

1 I think that's correct.

2 MR. WARD: I -- well, I wouldn't know. You couldn't
3 prove it by me. I -- I -- if he's here, I think he can testify
4 -- yeah, we'll agree to that.

5 THE COURT: All right.

6 (Following the bench conference, proceedings continued as
7 follows:)

8 THE COURT: Ladies and gentlemen of the jury, in place
9 of a witness testifying in person, the parties may agree and
10 stipulate to what a witness will testify to. In this case both
11 the State and the Defendant stipulate that if Mr. Syd Bearden
12 were called to testify, he would testify that he withdrew whole
13 blood from Ronald Williamson and gave it to Dennis Smith on
14 September the 24th, 1987. That he withdrew whole blood from
15 Dennis Fritz and gave it to Dennis Smith on September 4, 1987.
16 And it's stipulated that Mr. Bearden is qualified to withdraw
17 whole blood for that purpose. You may proceed.

18 This stipulation may be considered by you as evidence
19 in the case.

20 MARY LONG,
21 having first been duly sworn to testify the truth, the whole
22 truth and nothing but the truth, was examined and testified as
23 follows, to-wit:
24 (Whereupon, State's Exhibits Nos. 24, 25, and 26 were marked
25 for identification.)

DIRECT EXAMINATION

2 BY MR. PETERSON:

3 Q Please, state your name.

4 A Mary M. Long.

5 Q And where do you reside?

6 A In Oklahoma City.

7 Q And what is your present occupation?

8 A I'm a criminalist with the Oklahoma State Bureau of
9 Investigation.

10 Q By whom are you -- you're employed by the OSBI?

11 A That's correct.

12 Q And how long have you been so employed?

13 A Eight years.

14 Q What is your educational background?

15 A My educational background consists of a Bachelor of
16 Arts Degree in Chemistry from Southwestern Oklahoma State
17 University and a Bachelor of Science Degree in Forensic Science
18 from Central State University.

19 Q Have you had any subsequent specialized education in
20 the field of body fluids?

21 A Yes, I have.

22 Q And what would that be.

23 A After going to work for the OSBI, actually, is when
24 all my specific training in forensic serology, which is what I
25 do, actually took place. I've attended some seminars given by

1 the FBI -- actually, they're not seminars; they're college
2 courses in basic serology, in biochemical methods of blood
3 stain analysis, and in the microscopy of hairs and fibers given
4 at the FBI Academy by laboratory personnel from the FBI. Also
5 attended a school on the analysis of sex crimes evidence given
6 by the Serological Research Institute in Emeryville, California.

7 Also attended the fifth OSBI Agents Academy, and
8 within that Academy I was certified to be a teacher of police
9 officers to teach them how to collect and preserve evidence
10 at crime scenes. Also have been to a few other seminars around
11 the State of Oklahoma about homicide investigation, sex crimes
12 investigation, and such other things.

13 Q Are you a member of any organizations related to your
14 work?

15 A Yes, I am. I am a member of the American Academy of
16 Forensic Sciences, and also the Southwest Association of
17 Forensic Scientists.

18 Q Would you explain to the jury the nature of the work
19 you do with body fluids.

20 A Yes. My title with the State of Oklahoma is called
21 criminalist, but probably a more specific title for me would
22 be a forensic serologist. What I do is I receive evidence in
23 criminal cases, I perform analysis on that evidence, and then I
24 testify to the results in court. And the specialization that I
25 have is in the area of samples that come from the human body,

1 whether it be saliva, blood, semen, any body fluid type thing.
2 So, again, I analyze all those things and testify to what the
3 results are in court.

4 Q Do you -- do you also do -- determine the amount of
5 drugs or alcohol in the contents of the body fluids?

6 A No.

7 Q You do not do that.

8 A No, sir.

9 Q Okay. If semen or sperm is present, can you determine
10 the blood type?

11 A Yes, sometimes.

12 Q And could you explain to the jury how you would
13 obtain that.

14 A Okay. In the case of semen, to determine the blood
15 type I have to do what is called a secretor test. Now, a
16 secretor is a person who has their blood type activity in their
17 water-base body fluids. Everybody is probably pretty familiar
18 with your blood type, if you're an A or a B or an O or an AB.
19 And 80 percent, about four out of five people, have their A or
20 B or O blood type activity in their water-base body fluids,
21 such as semen, saliva, tears, gastric juices, those kind of
22 things.

23 So, doing this secretor test for the ABO activity,
24 the ABO blood system activity is done many times in cases where
25 semen is identified in the body of a female.

1 Q Okay. And did you have an occasion to examine
2 evidence submitted to you by the Ada Police Department in this
3 case?

4 A Yes.

5 Q Let me show you what's been marked for identification
6 purposes State's Exhibit 3. From whom did you receive that?

7 A State's Exhibit No. 3 is a paper sack which has several
8 labelings on it. This has Debra S. Carter and then 825138,
9 and some other things -- I'm not sure exactly what this says;
10 it's a little bit vague, something weapon, electric blanket
11 cord, socks, belt, J.P., 12/10/82. Then it has my case number
12 here, which is S82784, my initials, the date, and my item
13 number that I assigned it for my report. This is my Item
14 No. 15.

15 Q Okay. From whom did you receive that?

16 A These were submitted to the OSBI Lab by Jerry Peters,
17 and that was on 12/10 of '82.

18 Q Let me show you what's been marked for identification
19 purposes State's Exhibit 15. Do you recognize that exhibit?

20 A Yes, I recognize this, yes.

21 Q Okay. And from whom did you receive that?

22 A This item was received also from Jerry Peters on
23 12/10 of '82.

24 Q Okay. Do you know what it contains?

25 A Yes. This item, State's Exhibit No. 15, is what we

1 commonly call just an OSBI evidence envelope. We had these
2 printed up just to make things a little bit easier when law
3 enforcement agencies submit evidence to us. It just has sort
4 of a form thing printed on the front, so they can fill it out.

5 Inside here is contained numbers 1 through 14 that I
6 assigned for my report. And what these are are items that are
7 collected routinely at an autopsy by the medical examiner, and
8 what they are is they draw blood from the person. They take
9 vaginal, oral, and rectal swabbings from the person. They do a
10 pubic combing. Then they take known scalp hairs and know pubic
11 hairs. They also take any trace evidence that they think might
12 be important from the body of the person.

13 In this case, they took some trace evidence from the
14 perianal area of Debbie Carter. They also did clippings of
15 right hand and left hand, fingernails. They did some scrapings
16 from the writing on the chest of Debbie Carter and also from the
17 material on her back. And then, there was also one cap, a
18 catsup bottle cap that was removed from her body.

19 Q Let me show you what's been marked for identification
20 purposes State's Exhibit 17 and State's Exhibit 18. Do you
21 recognize those exhibits? I'm sorry, let me -- strike that just
22 a second. State's Exhibit -- for the record, State's Exhibit 16
23 and State's Exhibit 17.

24 A State's Exhibit No. 16 is an envelope that has a return
25 address from the medical examiner's office in Oklahoma City.

1 It's labeled as Debra S. Carter, scalp hair, 825138. It also
2 has the initials M. R. H. Also has S. P. L., 2/15 of '83, and
3 it has the case number, S82784, my initials, the date, and No. 7,
4 which is the number that I gave it for my report. These are the
5 known scalp hairs taken from Debra Carter.

6 Q Okay.

7 A State's Exhibit No. 17 is a similar envelope except
8 on the front this time the labeling is pubic hair. The rest of
9 the labeling is basically the same.

10 Q Okay. Did you receive these from Jerry Peters?

11 A Yes.

12 Q Let me show you what's been marked for identification
13 purposes State's Exhibit No. 4. Do you recognize that, please?

14 A Yes. State's Exhibit No. 4 is just a manila envelope
15 which has labeling, panties found in bedroom, S.E. corner floor,
16 12/8/82, G. L. R, 3:00 o'clock p.m. It also has my case
17 number, my initials, the date, and my item number which I
18 believe is No. 30. It's torn and you can't tell, but it's
19 No. 30.

20 Inside here is another envelope, and this contains
21 the panties, my Item No. 30.

22 Q And did you receive those from Gary Rogers?

23 A These items were received on 12/16 of '82 from Gary
24 Rogers.

25 Q Let me show you what's been marked as State's Exhibit

1 No. 6. Can you identify that?

2 A Yes. State's Exhibit No. 6 is what we commonly call
3 a paper bindle. What we do in the laboratory when we have
4 things that are small or could easily get lost, we fold them
5 up in this little piece of paper, so that nothing can happen
6 to them.

7 This paper bindle says, hair found in floor under
8 victim, D. Smith, 12/8/82, and it has the initials M. R. H.
9 It has my case number S82784, my initials, the date, my Item
10 No. 27. It also says S. P. L., 1/10/83.

11 Q And from whom did you receive those?

12 A This Item No. 27 on my report was received from Gary
13 Rogers 12/16 of '82.

14 Q Let me show you what's been marked for identification
15 purposes State's Exhibit No. 7. Can you identify that?

16 A State's Exhibit No. 7 is an OSBI envelope which is
17 labeled No. 137 through 142. This particular envelope I never
18 had in my possession. I don't have any markings on it.

19 Q Okay. Let me show you what's been marked for
20 identification purposes State's Exhibit No. 2, and ask you if
21 you can identify that.

22 A State's Exhibit No. 2 is a box which has labeling on
23 it, Ada Police, Carter bedding, two sheets, one pillow case,
24 one bedspread. Inside here are bedding items. There are
25 striped sheets and also a bedspread.

1 Q Let me show you what's been marked for identification
2 purposes State's Exhibit 14. Can you identify that?

3 A State's Exhibit No. 14 is a paper sack which contains
4 another plastic sack. It's labeled again with my case number,
5 my initials, the date, and my item number. Some other labeling
6 is, homicide, Debbie Carter, Pontotoc County, also says J. P.,
7 12/10/82, gag from mouth.

8 Q And do you recognize that?

9 A Yes, I do. My markings are here.

10 Q Okay. Let me show you what's been marked for
11 identification purposes State's Exhibit No. 5. Can you identify
12 that?

13 A State's Exhibit No. 5 is a paper sack which has my
14 labeling, case number, initials, date, and my Item No. 18.
15 Also has received from Mary Long on 12/23/82, J. P. It says
16 received from Jerry Peters 4/6/88, 13:40 p.m., C. L. R.,
17 12/8/82, found bedroom, 1022½ East Eighth, 12:30 p.m. And
18 then there's some initials here, but they're covered up by the
19 State's Exhibit sticker.

20 Q Do you recognize that exhibit?

21 A Yes, I do.

22 Q And from whom did you receive that?

23 A I received that item from Gary Rogers on 12/16 of '82.

24 Q Let me show you what's been marked for identification
25 purposes State's Exhibit No. 8. Can you identify that?

1 A State's Exhibit No. 8 is a small paper sack which
2 says, wall section, south side, 3:20 p.m., G. L. R., 12/9/82.
3 It says J. P., 2/8/83. Has a big No. 5 marked on it. Also has
4 my case number, my initials, the date, and Item No. 20 which I
5 assigned it for my report. This is a small section of wall.

6 Q Okay. And from whom did you receive that?

7 A Received this from Gary Rogers on 12/16 of '82.

8 Q Okay. In State's Exhibit No. 15, did you make an
9 analysis of the vial in there labeled whole blood, Debbie Carter?

10 A Do you want me to take it out?

11 Q If you wish to.

12 A Yes, I did. This vial which is No. 1 on my report
13 contained the whole blood.

14 Q Okay. Were you able to group that blood?

15 A Yes, I was.

16 Q And what group was it, please?

17 A I was able to determine that this human blood was
18 Group A.

19 Q And that blood was Debbie Carter's; is that correct?

20 A That's -- it was labeled as Debbie Carter's.

21 Q Okay. Did you also receive some swabs?

22 A Yes, I did.

23 Q And did you test those swabs?

24 A Yes, I did.

25 Q Would you tell the jury your results, please.

1 A Yes. In this vial, which is labeled No. 2 on my
2 report, are two swabbings that are labeled as having come from
3 vaginal area of Debbie Carter. What I did with those swabs is
4 I made an extract, or I soaked part of them in saline, which is
5 a salt solution about equivalent to what your tears are.

6 From that saline extraction, I looked -- made a slide
7 and looked under the microscope, and I identified the presence
8 of sperm cells.

9 Q And did you determine whether there was any antigen
10 activity present?

11 A I was not able to detect the presence of any antigen
12 activity on these swabs.

13 Q And what would that indicate to you?

14 A Well, with no antigen activity detected, either
15 antigen levels too low to detect, or the possibility of a
16 non-secretor.

17 Q Also in State's exhibit that you have in front of
18 you, did you have combings, pubic combings, and known pubic
19 hair of that of Debbie Carter?

20 A Yes, they were originally submitted inside State's
21 Exhibit No. 15.

22 Q And to whom did you give the pubic combings, the
23 known pubic hairs, and the known scalp hairs to?

24 A They were all given to Susan Land of the OSBI.

25 Q Okay. In State's Exhibit 15, I believe, there is

1 fingernail clippings; is that correct -- right and left hand?

2 A That's correct.

3 Q Were you able to determine if there was any material
4 under the fingernails of Debbie Carter?

5 A Yes, I was. On No. 9, which are the fingernails from
6 the right hand, there was blood identified on one of the
7 fingernails, and it was -- had Antigen A activity, and that's
8 indicative of Type A.

9 Q Is that the same blood grouping as Debbie Carter?

10 A Yes, the same as her own.

11 Q There was nothing else, no skin, no dirt, or any of
12 that kind of material?

13 A No, nothing that was analyzable.

14 Q Okay. In State's Exhibit No. 2, the box containing
15 the bed sheets, did you -- what did you do with the bed sheets,
16 the pillow case, and those items in State's Exhibit 2?

