

1 a question, but I'll ask it later, if you're going to
2 be here. Court will be in recess until 1:30.

3 (WHEREUPON, a recess was taken; proceedings resume as follows,
4 to-wit:)

5 THE COURT: Court's back in session. Call your
6 next witness. I guess, I don't know, they might have
7 been through with you, Kermit. Did you have any
8 additional questions of Mr. Channell?

9 MR. BURT No, sir, Your Honor.

10 THE COURT: You can go back there to the witness
11 room, then. No, you want him in the courtroom; right?

12 MR. DAVIS Your Honor, I was told that they may be
13 calling an expert in that field.

14 THE COURT: Okay, then you can have a seat in the
15 courtroom. All right, call your next witness.

16 MR. BURT Dr. Zajac, Your Honor.

17 THE COURT: Okay. Did you get the spelling of
18 her name?

19 MR. BURT It's Z-A-J-A-C; Patricia. Raise your
20 right hand and be sworn.

21 (Witness sworn.)

22 THEREUPON,

23 PATRICIA ZAJAC

24 was called as a witness by and on behalf of the Defendant/
25 Petitioner and having been duly sworn was examined and testified

1 as follows, to-wit:

2 DIRECT-EXAMINATION

3 BY MR. BURT:

4 Q] Could you restate your name for us, and tell us your
5 business or occupation?

6 A] Patricia Zajac, Z-A-J-A-C, I'm a professor of Criminal Jus-
7 tice and chair of the Criminal Justice Department at California
8 State University in Hayward. It's called East Bay now.

9 Q] And during, uh, before you became a professor, were you in-
10 volved with law enforcement as a serology CSEUB?

11 A] I was a criminalist with the Alameda County Sheriff's
12 Department Crime Laboratory for almost twelve years. Yes.

13 Q] And can you tell me what of time that was that you were a
14 criminalist with that agency?

15 A] 1970 to almost 1982.

16 Q] And tell us what kind of work you did during that time
17 period with law enforcement, working at the Crime Lab?

18 A] I was a journalist criminalist for good part of that,
19 examining a number of types of physical evidence, uh, going out
20 to crime scenes and collecting evidence, uh, writing reports on
21 the analyses and testifying in court. I specialized in forensic
22 serology, uh, and developed for the laboratory their basic
23 testing protocols, procedures, uh, back then it was pre-DNA, and
24 this involved the ABO antigens system but also enzymes system,
25 uh, in terms of proteins by electrophoresis. And I did research

1 in that area and published a number of articles on those
2 procedures.

3 Q] And are those, are your publications listed in your CV?

4 A] Yes, they are.

5 Q] Did you, at my request, uh, swear out a declaration that
6 was submitted on behalf of Mr. Misskelley?

7 A] Yes.

8 MR. BURT: And I'd like to offer into evidence
9 what is next in order, what is Exhibit EE to the, uh,
10 amended petition we filed, and I believe we are on
11 #27.

12 (WHEREUPON, Petitioner's Exhibit #27 was admitted and received
13 into evidence and is appended on page .)

14 DIRECT-EXAMINATION, continuing:

15 Q] I wonder if you can identify that?

16 A] (Witness examining same.) Yes, this is the affidavit of my
17 CV.

18 Q] Okay. And the affidavit has attached to it the CV, which
19 is an accurate summary of your qualifications in the area of
20 forensic serology?

21 A] Yes.

22 Q] Can you tell the Court your educational background?

23 A] I have a bachelor's of science degree in criminalistics and
24 a minor of chemistry from the University of California at
25 Berkley; I earned a master's degree in criminal justice in

1 forensic science from California State University in Sacramento;
2 I have a master's in public administration from University of
3 Southern California; and I have a doctorate in public
4 administration from the University of Southern California.

5 Q] And your present position is as the chairperson of your
6 department?

7 A] Yes. I'm teaching courses primarily in physical evidence
8 courses.

9 Q] Physical evidence courses; and where are you teaching as
10 far as university is concerned?

11 A] The university students are mostly juniors and seniors, uh,
12 a good portion of the students are individuals who are going
13 into a law enforcement position. We have law enforcement
14 officers who are returning for their degrees and then we have
15 forensic science students that are taking these courses.

16 Q] And does that teaching position require you to keep up on
17 the literature, not only in the area of forensic serology, but
18 in all areas of criminalistics?

19 A] Yes, it does.

20 Q] Are you qualified to testify in courts on the, uh, in the
21 general subject area of forensic serology?

22 A] Yes, I am.

23 Q] Approximately how many times?

24 A] Several hundred.

25 Q] And has that been on behalf of the prosecution and on

1 behalf of the defense, or is it - - how would you characterize
2 the balance?

3 A] Uh, the balance would be that, well, when I was with the
4 Sheriff's Department, I was requested to testify mostly by the
5 prosecution. Uh, subsequent to my leaving the sheriff's
6 department, I have been requested to testify mostly by the
7 defense, and I would say it's probably a ten to one prosecution
8 to defense.

