SUPREME COURT OF THE STATE OF CALIFORNIA

THE PEOPLE OF THE STATE OF CALIFORNIA,

Plaintiff-Respondent,

VS.

KEVIN COOPER,

Defendant-Appellant.

CR 72787

Supreme Court No. <u>Crim 2455</u>

APPEAL FROM THE SUPERIOR COURT OF SAN DIEGO COUNTY

HONORABLE RICHARD C. GARNER, JUDGE PRESIDING

REPORTERS' TRANSCRIPT ON APPEAL

APPEARANCES:

For Plaintiff-Respondent:

HON. JOHN K. VAN DE KAMP State Attorney General Department of Justice

110 West "A" Street, Suite 700 San Diego, California 92101

For Defendant-Appellant:

IN PROPRIA PERSONA

5 / volum

VOLUME volumes.
Pages 4790 to 4904, incl.

JILL D. MC KIMMEY, C.S.R., C-2314 and BRIAN V. RATEKIN, C.S.R., C-3715 Official Reporters

•	SUPERIOR COURT OF THE STATE OF CALIFORNIA		
1 2	FOR THE COUNTY OF SAN BERNARDINO		
3	FOR THE COUNTY OF DAIL BUILDING		
3	THE PEOPLE OF THE STATE OF CALIFORNIA,		
5	Plaintiff,		
6	vs.)	NO, OCR-9319	
7	KEVIN COOPER,	VOLUME 46	
8	Defendant.	Pgs. 4790 thru 4904, incl.	
9			
10	REPORTERS' DAILY TRANSCRIPT		
11	BEFORE HONORABLE RICHARD C. GARNER, JUDGE		
12	DEPARTMENT 3 - ONTARIO, CALIFORNIA		
13	Wednesday, July 11, 1984		
14	APPEARANCES:		
15	For the People	DENNIS KOTTMEIER District Attorney	
16		DENNIS KOTTMEIER	
17		District Attorney By: JOHN P. KOCHIS Deputy District Attorney	
18		DAVID MCKENNA	
19	For the Defendant:	Public Defender By: DAVID NEGUS	
20		Deputy Public Defender	
21			
22	Reported by:	JILL D. MCKIMMEY	
23	wohor com al.	Official Reporter C.S.R. No. 2314	
24		and BRIAN RATEKIN	
25		Official Reporter C.S.R. No. 3715	
26			

ŧ

j

1	<u>I N D E X</u>
2	
3	DEFENDANT'S WITNESS PAGE
4	GREGONIS, Daniel J. (Resumed)
5	Direct Examination Resumed by Mr. Negus 4790 Direct Examination Resumed by Mr. Negus 4856
6	
7	
8	
9	
10	o0o- -
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	

ė

K.

Volume 46 Wednesday, July 11, 1984 SUBJECT INDEX

GREGONIS	His opinion on amount left: enough to do
DIRECT Resumed by Mr. Negus	electrophoretic run .
4791 - A-41: His opinion of who	Running Defendant's blood
it came from when first	with A-41, not letting
discovered, his thought	Defense know of amount
process about concern for	left
losing enzymes	4856 - How many runs were left from
4793 - His normal test sequence	A-41 on August 2, subse-
His concern for preserving	quent tests done on A-41.
a portion for defense,	relation to their DP
4794 - His procedure with Dr. Blake	Sensabaugh book: Gm
4786 - Finding A-41 was not from	4864 - Other antigens with good
victims, did it change his	DP in dried blood
testing strategy	4865 - His first indication of
4798 - The space he could wait with	scarcity, of A-41: con-
a frozen sample before	versation between Mr.
deterioration	Negus and Mr. Kochis 4867 - Conversation with Ed
4799 - Common procedures in photo-	
graphing plates	Blake re sending
His checking the photographs	photographs of PEP A 4869 - Crime lab meeting, 8-16
of A-41 particularly 4802 - Exhibit H-330	Subsequent calls with
4804 - H-336	Dr. Blake, witness'
4808 - H-342	noncompletion of test
4811 - EsD in A-41 sample	4872 - The testing with Blake
4812 - H-338	4874 - Blind tests, when results
4813 - H-340	were obtained from
4814 - H-353	Defendant's blood on
4816 - H-358	Group II
4817 - H-354	4875 - Samples from bedroom mixed
4820 - J-6	with blood
4821 - Using standards	4878 - Their testing and results
4823 - H-360: condition of A-41	4885 - A-3, rope: why results
in October 2000	incomplete, problems with
4825 - Procedure of extraction	nylon and blue denim.
from pillbox	4891 - Enzymes from J-9, compared
4827 - The amount remaining: as	with A-3
indicated in Prelim, as	4895 - Experiments on Dura-print
subsequently discovered	and typing blood
Monday 4829 - Its shape described, what	
4829 - Its shape described, what tests can be done	· <u>.</u>
4830 _ u_356	•
4832 ÷ H355, 353, 104	
4833 - H-336	
4838 - Saferstein's opinion on	**
photography	
photography	
4841 - H-334	`
4846 - H-349	••
4851 - Testing on 6-28 of A-41,	
testing on 6-12 4852 - testing on 6-29	
4852 - testing on 6-29	