17 A State's Exhibit No. 2, the first thing that I did was
18 just examine the items for anything that I might think is
19 evidence. Down in the OSBI Lab we have some large tables -- it
20 would be about the equivalent of both of these tables pushed
21 together -- and we always take clean, white paper and put it
22 down, and search the items that we need to look at on the clean,
23 white paper.

24 We take a pair of tweezers and take off all of the
25 hairs and the fibers, and -- oh, sometimes you never know what

1 might be evidence -- little flakes of paint or something like
2 that. All of that is removed and collected. Then any stains
3 that might be possible body fluid stains are cut out and
4 collected.

5 From those things that I did, numerous hairs were
6 removed, and I gave those to Susan Land. Then I performed
7 analysis on some of the stains that were removed for presence
8 of body fluids. On the fitted sheet I identified semen and
9 also, I identified human blood, Type A.

10 Q And were you able to pick up any antigen activity in
11 the semen?

12 A No.

13 Q And that would indicate that the person could have
14 been a non-secretor; is that correct?

15 A That's a possibility.

16 Q On the panties, which would be State's Exhibit No. 4,
17 what did you do with those?

18 A Again, on the panties, a similar operation that was
19 done on the bedding. They were examined for any hairs or
20 anything else that could possibly be evidence. That was
21 collected from them, and then any body fluid stains were cut
22 out and analyzed.

23 The hairs that I collected were given to Susan Land
24 on 1/17 of '83. And the stains that I removed I identified
25 sperm cells, but I was not able to determine any antigen activity

1 from the semen.

2 Q That would indicate the possibility of a
3 non-secretor again; is that correct?

4 A That's a possibility.

5 Q Let me show you what's been marked for identification
6 purposes State's Exhibit 3, which you've already identified.
7 What did you do with those items?

8 A State's Exhibit 3, which is my No. 15, again,
9 basically the same operation was done. I removed all of the
10 hairs and possible trace evidence, and I also checked it out
11 for anything that I thought might be a body fluid stain. There
12 were no body fluid stains identified, so the hairs were removed
13 and collected and given to Susan Land on 1/4 of 1983.

14 Q And do you recall -- you stated that you removed hair
15 from the socks and the electrical cord; is that correct?

16 A I believe so.

17 Q From State's Exhibit No. 14, which would be the rag
18 or the wash rag, what did you do with that?

19 A From State's Exhibit No. 14, which is my No. 17, I
20 collected all of the hairs and possible trace evidence and
21 submitted it to Susan Land on 1/4 of '83.

22 Q And you removed hair from that washcloth; is that
23 correct?

24 A Yes, that's correct.

25 Q Let me show you what's been marked for identification

1 purposes State's Exhibits 25 and 26. Would you look at those,
2 please. Excuse me, 24, 25, and 26.

3 A State's Exhibit No. 24 is a coin envelope which has
4 the labeling on the front, S82784, 6 PB, con't., which is
5 containing hairs from bedding, S. P. L., and it says S82784,
6 No. 32, M. R. H., and it says Carter. This particular coin
7 envelope did not originate with me, so I don't have any
8 markings on it.

9 State's Exhibit No. 25 is a little plastic -- what we
10 call petree dish; it's just a little plastic bottom with a lid
11 on it which is labeled S82784, my initials, the date, No. 30,
12 and it says, hairs from panties, M. R. H., and then it says
13 S. P. L., 1/10 of '83.

14 And State's Exhibit No. 26 is another paper bindle,
15 which has my case number, my initials, the date, my Item No. 17,
16 hairs from washcloth, and it has M. R. H., and then S. P. L.,
17 1/10/83.

18 Q And did you submit those items to Susan Land on
19 1/4 of '83?

20 A I submitted State's Exhibit 25 and State's Exhibit 26
21 as you see them to Susan Land on those dates. On State's
22 Exhibit No. 24, I submitted the contents to her, but not the
23 actual little outside envelope.

24 Q Okay. And the contents of those were the items of
25 hair evidence taken from the bedding; is that correct?

1 A Yes, there are six paper bindles inside.

2 Q Did you have an occasion in March of 1983, to receive
3 any items of evidence from the Ada Police Department concerning
4 running tests on secretor, non-secretor?

5 A Yes.

6 Q Did you receive items from -- identified to you as
7 from Ronald Keith Williamson and Dennis Fritz?

8 A Yes, I did.

9 Q Did you run tests on those samples submitted to you?

10 A Yes.

11 Q And were you able to determine whether or not they
12 were secretors or non-secretors?

13 A I was able to determine that on the samples I had no
14 antigen activity was detected.

15 Q Same as on the bed sheets and same as on the panties;
16 is that correct?

17 A Those are consistent results.

18 Q Did you have an occasion to receive in September of
19 '87 whole blood and saliva samples from Dennis Fritz and Ron
20 Williamson?

21 A Yes.

22 Q And did you run tests on those items?

23 A Yes, I did.

24 Q And would you relate to the jury your findings on the
25 blood and the saliva samples from Dennis Fritz and Ron Williamson.

1 A From Dennis Fritz I received whole blood, and I
2 determined it to be Group O, and I also determined the Lewis
3 type to be A+B-.

4 Q And what does that indicate to you?

5 A Well, Group O indicates that he, of course, is Group
6 O; that's about 45 percent of everybody is Group O. The Lewis
7 type is a genetic indicator of whether or not a person can be a
8 secretor. If a person is Lewis A positive B negative, he does
9 not have the genetic capability to be a secretor. That means
10 that he has no blood group activity that can be detected in his
11 saliva or semen; or if it's a woman, vaginal fluid.

12 If a person is A negative B positive, then, of course,
13 they are a secretor, and their blood group activity shows up in
14 these water-base body fluids. Again, Dennis Fritz was a Lewis
15 A positive B negative, so that means non-secretor.

16 Q Did you receive the whole blood of Ron Williamson
17 on the 9/24/87, and saliva samples?

18 A Yes.

19 Q And did you determine his group?

20 A Yes. I determined that he's human blood Group O.

21 Q And did you determine whether or not there was any
22 antigen activity present in the saliva sample submitted also
23 at that time?

24 A No, there was no antigen activity in his saliva.

25 Q Did you do testing to determine whether he was a

1 secretor or non-secretor?

2 A Not at that time, and not with these items that were
3 submitted.

4 Q Okay. Did you at a later time determine?

5 A Yes, I did. Another vial of blood was submitted, and
6 the Lewis type was determined to be A positive B negative, which
7 is non-secretor.

8 MR. PETERSON: Your Honor, State yields the Witness.

9 THE COURT: We'll take a recess.

10 MR. WARD: Pardon me?

11 THE COURT: Remember the instructions I've previously
12 given you. You may step down, and those in attendance of the
13 trial remember that you're not to be anywhere near the jurors
14 in this case. You may step down.

15 (Following a short recess, proceedings continued as follows:)

16 THE COURT: Mr. Ward, you may cross examine.

17 CROSS EXAMINATION

18 BY MR. WARD:

19 Q Mrs. Long -- is it Mrs. Long?

20 A Yes, it is.

21 Q Okay. When did you receive the last item of evidence
22 that you worked on pertaining to this case?

23 A The very last item that I received was my Item No. 155,
24 which was received on October 26th of 1937.

25 Q Ocotober -- okay, all right. Now, that was blood and

1 some -- was that the blood sample of Williamson and Fritz?

2 A It was a blood sample from Mr. Williamson.

3 Q Okay. All right. Well, prior to that, when was the
4 last thing you had received -- I had forgotten about that.

5 A Prior to that was in September of 1987.

6 Q Of '87?

7 A Of '87.

8 Q Now, that was the blood sample of Fritz?

9 A Yes. It was blood and saliva from Fritz, blood and
10 saliva from Williamson, and saliva from a person named Ricky
11 Simmons.

12 Q Named what?

13 A Ricky Simmons.

14 Q Okay. Then -- okay. Prior to that, when was the last
15 thing that you received?

16 A Prior to that, the last thing that I received was
17 saliva from David Hanks, Ronald Keith Williamson, and Dennis
18 Fritz on March the 29th or 1983.

19 Q Okay. And nothing was submitted to you from here or
20 any place else other than these three blood and saliva samples
21 in 1987, since March of 1983?

22 A They were not submitted to me. I don't know if anyone
23 else received them, but not to me.

24 Q Well, I thought -- well, no, I know that. I'm just
25 asking about -- nothing was submitted to you after that March,

1 1983 date?

2 A That's correct.

3 Q And you held this same position all this time, '83
4 up to today?

5 A That's correct.

6 Q Work in the same office; all right. How many
7 different individuals did you make the determination of being
8 secretors or non-secretors -- how many -- how many people did
9 you test -- I don't mean test; you used the samples.

10 A The two-phase test of blood typing and saliva typing
11 was done on two people, and that was Mr. Williamson and Mr.
12 Fritz.

13 Q That's not what I asked you, Mrs. Long. I asked you
14 how many people you determined were secretors or non-secretors
15 since you were -- became involved in this case.

16 A I determine that two people were non-secretors in
17 this case based upon blood and saliva confirming each other.

18 Q That's not what I asked you, Mrs. Long. I asked you
19 how many did -- did you testify at the preliminary hearing in
20 this matter?

21 A Yes, sir, I did.

22 Q All right. Then, how many people did you tell us you
23 had determined were secretors or non-secretors?

24 A Confirmed by blood and saliva --

25 Q Listen --

1 MR. WARD: If the Court please, would you ask her
2 to answer the questions I'm asking. I don't care about her
3 opinions and I don't care about her making any changes in it.

4 THE COURT: He didn't ask you how you confirmed it.
5 He asked you what your results were.

6 Q (By Mr. Ward) Did you test 20 people?

7 A I tested saliva samples on people, but that's not a
8 confirmation.

9 Q I don't care if you testified urine. Did you test
10 20 people?

11 A Mr. Ward, I'm not sure exactly --

12 Q Well, do you have some records to show?

13 A Yes, sir.

14 Q Then, I suggest you look at it and find out.

15 A I tested saliva samples on certain persons, and I
16 tested one, two, three, four, five --

17 Q Okay. I'm going to ask you where this will be simple
18 enough even for you to answer it. In your testimony at the
19 preliminary hearing some time in July of 1987, did you sit on
20 that witness stand under oath and tell this Court that you
21 tested 20 people, one of which was Debbie Carter? Just yes or
22 no -- is that what you did?

23 A I tested body samples from about 20 people, yes.

24 MR. WARD: If the Court please, will you tell her to
25 answer my questions.

1 MR. PETERSON: Your Honor, she's trying to.

2 MR. WARD: No, she's not. She's trying to avoid
3 answering my questions --

4 THE COURT: Wait a minute. Wait a minute.

5 MR. WARD: -- if the Court please.

6 THE COURT: Please, please, please. There's too much
7 experience in this courtroom to go outside the rules. If you
8 do not understand the question asked, then tell State you do
9 not understand. If Mr. Ward asks you a question, you answer
10 his question. Do not answer a different question.

11 Mr. Ward, ask your next question.

12 MR. WARD: Just a second, Judge, I may be able to
13 shorten this; just a minute.

14 (Whereupon, Defendant's Exhibit No. 1 was marked for
15 identification.)

16 Q (By Mr. Ward) You've been handed what's marked for
17 identification Defendant's Exhibit No. 1. Do you know what that
18 is?

19 A Yes, sir, I do.

20 Q What is it?

21 A Defendant's Exhibit No. 1 is a chart that I prepared
22 which reflects antigen activity detected on body fluid samples
23 from 20 different people.

24 Q Okay. Now then, did you testify to the results of
25 those tests run on those 20 different people?

1 A Yes, sir, I did.

2 Q All right. Now, in that chart you even name the 20
3 different people; don't you?

4 A Yes, sir, that's true.

5 Q Okay. Now then, what was the result as shown by that
6 chart insofar as how many were secretors and how many were not
7 secretors?

8 A This test that was preformed does not confirm the
9 secretor status. It only lets me know what antigen activity
10 was present on that sample that was submitted.

11 Q And what does that indicate?

12 A I can tell you what --

13 Q Let me point something out; come up here. Now, this
14 is your report that you prepared?

15 A Yes, sir, that's correct.

16 Q All right. We're going to indicate something on
17 there. What does that mean? What does that part of it say?

18 A Okay. The column that says Antigen Activity Detected
19 shows that 12 samples that I tested had no antigen activity
20 present.

21 Q And what does that mean?

22 A That means either there was no saliva there and the
23 samples were not good, or the person was a non-secretor, one or
24 the other.

25 Q You're not going to say that 12 of those 20 samples

1 or tests, whatever you showed, that they were non-secretors;

2 are you -- 12 out of 20, one of which was Debbie Carter.

3 You're not going to say that today; are you?

4 A No, sir, I'm not. I'm going --

5 Q You did in July; did you not?

6 A Sir, I don't think so.

7 Q Who has told you not to say that here today?

8 A No, one, sir, I can't say those people are

9 non-secretors.