9 Q] And have you published in the area of biological fluid
10 analysis?

11 A] Yes, I have.

12 Q] And is that, are those publications listed accurately in
13 your CV?

14 A] Yes, they are.

15 MR. BURT: Your Honor, at this point I would ask
16 to qualify Dr. Zajac in the area of forensic serology.

17 THE COURT: Any questions?

18 MR. DAVIS: No, Your Honor.

19 THE COURT: All right, you may proceed.

20 MR. BURT: Thank you.

21 DIRECT-EXAMINATION, continuing:

22 Q] And Doctor, at my request, did you review, uh, a certain
23 amount of material that was generated in this case and related
24 to the forensic serology aspects of this case?

25 A] Yes.

1 Q] And specifically, did you, uh, review the trial testimony
2 relating to the serology evidence, and also the DNA evidence?

3 A] Yes.

4 Q] And the testimony of Mr. Channell?

5 A] Yes.

6 Q] Also the testimony of Mr. DeGuglielmo?

7 A] Yes.

8 Q] And did you also review the closing arguments, those
9 portions of the closing arguments which dealt with the
10 discussion of the scientific evidence?

11 A] Yes.

12 Q] Did you also review in preparation for your testimony today
13 the, uh, lab notes that were referenced by Mr. Channell through
14 his testimony?

15 A] Yes.

16 Q] And specifically, did you have an occasion to look at
17 Exhibit - - it was #21 or #22 - - did you have an occasion to
18 review Exhibit #21, which was identified by Mr. Channell as his
19 lab notes?

20 A] (Witness examining same.) For the most part, yes, they're
21 accompanied by a letter that I don't believe I saw initially.

22 Q] Was that the letter, uh, written by Detective Gitchell; the
23 first couple of pages there?

24 A] Yes.

25 Q] Other than that, you actually reviewed the lab notes?

1 A] Yes.

2 Q] And did you also have an occasion to look at Mr. Channell's
3 P30 gels that he brought to court with him today?

4 A] Yes.

5 Q] He graciously showed you those and you were able to study
6 them?

7 A] Yes.

8 Q] Take a look at the originals, not the Xerox copies?

9 A] Yes.

10 Q] Is there anything else you reviewed in preparation for your
11 testimony?

12 A] Well, the reports that...

13 Q] ...I think you reviewed some protocols; correct?

14 A] Right, and some protocols and the QuantiBlot protocol.

15 Q] So did you review protocols, including the Arkansas State
16 Crime Lab serology protocol?

17 A] Yes.

18 Q] And also the FBI laboratory and serology protocol?

19 A] Yes.

20 Q] And also the protocol from QuantiBlot?

21 A] Yes.

22 Q] Back in the time period when this case was tried, 1993,
23 were there forensic serologists who were available to testify in
24 behalf of defense lawyers who were confronting forensic serology
25 evidence in pertinent cases?

1 A] Yes.

2 Q] And did you yourself perform that role back in that time
3 period, in other words, on occasion were you consulted by
4 defense lawyers, uh, and asked to help them confront serology
5 evidence?

6 A] Yes.

7 Q] What in general was the protocol back in '93 for how a
8 defense serological expert would, uh, help a defense lawyer in
9 terms of, first of all, what you would need to look at in order
10 to render any helpful opinions? In other words, I, I come to
11 you as a lawyer and say, "I got a case involving serology, I've
12 got the report, what else do you need to look at in order to
13 help me?"

14 A] I would advise that they get what's called the bench notes
15 as well as the laboratory notes of, uh, anything that's done in
16 the laboratory, uh, whether it's sketches, test notes, test
17 results, uh, protocols, uh, conversations that are written down;
18 anything that pertains to the case itself.

19 Q] And why can't you just rely on the reports; in other words,
20 when the State hands over a report of the result, uh, for
21 instance, in this case we have Mr. Channell's report indicating
22 no semen found. Why do we need to look at the bench notes in
23 order to understand what he might be saying as a witness?

24 A] One of the things that a criminalist or a forensic analyst
25 would look at is whether or not, number one, the tests were

1 performed; number two, whether or not the test supports the
2 report, uh, and then ultimately, whether or not the tests or the
3 report, any report, support the testimony.

4 Q] In other words, you've got to see whether the report is
5 backed up by the lab notes?

6 A] Yes.

7 Q] And then the second level is, uh, is the testimony that's
8 being offered accurate in terms of what the, what the notes and
9 the reports say?

10 A] That's correct.

11 Q] Now in this case, uh, when you reviewed Mr. Channell's lab
12 notes, were you able to decipher exactly the procedures he
13 performed in relation to the two samples that we talked about
14 with him this morning; that is the Q6 and Q10 samples?

15 A] From the lab notes and the bench notes, not precisely, uh,
16 the summary sheet showed basically the test results, but I did
17 not see anything that explained, uh, with the exception of the
18 P30, which showed the actual gels as well as the rest of the
19 samples. I didn't see how some of the tests were conducted, nor
20 controls and, uh, negative controls, positive controls,
21 substrate controls and that sort of thing.

22 Q] Were his notes pretty standard, though, in terms of how,
23 uh, law enforcement forensic analysts keep bench notes, would
24 you say?

25 A] Uh, I would say standard and in some respects; uh, I've

1 seen a lot more in notes and I've seen a lot less in notes.