ONTARIO, CALIFORNIA; WEDNESDAY, JULY 11, 1984; 9:40 A.M. HON. RICHARD C. GARNER, JUDGE DEPARTMENT NO. 3 2 APPEARANCES: 3 The Defendant with his Counsel, DAVID 4 NEGUS, Deputy Public Defender of San 5 Bernardino County; JOHN P. KOCHIS, 6 Deputy District Attorney of San 7 Bernardino County, representing the 8 People of the State of California. 9 (Jill D. McKimmey, C.S.R., Official Reporter, C-2314, 10 Brian Ratekin, C.S.R., Official Reporter, C-3715) 11 12 THE COURT: Mr. Gregonis is still on the stand 13 under oath. 14 Let's commence. 15 16 DANIEL J. GREGONIS, resumed the stand on 17 behalf of the defense, having been previously duly 18 sworn, was examined and testified further as follows: 19 20 DIRECT EXAMINATION (Resumed) 21 BY MR. NEGUS: 22 When you started to analyze A-41 in the early part of 23 June, it had already been pointed out to you by 24 Mr. Baird as an unusual sample; is that correct? 25

I don't know if it had been pointed out to Mr. Baird.

I knew the location of where it was.

- 2 Q Okay.
- 3 A It was pointed out to me as being from the hall.
- 4 Q And isolated from the rest of the blood that you knew 5 about at that point in time?
 - A Yes.

6

7

8

10

11

12

13

14

15

16

17

18

19

- Q In your experience, did you come -- did you have an opinion that there was a higher probability that that sample of blood could have come from a non-victim than, say, the sample that Mr. Stockwell had collected from the surface of the waterbed?
- A Well, I would say there is a higher probability. I —
 at the time, I believe I thought that it was most
 probable that it was just coming from the victim, from
 somebody's hand, or something like that, but there is
 a higher probability of that sample being from an
 assailant, if he's bleeding.
- p Frozen blood will last at least a year without any
 deterioration or any deterioration that's going to
 affect your typing result; is that correct?
- A Not necessarily. There's a couple that I would tend to think that would -- you'd lose activity. One in particular is the Gc. Others -- all of them, you're losing activity to some extent. Frozen blood is obviously better than room temperature, and I would expect to get most of the enzymes after a year.

(;

À

20 21

22

23

24

25

- Q So that -- I take it in deciding, at least, in your thought process about how to analyze A-41, doing it quickly to do the Gc was not part of your processes; is that right, thought processes?
- A. Not at the time, no.
- Of the -- of the systems that you actually analyzed prior to October of this year, the -- were -- were any of those such that you would expect if they were fresh-frozen blood, frozen and kept in a proper frozen environment, that they would deteriorate within, say, less than a year?
- A I wouldn't expect them to, but they definitely could.
- When you analyzed A-41 at the beginning -- you have a chart that you do: is that correct? I mean that you fill out when you finish analyzing any sample. It starts with o-tol, the species test, the ABO forward and reverse and just goes --
- 22 A I normally take that while I'm doing -- after I finish
 23 the test, yeah. It's not after all the tests, no.
 - Q Right. So you fill in the -- fill in -- you fill in the chart as you go along, essentially?
 - A Yes, I do.

24

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

- Q And, well, is it your normal procedure just to -- to work from some sort of right to left across the -across the chart in terms of the order that you do the test?
- A To some extent, yes. I would say in a normal case it would go from, of course, ortho-tolidine, human, ABO, and then probably the Group I and Group II. I may skip around after that.
- Q And is there any particular reason, other than just custom and habit, for that?
- A Plus the fact that those are the systems that we run most often, and that they are the ones that I have found at least give me the best and most informative results.
- And, essentially, that is that's what you did up until June the 13th? You started with your presumptive tests for blood, you did species and ABO at the same time, and then you -- you -- the next day you did your Group I; is that right?
- A That is true, yes.
- When you -- when you were doing that work, did you
 have in mind preserving some of that sample so that
 the defense, if Mr. Cooper had been captured, would
 have been able to do an independent check of the work
 that you'd done?
- A I had in mind at that time, like I normally do, to

- C----

conserve as much sample as possible. If there was enough left over after my testing was complete, then, obviously, the -- from my thinking, the defense is welcome to it.