10 Q Did you have the same samples from them that you had
11 from Williamson and Fritz?

12 A Yes.

13 Q All right. Save and except the blood sample.

14 A That's correct.

15 Q You didn't have blood. Did you ask for blood samples
16 on Williamson and Fritz?

17 A I don't recall if I asked for them or they were
18 provided. I don't recall.

19 Q Did you tell somebody you needed them?

20 A It's pretty customary to have blood samples submitted.

21 Q Then, why didn't you tell them that in 1983, Mrs. Long?

22 A I don't recall exactly --

23 Q You got here and your testimony wasn't worth a rip
24 at the preliminary hearing; was that not right?

25 A I --

1 Q The Judge made some pretty good rulings against you
2 in that --

3 MR. PETERSON: Judge, Judge, I'm going to object to
4 the form of the question.

5 MR. WARD: If the Court please, just --

6 THE COURT: Okay. Ask a question without referring
7 to what the Court does.

8 Q (By Mr. Ward) You were having difficulty in getting
9 your testimony in here in July; were you not?

10 A Well, I don't recall.

11 Q You don't recall. Well.

12 A What difficulty is.

13 Q You said 12 out of the 20 tests were non-secretors
14 in July of 1987; did you not?

15 A I reflected the results of my report which says 12 of
16 those samples had no antigen activity.

17 Q And if you don't have any antigen activity, then
18 you're a non-secretor?

19 A You should be.

20 Q Okay. All right. We're in agreement on that. Now
21 then, earlier in response to one of -- now, that's 12 out of 20,
22 6 out of 10, 3 out of 5 are non-secretors in that group you had
23 there. Now then, did you tell the Court here in response to
24 one of Mr. Peterson's questions that one out of five were
25 non-secretors?

1 A That's correct.

2 Q Then your test didn't show the same results; did it?

3 A These tests did not show the same results --

4 Q Just yes or no, Mrs. Long. I don't -- Mr. Peterson

5 will get you to explain this, I'm quite sure. I'm not

6 interested in your explanations. I'm interested in your

7 answers. Don't hedge; don't try to avoid me --

8 MR. PETERSON: Your Honor, I'm going to object.

9 Counsel's being argumentative with the Witness, and she's
10 trying to answer the question the best way she can.

11 MR. WARD: If the Court please, she's trying to avoid --

12 THE COURT: Let me instruct. Mr. Ward, one more time,
13 I'm going to have to do something about this bantering. I'll
14 instruct you one more time, Mr. Ward is asking the questions.
15 If you do understand the question, answer it. If you do not,
16 tell him so. Do not answer a different question.

17 THE WITNESS: Okay.

18 THE COURT: Ask your next question.

19 Q (By Mr. Ward) Is your answer to that yes or no.

20 A Would you ask me the question again.

21 Q I'll ask the reporter to read it to you.

22 A Okay.

23 Q So there won't be any doubt about it.

24 MR. PETERSON: Your Honor, I'm going to ask counsel
25 not make sidebar comments to the Witness.

1 (Whereupon, the reporter read back the portion of the
2 transcript contained in Line 2, Page 684.)

3 Q (By Mr. Ward) Now, did you understand that question?

4 A Was there a part further back than that?

5 (Whereupon, the reporter read back the portion of the
6 transcript contained in Lines 20 through 25 on Page 683, and
7 Lines 1 through 4 on Page 684.)

8 A If you're asking me if these tests show just one out
9 of five --

10 MR. WARD: If the Court please, wait just a minute,
11 Mrs. Long. Would you tell her that if she doesn't understand
12 it, I'll have Dawn read it to her again.

13 THE COURT: Sustained. Do not repeat the question.
14 Just answer it. If you do not understand it, state that. If
15 you do understand it, answer it. Do not answer a different
16 question.

17 A Mr. Ward, I don't think I recall exactly -- I don't
18 understand your question. Ask me one more time.

19 Q All right. In response to Mr. Peterson's question
20 you told this Court and jury, or did you not tell this Court
21 and jury, that 80 percent were secretors, of the general public,
22 and 20 percent were non-secretors?

23 A That's correct.

24 Q Okay. Now then, of the tests that you ran, whatever
25 tests you ran -- strike that. Did you have control of the

1 testing of these samples? You made the choice as to what tests
2 were to be run?

3 A Yes, I did.

4 Q I certainly didn't; did I? And Mr. Williamson had
5 nothing to do with what tests were run; did they?

6 A No.

7 Q Did he?

8 A No.

9 Q Okay. All right. Now then, when you ran the tests
10 on these 20 samples, including one being from Ms. Carter, you
11 had 12 of those 20 or -- as non-secretors; did you not -- from
12 this report that you just looked at?

13 A There were 12 with no antigen activity.

14 Q All right. Whatever we want to call it, but there
15 were 12 out of 20; were there not?

16 A That's correct.

17 Q And that is considerably more than 20 percent; isn't
18 it?

19 A That's correct.

20 Q It would be more like 60 percent; wouldn't it?

21 A Yes, that's right.

22 Q All right. And it was your test and your test results?

23 A That's correct.

24 Q Okay. The test that you ran on Williamson and Fritz
25 in October, September, whenever it was, of this past year,

1 didn't show any different results than you had back in 1983;

2 did they -- as far as they were concerned?

3 A That's correct.

4 Q Okay. How do you explain the difference from the 20
5 percent average to 60 percent here in 1983, according to your
6 tests?

7 A Could you repeat that question?

8 Q How do you explain the difference in the 60 percent
9 and the 20 percent; the 60 percent results that you got and the
10 20 percent average, which I assume is correct; that's what you
11 said.

12 A The difference can be explained here because 20 is
13 not really a very large number as opposed to what blood banks
14 and other entities do for a general population numbers over
15 thousands of people. Twenty is not really near the volume-type
16 number as opposed to several thousand.

17 Q Would a smaller number vary as many as 5 percent one
18 way or the other?

19 A I really don't know.

20 Q Ten percent?

21 A I don't know.

22 Q Yours is guesswork; is it not?

23 A I'm not sure I understand your question.

24 Q You're just guessing at the results of these things;
25 are you not?

1 A No.

2 Q Well, you can't come within 40 percent of the average
3 out of -- and have 20 samples, and you miss it 40 percent?

4 A That doesn't have anything to do with the results
5 each person by each person.

6 Q Oh, okay. Okay. We'll forget that. Among your
7 other duties, you gathered hair samples from the -- or exhibits
8 or whatever you want to call them, from the items submitted to
9 you by the police department here and Gary Rogers and whoever
10 -- the medical examiner's office; is that not correct?

11 A That's correct.

12 Q Now then, how many hair samples -- strike that. What
13 did you do with the hair samples that you collected?

14 A The hair samples from each and every item were placed
15 in either a plastic petree dish or a paper bindle, and then
16 those hair samples --

17 Q How did you decide which went where?

18 A Well, the ones that had just a few hairs go in the
19 plastic ones, and the ones with more hairs would be held in a
20 paper bindle.

21 Q Okay. Now, what do you call just a few, two or three?

22 A Yes.

23 Q Okay. And anything over that went in a bindle, for
24 the benefit of the jury, is a little paper envelope container?

25 A It's a piece of paper that's folded up into a little

1 container.

2 Q Kind of like these containers that hold this
3 artificial sweetner?

4 A No, sir, it starts out to be just a flat piece of
5 paper, and it's folded up with several folds in it to make,
6 like, a little pocket.

7 Q Okay. What did you do with them -- who did you
8 submit them to is what I'm driving at.

9 A They were submitted to Susan Land of the OSBI.

10 Q Everything that you collected went to Susan L-a-n-d?

11 A Yes.

12 Q Okay. And what is her position?

13 A She is also a criminalist at the Oklahoma State
14 Bureau of Investigation.

15 Q And what, if you know, did she do to them or with
16 them?

17 A I really can't answer that because I don't have
18 knowledge of exactly what she did with everything.

19 Q Is she a hair and fiber examiner among her other
20 qualifications?

21 A Yes, she is.

22 Q Is that what you sent them to her for?

23 A Yes.

24 Q Do you know whether she examined them?

25 A I really don't know exactly if she did some

1 examinations or not, or I really have no knowledge of what she
2 did.

3 Q Okay. Now then, how many different hair samples or
4 exhibits or whatever you want to call them, did you submit to
5 her?

6 A There were hair samples submitted on January 3rd of
7 1983 from --

8 Q How many?

9 A -- from five items. There were hair submitted from
10 one item on January 4th, 1983. Five more items on January 4th
11 of '83. One item on January 1st of 1983. Thirteen items on
12 January 4th of '83. Another item on January 4th of '83.
13 Another item on the 17th of '83. And then 14 items on January
14 17th of '83. Four items on January 31st of '83.

15 Q Is that all?

16 A Then, I believe the rest of the hair samples were also
17 submitted to her as they came in later in 1983, and those --
18 there were numerous ones. They're all reflected in my report.

19 Q Okay. But they were not submitted to you and then to
20 her, but rather submitted directly to her?

21 A The items that are numbered in my report after Item
22 No. 126 went directly to her.

23 Q Directly to Mrs. Long?

24 A To Susan Land.

25 Q I mean Land.

1 A Yes. The only items that I dealt with during that
2 period went through Item No. 126. Those were all submitted,
3 and then any ones that came in after those were submitted to
4 her were given directly to her instead of going through me and
5 then going to her.

6 Q Okay. Now then, if I kept track, you submitted 45
7 different items, either the bindle or what you call the petree
8 dish?

9 A Yes.

10 Q Containing these hair samples. And these you -- did
11 you take each item of those 45 and tell me what you got them
12 from.

13 A Yes, I can.

14 Q Would you please.

15 A Okay. On 1/3 of '83 the hairs were taken from the
16 pubic combing, the known pubic hair, the known scalp hair from
17 the perianal area and from the body of Debra Carter. These were
18 items that were collected by the medical examiner's office. All
19 of those were given to her on 1/3 of '83.

20 Q Now, they were by you given to her on the 3rd of
21 January, 1983. Now, were these all in one container?

22 A No, each one would be in its own container. Each of
23 the hair -- all of the hairs removed from one single item would
24 be together in one container, but none were ever mixed from,
25 say, Item 7 and 11. Each item has its own container unless

1 there were too many to fit in one, and then it was given two or
2 more, however many were needed.

3 Q So, you read that list, and you may have gotten where
4 I wanted to go. You said pubic combings and known pubic hairs
5 of Debbie Carter.

6 A Yes.

7 Q Were in this exhibit or whatever you -- item, January
8 the 3rd, 1983. How many separate containers were they delivered
9 in?

10 A The pubic hair and the pubic combings?

11 Q Yes, ma'am.

12 A All of the known pubic hairs were in just one
13 envelope, and all of the hairs that were from the pubic combing
14 were in one envelope.

15 Q Okay.

16 A So, that makes two containers.

17 Q Okay. All right. Those were the main items I was
18 interested in. I'm glad you got them as quick as you did.

19 MR. WARD: Just a second, Judge. Judge, I believe
20 that's all.

21 THE COURT: Any other questions?

22 REDIRECT EXAMINATION

23 BY MR. PETERSON:

24 Q Ms. Long, from this list of 20 some-odd names that you
25 got, the only thing that you can tell from --

1 MR. WARD: To which we're going to object as being
2 leading and subjective. This is his witness if the Court please.

3 MR. PETERSON: Just laying a predicate, Your Honor.

4 THE COURT: Well, sustained.

5 Q (By Mr. Peterson) What can you determine from saliva,
6 from urine, from tears, from body fluids?

7 A I can determine what antigen activity is present.

8 Q If there's antigen activity present, can you obtain
9 a blood type?

10 A Yes, if there is antigen activity there, yes.

11 Q If there is no antigen activity, what does that
12 indicate to you, such as the eleven people that indicated no
13 antigen activity.

14 A No antigen activity indicated that I didn't pick
15 anything up because the person is either a non-secretor, or the
16 sample is of insufficient quantity to pick it up.

17 Q Okay. And from the two blood samples that you
18 obtained from Mr. Fritz and Mr. Williamson you were able to
19 definitely say that they were non-secretors; is that correct?

20 A I was able to determine that they're non-secretors
21 by the two tests combined together, the A positive B negative of
22 the Lewis type, plus the finding of no antigen activity in their
23 water-base body fluid which is saliva.

24 Q Now, Mr. Ward asked you questions about the sample
25 that you have here, that was not a large sample of people; was it?

1 A No, 20 is really not a large population sample at all.

2 Q Okay. If the sample would have gotten larger and
3 larger, say a thousand, would the range more nearly equal the
4 30/20 split?

5 A I would expect it to.

6 Q Do you have any control over whether a person who
7 submits anything is a secretor or non-secretor?

8 A No.

9 Q You just tell what the results of those tests are; is
10 that correct?

11 A Yes.

12 Q Thank you.

13 MR. PETERSON: I have no further questions.

14 RE CROSS EXAMINATION

15 BY MR. WARD:

16 Q Well, certainly you don't have any control over
17 whether they're secretors or non-secretors; do you? You never
18 did indicate that; did you?

19 A No, no.

20 Q No. But you do have control over what you test;
21 don't you?

22 A Well, I'm not sure -- I don't understand your question.

23 Q You have control over what you test. If I send you
24 and item to be tested, you know exactly what that is; don't you?

25 A Yes, I know what it is.

1 Q And if I don't send you enough, you can send it --
2 call back to me and say send me some more or something else;
3 don't you?

4 A Yes.

5 Q Can't you?

6 A Yes.

7 Q And in fact, that's what you did as far as Ronald
8 Williamson is concerned and Fritz was concerned on blood.
9 They sent it back because you said you didn't have enough
10 saliva or saliva alone was not enough, or something to that
11 effect; isn't that right?

12 A I don't recall if it was --

13 Q Did you tell the State of Oklahoma through Mr. Rogers
14 and filter down here to the District Attorney's Office that the
15 other 19 -- I mean, 18 people, maybe 17 discounting Ms. Carter
16 -- did you tell them you needed blood samples from them, too?

17 A I don't recall.

18 Q Did you ever run any test on those other people --
19 tests on blood?

20 A No.

21 Q Who were some of those people? Maybe we can tell you
22 whether they're still around or not.

23 A The ones who just had no antigen or --

24 Q Well --

25 Q -- or everybody on the list. I can go through the

1 whole list.