2 Q] So somewhere in the middle in terms of the detail you got?

3 A] In the middle; yes.

4 Q] In terms of the information that he did put in there, were
5 you able to figure out what he did and what, if any, problems
6 there were in the testing?

7 A] Uh, knowing the type of tests, I don't want to use the word
8 "assume" what he did in terms of how the test was conducted, uh,
9 he did indicate in his notes some of the problems and some of
10 the questions and that sort of thing with the tests.

11 Q] Now he testified this morning, uh, and his lab notes
12 reflect on page 5 there that he got a - - or he wrote down - -
13 was a false positive on his P30 testing on both Q6 and Q10
14 samples; right?

15 A] That's correct.

16 Q] And were you able to discern what that meant, first of all?

17 A] What, I think I could discern that basically what most
18 tests, and he did do this with the P30, any background or sub-
19 strate control is used to see if there is anything that might be
20 causing the test result, other than the sample in question. Uh,
21 and in this respect, that did occur, that, uh, that the
22 substrate or the background of the, of the pants did cause a
23 positive result and then ultimately, uh, a sample of the mud was
24 tested and gave a positive result.

25 Q] And, uh, what was the general, generally accepted practice

1 within the forensic science community back in '93 as to what the
2 implication of that finding should have been?

3 A] Uh, the official finding is that you can't basically call
4 the results on a supposed stain or a questioned sample because,
5 uh, you're getting false results.

6 Q] Okay. And that's, did you, you sat in this courtroom this
7 morning and heard Mr. Channell testify; right?

8 A] Yes.

9 Q] And he essentially said the same thing; did he not?

10 A] Yes.

11 Q] Do you agree?

12 A] Yes.

13 Q] In that regard?

14 A] Yes.

15 Q] Now did you also notice that for those two samples, Q6 and
16 Q10, that he ran an acid phosphatase test?

17 A] Yes.

18 Q] And did you notice according to his notes that he got
19 "light" or "very light" results?

20 A] Yes.

21 Q] For the acid phosphatase test?

22 A] Yes.

23 Q] Uh, he at his testimony, not here, but at trial, called
24 that as a positive result; did he not?

25 A] Yes.

1 Q] Is that accurate?

2 A] In my opinion, no.

3 Q] And tell me why?

4 A] Well, there are two things: number one, in my experience,
5 again, controls are usually run, or analyzed along with the
6 samples, so a known semen sample, sometimes unknown semen, has
7 been diluted down sequentially. A known, uh, I call the agent
8 "blank" or the chemicals themselves to be sure they don't cause
9 any false reactions, and again, a substrate control. Uh, the
10 acid phosphatase isn't really quantitative, but it's a
11 comparison of the strength of the reaction. So as been stated,
12 a lot of things can cause positive tests for acid phosphatase
13 and a lot of substances have lower amounts of acid phosphatase
14 in them.

15 Q] What kinds of things are we talking about?

16 A] Most biological materials.

17 Q] Human and non-human?

18 A] Yes.

19 Q] So microbial substances can cause this slight reaction?

20 A] I haven't, uh, tested microbial as such, but the chemical
21 reaction can be a lot of things that generate the chemical
22 catalyst; yes. Uh, so generally, when you get a reaction on an
23 evidence sample, if it's not strong like the known control of
24 semen, then it generally is not interpreted as being a positive
25 for semen, because of the possibility of mud.

1 Q] So let me see if I understand this. When he did his P30
2 test, he used positive control?

3 A] Yes; a known semen.

4 Q] A known semen. And he used a negative control; that is a
5 sample with nothing in it?

6 A] Right.

7 Q] And he used a substrate control?

8 A] Yes.

9 Q] And when he tested the substrate control, he got a positive
10 reaction; therefore he said the test was invalid?

11 A] Right.

12 Q] Is what you're saying is that he should have used the same
13 procedure when he did his acid phosphatase test?

14 A] Yes.

15 Q] And was there some reason, uh, in particular, and, and are
16 you saying that that's just general practice?

17 A] General practice; yes.

18 Q] Accepted protocol?

19 A] Yes.

20 Q] Uh, was there some reason in this particular case that
21 should have been done?

22 A] It should have been done, or not been done?

23 Q] Why you would want to run a substrate control in a case
24 where your P30 results had already shown a problem?

25 A] Well, first of all, it should be standard practice to start

1 with. But I would imagine, especially, subsequently having P30
2 come up with a positive on the substrate control, I would
3 question what about those very weak acid phosphatase, and I
4 would go back and re-test the substrate and the mud to see if
5 there is acid phosphatase in it.

6 Q] And you also reviewed the DNA testing results; right?

7 A] Uh, the report of the results?

8 A] The report; yes.

9 Q] Uh, did you see that they used substrate controls doing the
10 DNA testing?

11 A] I didn't see anything as far as that I believe as far as
12 the...

13 Q] ...well, it says in the report, this is the last page of
14 Mr. Channell's "PCR analysis which was performed in duplicate
15 with both positive and negative controls incorporated in the
16 procedure." It's on page 25, if you look at the bottom
17 paragraph. Look in the bottom corner there.