- Q Well, in -- in this particular case, the defense has never been welcome to any of A-41; is that correct?
- A Except for the co-testing that we did back in October with Mr. Blake on the transferrin, Gc, and haptoglobin, I think I had used the sample prior to that time.
- Q Well, the co-testing was essentially Mr. -- Dr. Blake was -- came down to your laboratory, and together you worked out experiments, how to do experiments that you had decided in advance that you wanted to do; is that correct?
- A That's essentially correct, yes.
- Q And although Dr. Blake didn't dispute the particular tests that you wanted to do, he wasn't given an opportunity to -- to pick the tests that he wanted to do; is that right?
- A. I don't know whether he was given an opportunity to pick. I believe at that time that by court instructions or whatever, he was instructed not to tell me anything about which tests to do.
- Q What makes you believe that?
- A Basically, because he wanted me to outline which tests we were going to do, meaning the transferrin, Gc, and

la

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

haptoglobin, mostly the transferrin and haptoglobin. Whether he had any in mind or not, he did not tell me.

- Q That procedure was what you intended to do anyway; is that correct?
- A Yes, it is.

- Whatever Dr. Blake said, you intended to do the transferrin first and then the haptoglobin?
- A If Dr. Blake would have said that there was a better system for discrimination between -- or a better system which had a likelihood of eliminating Mr. Cooper, meaning a lower percentage, and would have used an equivalent amount of sample, I would have gone along with what he said.
- Q. What if he wanted to re-test one of the things that you'd already done?
- A. I would have disagreed with that simply because I'm confident in the results, and I believe that it would -- to my mind, that would have been a waste of the sample.
- Q On -- on June the 13th, the evidence became clear that there was at least six different types of blood in the Ryen house? I think we've established that, but that is correct; is that correct?
- A That's correct, we did, after knowing the PGM type.

 (No omissions.)

2

3

```
At that point in time, were you able to isolate A-41 as the sample which didn't match any of the victims?
```

- A Yes, I did.
- Q You had blood from Josh at that point in time?
- 5 A I believe at that point in time -- let me -- let me check,
- 6 but I believe that I had blood which I suspected as being
- 7 from Josh.
- 8 Q You had the A-43, A-44 and A-45 samples which came out 9 of the bathroom; is that right?
- 10 A Yes, I did.
- 11 Ω And you also knew at -- did you also know at that point
- in time that there was a peptidase A 2-1 that came out of
- the blanket in the Lease house?
- 14 A Not at that time, no.
- 15 | 0 When did you find that out?
- 16 A I found that out the next day, on June the 14th, 1983.
- 17 0 Okay. And then you learned at approximately that same
- 18 time from Mr. Lorenz back in Pittsburgh that Mr. Cooper
- was a one plus one plus and a PEP A 2-1?
- 20 A I believe it was shortly after that period that he called
- 21 me.
- 22 | 0 Okay. So within -- within a couple days?
- 23 A I can't tell you at this time. Like I said before, it
- 24 was shortly after that period.
- 25 | Q Okay. Did you take any notes of that or just --
- 26 A. No, I did not.

(

•

- 1 2
- 3
- 5
- 6 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25
- 26

- So you knew at least on the -- shortly -- whenever you got in touch with Mr. Lorenz that the PGM type on A-41 was consistent with Mr. Cooper?
- Yes, I did. At least it was consistent with the sample that was left at his crime scene.
- And Mr. Lorenz told you that that looked pretty good for Mr. Cooper, right?
- Well, he told me that there were fingerprints in the -in the car, or wherever he had fingerprints to connect Mr. Cooper with the case. So circumstantially it seemed like it was a reasonable inference, if you will.
- When -- when you found this information out, that point in time, the significance of A-41 changed radically; is that correct?
- I think the significance of A-41 was known on June 13th, when I found that it was a different blood from all the other victims. As to knowing the PGM or the peptidase A type, basically the only thing that told me is that the PGM1, ABO A came from a person that had Black heritage or mostly Black heritage.
- But, okay, when -- whenever you found out that -- that A-41 didn't come from a victim, its significance changed radically; is that true?
- I believe so, yes.
- At that point in time, did you do anything to change the testing strategy that you were going to apply to A-41?

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

Not really. I felt that there was enough sample to run through the systems that I was capable of doing at that time plus the transferrin, Gc and haptoglobin. Well, the haptoglobin I had been doing at that time, also.

- But you also realized at that point in time that when you finished your work there wasn't likely to be anything left over for the Defense to retest?
- Yes, I did.
- And did you do anything at that time to try and stop work or wait to see for a reasonable period of time, which wouldn't cause any deterioration of the work that you were going to do, to see whether Mr. Cooper was captured and allow the Defense to have a say in what tests you were going to do?

MR. KOCHIS: I'm going to object. period of time" is vaque.

THE COURT: Overruled.

THE WITNESS: No, sir. I had no idea when a suspect would be apprehended in this case, so I continued my analysis.

- (BY MR. NEGUS:) How long would you feel comfortable waiting to do work on a -- a sample if it's in a frozen state with .out being unduly fearful that -- that it's going to deteriorate?
- Well, any -- any case that I have, if I have the time to do it, I want to do it as soon as possible. As far as waiting to do something for an apprehension of a -- of a

suspect, I -- that's not our normal procedure in the laboratory. That's not my normal procedure.