2 Q The 20 that we're talking about here.

3 A Okay. Clifford Beech and Mike Carpenter. Debbie
4 Carter was also on this list.

5 Q Okay.

6 A Noel Clement, Jamie Donaghey, Dennis Fritz, Bill
7 Gibson, Brad Gipson, Russell Gordon, Paul Graham, David Hanks,
8 J. J. Johnson, Bruce Letty, George Marion, Ernest Floyd Schultz,
9 Robert Sharp, Robert Whittington, Ronald Keith Williamson, Wes
10 Wilson, and David Wade Wisdom.

11 Q Those are the people that you checked for being
12 secretors or non-secretors, whatever the results might be.
13 Those were the people that you tested?

14 A These are the people I tested.

15 Q Did you not test Glen Gore?

16 A No, sir, that name doesn't --

17 Q Nobody sent that to you; did they?

18 A No, sir.

19 MR. WARD: I believe that's all, Mrs. Long.

20 MR. PETERSON: No further questions.

21 THE COURT: You may step down.

22 SUSAN LAND,

23 having first been duly sworn to testify the truth, the whole
24 truth and nothing but the truth, was examined and testified as
25 follows, to-wit:

1 (Whereupon, State's Exhibits Nos. 30, 31, 32, and 33 were
2 marked for identification.)

3 THE COURT: Call your next witness.

4 MELVIN R. HETT,

5 having first been duly sworn to testify the truth, the whole
6 truth and nothing but the truth, was examined and testified as
7 follows, to-wit:

8 DIRECT EXAMINATION

9 BY MR. PETERSON:

10 Q State your name for the record, please.

11 A Melvin R. Hett.

12 Q And what is your occupation and where are you
13 employed?

14 A I'm employed as a criminalist supervisor by the
15 Oklahoma State Bureau of Investigation; work in the Northwest
16 Regional Laboratory, Enid, Oklahoma.

17 Q And how long have you been engaged in the work you've
18 described?

19 A I've been employed as a criminalist or a forensic
20 chemist for 14 years, from 1974 until 1977 I was employed as a
21 forensic chemist by the Oklahoma City Police Department. From
22 1977 until the present, I've been employed as a criminalist
23 with OSBI.

24 Q Would you state what special studies or training you
25 undertook to qualify you as a specialist in your work?

1 A I graduated in 1973 from Southwestern College, Winfield,
2 Kansas, with a Bachelor of Science Degree in Chemistry and
3 Biology. After graduation I attended the University of Oklahoma,
4 Norman, Oklahoma, for a period of one year in the graduate
5 department in biology.

6 After that year I became employed by the Oklahoma City
7 Police Department as I mentioned before for three years and
8 became employed by OSBI in 1977; been working there for the past
9 11 years.

10 During my time with the Oklahoma City Police
11 Department, I was working at OSBI Laboratory, Oklahoma City.
12 In that three-year period I had initial training in forensic
13 science and hair and fiber analysis, blood and body fluids,
14 drug analysis, and all other types of physical evidence with
15 OSBI.

16 During that time I also attended numerous schools to
17 prepare me for my job. Some of these have included a homicide
18 investigation seminar. I attended two schools with the Federal
19 Bureau of Investigation, Quantico, Virginia, on blood and body
20 fluid analysis in 1975 and 1977. I attended hair and fiber
21 seminar with the Federal Bureau of Investigation, a two-week
22 hair and fiber course there in Quantico, Virginia.

23 I've also had several other short courses with other
24 agencies on hair and fiber analysis. These have included the
25 Southwestern Association of Forensic Scientists. I've had two

1 short courses in hair and fiber analysis. I've had a hair and
2 fiber analysis course sponsored by the FBI and Oklahoma City
3 Police Department.

4 Q How long have you been engaged in the science of hair
5 identification?

6 A Approximately 13 years.

7 Q And how much of your work time is devoted to the
8 duties of hair and fiber identification?

9 A Outside of my supervisory duties at OSBI,
10 approximately 90 percent of my time is devoted to hair and fiber
11 comparisons and analysis.

12 Q How many examinations or tests have you -- on hair
13 have you performed in the course of your employment,
14 approximately?

15 A Several thousand.

16 Q Have you brought something with you today to be able
17 to demonstrate to the jury what hair identification is?

18 A Yes, sir, I have.

19 Q Would it assist you in your testimony?

20 A Yes, I have.

21 Q Let me show you what's been marked as State's Exhibit
22 30, 31, 32, and 33. Were these prepared at your request or by
23 yourself?

24 A Yes, sir, they were.

25 MR. WARD: Which one, by yourself or at your request?

1 MR. PETERSON: These here?
2 MR. WARD: Yeah.
3 THE COURT: Just the theory?
4 MR. PETERSON: Yes.
5 MR. WARD: I didn't hear you, Judge.
6 THE COURT: They don't have anything to do with the
7 hair examined here.
8 MR. PETERSON: No.
9 THE COURT: It's just how you go about it?
10 MR. PETERSON: Yes, show the jury how they do this.
11 THE COURT: All right. Objection will be overruled,
12 but you haven't offered them.
13 MR. PETERSON: Yes. I'd offer State's Exhibits 30,
14 31, 32, and 33.
15 MR. WARD: To which we'll object because it's not
16 been properly identified.
17 THE COURT: Overruled. They are received.
18 MR. WARD: Exception.
19 (Following the bench conference, proceedings continued as
20 follows:)
21 Q (By Mr. Peterson) Would you step down.
22 A (Complies with request.)
23 Q Mr. Hett, State's Exhibit No. 32 has certain labels,
24 Caucasian, Negroid, and Mongoloid. Could you tell the jury what
25 those -- significance of those diagrams are, please.

1 A Yes, sir. Ladies and gentlemen of the jury, on
2 State's Exhibit No. 32 we have a chart prepared. There are
3 three major sections that we see on the chart; one is labeled
4 Caucasian, one Negroid, one Mongoloid.

5 What these are are depictions of what human hairs
6 would look like through a microscope in a drawing form. These
7 are small sections of a hair. There are basically three areas
8 that a person would see through a microscope on any type of
9 hair of which human hair is included. I'll be talking about
10 several areas of the hair during this presentation.

11 The first area is the cuticle. There is a second
12 area further into the hair which is the cortex, and a third
13 area which is called the medulla. Now, hair is much like
14 an ordinary lead pencil in its construction. The three areas
15 to a lead pencil would be the paint on the outer surface, the
16 wood part, and the lead. This probably corresponds to a hair
17 better than any other object I can think of.

18 There's also two ends, obviously, to a pencil, the
19 eraser end and the lead end or the tip of the pencil. These
20 correspond to a hair in several ways. First of all, there's
21 on a full length hair a root on one end which corresponds to
22 the eraser on a pencil, and tip or the distal, the furthest
23 tip on the hair, which corresponds to the lead end on the pencil.

24 It can be any number of conditions out on the end. It
25 can either be broken off; it can be cut; it can be sharpened to

1 a point. Much of these same things are what we see in hair
2 comparisons and hair identifications. They can either be
3 tapered out and uncut; they can be cut with the scissors which
4 would be very blunt; they can be cut with a razor which would
5 give a sharp point; or they can be broken or crushed or any
6 number of treatments routine, all types of situations in hair
7 analysis.

8 Basically, we'll be talking about the characteristics,
9 approximately 25 characteristics that are used in hair
10 comparisons. The three areas again are the cuticle, the cortex,
11 and the medulla. Now, a cuticle is a layer of scales on the
12 outer surface of the hair which as I said before would
13 correspond to the paint on the surface of the pencil, a series
14 of overlapping scales that completely surrounds the hair.

15 The cortex is the next layer which corresponds to the
16 wood in a pencil. The cortex area -- the main characteristic
17 of the cortex area would be the pigment or pigment grains. This
18 is what gives hair its color. We can all look around the room
19 and see various colors of people's hair. This is the function
20 of most part pigment. It can also be from bleaching or other
21 conditions, but the pigment is what gives rise to the color in
22 a person's hair.

23 The inside layer is called the medulla, and this
24 corresponds to the lead in a pencil. Now, the medulla is
25 generally nothing more than an air sack which runs down the

1 center of the hair, but it does appear dark on a microscopic
2 view of a hair.

3 The representations I have on this first chart,
4 State's Exhibit 32, as I mentioned before, are three
5 characteristics here, Caucasian, Negroid, and Mongoloid. These
6 refer to the three major racial groups that we run into in
7 human hair analysis.

8 Caucasian, of course, would be whites; Negroid,
9 black individuals; Mongoloid would cover American Indians and
10 some Oriental groups. These are the three major
11 characteristics of hair. This is one characteristic that can
12 be determined in human hairs, to be in one of three racial
13 groups or they can be mixtures of racial groups which you run
14 into quite frequently here in Oklahoma.

15 Now, the characteristics of a Caucasian hair shaft is
16 generally flexible. It can vary in color between individuals,
17 and the diameter of the shaft may fluctuate slightly. One of
18 the main characteristics, however, is a more or less oval shape
19 as if looking at a cross section of the hair. It's like taking
20 your pencil, cutting it, and then looking at the end; this would
21 be the cross sectional shape.

22 Cross sectional shape on Negroid hair is generally
23 very flat or ribbon-like which introduces a lot of curl to the
24 hair, kinkiness and curliness.

25 Mongoloid hair is generally almost absolutely round

1 in the cross section. It would be like looking at this stick,
2 looking at the end of it. It would be very round, very
3 characteristic of the Mongoloid group. The Mongoloid, of course,
4 shaft is rather stiff, and the hairs would be mainly stiff and
5 straight, kind of arc-like. Caucasian hair may be somewhat
6 curly depending on the individual. Negroid hair, of course,
7 would be very flat.

8 The main characteristics that we look for in hair
9 comparisons: the cuticle, the differences between the three
10 racial groups. Cuticle can be anywhere from thin to medium
11 thickness in a Caucasian hair. Negroid hair cuticle can be
12 medium to thick. There are also numerous Negroid individuals
13 with very thin cuticle to their hair. Mongoloid will generally
14 always be very thick in the cuticle.

15 Other characteristics -- just running through this
16 very quickly -- the pigment seems to be a very important
17 determining factor in differences between racial groups of
18 Caucasian, Negroid, and Mongoloid. Cuticle is generally fine
19 to medium size in comparison to Negroid and Mongoloid hair, and
20 with a generally very even distribution of the pigment. Of
21 course, there are variations between Caucasian individuals.
22 These are just major racial groups.

23 Negroid hair, generally, is very clumped in the
24 pigment. It can be anywhere from very coarse to medium in size,
25 but the main characteristic is the clumping or aggregations of

1 pigment.

2 Mongoloid hair, pigment is generally very coarse and
3 generally a lot of pigment within the cortex as compared to
4 Caucasian. So, these are the main racial characteristics that
5 we first determine in human hair comparisons.

6 Q Is there a -- in Oklahoma do you find a mixture of
7 hair on individuals so that you -- it's hard to determine whether
8 they're Caucasian, Negroid, or Mongoloid hair?

9 A Yes, sir. This happens frequently, especially in
10 Oklahoma. In talking with other hair examiners in other areas
11 of the country, generally, the racial characteristics -- or the
12 racial groups are, for the most part, clearly defined. In
13 Oklahoma, however, we run into quite a few racial add mixtures
14 to hair. A lot of Caucasian-Mongoloid mixtures, lot of
15 Negroid-Mongoloid mixtures generally is what we run into, and
16 they -- when we run into hairs like this, they're generally
17 determined to be mixed racial characteristics. One cannot
18 really say whether they're absolutely classical Negroid or
19 classical Mongoloid or even classical Caucasian; a lot of
20 racial add mixtures.

21 Q State's Exhibit 31, what does that depict?

22 A State's Exhibit 31 gets into more of the
23 characteristics that we find in human hairs. These are
24 variations of characteristics. This is a very simple depiction
25 of the variations that we'll run into between individuals in

1 hair comparisons.

2 The first, approximately four areas here deal with
3 the cuticle of human hairs. Now, as I said before, these are
4 very simple depictions. These show some of the wide variations
5 within human hairs, but there are other characteristics that
6 can be found; but these are just, as I mentioned before,
7 general differences within hairs.

8 Dealing with the scales, as you remember before I
9 mentioned that the cuticle is like the paint on a pencil; and a
10 cuticle consists of overlapping scales that all point toward
11 the far portion of the hair; grow from the root and point out
12 toward the end of the hair. So, in scale protrusion there can
13 be much variation; there can also be mixtures between different
14 individuals and also on one individual's head. Hair depicts
15 some slight, medium, and great or large scale protrusions.

16 Now, the differences here: on slight protrusions
17 the scales lay very flat on the surface, and they don't stick
18 up at all. Medium would be an increased protrusion or increased
19 lifting from the surface of the hair. And a great protrusion,
20 this can be where either the scales stick out very far, or there
21 can be damage -- or this can also be caused by damage in hair
22 such as bleaching or other chemical treatment.

23 So, these are just three of the characteristics that
24 we can find. There are quite a few variations and variations
25 between these. There can also be variations from the root of

1 the hair out to the distal or far portion of the hair. And
2 this is basically due to weathering on hair. A hair that -- the
3 portion of the hair that is very close to the scalp, of course,
4 would not have been around as long as the portion of the hair,
5 say, three or four inches away from the scalp, so it has been
6 weathered. And part of this weathering can be from sun; it can
7 be from water, say for example, swimming pool chlorine can
8 damage the cuticle of the hair and cause it to change somewhat
9 from the base of the hair down by the root out to the distal tip,
10 so we run into quite a bit of variation oftentimes. In other
11 individuals, it is very even throughout. So, these are just
12 some general depictions of that.

13 Scale size can be anywhere from small which would
14 indicate scales that are very close together, very tight and
15 overlapping to an extreme where they are what we call large
16 scales which are actually far apart from each other.