18 A] Okay. Yes, I do see that.

19 Q] And so is there any indication that the DNA lab used a sub-
20 strate control?

21 A] It doesn't appear; no. But I think now that you pointed it
22 out, probably the known DNA and then a known negative agent
23 control, but I don't see that it states a substrate, meaning the
24 background.

25 Q] And would that have been a standard practice to use the

1 substrate control, especially in a case where your testing
2 showed that there was a problem with the substrate?

3 A] Yes.

4 Q] Uh, and you're indicating that Mr. Channell actually ran a
5 mud control sample to find out if other than mud was causing the
6 problem?

7 A] Yes.

8 Q] And what was the results of that?

9 A] It came back with a positive for P30.

10 Q] Positive for P30, which would indicate that the mud itself,
11 apart from the samples was creating some reaction?

12 A] Yes.

13 Q] In that kind of situation you need to run a substrate
14 control, not only from P30, but also for acid phosphatase and
15 DNA and any other kind of testing?

16 A] I would expect that; yes.

17 Q] Okay. And if you had been consulted in this case or if
18 someone like you with your qualifications had been consulted, is
19 that information that could have been conveyed to the defense
20 lawyer and used in cross-examining both the DNA expert and the
21 serology expert?

22 A] I would expect that; yes.

23 Q] Now, uh, did you also notice in your review of these notes
24 that, uh, Mr. Channell found no sperm when he examined the
25 slides microscopically for either the Q6 and the Q10 samples?

1 A] That's correct.

2 Q] And did you also notice in his report he actually wrote "no
3 semen found" on those two samples?

4 A] That's correct.

5 Q] Was there certain aspects of the testimony that you review-
6 ed that could of effectively impeached, had a lawyer had bench
7 notes and actually consulted with a forensic serologist?

8 A] I would say yes.

9 Q] And could you explain what those areas are?

10 A] I reviewed the testimony, in my opinion, uh, the emphasis
11 was on whatever - - and I might have to go back and clarify this
12 - - but whatever, uh, screening weak tests were leaning towards
13 and focusing on the fact that these were positive for semen,
14 when in fact, they weren't.

15 Q] When in fact they were not?

16 A] They were not. Uh, and the questioning and the responses
17 and the testimony summarizing that, uh, to say that visualizing
18 or observing, uh, specimens with a laser light or visual is
19 somehow a positive test for semen, I believe, in my opinion, is
20 incorrect. Uh, and the testimony was kind of dealt that it
21 could be semen, uh, and visualizing it with something like laser
22 or ultraviolet as visual, it could be almost anything. And the
23 same thing with the weak acid phosphatase, I do not believe, in
24 my opinion, that it is considered a positive test for semen.

25 Q] So when Mr. Channell says, uh, this is at page 1032:

1 Question: "Then I ran two screening tests for the presence of
2 semen." And he says: "That's correct."

3 Uh, did he in fact run two screening tests for the presence of
4 semen?

5 A] I don't consider a laser as a screening test. Again, it's
6 just a way of visualizing, uh, discolorations that might appear
7 under a different light source.

8 Q] Uh, and then when he says the second part of the analysis
9 is an acid phosphatase test, which is again a screening test to
10 see if the item that I am testing possibly can contain semen,
11 and that test was also positive. What you're indicating is that
12 a forensic serologist for the defense could take it as stated
13 and say, "That's not correct; in fact, it was not a positive."
14 It shouldn't be called as a positive?

15 A] It's not a positive test for semen. Semen, when tested if
16 it's a positive, should be very, very strong.

17 Q] And, uh, would it be your further opinion if a forensic
18 serologist had testified in the absence of a positive on the
19 acid phosphatase test, and in the absence of a positive on the
20 P30 test or a visual identification of sperm, that there was no
21 solitary basis whatsoever for concluding that there was any
22 semen?

23 A] That's correct.

24 Q] Were there other aspects of the testimony that could have
25 been addressed by a defense forensic serologists, given the

1 bench notes?

2 A] Other aspects, yes.

3 Q] Well, let me see if I can focus a little bit more. Did you
4 review as part of the lab notes a letter that was written by Mr.
5 Channell dated May 19th; this is page 18, a typewritten letter
6 with some notations on it?

7 A] Yes, in this respect, uh, in looking at the totality of the
8 notations, uh, I, on this particular letter, dated May 19th,
9 1993, the fact that there's notations about these two samples,
10 uh, Q6 and Q10, uh, as possibly being bacterial, uh, in nature,
11 I believe strengthens the fact that number one, there was no
12 semen there and that whatever is causing some of these results
13 is not a result of the samples.

14 Q] It's a result of bacteria?

15 A] It could be a result of bacteria, or some other microbial
16 substance.

17 Q] So if I, a defense lawyer, come to you with this letter,
18 assuming I have it and I say, "Dr. Zajac, what does it mean here
19 when Mr. Channell has written next to these two samples
20 'possibly bacterial in nature'", what would the implications of
21 that be in terms of the reliability of the testimony? What
22 would you have told me?

23 A] I would say that in trying to explain why the false
24 positive came up with the P30, why the weak acid phosphatase,
25 it's trying to explain the substance that's causing it and it

1 very well could be bacterial contained, or some other microbial
2 considering the conditions of the samples.