As far as a sample where I think that I'll be able to get the enzymes that I got before, I would say six months.

- Now, when you -- when you -- did your electrophoretic runs -- well, let me back up. The -- it's not practical to photograph or record the results of the species, the ortho-tolidine or the ABO testing; is that correct?
- A. Not really, no.

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

- Q But it is common practice and is quite feasible to photograph the results of the different electrophoretic testing that you did; is that correct?
- A It is a common practice. Many times you cannot get in a photograph what appears on the plate.
- Q But the -- if you -- if you take an accurate photograph of your results, you -- another serologist can check at least a part of your work; is that correct?
- A. It depends on how intense and whether we actually picked up what was on the -- on the plate onto the film. If we did not, obviously, the -- the other serologist cannot, quote-unquote, "check" a part of my work.
- When you did the -- when you got your results on the
 13th, did you -- did you look at the photographs that
 you took of A-41 to make sure that they had come out?
- A No, sir, I did not.

Why didn't you do that?

Well, Polaroid, you pull it apart, and there's a 2 photograph. I generally check it to see if the exposure's 3 right. I don't generally check it to see if you can read everything off of the photograph that I read off the plate.

Why don't you do that?

Because the best call, as far as I'm concerned, is off 7 the plate itself, not off the photograph. 8

Okay. But the -- with the exception of the transferrin-Gc run, you can't preserve the -- the plate for any length of time; is that right?

12 No, I cannot. A.

> Okay. So if -- if somebody else is going to be able to -to -- to check your work, you're going to have to provide the photograph; is that right?

If it's possible, yes. A.

And so why don't you check to see, after you have taken a photograph, whether it came out or not?

I believe I stated before the reasons -- what I do with A. the photograph. I check it out to make sure that the exposure is correct, whether certain things are coming out, and as -- I do not check each and every individual sample.

Well, let -- let's just focus on -- on A-41 for a minute. That wasn't just any general sample, right? We have -it became special?

25 26

5

6

9

10

11

13

14

15

16

17

18

19

20

21

22

23

```
    1 A Well, it was an unknown. It's just like, as far as I'm
    2 concerned in running the plate, it's just like any other
    3 unknown.
```

- Q Okay. Once you knew that it didn't come from -- once you knew it didn't come from one of the victims, it became special, right? I mean, phone calls were made --
- 7 A Well, I believe the significance of it became more8 important, yes.
- 9 Q Okay. So was there -- why did you -- why didn't you check at least that particular sample to see if your photograph had come out?
- 12 A Because, again, the -- well, the way I set up the photo13 graphs and the exposures and everything was a way of
 14 trying to get a general picture of the plate and the
 15 best exposure for the entire plate. I did not check
 16 any specific sample again. And that's not my normal
 17 procedure.
 - Q So -- so just because you don't normally do it, you -- you didn't do it in this case; is that correct?
- 20 A. Basically, yes.

5

6

18

19

24

- 21 Q Can you look at the photograph you took of the PGM

 22 result that you got on A-41 and tell whether it's a PGM1

 23 or not?
 - A I don't know.
- 25 Q Have you done that before?
 - A. Not -- well, I may have done it at the Preliminary Hearing.

```
I don't recall whether I was able to tell from the photograph or not.
```

- Q Okay. Do you have the photograph with you?
- A. No, I do not.

2

3

5

6

7

8

9

10

11

12

13

16

18

19

20

- Q Where is it?
 - A. It's back in the crime laboratory.

MR. NEGUS: I request that tomorrow that Mr. Gregonis bring the originals so that we can compare them with the photographs that he's provided.

THE COURT: Please do.

THE WITNESS: Yes, Your Honor.

- Q (BY MR. NEGUS:) At that particular -- the PGM is sort of a dark blue on a yellow background; is that correct?
- 14 A. It's a blue. It ranges anywhere from a very extremely
 15 light blue to a dark blue depending on the sample.
 - Q And it's on a yellowish color?
- 17 A. Light yellowish, yeah.
 - Q Showing you Exhibit H-330, is that a Xerox copy of your notes of electrophoretic run 258, which was done on June 13th, 1983, and includes, in slot No. 7, A-41?
- 21 A Yes, it is.
- Q And can you read from that photograph whether or not
 A-41 -- what PGM type it was?
- 24 A No. I cannot.
- Q Okay. Did, in taking that photograph, did you use any filters on your camera?

```
2
 3
 5
 6
 7
 8
 9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
```

```
Yes, I did.
What kind?
It's a red filter.
    (No omissions)
```

2

3

5

6

7 8

9

10

11 12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

Q Did you -- did you experiment with it before to see whether or not it was doing the best to enhance the image?

