wayne Davis? Maybe he was just a slob, if you know what I mean.

A I really don't understand the question.

Q Let me put it another way then. You have taken a T-shirt and you have taken it up to the ultraviolet light and you have looked at it and

1	you have evidently seen something at one point in
2	time. What was it that made you say to yourself,
3	ah ha, this material right here belongs to the
4	body fluid of one individual, that individual
5	being Gerald Wayne Davis?
6	A I have not made that statement.
7	Q Oh, okay. Well that's where I thought we
8	were headed. So then it just could be somebody
9	else?
10	A As I stated earlier, if you wanted an
11	explanation of the scientific basis of the
12	examination, I can go on with that because there
13	are other procedures to go through.
14	Q Keep on going through the procedures. We
15	are back at the ultraviolet light.
16	A The items are examined individually. They
17	are examined by UV light. And then if stains are
18	present, which under UV light you will have
19	apparent yellowish or white yellowish staining.
20	As far as a T-shirt, say, the T-shirt in this
21	particular instance has a variety of stains on it
22	which are visual by the naked eye, portions of
23	the stained material were identified chemically
24	as being positive for seminal fluid.

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1 Let me ask you a question. How did you O 2 identify them chemically as being positive for 3 seminal fluid? First of all, one test is what is called Α 5 alphanaphtal phosphate test, you take a portion 6 of, a very small portion, possibly even one tiny 7 shread of the stain, subject it to chemical 8 alphanaphtal phosphate test and a fast blue B dye 9 solution, and in the presence of seminal fluid it 10 will turn from a clear color to a purple color. 11 After this is done, another small portion is 12 used. 13 Sergeant Zain, can I ask you a question? 14 Is there anything else from the human body that 15 might be sold commercially that might turn purple 16 upon going through this test? 17 The only reaction that will occur with the 18 acid phosphatase test is acid phosphatases that 19 are found in the the human body. That is why 20 this is a preliminary chemical test. Because the 21 second test we use is by the name of P-31. 22 relates to a chemcial that is only found in a 23 male individual. The P-31 test is called 24 across-over electrophoresis test. What it does

1	is a portion of the stain material reacts with
2	P-31. If it is negative, there will be no visual
3	positive reaction. If it is positive, there will
4	be a positive reaction which is only specific for
5	seminal fluid, human seminal fluid. It will not
6	react with any other body fluid of any kind.
7	Q Sergeant Zain, I don't want to get into
8	specifics, but you know we are kind of talking
9	about a T-shirt here. About how big of a spot
10	are we talking about on this T-shirt?
11	A If you can hand me the T-shirt, I'll show
12.	you the seminal stains.
13	Q Is it as big as a bread box?
14	A There are a variety of seminal stains all
15	over the T-shirt.
16	Q Are we talking about the size of dimes?
17	A I think they range anyway from a half
18	dollar on up.
19	Q Half dollar on up, okay. I've got a
20	question for you with regards to your statement
21	earlier about contamination. Tell us a little
22	bit about contamination.
23	A Contamination can be due to one or two
24	things: Primarily, one, you can have soiled or

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1 dirty clothing. As most everyone knows, that's 2 why we wash clothes routinely. You can also have 3 contamination from detergent. Detergents will 4 stay in clothing most often than none. They will 5 destroy body fluids and stains. That's why we 6 wash clothes. That's why they make protein 7 soluble wash detergents, so you can get blood and 8 different types of stain out of clothing. Secondly, you have contamination possibilities of 10 the stain or stains themselves. 11 We are talking about two different kinds 12 of contamination then? 13 That's correct. 14 We are talking about contamination when 15 somebody, for instance, changing a tire and 16 getting their shirt contaminated with road grit, 17 and on the other hand we are talking about 18 contamination with body fluids? 19 Well, you can hold them separately or you 20 can combine them, because all in one, if you have 21 a soiled - while we are using a T-shirt, that 22 has a lot of perspiration on it, body secretions, 23 just from wearing it, and then you have seminal 24 fluid stains also on that T-shirt. While the

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seminal fluid would have remained in a liquefied state and not have become dried, it could have caused and the possibility exists of bacterial activity inside that body fluid. Because anytime time a body fluid leaves an individual's body, there is an automatic contamination of whatever the body fluid might be up to and including the time that that stain becomes dried. When a stain becomes dried, bacterial degradation will cease, because it's like in a fixed state. Say you have a lot of the bacterial activity and the quicker it dries, the less that activity becomes. But on the other hand, if it becomes moist again, you can have bacterial activity start up again, like food.

Q Let me ask you a question. Let's say for, instance, we had a particular piece of clothing and we incubated it on something like a warm water bed, then the material we got on the material that we are attempting to do the test on, we might have a heightened amount of bacterial degradation, I think you called it?