3 Q] In the declaration that you signed for me, you made
4 reference to the, uh, standard of admissibility in Arkansas for
5 the admissibility of scientific evidence; correct?

6 A] Yes.

7 Q] *Prater v. State*; right?

8 A] Yes.

9 Q] And you quote that case as saying that...

10 MR. DAVIS: Your Honor, at this point, for this
11 witness to testify as to the standard of admissibility
12 of the State of Arkansas...

13 THE COURT: ...sustained. Sustained.

14 MR. DAVIS: I mean...

15 THE COURT: ...I've read the case.

16 MR. BURT: I know the Court knows it. That was
17 just foundational to ask her whether in her opinion,
18 uh, if the lab followed reliable procedures.

19 THE COURT: Well, I'll let you ask her that
20 question.

21 MR. BURT: That is the question.

22 THE COURT: Okay.

23 DIRECT-EXAMINATION, continuing:

24 Q] In other words, when the *Prater* report says "if the
25 laboratory that performed the test did not follow the reliable

1 procedures to ensure accurate test results, the tests should not
2 be admitted." Do you an opinion whether reliable test
3 procedures were followed as to the identification of semen in
4 this case, or the procedures that Mr. Channell followed reliable
5 enough for him to state a scientific conclusion that semen was
6 present or not present?

7 A] As I mentioned, with respect to the acid phosphatase that I
8 did not see anything with respect to the proper controls. I
9 believe the P30 test appeared to be proper and I believe the
10 examination for spermatozoa was proper. And, uh, the report
11 that came out that said no semen present would be, simply, be a
12 result of those, of those tests.

13 Q] But, uh, so if the tests, no semen, uh, "the result of my
14 findings are that no semen is present," that, in your opinion,
15 would have been reliable science?

16 A] Yes, a result of, uh, at the conclusion, from the science
17 that was done.

18 Q] But how about any opinion that, uh, semen was present,
19 given the testing?

20 A] There's no reliable scientific data that supports semen
21 being present.

22 MR. BURT: That's all I have. I would move at
23 this point that exhibit into evidence, which is the
24 affidavit and the CV.

25 MR. DAVIS: Your Honor, I have no objection to

1 the CV, but the affidavit itself would be hearsay.

2 THE COURT: Sustained as to the affidavit. The
3 CV is received just for bookkeeping purposes. The
4 affidavit has already been received as a pleading, but
5 as far as an exhibit to the testimony, I'll sustain
6 the objection.

7 MR. BURT: So the CV comes in?

8 THE COURT: Yes, the CV comes in.

9 MR. BURT: Thank you.

10 THE COURT: Ma'am, I have a question. I've
11 always, uh, been doing this for a long time, and I've
12 always considered acid phosphatase to be a positive
13 test for the presence of seminal fluid. Is that not
14 correct?

15 THE WITNESS: A strong positive; yes.

16 THE COURT: Well, any positive.

17 THE WITNESS: As a presumptive. Uh, in my
18 experience and, uh, substances are, something that is
19 weak is not an indicative of semen being present.

20 THE COURT: Well, that's a matter of interp-
21 retation; right?

22 THE WITNESS: Well, that's part of the analyst's
23 job is to interpret the testing results.

24 THE COURT: Well, I understand that. Where else
25 in nature is acid phosphatase, the enzyme, found? Is

1 it found anywhere else, other than seminal fluid?

2 THE WITNESS: Yes.

3 THE COURT: Where?

4 THE WITNESS: Uh, blood, vaginal fluid, uh, some-
5 times in urine, perspiration, there's other
6 biological, human biological materials.

7 Likewise, acid phosphatase catalyzes the chemical
8 reaction to mimic the color, so if there is another
9 catalyst someplace, it can generate the same, uh,
10 chemical reaction.

11 A strong reaction is indicative that there's the
12 possibility of semen.

13 THE COURT: It doesn't mean you'll necessarily
14 find semen.

15 THE WITNESS: Precisely.

16 THE COURT: It means you've identified seminal
17 fluid; right.

18 THE WITNESS: It's not a conclusive for seminal
19 fluid. It says, okay, it's likely seminal fluid
20 either will show sperm present, the sperm fraction or
21 the P30 from the fluid portion, but it's, uh, it's a
22 presumptive test, uh, and it is indicative of the
23 possible presence of seminal fluid but it requires a
24 strong reaction.

25 THE COURT: All right.

1 MR. BURT: Could I ask a follow-up question?

2 THE COURT: Sure.

3 MR. BURT: Thank you very much.

4 DIRECT-EXAMINATION, continuing:

5 Q] You say one of the things you reviewed in this case was
6 the, uh, FBI Crime Laboratory procedures for the serological
7 identification of biological substances?

8 A] Yes.

9 Q] Uh, dated December 22, 2002?

10 A] Yes.

11 MR. DAVIS: Your Honor, you can't, I mean, maybe
12 he can explain why, but a set of, uh, based on...

13 THE COURT: ...you don't have to use criteria
14 that were in existence at the time of the examination.
15 I think that's what the objection is.

16 MR. BURT: I understand and so my question is
17 going to be, uh, what was the standard in 2002 and did
18 it differ in 1993?