- A I have experimented with PGM and the other formazartype dye overlays, and the red filter seems to enhance the blue bands the best.
- Is it possible to increase contrast of photos by -- by various photographic means, that is, taking a
 picture with higher contrast film, using higher
 contrast paper, that sort of thing?
- A Generally, yes.
- Q Showing you H-336, does that appear to be a photograph of the photograph that you took of A-41?
- A. Yes, it does.
- Q And does that appear to be printed at a higher contrast than the -- than the original?
- A. Yes, it does.
- Q Can you -- using that higher contrast, can you tell whether or not A-41 was a -- what PGM type it was?
- A. No, I cannot.
- Q In the -- in the dying process of -- of -- in order to bring out that blue color from the PGM proteins after they've been separated electrophoretically, are there -are there any particular compounds that you use which are relatively unstable and need replenishing frequently?
- A. There's some that need light -- that are light sensitive.

رغمه جود درخه درخه میدور درخه درخه درخه درخه

ŧį.

2

1

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20 21

22

23

24

25

26

Q	There's some that that well, for example,	in	
	order to bring out the the PGM color, do you	have	
	to use a protein called G6PD?		

- It's an enzyme, glucose 6 phosphate dehydrogenase.
- It's also a protein? Q.
- Well, yes. A
- You use that as part of the -- as part of a sort of chain of chemicals that are required in order to create the reaction which creates the blue color?
- Yes, sir.
- And the particular G6PD that you used in the laboratory comes from animals?
- I believe it's from yeast.
- But it's -- it's chemically more or less the same compound as the G6PD that you find in type in human blood; right?
- I wouldn't say -- I really don't know whether it's the same type as -- you mean phenotype. I believe it does the same action.
- It has the same chemical properties with the possible exception of different electrophoretic charges?
- What I can say is it performs the same function. I wouldn't say that it has the same chemical properties, and I don't know whether it has the same electrophoretic mobility.
- And it also has the same lack of stability as the G6PD Q.

3a

that you find in the body; right? Again, I can't say that, because you're comparing two 2 different things, two different organisms, which may 3 produce enzymes which are -- although they do the same function, may have different stabilities. 5 Well, do you know if the G6PD that you used in the 6 laboratory is unstable? 7 I believe I said I do not know the relative stabilities 8 of the GGPD in the laboratory as compared to human 9 G6PD. 10 I know, but forgetting that question, do you 11 know whether it's unstable, won't last more than a week 12 or two? 13 I believe it's relatively stable. 14 How often do you change yours? 15 We go through -- we don't purposely change the bottles. 16 We generally go through a bottle, one mil bottles, 17 every two weeks, three weeks, generally. 18 When you -- when you get it in, do you do anything to 19 make sure it's okay? 20 Just running it on a general electrophoresis plate and 21 seeing how it develops with the standards and other 22 things. 23 In June of 1983, were you having any problems with your 24

G6PD?

No, sir.

26

When you -- when you do electrophoretic testing of a blood that's come from a -- a dead person's body, that is blood like, for example, that is collected at an autopsy, is it frequent that the level of PGM activity which is electrophoretically measured increases? I mean you get really strong PGM's on dead people's

Sometimes you do, yes. 8

bodies; is that right?

I mean that's more often than not?

MR. KOCHIS: Well, Your Honor, again I am going to object because I think it calls for speculation, that there can be a number of variables involved -- the length of time between the death and the blood sample being taken, the length of time between the sample being taken and the --

> MR. NEGUS: I think we said "fresh" in the question. Do you want to clarify that, Mr. Negus? THE COURT:

- BY MR. NEGUS: When you -- when you get blood that is freshly taken at an autopsy within a day or two after the person dies, and you run it electrophoretically, usually you get really strong PGM results; isn't that true?
- I would say the longer you wait to take the sample, up to a point, at least, you're going to get a little bit stronger results, yes.
- So if you took it right at the scene, you're going to get less strong, a day later, stronger, two days later,

11 12

1

2

3

5

6

7

9

10

13

14

15

17

20

21

22 23

24

25

26

16

18

2

3

5

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

- A I would say yes, until it starts degrading to the point where you can't read it, there's too much bacteria.
- Q And that looks streaky?
- 6 A Yes, it does.
 - Q But, likewise, it's usually a strong reaction even if it's streaky; is that right?
 - A Yes; however, I believe that's more a bacterial PGM rather than the PGM that we're desiring to type.
 - Q I understand, but what I'm really talking about now is just -- is just, you know, what -- what kind of color is produced on your -- on your electrophoretic plate. It's a strong -- you get a lot of dark blue; is that right?
 - A Well, it's a stronger reaction than a stain normally, yes.
 - When you were -- when you were doing your PGM's on this particular case in the first -- the week of the -- of the 12th and 13th up to the beginning of the next week, did you notice that you were getting sort of weak PGM results?
 - A. Not any more than usual, no.
 - Showing you Exhibit H-342, is that a picture of a PGM run that you took just before -- excuse me -- that you took on June 29, 1983?