17 Cuticle thickness can run anywhere from very thin to
18 medium to thick, can be any number of variations in between.
19 This can also change, as I mentioned before, from the root part
20 of the hair to the tip of the hair because of weathering. There
21 can be erosion from sun bleaching, just from brushing, from
22 chemical treatment, such as bleaching and dying. This can
23 change. It could even start out on an individual being very
24 thick at the root; and on a very extremely long hair, it can be
25 very thin to where you cannot even see the cuticle on a hair.

1 Cuticle fluctuation between individuals, it can be
2 either no variation in the cuticle thickness which would be a
3 very even layer of paint on the pencil to some slight variations
4 to, in some individuals, very great fluctuation in cuticle
5 thickness of a hair. Now, these can all be seen microscopically.

6 Cuticle color, generally, cuticle in hair will have
7 a clear color. It can also be either milky or yellow, or in
8 some conditions where the hair is dyed, it can take up a color
9 of the particular dye which would not be any one of these
10 three characteristics.

11 Moving on to the cortex area on this chart, which
12 would be State's Exhibit 31, we get into some of the pigment
13 characteristics. I know these may be difficult to see from
14 where you're sitting, but pigment distribution -- actually,
15 pigment concentration can either be heavy on an average or
16 light. And these would also vary between different racial
17 groups. For example, in Mongoloid individuals or Indian groups,
18 what we would consider a very light distribution or very light
19 density of pigment may be very heavy for a Caucasian individual.
20 So, these are just representations, probably on this chart, more
21 of Caucasian hair than the other two groups. So, the
22 distribution can vary from light to heavy.

23 Pigment distribution can also vary either toward the
24 medulla, the center portion of a hair, or toward the cuticle, or
25 it can be very general or even distribution, can vary between

1 individuals. And that brings us to the end of this chart.

2 Q State's Exhibit 30, what does that depict?

3 A State's Exhibit 30 is a chart continuing on pigment
4 characteristics of human hairs.

5 Q Would you tell the jury what that reports.

6 A These are just some of the additional characteristics
7 which we can see in a microscopic examination of hair. This
8 term at the top called pigment gapping. The next six depictions
9 will show variations in pigment gapping between individuals.
10 There can be a -- either a shallow gapping where -- and this
11 may be difficult to see, but right underneath the cuticle
12 there's an absence of pigment. There's just no pigment there.
13 This occasionally happens in individuals, and there can be
14 variations of this. It can be very shallow, medium which would
15 be more loss of pigment directly under the cuticle, or very
16 deep, or it can be any number of variations in between.

17 It can be also very regular or very irregular in an
18 individual. It can be a very long gapping which would show for
19 a long ways on a hair, or it can be a medium or very narrow
20 gapping. This is what's called pigment gapping. It's just an
21 absence of pigment is what it is in some individuals.

22 Cortical fusi, the next six representations, show
23 variations in air bubbles that are often present in the cortex
24 of a hair. These show up -- in the depictions here it's rather
25 difficult to see -- they look quite a bit like pigment grains,

1 but they are actually air bubbles which are included in the
2 hair shaft. These can vary between different individuals. They
3 can either be absent, can be very sparse, or very numerous and
4 dense in the amount of these air bubbles that are present in
5 the human hairs. They can either be small, medium, or large
6 depending on their size in relation to other individuals, and
7 this takes a great deal of study looking between different
8 individuals.

9 They can also, which does not show on the chart --
10 there can also be mixtures of cortical fusi. There can also
11 be differences between the root of the hair and the far tip.
12 Again, there can be variations of this on one individual.

13 In the medulla, which would be a third major region
14 on the State's Exhibit 30, the medulla, as I mentioned before,
15 would be like the lead in a pencil, the center portion which is
16 nothing more than air spaces, air sacks in the -- running down
17 the center portion of the hair. A medulla can either be absent;
18 it can be fragmented which means that it starts and stops
19 abruptly in a hair.

20 The next category would be discontinuous which means
21 that it is present more than it is absent in a hair, or it can
22 be continuous which means that the hair -- the medulla runs
23 through the hair completely from one end to the other with very
24 little breaks. Some variations in the size; can be very thin,
25 medium, or very thick in a human hair. There can also be

1 variations where it is not just either thin, medium, or thick,
2 it can run along thick, then taper off to very thin. Then it can
3 stop, and it would start and taper up again.

4 There's also variations in the cells or the air sacks
5 that are present in the medulla of a hair. It can either be
6 boat shape or various other type shaped cells running down the
7 center. These can all be seen under a microscope.

8 Q State's Exhibit 33, what does that depict?

9 A State's Exhibit 33 is the last of the four charts.
10 This depicts more characteristics that are used in human hair
11 comparisons on mainly pigment.

12 Q Would you demonstrate for the jury or discuss that
13 with them on how pigment distribution or clumping is significant.

14 A Yes, sir. Pigment, as I mentioned before, determines
15 the color that we visually see in an individual's hair. This is
16 a mixture of both sizes, densities, and color of the pigment.
17 In these pigment distribution depictions along the top row, it
18 can be a very general or even distribution which means that you
19 look at the hair, and you see a bunch of little pigment grains
20 just running very evenly through the hair giving the hair its
21 color.

22 They can also be clumped, which in pigment clumping
23 it's actually a large mass of pigment grains that are in a very
24 concentrated area with other pigment grains dispersed around in
25 the cortex. They can be streaked. The pigment grains can be

1 streaked, and this is nothing more than a bunch of small pigment
2 grains that just run in small chains. They can either be
3 single chains; they can be double chains; they can be aggregates
4 which are just a loose collection, not really called a clump,
5 but they're just a loose collection of pigment grains.

6 There's any number of variations between these.
7 Another interesting characteristic on an individual. This does
8 not necessarily run the same throughout an individual hair from
9 a person. If you look at many individuals at the root of the
10 hair, there's generally quite a bit of pigment. The longer the
11 hair is, the more weathering can happen to the hair where
12 pigment would be lost either through chemical treatment, through
13 bleaching, through just sunlight there can be a loss of pigment,
14 so it does not stay the same actually on one individual's hair.

15 In pigment clumping, the next depictions here, deal
16 mainly with Negroid hairs. The pigment clumping is not just
17 the presence or absence of clumping, there's numerous
18 variations of clumping. It can be slight clumping which would
19 be small aggregates, very few of them. It can be kind of an
20 average clumping or very dense where most of the pigment is
21 clumped into dense clumps. It can be small size, medium size,
22 or very large clumps.

23 There's various shapes that can occur in Negroid hairs,
24 and also to a smaller extent in the other racial groups can
25 either be kind of a square shape or rectangle or they can be

1 shapes that cannot be readily identified as a particular
2 geometric shape such as a rectangle or a triangle or a circle.

3 Pigment size, again there are many variations anywhere
4 from fine, almost so fine that you cannot individually pick out
5 the pigment grains under magnification 400 times under a
6 microscope. They can be very coarse, or they can be --
7 variations in between fine and coarse, or they can be mixed
8 where there's a -- both types present or multiple pigment-size
9 grains.

10 The pigment shapes, three depictions here, the round,
11 oblong, or various other shapes that cannot actually be
12 identified; they're just amorphous shapes, really don't fit any
13 kind of a geometric category.

14 The last row on here deals with pigment in the cuticle
15 between different individuals. There can be no pigment grains
16 in the cuticle. There can be slight pigment grains which would
17 just be an occasional pigment grain in a cuticle of a hair, or
18 there can be a large amount which would be a great amount of
19 pigments within the cuticle.

20 As I mentioned before, these are approximately 25
21 characteristics that I use in human hair comparisons.

22 Q And all of these can vary and be mixtures of such; is
23 that correct?

24 A Yes, sir. Even on one individual there can be
25 mixtures. Not all hairs on an individual's head look exactly

1 alike. There is a range of characteristics that are present on
2 one individual. So, when we have a known hair sample to be used
3 for comparison, we generally request at least 30 hairs to cover
4 the variation on an individual.

5 Q In your course of work, did you have an occasion to
6 receive from Susan Land on 9/19/33 certain exhibits relative to
7 this case?

8 A Yes, I did.

9 Q Did you receive some that were in slides and some that
10 were in bindles?

11 A Yes, sir, I did.

12 Q Did you also receive directly from people in the Ada
13 Police Department exhibits?

14 A Yes, sir.

15 Q Okay. What type of equipment do you have available
16 to you at the bureau?

17 A For hair comparisons the major two tools that are used,
18 the first one is a stereo microscope which is a low power
19 magnification microscope. It will magnify approximately 30
20 times; this for very low power work. The next tool that is used
21 for hair comparisons is a comparison microscope. What this is
22 is a -- is two microscope bases which are actually two separate
23 microscopes which have magnifications anywhere from 50 to 400
24 magnifications on each microscope. They're linked by an optical
25 bridge between them. Now, the purpose for this is to be able to

1 look at two hair samples or two microscope slides at the same
2 time on kind of a split screen. There's, as I mentioned before,
3 an optical bridge approximately two feet long that links the two
4 microscopes, and then one set of eyepieces to look through.

5 This is the main tool that's used for hair comparisons to
6 compare a known and an unknown side by side.

7 Q Mr. Hett, you received known hair samples of Dennis
8 Fritz and Ron Williamson; did you not?

9 A Yes, sir, both pubic hairs and scalp hairs.

10 Q And those of Debbie Carter?

11 A Yes, sir, again both pubic hairs and scalp hairs
12 samples.

13 Q And a number of other individuals; is that correct?

14 A Yes, sir, quite a large number.

15 Q And you also had submitted to you some unknowns; is
16 that correct?

17 A Yes, sir, either -- they can be called unknowns or
18 question hairs.

19 Q Okay. Could you tell the jury approximately how many
20 hours you have spent comparing the unknowns with the knowns in
21 this case?

22 A Considering all the unknown or question samples and
23 all of the known scalp and pubic hair samples, several hundred
24 hours were spent on the examinations.

25 Q In your examination of the unknown hairs in

1 relationship to Dennis Fritz and Ron Williamson, I'd like to
2 address the pubic hairs first if I could, Mr. Hett. Did you
3 receive any pubic hairs that were removed from -- let me ask
4 you before we get to that point -- Can you distinguish between
5 head hairs, pubic hairs, chest hairs under a microscope --

6 A Yes, sir.

7 Q -- to be able to classify them?

8 A These are some of the characteristics that -- or some
9 of the analysis that can be done on hairs. I might mention
10 that in any type of hair analysis one can determine whether a
11 hair is, first of all, human or non-human which would be some
12 other animal. Other things that can be determined from just
13 examination of a single hair would be whether -- which racial
14 characteristics are present, which racial group or which racial
15 mixture is present. Another category which we have just been
16 asked about is the different body areas. There are
17 characteristics which can place a particular hair from a
18 various body region, such as scalp hair there are various
19 characteristics which set it apart from other body areas.
20 Pubic hair has very general characteristics which can set it
21 apart from other body areas, as are other body hairs, for
22 example, facial hairs, very characteristic. And then, getting
23 out into the body hairs, arm hairs, chest hairs would be
24 different from scalp hairs or pubic hairs, so these can all be
25 examined -- an individual hair can be examined and determined

1 what body area that it originated from.

2 Q Do people, for lack of better terms, lose hair all
3 of the time?

4 A Yes, sir. Every day as an estimate, approximately
5 100 hairs are lost from the body. This is on an average. This
6 can either be from just falling out to grooming where if an
7 individual takes a shower, many of these hairs are lost at that
8 time. But approximately, a hundred hairs a day are shed from
9 the average individual.

10 Q Direct your attention to the pubic hairs that you
11 compared with the known hairs of Dennis Fritz. Did you receive
12 hairs -- pubic hairs from a washcloth that was labeled in
13 Debbie Carter's mouth?

14 A Yes, sir, I did.

15 Q Did you find any pubic hairs that matched that of
16 Dennis Fritz?

17 A Yes, sir, I did. I found one pubic hair from the
18 washcloth that I determined is consistent microscopically and
19 could have the same source.

20 MR. WARD: Would you repeat that answer, Mr. Hett. I
21 didn't hear that.

22 A Yes, sir. I found one of the pubic hairs from the
23 washcloth, it's my opinion that it is consistent microscopically
24 with Dennis Fritz's pubic hairs and could have the same source.

25 MR. WARD: If the Court please, we're going to object

1 either to that answer or the form of the question. Mr.
2 Peterson asked him if he found any hairs that matched. His
3 answer was yes, and then his explanation didn't say that.

4 THE COURT: Sustained.

5 Q (By Mr. Peterson) Did you find any hairs that were
6 microscopically consistent with that of Dennis Fritz?

7 A Yes, sir.

8 Q And what -- and how many hairs?

9 A One pubic hair.

10 Q The hair labeled -- the pubic hair found from the
11 floor under Carter.

12 MR. WARD: If the Court please, we're going to object
13 to these leading and suggestive questions. This man's
14 qualified himself as an expert. He doesn't have to be helped.

15 THE COURT: Okay. Rephrase your question.

16 Q (By Mr. Peterson) Any other pubic hairs did you find
17 that were consistent microscopically with that of Dennis Fritz?

18 A Yes, sir, I did.

19 Q And to distinguish them, where were they found?

20 A There were two hairs in particular that were from a
21 pair of torn blue panties. That will be my Item No. 30. These
22 two pubic hairs were consistent with Dennis Fritz. There was
23 also a sample that was submitted to me, Item No. 27, hair from
24 the floor under Debbie Carter. There was one pubic hair that
25 was consistent with Dennis Fritz. And several slides that were

1 submitted to me by Susan Land, there were -- labeled as hairs
2 from the bedding. These are from various sheets and blankets.
3 There were seven pubic hairs from these particular slides from
4 the bedding that I determined were consistent microscopically
5 with Dennis Fritz and could have the same source. Those were
6 the -- all of the pubic hairs for a total of 11.