19 THE COURT: Well, first of all, do you know what
20 the standard was in 1993 and '94?

21 THE WITNESS: In the laboratories I'm familiar
22 with, yes, the way the interpretation and the controls
23 that were necessary; yes.

24 THE COURT: All right. And then you can follow
25 it up with was it any different from 2002, is that

1 what your question is?

2 MR. BURT: Yes.

3 THE COURT: All right.

4 DIRECT-EXAMINATION, continuing:

5 Q] First of all you...

6 MR. DAVIS: May I voir dire on that, Your Honor?

7 THE COURT: Yes.

8 VOIR DIRE EXAMINATION

9 BY MR. DAVIS:

10 Q] If I understood, you said that you're familiar with the
11 standards in the labs that you were familiar with back in 1993
12 and '94?

13 A] Yes.

14 Q] And where were those labs?

15 A] Uh, California labs, uh, during the '80s I put on workshops
16 for labs throughout the U.S. and up in Canada, uh, and in the
17 late 1980s I was teaching forensic science, including forensic
18 biology, at Cal-State in Sacramento and I was teaching these
19 procedures. And these controls and the standards, uh, which is
20 part of the procedures.

21 Q] Okay. The initial question was regarding FBI standards for
22 2002. What you're telling us that those standards from 2002
23 were either the same as those in 1993; therefore, there would be
24 no difference, or the standards that you were familiar with in
25 '93 - - that you were familiar with the FBI standards that were

1 in effect in 1993, even if they were different in 2002. Is it
2 one of those two options?

3 MR. BURT: I'm not sure I understand the
4 question. Maybe she does.

5 VOIR DIRE EXAMINATION, continuing:

6 A] I'm not sure, uh, I don't recall looking at the standards
7 from the FBI in 1993, uh, so I can't compare what their
8 standards were in 1993 with what their standards are in 2002.
9 Uh, the way the tests are conducted and the controls, you know,
10 this would have been standard, whether written or not, when I
11 was working in the 1970s.

12 Q] So any opinion that you would have would be based on your
13 understanding of what the standards were, not necessarily that
14 they tracked FBI standards in 1993; correct?

15 A] I believe that's - - yes.

16 DIRECT-EXAMINATION, continuing:

17 Q] So I guess my question is whether if this is from the FBI
18 manual in 2002 and it says: "Human semen possesses acid phosphatase
19 activity that can be exploited on the presumptive identification
20 of this bodily fluid, referring to semen, because AP
21 activity is not exclusive to human semen, a positive test result
22 is only a presumptive identification and warrants that the stain
23 should be tested further to conclusively identify semen." My
24 question is the way that standard is framed in 2002, is that any
25 different than it was in 1993?

1 A] No, in fact, it's not any different than it was back in the
2 1970s.

3 Q] Okay. And, uh, the, uh, from the same document:

4 "Identification of human semen can be affected by either the
5 immunological detection of the soluble plasma protein prostatic
6 specific antigen PSA, or by the observation of human spermatozoa
7 on smears light preparation." Is the way that standard is
8 framed in 2002 and different than it was in 1993?

9 A] No, that's basically the same.

10 Q] And when they're talking about there about PSA, they're
11 talking about P30; right?

12 A] That's correct.

13 Q] So the standard in 1993 was acid phosphatase alone cannot
14 establish the identification of semen; you need either positive
15 P30 or identification as spermatozoa?

16 A] That's correct.

17 Q] And in this case you did not have identification of the
18 sperm microscopically; correct?

19 A] Correct.

20 Q] You didn't have a P30 test, a positive P30 test, according
21 to Mr. Channell?

22 A] That's correct.

23 Q] So what conclusion can you offer?

24 A] There was no semen identified.

25 MR. BURT: Thank you. That's all.

CROSS-EXAMINATION

1
2 BY MR. DAVIS:

3 Q] Did I understand you go say on direct testimony that you
4 heard Mr. Channell's testimony this morning and you agreed with
5 what he said on the witness stand under oath?

6 A] I would say that I agreed with the characterization of his
7 test results, uh, there was a couple of statements towards the
8 end in terms of interpretations for a couple of tests that I did
9 not agree with.

10 Q] Interpretations ...

11 A] ...that are used in the court testimony that I did not
12 agree with.

13 Q] All right. But as far as his testimony about what he did,
14 the tests he conducted, the observations he made, the
15 conclusions he reached, you didn't disagree with anything he
16 testified to; correct?

17 A] That's correct, except for the acid phosphatase, the
18 positive test.

19 Q] Okay. And you say because it didn't show significant
20 enough degree of color that it shouldn't have been declared
21 positive, whereas he said that he would call it a positive,
22 although he would have to do further tests to make it even
23 findings; correct?

24 A] That's correct. I agree with what his note says, that it
25 was a very weak or very light, uh, reaction, but was then

1 subsequent to that whether or not, he called it positive, and in
2 my opinion, it's not positive.

3 Q] Okay. I'm referring to page 1031 of the transcript of his
4 actual testimony to the jury in the Jessie Misskelley case, uh,
5 and in that testimony, Mr. Channell was asked, "Specifically
6 referring to Exhibits 45 and 48, what type of tests did you run
7 on those items?"