3ъ

25

26

G6PD?

That's a possibility, yes.

1 Yes, it is. 2 And had you just changed your PGM when you took that? 3 You mean G6PD? G6PD. Q. 5 I don't know. I don't keep a record of that. 6 That's a normal type PGM plate; right? 7 It's a PGM plate. 8 In terms of the -- in terms of the intensities, that's what you should be getting? 9 Well, that's what you want to get, but that's not --10 11 I don't believe there is such a thing as a normal PGM plate as far as intensities are concerned. 12 Well, if you don't get intensities like that, there's 13 got to be a scientific physical reason; right? 14 Well, yes, there can be, yes. You can explain it 15 most of the time. 16 Okay, and one -- one, for instance, could be that you 17 have a sample that's. say, six months old and it starts 18 19 getting faint; right? That's true, yes. 20 Or you could have a situation where you just don't 21 have enough blood in your test to get any results? 22 That is true, yes. 23 Or you could have -- you could have problems with your

When you get results that are considerably fainter than you would expect, given the age and amount of sample that you -- the age of the sample and the amount that you're using, do you suspect that you might have a G6PD problem?

Again, it depends on a number of factors, how long I let the plate develop before I take a picture. a possibility, obviously. It's a possibility that it's in the samples that I used. GGPD is not the only explanation.

(No omissions.)

3

Well, when you get results that are -- that are -- that are lighter for the most part than you'd expect, do you try and figure out why you're getting them?

- Sometimes, if I can't explain it by any other means, yes.
- 5 Alive or dead, there's more PGM in a person than there is esterase D; is that correct? 6
- Normally, yes. 7
- And it's also, well, not independently, but it is also 8 9 true, is it not, that it's -- there's usually more PGM activity which is measured electrophretically than 10 EsD in a given blood sample? 11
- 12 Usually, yes.
- On -- on the A-41 sample, did you have any problem --13 14 did you have any problem reading the esterase D?
- No, sir. 15

24

25

- Did that suggest to you something strange? 16
- Not necessarily. Esterase D is -- it shows up under the 17 florescent light, and also I have noticed it also photo-18 graphs better. 19
- Well, I mean, as far as taking a photograph is concerned, 20 it's certainly easier to take PGM photos that it is 21 esterase D, is it not, in terms of the complexity of 22 what you have to do? 23
 - I can't say that it's any easier to do either. as complex with both.
 - Showing you Exhibit H-338, is that the Xerox record and Q.

- 5 Q And is -- did you use the same G6PD in doing that that
 6 you did in the one on June 13th?
- 7 A Again, I don't know. I don't keep records of that.
- 8 Q And you have no memory?
- 9 A I don't know.

15

16

17

18

19

20

21

22

23

24

25

26

- 10 Q That's -- would that -- would you consider that to be a

 11 rather faint plate, the photograph?
- 12 A Well, the photograph is -- shows the -- the plate to be
 13 fainter than, say, your other one on June 29th, obviously.
 - Q Okay. And -- and you can tell that -- you know that in fact the -- the plate was faint, can you not? That's not just an artifact of the photograph? Your plate was faint?
 - A It appears to be from the photograph, yes.
 - You have references of the -- the things that you used to mold the gel? I mean, mold the stain?
 - A. Well, just by -- I would agree with your statement before, Mr. Negus, is that the plates do appear to be different intensities. The one on June 29th does look slightly overdeveloped to me, as a matter of fact. And the one on June 16th is obviously less, less intense on the photograph.
 - And you can't read a lot of that -- lot of those results

مان مربع المربع المربع المربع

1 off the photograph, correct? 2 I would say no. Again, my -- my statements as -- as 3 before is that my best reading is done right off the plate. THE COURT: Counsel, any objection if I look at them 5 briefly? 6 MR. NEGUS: 7 (BY MR. NEGUS:) And, just as long as we're doing that, 8 showing you H-340, is that another run that you did on 9 June the 24th, run 260? 10 Yes, it is. And is likewise that not as faint as the ones before 11 .Q. 12 but also faint? 13 That is true. There -- there's some samples that I would 14 have to say are just as intense. 15 On -- on this plate, the -- the No.6-24 one, the one in 16 slot No. 1 is blood that was freshly drawn from the arm of Michael Martinez, correct? 17 18 Yes, it is. And you, given the history of the sample there, you 19 wouldn't expect that to be -- to be faint normally, would 20 21 you? It may be. I normally dilute a -- or wash a fresh sample 22 with saline and then dilute it, lysen it with a volume 23 of -- of Cleland's reagent in this case, and it may be 24 that I -- it diluted more than normal. 25

How do you get it into the -- into the gel to -- to type

26

Q

it?