7 Q And did you find any hairs, pubic hairs, that were
8 consistent microscopically with that of Ronald Williamson?

9 A Yes, I did.

10 Q And would you tell the jury what those were, please.

11 A Yes, sir. There were two pubic hairs also from the
12 bedding that I made a comparison to Ron Williamson. These two
13 hairs were consistent microscopically and could have the same
14 source as Ron Williamson's known pubic hair.

15 Q Direct your attention to the scalp hair
16 identifications in your Item 17. Did you find any hairs that
17 were consistent with that of Ronald Keith Williamson, and where
18 were they labeled from?

19 A From Item No. 17; this is my Item No. 17, hairs from
20 a washcloth in Debbie Carter's mouth. I found two scalp hairs
21 that I compared to Ronald Williamson's. These hairs are
22 consistent microscopically and could have the same source.
23 These were the only scalp hairs that matched or were
24 consistent with Ron Williamson.

25 Q And Dennis Fritz, did you find any head hairs that

1 were consistent with him?

2 A Yes, sir, I did.

3 Q And would you describe for the jury what those were,
4 please.

5 A Yes, sir. I found two hairs that were consistent
6 with Dennis Fritz. One was from the bedding which was my
7 Item No. 32. The second one was from Item No. 62 which was
8 identified as hair from the floor under Carter. The scalp hair
9 from the bedding and the scalp hair from the floor were both
10 consistent microscopically with Dennis Fritz and could have the
11 same source.

12 Q You have used the terms could have the same source as
13 words of art. What definition does that have?

14 A The words could have the same source, actually, it
15 needs to be considered with the complete statement which was
16 made. When a hair matches, if you will, it is consistent
17 microscopically to a known source.

18 MR. WARD: If the Court please, we're going to object
19 to the terminology Mr. Kett used there. If they matched, let
20 him say so. If they didn't -- don't match, tell him not to use
21 that terminology.

22 THE COURT: You can cross examine, Mr. Ward.

23 A Okay. In considering the statement if hairs are
24 microscopically consistent and could have the same source, what
25 the term of art or the words could have the same source means

1 is that the hairs either did originate from that source, or
2 there could be or might be another individual in the world
3 somewhere that might have the same microscopic characteristics.
4 In other words, hairs are not an absolute identification, but
5 they either came from this individual or there is -- could be
6 another individual somewhere in the world that would have the
7 same characteristics to their hair.

8 Q (By Mr. Peterson) In your profession and in your job,
9 can you distinguish the hair between that of identical twins?

10 A Yes, sir, I have examined hairs of identical twins.
11 The reason for this is that hairs -- or identical twins are the
12 most similar genetically to each other of any individuals,
13 identical twins; and it is possible to distinguish between
14 identical twins.

15 Q Did you receive head and pubic hairs from a number of
16 other individuals that were labeled from different people?

17 A Yes, sir, other than Dennis Fritz, Ron Williamson,
18 and Debbie Carter, there were several -- in fact, a large
19 number of individuals that their known scalp and pubic hairs
20 were submitted in this case.

21 Q And were all of those people eliminated as being a --
22 microscopically consistent with the hairs that you've just
23 described?

24 A Yes, sir, the examinations that I made, I found no
25 individual other than the ones that I've mentioned that were

1 consistent microscopically with the questioned hairs.

2 Q Did you examine, for instance, an individual labeled
3 to you as Glen Gore?

4 MR. WARD: If the Court please, I'd like them to lay a
5 better predicate than that.

6 THE COURT: Sustained.

7 Q (By Mr. Peterson) Did you receive from law enforcement
8 a hair sample identified as Glen Gore?

9 A Yes, sir.

10 Q Glen Dale Gore. Did you?

11 A Yes, sir, I did.

12 Q And when did you receive that?

13 A I would have to refer to my notes or my report. This
14 is on July 17th, 1986, I received a sample of known scalp hair
15 and known pubic hair from Dale Gore.

16 Q And did you compare, for instance, his hair with the
17 hair that was found in and around Debbie Carter's body from the
18 belt, the socks, the washcloth, the -- underneath -- the floor,
19 the torn blue panties, the bedding, et cetera. Did you compare
20 his hair just like you did everyone else's?

21 A Pubic hairs, yes, I did.

22 Q And head hairs.

23 A And also scalp hairs.

24 Q And were any of his hairs microscopically consistent
25 with the unknown hairs?

1 A No, sir.

2 Q Did you do that for -- on several other individuals?

3 A Yes, sir.

4 Q The same tests?

5 A Yes, sir, I did, direct comparison with the unknown

6 hairs.

7 Q Let me show you what's been marked for identification

8 purposes State's Exhibits 29, 27, and 28, and ask you to look

9 at those and see if you can identify them.

10 MR. WARD: What are those numbers again?

11 MR. PETERSON: I think 27, 28, and 29.

12 MR. WARD: Okay.

13 A Yes, sir, I can identify these.

14 Q (By Mr. Peterson) And what are those?

15 A State's 27, 28, and 29 are several microscope slides

16 which have hairs mounted on them. The hairs -- some of the

17 hairs are questioned or unknown samples that were submitted to

18 me in the case. The remainder of the samples are known scalp

19 and pubic hair samples from various individuals submitted to

20 me also in this case.

21 Q Are they -- if you know, whose are they -- the knowns?

22 A Well, the known hairs are known pubic hair and scalp

23 hair samples from Debbie Carter, known pubic and scalp hair

24 samples from Dennis Fritz, and known pubic and scalp hair

25 samples from Ron Williamson.

1 MR. PETERSON: Yield the witness.

2 (Whereupon, Defendant's Exhibit No. 2 was marked for
3 identification.)

4 CROSS EXAMINATION

5 BY MR. WARD:

6 Q Mr. Hett, you've been handed what has been marked
7 for identification Defendant's Exhibit No. 2. Do you know what
8 that is?

9 A Defendant's Exhibit No. 2 appears to be copies of
10 reports that I have sent out on this case.

11 Q Are what?

12 A Reports, laboratory reports.

13 Q Oh, okay. Now, those were prepared by you?

14 A Yes, sir.

15 Q Or it was prepared by you if we want to refer to it.
16 You said in the plural. That is more than one report?

17 A Well, yes, sir, Defendant's Exhibit 2, the sticker on
18 it is on one report. There are several pages here.

19 Q Well, let me ask you this: Is that all of the reports
20 that were prepared by you on this case? Is that everything that
21 was prepared?

22 A Well, if I can have a few minutes to look.

23 Q Well, I've got plenty of time.

24 A No, sir, there are other reports in here that are
25 from other individuals. I'm not familiar with these reports.

1 Q No, I'm talking about does that contain all that you
2 have prepared. I don't know what else was in there, but is
3 that all that you have prepared?

4 A Well, it will take me a minute to look through this.

5 Q Okay.

6 A No, sir, there are two reports present in two
7 separate reports. I have prepared and given to the District
8 Attorney's Office three reports.

9 Q All right. There are two in that exhibit?

10 A Yes, sir, two of my reports.

11 Q All right. And you have prepared three and have
12 given them to the District Attorney?

13 A That's correct.

14 Q Which one that you gave to the District Attorney --
15 which one of the three that you gave to the District Attorney
16 is not included in Exhibit No. 2 there?

17 A This would be the last report that I sent out in the
18 case.

19 Q And can you tell when it was dated?

20 A Yes, sir, April 7th, 1988.

21 Q This month?

22 A Yes, sir.

23 Q Did it contain anything that is not contained in that
24 report in this Exhibit No. 2?

25 A Yes, sir.

1 Q What time period does it cover, Mr. Hett?

2 A The third report?

3 Q Yes, sir.

4 A Well, as far as when evidence was received, the last
5 date that I received any evidence on Report No. 3 was October
6 7th, 1987.

7 Q Is that all it contains on the evidence that you
8 received 1987?

9 A Well, nothing past 1987. There is evidence on here
10 from 1985.

11 Q On your third report?

12 A Yes, sir.

13 Q Why was that 1985 evidence not contained in the
14 report which is marked Defendant's Exhibit No. 2?

15 A These were examinations that were not completed at
16 that time of the second report.

17 Q Do you have a copy of it with you?

18 A Yes, sir, I do.

19 Q May I have it, please, sir, and give us back Exhibit
20 No. 2.

21 (Whereupon, the following bench conference was had:)

22 MR. WARD: If the Court please, I'd now like to have
23 a recess and time to look that report over. This was one of
24 the things that was ordered furnished to me by the -- Judge
25 Miller, and it's obvious I didn't get it all. Now, I want some

1 time, and I don't want to play guessing games with this man in
2 front of this jury.

3 THE COURT: All right.

4 (Following the bench conference, proceedings continued as
5 follows:)

6 THE COURT: We'll take a brief recess at this time.
7 Remember the instructions I've given you. You may step down.
8 Those who are attending this trial must not be anywhere near
9 the jurors when they're outside the courtroom.

10 (Following a short recess, proceedings continued as follows:)

11 THE COURT: You may proceed.

12 Q (By Mr. Ward) Mr. Hett, we've returned your original,
13 I guess, your copy of that report to you and have taken the
14 liberty of Xeroxing a copy for our use. Does that report --
15 I notice it refers to some items submitted to you in 1985 by
16 Mike Baskins, a city police officer.

17 A Yes, sir.

18 Q All right. Now, was that not examined until some time
19 this year, whatever it might have been?

20 A No, sir, these were known hair samples, and it --
21 well, there was some saliva samples that came along with it
22 that I did not analyze. They just happened to be with those
23 samples. These were analyzed, the majority of these, prior to
24 this report. These were just listed as having received this
25 evidence. It had never appeared on a submittal form, or it had

1 never appeared on a previous report.

2 Q Was the results of the examination of those items
3 complete when this report was -- which has been marked for
4 identification Defendant's Exhibit No. 2 was completed and sent
5 to the District Attorney?

6 A Excuse me, I don't understand which report you're
7 talking about. Are you talking about the one you just copied,
8 the third report?

9 Q No, sir, I'm talking about the first two that were
10 included in Defendant's Exhibit No. 2, the one you -- well,
11 hand it back to him. Now, refer to Exhibit -- Defendant's
12 Exhibit No. 2, Mr. Hett. Now, when was that -- that or those
13 reports completed?

14 A The reported date on this was January 9th, 1986.

15 Q Then, items were received by you prior to the
16 completion or reporting date of that report?

17 A The samples that are mentioned on here, yes, they
18 were, known hair samples.

19 Q Well, I'm referring to the ones on your third -- your
20 April the 7th, 1988 report. There are some things in there
21 furnished to you in 1985.

22 A There were some of the items on the third report that
23 I received in '85.

24 Q Yes, sir. Were those items examined and the results
25 included in your report of January, 1986?

1 A Some of the items were. Some had not yet been
2 received.

3 Q No, I'm talking about the ones that were received in
4 1985. Those that were received in 1985 had certainly been
5 received before your January of 1986 report was completed;
6 wasn't it?

7 A That's correct.

8 Q All right. Now then, are all of those items included
9 in that report?

10 A In which report, the second or the third? I'm sorry,
11 I don't understand.

12 Q Which one was dated January, 1986?

13 A The one that's marked Defendant's Exhibit No. 2.

14 Q Okay. Now then, you say that contains two of your
15 reports?

16 A Yes, sir, there is one report January, '86; one
17 December, '85.

18 Q All right. Now then, were the items submitted to you
19 in early -- earlier than December, of course, of 1985, included
20 in either one of those results -- I mean reports? For instance,
21 the items submitted to you by Mike Baskins, I believe, in July
22 of 1985.

23 A Yes, sir.

24 Q Refer to your report of April the 7th, 1988.

25 A Yes, sir.

1 Q Now, find the item which says Gary Rogers did
2 something, submitted something to you.

3 A Sir, those were samples under 145 and 146, Gary
4 Rogers and Dennis Smith had submitted some items of evidence
5 by mail.

6 Q When?

7 A July 17th, 1986.

8 Q July of -- okay, '86, a year ago this past July?

9 A July of '86, two years ago this -- well, a year ago
10 last July; that's correct.

11 Q When were these items examined?

12 A These items were examined, I believe, approximately
13 a month ago.

14 Q Your report doesn't show?

15 A Exactly the day they were analyzed?

16 Q Yes, sir.

17 A No, sir, this shows the date they were reported. I'd
18 analyzed them prior to that reporting date.

19 Q And your report was dated April the 7th, 1988?

20 A Yes, sir.

21 Q Do you know that Dennis Fritz, co-defendant in this
22 case, went to trial April the 6th, 1988?

23 A I believe it started approximately that time, yes, sir.

24 Q Just -- not approximately, Mr. Hett, exactly.

25 A I was not here until later.

1 Q I know you were not here, but you did appear a day
2 or two later; didn't you?

3 A That's correct.

4 Q In that case?

5 A Yes, sir.

6 Q All right. You knew you were going to appear here,
7 you received your subpoena, what, a couple or three weeks in
8 advance?

9 A Yes, sir.

10 Q And you had testified in the preliminary hearing in
11 this matter in July of 1987; had you not?

12 A Yes, sir, I did testify at the preliminary hearing.

13 Q And you hadn't even examined all of the evidence at
14 that time; had you?

15 A That's correct. There were other examinations that I
16 completed after the preliminary.

17 Q Okay. But you didn't make any of that available to
18 either Defendant; did you -- the results of those examinations?

19 A Sir, I sent the report to the submitting agency and
20 the District Attorney's Office, which is what I'm required to
21 do on all criminal cases.

22 Q Okay. Mr. Hett, why was your report dated April the
23 7th, just by coincidence, or did you bring that down here with
24 you for the trial of Dennis Fritz to save the postage or
25 something of that nature?

1 A Sir, that's when I completed the examinations, and
2 the case was typed. I brought the report with me.

3 Q It took a year and a half to do this, Mr. Hett?

4 A This is when I completed the analysis.

5 Q It took you a year and a half from the time you got
6 it. You got them in December of 1985 and didn't finish it until
7 April of 1988?