8 And he says, "I examined those items for the presence of blood
9 and semen. I did not find any blood on each of these items."
10 Did you check his test results to determine if that was
11 accurate?

12 A] Uh, I looked at the summary sheets on that, uh, and accept-
13 ed whatever he stated on that.

14 Q] Okay?

15 A] That he said, you know, that they were negative.

16 Q] Okay. Did you analyze them critically to determine if he
17 could have been wrong in that aspect, or did you just, if he, if
18 he concluded there was no blood, did you just reach the same
19 conclusion as he did?

20 A] I accepted his, his summary, his notes on that.

21 Q] Okay. Then it says "they were my Q6 which were some blue
22 jeans and also Q10, another pair of pants, very dirty and muddy.
23 I employed a laser technique which is an alternative light
24 source to help determine if there were any stains I could not
25 see with the naked eye."

1 Okay. Now is there anything incorrect about Mr. Channell using
2 the laser light source as a way to try to determine if there are
3 stains present?

4 A] No, there's nothing about that.

5 Q] Okay. So you find no fault with that testimony?

6 A] Not that part; no.

7 Q] Nothing misleading here?

8 A] No.

9 Q] Okay. It then says "I did find some questioned stains. I
10 further analyzed these stains in a microscope to see if I could
11 identify any sperm cells present. I could not."

12 Is that something that would be appropriate for Mr. Channell to
13 do in trying to analyze this evidence?

14 A] Yes.

15 Q] Any disagreement with his conclusions reached, based on
16 your examination of his tests and procedures?

17 A] No.

18 Q] Okay. It says "I went also and tried to determine whether
19 there were any enzymes present, specifically P30 prostatic
20 antigen."

21 Would that be something that would be a logical procession to do
22 in order to try to determine if there might be semen present?

23 A] Yes.

24 Q] Okay. So no fault with his process at that point?

25 A] That's true.

1 Q] Okay. He says "I ran a test on these items with that and I
2 got a positive reaction. However, in the course of my work I
3 also ran control samples which also gave me a similar reaction.
4 Based on that I concluded there could possibly be something in
5 the material or in the mud that was interfering with my
6 testing."

7 Any problem with that?

8 A] Uh, it could be a choice of words, uh, I don't believe in
9 this statement that it's clear that the mud was giving the false
10 positive. I would not call it interfering; generally, inter-
11 ferring refers to something that's causing the evidence not to
12 come up or something like that. I think it should have been
13 stated that the mud or the dirt was causing the presence of the
14 P30 reaction, so therefore, the test results are inconclusive or
15 indetermined, cannot be determined having P30 there.

16 Q] Okay. But, I mean, no qualms with his explaining his
17 explanation there that the results, there were mixed results and
18 explaining to the jury at least his opinion as to what the
19 reason for the mixed results were?

20 A] That it was coming from the mud.

21 Q] Okay. So that's the difference you have, but you agree
22 that he did explain to the jury that he had these mixed results
23 on that test?

24 A] He did explain it.

25 Q] Okay. And he also told the jury that there was no semen

1 found when he analyzed it microscopically; correct?

2 A] He said there was no sperm found.

3 Q] That's correct. And then he basically says he submitted it
4 to Genetic Design so they could employ DNA testing, which is a
5 more sensitive technique. Do you find fault with that?

6 A] Uh, my opinion, the submitting for DNA analysis, a firm I
7 am not familiar with, but it's not necessarily more sensitive.
8 It's simply testing something that's not going to confirm or say
9 that there is semen present or semen is not present. It's not
10 an additional test for semen. It's for testing something else.
11 And so I felt that wasn't quite accurate.

12 Q] Okay. You would have used different words; right?

13 A] I would have simply said at this point that we'd exhausted
14 the test for semen and there wasn't anything there.

15 Q] But that wouldn't have explained to the jury that you were
16 sending it off to a DNA lab to get further tests on it. So if
17 you want to convey some information that you're transferring it
18 to a DNA lab to get further tests, that wouldn't chin the pole.
19 So what, what would you tell them?

20 A] Well, I don't think there's any problem with saying it's
21 being sent off for more tests, uh, again, it could be just, just
22 the wording that I don't feel that saying it's more sensitive
23 being a in DNA is going to tell me something that I can't get.

24 Q] Okay. And if I understand, also, you said you were
25 critical because he referred to a laser exam as a screening test

1 for semen?

2 A] Yes.

3 Q] Okay. His testimony on page 1033 says "what the laser does
4 is, it picks up, it's an alternative light source that picks up
5 on any material that might glow, for instance, there are certain
6 items that will glow and semen is one of them. It is, however,
7 just a basic screening test which allowed me to try to first
8 identify the stain and secondly, to try to continue on with my
9 analysis." Now I realize that you wouldn't refer to it as a
10 screening test, but is there anything he says in there that you
11 find fault with, other than he's using the term "screening
12 test." Is his description of the procedure accurate?

13 A] The description of the procedure, I guess what bothers me
14 is that the "and semen is one of them." Well, there's hundreds,
15 probably thousands of things that will fluoresce under, you
16 know, ultra violet laser and, uh, I believe that the question
17 should have come up as to whether other things could cause a
18 fluorescence.