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

- A I place it on a cotton thread and put it in the gel that way.
 - Normally, as a rule of thumb, you get -- you check the color of the thread to see what it looks like before you put it in?
 - A On whole bloods especially, I make sure that there's, you know, a good, red color there. But it does -- varies on the sample and my dilution. I do not -- for whole bloods, I do not do quantitative dilution each time.
 - But you -- but you can visually look and see that, you know, if you're going to -- either that you have enough there to get a result off of it by -- by looking at it and -- and observing its degree of redness, right?
 - A Yes, I do.
- Showing you, well, Exhibit three fifty -- H-357, does that appear to be a photograph of the photograph you took where the contrast has been attempted to be increased on the run that you did, Run 259, on June 16th?
- A. Yes, it does.
- And showing you Exhibit H-353, does that appear to be a photograph whose contrast has been increased of the plate that you did on June the 12th, 1983, Run 257? I don't --
- A. I have no reference on that photograph.
- Q You didn't bring any of the copies of the photographs that you have or anything?

```
A. No, I did not. I have some here, but I don't -- I don't think I probably have that one.
```

You just have the ones that I requested; the other pictures, you don't. I'll come back to that later.

MR. NEGUS: Could I just -- if Counsel has no objection, Your Honor, I'd like to just identify these tentatively for the record, and then, when he brings back his -- his photographs tomorrow, we can confirm them just based on my notes.

THE COURT: Well, they're marked already.

MR. NEGUS: Right. The exhibits are marked. But they -- they don't have any writing on them that tells what they are. I know from my key what they are, and I was counting on his being able to compare them with his originals to --

THE COURT: That's fine.

- Q (BY MR. NEGUS:) Okay. Showing you again H-353, assuming that's a photograph of June 12th, 1983, Run 257, where the contrast has been enhanced, does -- do the PGM results in that, with the exception of the streaked ones, appear to be faint?
- not optimum; they're not like putting a sample or a plate full of whole bloods on there. It -- I don't know what the samples are, so I can't tell you whether they'll be there or not.

```
Do you have the notes of the run you did on June 12th?
2
        No, I do not.
        Tomorrow could you bring all the notes of the work that
3
        you did?
        Yes.
5
            MR. KOCHIS: Your Honor, I may have Xerox copies
6
    of those notes.
7
            MR. NEGUS: I think I do, too.
8
            MR. KOCHIS: Perhaps at the recess I can see if he
9
    can orient himself to my notebook and he could answer some
10
    of those questions.
11
        (BY MR. NEGUS:) Just using, as to refresh your
12
        recollection, the notes that I have of the runs that you
13
        did, in fact, 9, 10, 11 and 12 on that are whole bloods,
14
        are they not?
15
        Yes, they are.
16
        And showing you Photograph H-358, which I'd like you to
17
        assume for the moment is from Run 261 on June 24th, 1983,
18
        that likewise shows very faint results throughout the
19
        plate; is that correct?
20
        Well, it shows faint results, yes. There's some that
21
        are --
22
        Less faint than others, but --
23
        Well, there's some that are, I would say, optimal from
24
        the picture, at least. I don't like too intense results,
25
        either.
```

14

15

16

17

18

19

20

21

22

23

24

25

26

A

1 Well, in terms of being able to -- in terms of being 2 able to read them all, there's obviously some that 3 are too faint; is that right? From the photograph, yes. 5 Showing you H-354, I'd like you to assume that that's 6 run 260 done on June 24, 1983. That is likewise some 7 of those, even though they've been photographically 8 amplified, are too faint to read; is that right? 9 I would agree, yes. 10 When you do your runs, you number them consecutively, 11 is that -- is that correct? That is, 255, 256, 257? There wouldn't have been any extra Group I runs in 12 between 255 and 256? There shouldn't have been, no. And in this particular case, you were doing runs involving this particular case from 255 to 261 and then skipping -you went on with 2 -- with a run that didn't concern this case? You then did 263; is that correct? A. That sounds about right, yes. The runs that you were doing between 255 and 261 all have problems with faintness; is that correct? I don't know. Is that every one of them in here? A. I'm -- I thought it was, but I'm not positive.

Do you see any other ones, except for the one on

Well, there's some samples that are faint in the pictures,

June 29, where you don't have problems with faintness?

yes.

Well, the fact that you have whole blood that's faint,
you have continual faintness much fainter than -- than
the optimal plate that you got on June 29 for an
extended period of time with all kind of different
samples, wouldn't that suggest to you that you had a
GGPD problem?

- A Well, first of all, the whole bloods, again, I believe I explained that before, as to the dilution, I don't dilute it quantitatively. As to the faintness of each of the samples, you'd have to inter-compare the samples on the dates. I don't know whether there's -- there's any samples that may have been re-run on any of these dates that I can inter-compare.
- Well, you certainly -- if you have strong esterase D
 results and weak PGM's, that suggests there's something
 wrong with your PGM staining; right?
- A That suggests that there may be something wrong, yes.

 It could also be the samples themselves.
- But if you have samples that are fresh that have just been deposited as dried samples on June the 5th and you get them down and you have them frozen by June the 8th or 9th and you're running them the next week, there shouldn't be any problem with them as far as the sample age is concerned; right?
- A I would say no.