A Theoretically, if the stain was in a liquefied state, not in a dried state, it might

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enhance it to some degree. When bacteria get started, nothing seems to stop it until its either dried or frozen or whatever. relationship to the jury here, the easiest way, a lot of times when we are talking about blood and body fluids, it's just like blood and body fluids are protein. Everybody can relate to protein. As far as from the standpoint if you have a piece of meat and you fry it, you denature the protein in meat. That's why it makes it taste better. You have foods that once you open a can -- I'm sure most of the ladies on the jury have done some canning at one time or another. Once you open that up, you have to either keep it in a refrigerator or you have to have it in sort of a preservative to keep bacterial activity from happening. If you have something in a refrigerator, you use it, you set it outside, you are going to have mold grow on it or fungus. You are going to have bacterial activity. Blood and body fluids are the same thing. They are biological materials and can have, depending on varying degrees of temperature, varying degress of moisture, will vary according to the type of

1 of bacteria that could possibly be present. 2 Then help me out with this then. 3 different types of bacteria out there that are effecting these proteins that are part of your 5 body secretions? 6 Oh, there is quite a variety of bacteria 7 in the world. 8 With regards to all of these different 9 kinds of bacteria, do you ever run into 10 situations where you start out with tests and it 11 kind of looks like, for instance, one type of 12 material, such as you got listed out here and 13 later on it looks like maybe it's another kind of 14 materials rather than the first type? Let me 15 strike that. Let me rephrase that question. 16 From a scientific standpoint can you be put in 17 the position whereby that if you don't know what 18 bacteria acted upon a particular substance from 19 the body, you don't know what it was when you 20 started out, you only know what it is when you 21 ended up with it? 22 As I stated earlier, that's one reason why 23 we use controls and standards for all testing. 24 Secondly, bacterial contamination, to whatever

degree it may be, will more likely than not destroy blood typings rather than enhance blood typings. When I explained that the A blood tying which I identified could have originated either from the material due to contamination of the material, the possibility exists that it could have originated from an A secretor individual. I could not elminate that interpretation from the standpoint of the information which I had gained from the evidence that I examined.

Q Then are you telling me in so many words that you can only state with regards to percentages what the possibilities are of your results, rather than with any degree of exactitude?

A I don't believe that you and I have talked about any percentages, other than secretor/non-secretor status. What I did state earlier is that from the standpoint of the examination, the tests which were performed, that there was an indication of an A blood type being present in the secretions which I identified, the extreme of the identification was minimal, but I did not feel that I could exclude it from my

1 report. On a scale of 1 to 10, I had an 2 indication of an A blood type which was probably 3 a two. But, there again, the identification of the blood type as far as the ABO blood typing 5 from seminal fluid was definitely 100 hundred 6 percent A, O, due to being on a scale of 1 to 10, 7 would be 10. Well let me ask the next question. If you 8 9 got a control, how can you be sure that it's a 10 control, because it might too be bacterially 11 contaminated? 12 That's exactly what I stated earlier. 13 That I got a two plus scale on the control for an 14 A blood type and I got two plus on the stain. 15 And that at that time, if I would have eliminated 16 the A blood type which I was seeing, being due 17 directly to bacterial contamination, then the 18 blood typings which were reported would have been 19 consistent with Miss Ward's and also consistent 20 with Mr. Davis'. 21 And they could also be consistent with Q 22 just about a whole lot of other people? 23 Well if you want to get into percentages, 24 as far as in a two plus one plus and a secretor,

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that's something different. Because you say a whole lot of other people -- For example, an ABO O individual is approximately 43 percent of the general population of West Virginia. A PGM two plus, one plus is approximately 25 percent of the general population of West Virginia. And of course a secretor individual is 80 percent of the general population. So 43, 25 of that, about 10 percent, 8 percent of that, we'll say probably around the realm of 7 percent of the general population of West Virginia.

A It would be the same for an A, two plus, one plus, secretor as it would for an O. And you are theoretically saying in percentagewise it would mean a lot of people. What I am saying is that it would be approximately 7 to 8 percent of the general population of West Virginia, and half of that would be approximately three and a half percent of the male population of West Virginia.

So you would exclude ninety-six and a half percent of the male population of West Virginia as having deposited an O blood type, two plus, one plus, secretor individual from seminal fluid.

1	Q That is if there was no contamination
2	involved?
3	A It's from the standpoint if it's an A, two
4	plus, one plus, secretor individual, it would be
5	the same percentage.
6	MR. LESTER: I don't have any
7	further questions of this witness.
8	MR. REVERCOMB: I just have one last
9	question.
10	REDIRECT EXAMINATION
11	BY MR. REVERCOMB:
12	Q Basically what you are saying is the fact
13	you got this weak A factor does not exclude Jerry
14	Davis from being the donor of that seminal fluid?
15	A That's correct
16	RECROSS EXAMINATION
17	BY MR. LESTER:
18	Q If I might ask one further question, and
19	it doesn't particularly point towards him as
20	being the donor of that particular fluid?
21	A All these reports do are to give the
22	scientific information for what they are. It's
23	not my job to give information to point to any
24	one individual or another, only to show or to

1	explain that it either can include an individual
2	or that it 100 percent excludes that individual.
3	And in this particular instance it does not 100
4	percent exclude Mr. Davis as having deposited
5	that seminal fluid on the items which I have
6	testified to over here.
7	MR. LESTER: I have no further
8	questions, your Honor.
9	THE COURT: Anything else of this
10	witness?
11	MR. REVERCOMB: No, your Honor.
12	THE COURT: I understand this
13	witness has to be in another location. Is there
14	any objection that he be excused from this trial?
15	MR. LESTER: No, your Honor. I have
16	none.
17	THE COURT: Thank you, officer, you
18	may step down and be excused.
19	(Witness Zain stood aside.)
20	THE COURT: Ladies and gentlemen, we
21	are going to recess for the day. We thank you
22	for your patience during the day, particularly
23	this last period of time. This officer has to be
24	in another court somewhere in the state, as I