19 Q] And then on page 1033 Mr. Channell states "the third step
20 is to try to visualize to see if you can see any spermatozoa in
21 the stain that I identified." And the question to him was "and
22 you could not do that?" And he said, "That's correct." Do you
23 agree with his conclusions there?

24 A] Yes.

25 Q] So what was it about, if we could narrow it down a little,

1 what was it about Mr. Channell's testimony that you determined
2 was misleading or inappropriate for the jury to consider?

3 A] Well, number one, specifically stating that the semen - - I
4 don't want to say other substances, but also on that same page,
5 uh, starting with line 4: "the second part of the analysis was
6 an acid phosphatase test which is again a screening test to see
7 if the item tested positive can contain semen. And that test
8 was also positive." I disagree with that.

9 Q] And you said you examined, uh, a crime lab report from Mr.
10 Channell where it says that based on analyses from all of these
11 different things, there was no semen found?

12 A] Yes.

13 Q] Okay. And it's your understanding that report could have
14 been published and provided to attorneys and defense counsel?

15 A] I would accept it.

16 Q] And in fact, that's the conclusion that you said, I mean,
17 that basically you've reached in your analysis that Mr.
18 Channell's analysis; right?

19 A] Yes.

20 MR. DAVIS: That's all.

21 THE COURT: Ma'am, you've reviewed the record
22 only, you did no independent laboratory testing, your-
23 self?

24 THE WITNESS: That's correct, Your Honor.

25 THE COURT: Anything else?

1 MR. BURT: Just a couple of things, Your Honor.

2 RE-DIRECT EXAMINATION

3 BY MR. BURT:

4 Q] Knowing that he stated in his report that no semen was
5 found, if you have been a consultant for the defense, would you
6 at least told the defense lawyers they ought to bring that up in
7 cross-examination?

8 A] Yes.

9 Q] Uh, when he states on page 1032 "I concluded there could
10 possibly be something in the material or in the mud that was
11 interfering with my testing." In fact, he had run tests prior
12 to his testimony which showed conclusively that there was some-
13 thing in the mud interfering, causing a positive reaction;
14 right?

15 A] Yes.

16 Q] It wasn't "possible" interference. His P30 test that he
17 ran and then you reviewed showed, did they not, that the mud
18 itself was causing a positive result?

19 A] That's correct.

20 Q] Uh, so when, when he says here "I concluded it could
21 possibly be something in the material," that, uh, was that
22 accurate; is that something that you would have nudged a defense
23 lawyer and said, "Hey, stand up and ask him about the P30 test"?

24 A] Yes, I would advise that.

25 MR. BURT: That's all I have.

1 MR. DAVIS: No further questions.

2 MR. PHILLIPSBORN: Your Honor, on, on behalf of,
3 uh, on behalf of Mr. Baldwin, I just have two
4 questions.

5 THE COURT: All right.

6 DIRECT-EXAMINATION

7 BY MR. PHILLIPSBORN:

8 Q] Dr. Zajac, uh, in terms of your, your explanation and
9 opinions about and your use of vocabulary and nomenclature, I'm
10 referring to the discussion you've just had with Mr. Davis about
11 your agreements and disagreements about testimony provided. Uh,
12 if defense counsel had, uh, consulted you or consulted a
13 laboratory scientist with qualifications and experience in
14 serology in the early 1990s and 1993, uh, would part of what you
15 would have expected the consultation to include the, uh, to be,
16 uh, an explanation of the kind of vocabulary that is appropriate
17 for, uh, a laboratory, a forensic laboratory scientist to use in
18 characterizing, for example, a screening test for what a
19 positive result would be?

20 A] Yes.

21 Q] And, uh, at the same time, assuming that a lawyer were to
22 explain to you that in discovery he had received, or she had
23 received some reports, typewritten reports, that stated ultimate
24 conclusions by a crime laboratory serologist or criminalist,
25 would it have been your recommendation at the time, meaning in

1 1993, for the lawyer to make every effort to obtain the bench
2 notes, the documentation that you were describing to Mr. Burt
3 earlier in order to permit you to assist that lawyer in review-
4 ing the evidence, the foundation for it and to prepare to
5 address the issues being raised by the serological results?

6 A] Yes.

7 MR. PHILLIPSBORN: Thank you. Thank you, Your
8 Honor.

9 THE COURT: Mr. Davis?

10 MR. DAVIS: No further questions.

11 THE COURT: All right, Ma'am, you may stand down.
12 You're excused from the Rule and free to go.

13 THE WITNESS: Thank you.

14 (Witness excused.)

15 THE COURT: Are you going to let Mr. Channell go?

16 MR. DAVIS: I'm assuming that they are finished
17 with their experts.

18 MR. BURT: Done for the day, there will be no
19 further experts for the rest of this day. He did make
20 reference to one page in his lab notes, uh, which we
21 didn't have and I'd like to add to my exhibits and
22 make a copy.

23 THE COURT: That will be fine. I've got a
24 question or two, if you want to take the stand again.

25 (WHEREUPON,