8 A Sir, I had many other cases going at the same time.
9 This is not the only case I have.

10 Q Yes, sir.

11 A This is when I completed the examination.

12 Q Mrs. Long -- not Long, Land testified that this case
13 was turned to you in September of 1983?

14 A Yes, sir.

15 Q Even the exhibits introduced here in evidence or
16 numbered 27, 28, and 29 -- now, that's the ones you've
17 identified here as being mounted scalp hairs, those had already
18 been prepared and handed to you in September of 1983.

19 A The majority of them had, yes, sir.

20 Q Everyone of those in Exhibits 27, 28, and 29,
21 according to Mrs. Land were given to you in September of 1983.

22 A Some of these I mounted myself from bindles.

23 Q Not any in those three exhibits -- you didn't mount
24 any of those; did you?

25 A If I could see those slides, I could tell you exactly

1 the ones I --

2 Q You just looked at them, but we'll hand them back
3 to you.

4 MR. WARD: Hand him 27, 28, and 29.

5 Q (By Mr. Ward) Now, did you mount any of those?

6 A I did not mount any of State's Exhibit 29; these were
7 all mounted. I did mount -- let me count them, one, two, three,
8 four slides in State's Exhibit 28.

9 Q How many slides are contained in State's Exhibit 28?

10 A Fourteen.

11 Q And you mounted four of those?

12 A Yes, sir.

13 Q And if Mrs. Land testified that she --

14 MR. PETERSON: Your Honor, I'm going to object to the
15 form of the question.

16 THE COURT: Sustained. You cannot compare one
17 witness's testimony to another.

18 Q (By Mr. Ward) But you did that, regardless of what
19 anybody else said?

20 A Yes, sir, my initials are on there.

21 Q Okay.

22 A Susan Land's initials do not appear anywhere on these
23 slides, on these four.

24 Q Okay. And are those initials yours apparent --
25 anybody pick them up can look at them and see what they are?

1 A Yes, sir, they have my initials, M. R. H.--

2 Q Okay.

3 A -- on four slides.

4 Q When did you --

5 A It's my writing.

6 Q When did you mount those, Mr. Hett?

7 A The exact date, I have no idea.

8 Q I'd like to have the exact dates, Mr. Hett, yes, sir,
9 I'd like to have it.

10 A I mounted them after September, 1933, at the time I
11 realized I needed more known pubic hairs mounted from Debbie
12 Carter, so I mounted more pubic hairs out of her known.

13 Q Are there any on there mounted by -- known pubic
14 hairs of Debbie Carter mounted by Mrs. Land?

15 A I could attempt to identify her initials.

16 Q Well, I don't care how you can come up with the
17 answer to my question, but would you please try.

18 A Well, sir, I see two sets of initials on Debbie
19 Carter's known pubic hair. Appears to be Mary Long's and also
20 Susan Land's. As I mentioned before, two sets of initials on
21 two particular slides I see.

22 Q Two sets of initials on two slides?

23 A Well, actually three sets of initials if mine are
24 included.

25 Q Are yours included?

1 A Yes, sir.

2 Q Well, what -- why, if you didn't mount them? Why are
3 your initials on there?

4 A So I can identify them.

5 Q Okay. Do you have any idea when -- strike that. Were
6 those submitted to you in September of 1983?

7 A The known pubic hair slides from Debbie Carter?

8 Q Yes, sir.

9 A Yes, sir.

10 Q Now, how do you know that other than what I told you
11 a minute ago what a witness testified to? Do you have any dates
12 there, written down in your own handwriting?

13 A Yes, sir, I do.

14 Q On the slides?

15 A No, sir.

16 Q Whereabouts?

17 A They're on some notes that I have.

18 Q Do you have them with you?

19 A Yes, sir.

20 Q Would you look at them and tell me, then, what date
21 you mounted the four that you mounted -- that you say you
22 mounted.

23 A I would not have a date on the four that I mounted.

24 Q You'd just have dates of something somebody else did,
25 not anything that you did; is that correct? Is that what you're

1 telling this court and jury, Mr. Hett?

2 A Sir, I looked these hairs over very --

3 Q Get your notes -- would you get your notes and look
4 at them and see.

5 A Sir, I can guarantee you I do not have notes on when
6 I --

7 Q I didn't ask you to guarantee me anything.

8 A -- examined and mounted the hairs.

9 Q Would you get your notes.

10 MR. WARD: Court please, would you ask him if he has
11 some notes available to get them and refer to them. I'm not
12 interested in his guarantee.

13 THE COURT: If you need your notes to answer the
14 questions, refer to those notes. Mr. Ward, ask your next
15 question.

16 Q (By Mr. Ward) Do you need your notes?

17 A I do not need my notes to answer that question about
18 when I mounted Debbie Carter's known pubic hair because I did
19 not write that down.

20 Q There isn't any way you can tell me; can you?

21 A No, sir.

22 Q Can you even -- can you tell me the year that you
23 did it?

24 A This would be since 1983.

25 Q That could be 1983 -- I mean, '84, '85, '86, '87, or

1 any time up until yesterday?

2 A Sir, the original reporting date, my first report,
3 was December of 1985. It would be between September, 1983, and
4 December, 1985.

5 Q You can't tell me within two years and four months of
6 when you mounted a hair on a piece of glass.

7 A The exact date on those known hairs, no, sir.

8 Q Can't tell me within six months of the exact date;
9 can you?

10 A Sir, I said I did not have the date written down.
11 This was during the examinations.

12 Q You're just counting on your memory; is that correct?

13 A Sir, I can identify the slides that I mounted. I did
14 not write a date down.

15 Q That's what I'm talking about, you're just counting
16 on your memory that it was done some time within that date,
17 and you've testified that you have -- this is not the only case
18 you've got, and that you've done thousands of hairs. Have you
19 done thousands of them within this time frame from 1983 to 1985?

20 A Yes, sir, I would say so.

21 Q Okay. Would you look at the rest of them and see how
22 many more on Exhibit -- you're referring to four slides on
23 Exhibit 29?

24 A I'd have to look again. It will be a minute. Yes,
25 sir, I mounted four slides --

1 Q On Exhibit -- contained in Exhibit 28?

2 A -- on Exhibit 28.

3 Q All right. Would you look at Exhibit 29 and tell me
4 if you mounted any of those.

5 A No, sir, I did not.

6 Q Okay. And you didn't mount any on 27, just on 28?

7 A That's correct, only on No. 28.

8 Q Okay. It took three or four years to get the results
9 of this examination; didn't it, Mr. Hett?

10 A Yes, sir. As I mentioned, several hundred hours
11 were involved in the examination.

12 Q Several hundred hours; okay. Did you receive some
13 hair, both scalp and pubic hair, from the Ada Police Department
14 from an individual named Ricky Simmons some time during the fall
15 of 1987?

16 A I recall receiving a hair sample from Ricky Simmons.
17 I received this from Mary Long on October of 1987.

18 Q When did you complete that examination?

19 A That was completed just prior to the April of 1988
20 report.

21 Q Before -- some time before the 7th of April, 1988?

22 A That's correct, this year.

23 Q How were you able to do those so quick, Mr. Hett?

24 A Sir, that's when it was completed.

25 Q Sir, --

1 A I didn't say they were done quick. I don't do hair
2 analysis quick. I don't make quick decisions.

3 Q Well, from October the 19th to April the 7th is
4 pretty quick compared to December of 1982 through 1986 when
5 your second report was completed. That's pretty quick; wasn't
6 it -- almost six years, compared to about four months, five
7 months; pretty quick; isn't it?

8 A I'll grant you that four months is shorter time than
9 several years, yes, sir.

10 Q Okay. And that's how much it took you to do Ricky
11 Simmons; wasn't it?

12 A No, sir. That's the difference between the time I
13 received it and the time that I sent out the report.

14 Q Okay.

15 A I didn't say that I examined it the whole time.

16 Q How much time did you spend examining that, Mr. Hett?

17 A Ricky Simmons alone -- only Ricky Simmons's hair?

18 Q Well, I guess. I don't -- do you examine more of
19 them than one at a time?

20 A No, sir.

21 Q Okay, then Ricky Simmons alone, then, however you --
22 however you do it.

23 A Ricky Simmons's comparison would have lasted probably
24 a day, approximately eight hours.

25 Q You spent eight hours on that; is that correct?

1 A Approximately, yes, sir.

2 Q You received them in October of 1987, and you were six
3 months preparing the report?

4 A No, sir, I was not. The actual preparation of the
5 report based on all of the notes would -- you know, when I talk
6 about preparing a report, I talk about writing the report and
7 getting it typed. Okay. Writing a report and getting it typed
8 after my analysis is complete would probably take less than two
9 hours.

10 Q Okay. You've got eight hours' work in it, two hours
11 in writing and -- preparing and typing the report; that's ten
12 hours. How do you account for the rest of the six months delay
13 in getting it down here?

14 A Other cases, crime scenes, teaching schools, telephone
15 calls, testifying in court, and any number of other assorted
16 duties that I have each and every day. This is not the only
17 case that I have.

18 Q I know that, Mr. Hett. Yeah.

19 A That's how I can account for my time.

20 Q Okay. You work for the State; don't you?

21 A That's correct.

22 Q Okay. Just a lot of delay up there; isn't there?

23 A There's a great deal of work to do. I wouldn't
24 necessarily call it delay.

25 Q In fact, your work in this case --

1 MR. PETERSON: Your Honor, let -- he's interrupting
2 the Witness.

3 MR. WARD: Oh, I -- if he's got anything else to say,
4 I'd be more than glad to hear it.

5 Q (By Mr. Ward) What were you going to say, Mr. Hett?

6 A I wouldn't necessarily call it delay.

7 Q What would you call it?

8 A I'd say there was a great amount of work to do. There
9 are cases that have suspects going to court prior to the time
10 that this one did. There were suspects that were arrested, had
11 court dates that I needed to get the evidence completed on
12 that did have court dates set between 1983 and 1988. Numerous
13 cases.

14 Q Okay. Have you finished answering? I don't want to
15 interrupt you.

16 A Yes, sir, I'm finished.

17 Q Okay. Now then, you say you wouldn't call that a
18 delay, I believe was the words you used. From a homicide that's
19 committed -- was committed in 1982, to 1985 or 6 whenever it
20 was you wrote this first report, be what, four or five years,
21 three or four years?

22 A From 1982?

23 Q Yeah.

24 A Until 1985, the first report would be --

25 Q To whatever your first report was.

1 A -- three years.

2 Q Okay, three years.

3 A I had the evidence approximately two years.

4 Q You had it two years, and you know this case was not
5 filed until May of 1987.

6 A I don't know the exact date, but I believe it was '87.

7 Q I can tell you the exact date, May the 8th, 1987;
8 that's the exact date. You know that; don't you?

9 A If you say so. I don't know the exact date.

10 Q You heard it when you were here at the preliminary
11 hearing. It was discussed quite a bit; wasn't it?

12 MR. PETERSON: Your Honor, I'm going --

13 Q (By Mr. Ward) That particular date.

14 A I don't recall.

15 MR. PETERSON: Your Honor, counsel is testifying, and
16 he's arguing with the Witness.

17 THE COURT: Well, that's cross examination.

18 MR. PETERSON: Object to the form.

19 THE COURT: Overruled.

20 Q (By Mr. Ward) Now, that was certainly a delay from
21 December of 1982 until May the 8th of 1987 was quite a delay;
22 wasn't it -- four and a half years.

23 A Between the commission of the crime and filing --

24 Q Yes, sir.

25 A -- of the charges.

1 Q Yes, sir.

2 A That's a great deal of time, yes, sir.

3 Q That's a great deal of time. And in your experience,
4 it's quite unusual; isn't it?

5 A No, sir. I have open homicide cases dating back to
6 the '70's which have never been filed.

7 Q Nothing's been filed in them yet; have they?

8 A That's correct.

9 Q Okay.

10 A But the chances are they could be.

11 Q And you'd say that four and a half year difference is
12 not unusual in your experience?

13 A Most cases are filed sooner than that in my experience;
14 however, I have cases that date back ten years that are still
15 unsolved.

16 Q Okay. Why was this case submitted to you after Mrs.
17 Land had had it for six months or longer than that?

18 A I was contacted by Mrs. Land, also my supervisor and
19 asked if I could take the case.

20 Q Why didn't she keep it?

21 A Sir, I don't know.

22 Q Is that a usual happening in your department, or is
23 that unusual?

24 A That would be more unusual than usual; however, it
25 does happen. We submit evidence. We transfer it from various

1 laboratories to other laboratories every day. But as far as
2 giving a case from one laboratory to another that's already had
3 some evidence completed on it or has been started, that would
4 be somewhat unusual.

5 Q She had had these exhibits some nine months when it
6 was turned to you -- well, nine months since the commission of
7 the offense.

8 A Approximately.

9 Q Okay. Let's say, eight months she'd had it. You
10 don't know what had happened to any of those exhibits during
11 that time?

12 A I have an idea.

13 Q I'm not talking anything wrong happened to it, Mr.
14 Hett, I'm just -- you don't know; do you? You don't know why
15 that nine-months' delay; do you?

16 A No, sir. What I can tell you is that I was asked to
17 take the case.

18 Q You have no personal knowledge of the first nine
19 months delay, but you do know how and why the rest of the time
20 expired; don't you?

21 A Yes, sir, I do.

22 Q Because this was under your direction and control?

23 A Yes, sir, under my examination.

24 Q Okay. I noted in your preliminary remarks to the
25 jury from these drawings or charts or whatever you want to call

1 them, that you kept referring in response to Mr. Peterson's
2 questions that generally this happened. What -- generally,
3 what do you mean -- most of the time?

4 A When I say generally?

5 Q Yes, sir. You used the term --

6 A Generally would mean on most occasions.

7 Q Yeah, on most -- not on all occasions.

8 A No, sir, otherwise, I would have said in every
9 instance.

10 Q Yes, sir. Who prepared those charts you were looking
11 at?

12 A Those charts were prepared at our Enid office -- or
13 excuse me, Oklahoma City office, headquarters. These are
14 enlargements of some standard training devices that are used
15 in training hair examiners and also for education.

16 Q Okay. Now then, I'll ask you again: Who prepared
17 them?

18 A Who exactly, I do not know.

19 Q You don't know.

20 A I asked them to be prepared. They were furnished.

21 Q When were they prepared?

22 A Best of my recollection, they have been used on other
23 occasions. They're probably at least a year old, some of them.

24 Q Use them quite often?

25 A I don't use them quite often. They have been used in

1 other instances, training. I'd --

2 Q Have you used them for testimonial purposes before?

3 A Yes, sir.

4 Q Okay. Now, the three, if I understood you right, the
5 three types of hair these charts referred to -- maybe not types
6 of hair, that maybe the wrong terminology that you said --
7 Caucasian, Negroid, and Mongoloid. Are you using Mongoloid as
8 a racial termination rather than a mental type thing -- you
9 know, Mongoloid is a type of mental defect. You understand
10 that; don't you?

11 A That is what I understand to be a slang term for a
12 particular chromosome abnormality. The way I use Mongoloid --

13 Q It's not a slang term; is it, Mr. Hett?

14 A Excuse me?

15 Q If you know, it's not a slang term; it's a very
16 scientific term. It's a type of mental defect; is it not?

17 A It's not used near as much as Trisomy 21.

18 Q Well, I know --

19 A -- which is a greater --

20 Q -- but it is -- it is a pretty scientific term for a
21 type of mental deficiency; isn't it?

22 A It may be. It's also a scientific term for a
23 particular racial characteristic in hair.

24 Q All right. And you're using it as racial rather than
25 mental?

1 A As a broad racial category, yes, sir.

2 Q All right. Okay. Now, can you look at a hair or a
3 handful of hair and tell whether this came from a Caucasian, a
4 Negroid, or Mongoloid?

5 A With a handful of hairs?

6 Q Yes.

7 A Yes, sir, even with a single hair, one can get racial
8 characteristics; however, these must be used with caution. The
9 reason for this, I've seen Negroid individuals that had
10 obviously Negroid hair. Their pubic hair, when examined, looked
11 Caucasian.

12 Q Okay.

13 A This on an obviously black individual, I have seen
14 that occur. So, just because you can look at a hair, you can
15 determine racial characteristics, but you may not know the exact
16 race of that individual. There also are mixtures.

17 Q One of those Negroid characteristics that you referred
18 to was the hair being, I believe you said flat?

19 A It would have a flat cross section, flat shape.

20 Q And that would cause the curl in the hair?

21 A Yes, sir. Generally, the flatter the hair, the more
22 curly or coiled it is.

23 Q Well now, that just applies to someone in -- a member
24 of the black race, or would a curly-headed white person have
25 that same characteristic, the flat hair?

1 A Yes, sir, I've seen Caucasian individuals or whites
2 with very flat, curly hair.

3 Q The same thing that you say was a characteristic of
4 a Negroid?

5 A I'm not saying that's the only characteristic.

6 Q I know, but we're not talking about --

7 A But that is one of the characteristics that is used.
8 I have seen --

9 Q So, that characteristic -- go ahead.

10 A I have seen Caucasians with very flat hair.

11 Q Okay. How about Mongoloids?

12 A Generally, I've not seen a Mongoloid with flat hair.

13 Q I've never seen a curly-headed Chinaman either, but
14 I just thought maybe in your experience you might have, but you
15 haven't seen one of them?

16 A Not what you're describing, no, sir, unless, of course,
17 he would have a permanent. That could happen.

18 Q Have a what?

19 A If he had a permanent wave done to his hair.

20 Q Would that create this flat characteristic you're
21 talking about?

22 A Not the natural flat characteristic that one would see.

23 Q But would it create a flat characteristic; is that
24 what a permanent does, make the hair flat? Is that what --
25 curly?

1 A It can flatten it somewhat in some areas, but it
2 would not be overall flat shape.

3 Q But you could tell the difference; couldn't you?

4 A Yes, sir, a certain amount can be examined on
5 permanents that have been introduced to hair that's not
6 generally curly.

7 Q Okay. Now, you say it's very difficult to use one
8 hair and come up with any results.

9 A No, sir, I did not say that.

10 Q Well, what did you say, then, Mr. Hett? I certainly
11 don't want to misquote you.

12 A Sir, you had asked me about taking either a handful
13 of hair or a single hair and determining racial characteristics.
14 My answer was that on either one, racial characteristics could
15 be determined from either a single hair or a handful, as you
16 put it.

17 Q Okay. Let's -- as far as numbers are concerned, let's
18 go back to the four slides in Exhibit No. 28 that you said you
19 mounted. And I believe -- if I misquote you, Mr. Hett, you tell
20 me so. I believe you said that you realized that you needed
21 more known pubic hairs of Debbie Carter; is that why you did
22 that?

23 A That is the reason that I mounted more known pubic
24 hairs.

25 Q Okay. I did quote you correctly?

1 A Yes, sir.

2 Q Okay. Now then, why did you need more?

3 A There were only two slides of known pubic hair from
4 Debbie Carter mounted. What I did was to go back to her known
5 pubic hair that I had received and mounted more --

6 Q Okay.

7 A -- for the comparison. I felt that I needed to
8 examine more hairs to determine the characteristics that were
9 present in her known sample.

10 Q Okay. You needed more because you get a better
11 result with more hair?

12 A Well, I wouldn't say more is always better, but
13 occasionally, a person needs to look at more hairs in a case.
14 More is not always better.

15 Q Okay. Is six better than one?

16 A As far as known hair samples go?

17 Q Yes, sir.

18 A Yes, sir, it would be very difficult to use a single
19 hair as a known sample.

20 Q By the same token, if you have an evidence hair, let's
21 call it -- I guess that's -- is that how you refer to the other?

22 A Questioned hair, evidence hair, either one would be
23 correct.

24 Q Okay. If you just have one of them, that limits your
25 ability, too; doesn't it?

1 A It does not limit the ability in a comparison. Each
2 hair is compared separately to a known sample, so one hair is
3 one hair. It can be compared to a known sample.

4 Q Okay. Mr. Hett, you said that your -- a lot of your
5 time is taken up in testifying. You testify all over the State;
6 don't you?

7 A My particular area of the State is Northwest Oklahoma.
8 I occasionally have testified in other areas of the State, but
9 my main area is 19 counties, Northwest Oklahoma.

10 Q Well, this is the second time you've testified here
11 to my knowledge in the not too distant past; is that not correct?

12 A That's correct.

13 Q All right. You've testified in Lawton which is not
14 in Northwest Oklahoma.

15 A That's correct.

16 Q Okay. And that has been recently, too; has it not?

17 A Within the last year.

18 Q Okay. Now, you testified that you can tell twin
19 hairs apart -- hair from twins apart. If you took two hairs,
20 one from one identical twin and one from another, you could say
21 these are not microscopically consistent?

22 A Based on two single hairs?

23 Q Yes, sir.

24 A That is not how a hair comparison is done, but I can
25 take two hairs off of my head and look at them and come up with

1 differences and say they're not consistent, but that's not the
2 way a hair comparison is done.

3 Q If I gave you -- pull one out here and one out here
4 and gave this to you and all the time you needed and all of the
5 equipment you've got, could you come back into this court under
6 oath and swear those two hairs came from the same source?

7 A I don't believe I could. I don't believe any hair
8 examiner could --

9 Q Nobody could; could they?

10 A -- based on two single hairs.

11 Q It cannot be done; can it?

12 A It could be done.

13 Q If I gave you a handful out of both sides, could you
14 say they came from the same source -- that they did come from
15 the same source?

16 A Sir, as I testified before, hairs are not absolute
17 personal identification.

18 Q Okay. Now, --

19 A Therefore, the answer would have to be no.

20 Q -- you're not telling the Court that these hairs
21 you've referred to about Dennis Fritz, you're not swearing under
22 oath those hairs came from Dennis Fritz; are you?

23 A No, sir, I've never testified to that.

24 Q You didn't say -- they could have. I believe you even
25 used the term they might have once; didn't you?

1 A I used the word might.

2 Q Right here in this courtroom not more than 20, 30
3 minutes ago.

4 A That's correct, I did use the word might.

5 Q And with the terminology you're using, you're putting
6 this jury in a position to guess that two of those hairs came
7 from this man right here?

8 A I'm not saying that. I'm saying that the hairs are
9 microscopically consistent and could have the same source.

10 Q Uh-huh.

11 A Two scalp hairs, two pubic hairs.

12 Q But you cannot eliminate anybody, like if you and I
13 each put a finger right there, you could specifically say that
14 one of -- or someone qualified in that field could specifically
15 say that one of those was mine and one of them was yours. You
16 can't do that with hairs; can you?

17 A Hairs are not fingerprints.

18 Q You're kidding me, Mr. Hett.

19 A There is no comparison to -- between the two.

20 Q But you -- they are positive identification; are they
21 not?

22 A They would be an absolute identification.

23 Q But hair is not?

24 A Hairs are not absolute identification.

25 Q Hair cannot --

1 A There could be another individual somewhere in the
2 world that may have hair exactly like mine.

3 Q There could be another individual somewhere in this
4 room that had hair exactly like yours or somewhere on that
5 12-man jury that had hair exactly like yours. Could be;
6 couldn't there?

7 A That's possible, but looking at the hair, I don't see
8 anyone that has hair that looks like it would be like mine.

9 Q You can tell that sitting in -- with your naked eye
10 from the jury box, and yet it took you four and a half years
11 with all your sophisticated equipment to do -- say that, what
12 little you have said, about the hair of Fritz and Williamson.

13 A Sir, I was talking about the difference between my
14 hair and other hairs here in the jury.

15 Q Okay.

16 A Just on a visual examination. That's not the same as
17 doing a detailed microscopic examination.

18 Q Are you talking about color? Is that what you're
19 looking at visually?

20 A I'm talking about color; I'm talking about length;
21 talking about the spatial orientation, and curliness.

22 Q The length -- would a long hair --

23 A Length.

24 Q -- not be consistent with yours? Just the length
25 alone, would that make a difference?

1 A Based on length, if I found a hair that was twice as
2 long as mine, it would be rather difficult for that hair to
3 come from me.

4 Q Uh-huh. But if you found one half as long as yours,
5 that wouldn't mean anything to you except maybe that hair might
6 have been broken; would it?

7 A Sir, it would depend on how long my hair was and the
8 range of lengths in my scalp hair. I could have -- take the
9 longest hair on my head -- I can have hair on my head that's
10 half that long, and I'm sure that I do.

11 Q Okay.

12 A I'm sure I have some that are a fourth that long,
13 especially in areas toward the back.

14 Q And you could pull one of each out and couldn't tell
15 that they both came from your head; could you?

16 A Sir, that's not the basis for a comparison. A
17 comparison is based on --

18 Q Would you just answer my questions. You couldn't pull
19 one from either side of your own head and tell that they came
20 from the same source?

21 A Are you talking absolute identification?

22 Q Yes, you bet, this is absolute, Mr. Hett.

23 A No, sir, I said you cannot do an absolute
24 identification on hairs.

25 Q What are -- you can't get absolute -- what are you

1 doing? Are you playing guessing games in your field?

2 A No, sir, I'm doing detailed, scientific analysis of
3 approximately 25 to 30 microscopic characteristics in hairs.

4 Q Approximately 25 what?

5 A Approximately 25 to 30 microscopic characteristics in
6 hairs and basing an opinion on that detailed comparison.

7 Q All right, but 25 to 30 or 125 or 130, you still can't
8 say they came from the same source; can you?

9 A Sir, I've testified hairs are not absolute personal
10 identification.

11 Q Just a second.

12 MR. WARD: I believe that's all.

13 MR. PETERSON: Just a minute, Your Honor.

14 MR. WARD: We want that Exhibit 2 back.

15 REDIRECT EXAMINATION

16 BY MR. PETERSON:

17 Q Mr. Hett, do you sit down with a case and spend the
18 entire time on that one case?

19 A Once I receive it, no, sir. There is -- occasionally,
20 there are some things that need to be done immediately in a
21 case that can be taken care of. There are, as I mentioned
22 before, court dates, other cases are coming up, cases that have
23 the date set, you know, within two weeks where possibly another
24 case can wait. Different priorities have to be set, so every
25 time I get a case in, I don't just work it completely through

1 and leave everything else. That's something that I really
2 cannot do.

3 Q You testified about eight hours of examination. Does
4 that mean that you sat down one morning and spent eight hours
5 looking through a microscope, or is that over a period of days?

6 A That would probably not be all on one day. This would
7 be over the period of possibly several days.

8 Q What are the three results that you can get -- what
9 are the three results that you can give in whether a hair is
10 consistent, inconsistent, or what --

11 MR. WARD: To which we're going to object. There is
12 nothing in evidence about any number of results he can get.

13 THE COURT: I think that's beyond the cross
14 examination.

15 MR. PETERSON: He questioned his -- well, yield the
16 witness.

17 MR. WARD: I don't have anything else.

18 THE COURT: You may step down. Call your next witness.

19 MR. PETERSON: Barney.

20 MR. WARD: Okay.

21 (Whereupon, the following bench conference was had:)

22 MR. PETERSON: State of Oklahoma rests.

23 THE COURT: Let me --

24 MR. PETERSON: Before I rest, Your Honor, at this time
25 the State moves for introduction of State's Exhibits 1, 2 --