Q And as far as your dried samples were concerned, you had, with the exception of A-42 and A-43, sufficient quantity to do -- you know, to put a sufficient amount of sample in there to get a readable result?

- A Well, again, I -- you know, my sample that I do, I do try and conserve the sample itself, but, at the same time, I do try to make it so that I am likely to get a result, so I'm -- I'm trying to use a minimum amount of sample to begin with. I'm not using a copious amount.
- Q But you're still trying to make sure that you get something that is readable; right?
- 13 A. Yes, sir.
 - Q And photographable; right?
 - A I -- well, up until really probably the preliminary hearing on this case, I really didn't concern myself too much about the photographs.
 - Q Well, why not?
 - A Basically, because my calls were from the plates. I had thought previous to this time that my photographs were a good reflection of -- of my work. I do not believe that they are as accurate or were as accurate as they could be at that time.
 - That was just because you hadn't thought about the
 problem?
 - A It's because I hadn't seriously evaluated, except to

5a

3

5

6

7

8

9

10

11

12

13

17

22

A

set up the photographs, the best way to -- to take photographs of the plates, and I'm still evaluating that problem. It's a problem to try to get good photographs and try to get as much information on the photograph.

- Leaving aside the problem of photographing, you were getting light plates during that period of time, were you not? I mean, that is, the photographs show adequate contrast on the black lines and on the writing and that sort of thing, and you can see from the photographs that the plates are considerably -that is, the results are considerably -- are very faint; is that right?
- As I believe I said before, yes, they are faint, or 14 fainter than optimal. 15
- So that's not just a problem then of photography? 16
 - No. I would say it's in the samples. A.
- Or the stain? 18
- Possibly the G6PD, yes. That is a possibility. A 19
- J-6 was a -- was a sample which you -- which was --20 which you had a limited amount of; is that correct? 21
- And you analyzed J-6 on June the 16th, 1983, in run 23 259; is that correct? 24
- 25 A. That is correct, yes.

Yes, it was,

And you were -- even off the plate, you were unable to 26

- get a PGM result because there just wasn't enough
 activity there; is that correct?
- 3 A That is correct, yes.
- 6 A Yes, I did.
- 7 Q And the esterase D, although faint, is still readable 8 on a photograph; is that correct?
- 9 A. That is true.
- 10 Q Would that be suggestive that you had a staining
 11 problem with your PGM?
- 12 A That is one possibility, yes.
- 13 Q During these staining tests on your PGM's -- well,

 14 when you use standards on the -- on the -- on your

 15 electrophoretic runs, you know what the standards are

 16 going to be in advance; is that right?
- 17 A. Yes, I do.

19

20

21

22

23

24

25

- And do you actually make calls on those standards, sort of like blind when you're going through reading the plate, or do you write down the known standards first on your -- on your chart without actually trying to read them off the plate?
- A Basically, what I will do is I will just not look at the left-hand side of my -- my data sheet here with what the samples are. I will just call them as I see them.

In the run that included A-41 on the -- on the PGM, 1 the standard was in slot 6; is that correct? 2 3 Yes, it is. Can you read the standard in slot 6 from the photograph? No, I cannot. It's blotted out by some smearing of 5 6 the sample. You called it, though; right? 7 8 Yes, I did. In --9 a If I may explain something also to you, Mr. Negus, 10 is that in calling these plates, I may read them three 11 or four times, and I photograph them once. 12 Okay. In -- in the photograph you did on the 16th, 13 I'm showing you both the contrast and the other ones, 14 your standard is in slot 7 that time; right? Yes, it is. (No omissions.) 17 19 20 23 24

15

16

18

21

22

25

```
6-1
```

```
Can you read that off the photograph?
```

- No, I cannot.
- No activity at all, right? 3
 - Well, there's activity there, yes.
- Nothing that you can interpret? 5
- I think I said I can't read it, Mr. Negus. 6
- Okay. When your standards don't come out, does that 7 suggest you might have some sort of problems with your --8
- with your results? 9
 - Generally the standard -- or that the standard's getting weak. That's most likely the case, and that's the experience that I have had before.
- If your standards get weak, do you change them? 13
- Yes, I do. 14

10

11

12

15

16

17

18

19

20

21

22

23

- THE COURT: Counsel, if you're going into a new area, perhaps we can take a recess.
- MR. NEGUS: I'm not going into a new area, but we can still stop.
 - THE COURT: Let's take a break.
- (Recess.)
 - (BY MR. NEGUS:) On October 1st, I guess it was, of 1983, when you and Dr. Blake began to work on the experiments for the Group III and the haptoglobin, A-forty -- that which remained of A-41 was in a pillbox in the freezer;
- is that right? 25
- That is true, yes. 26

```
1 Q And showing you Photograph H-360, is that a photograph
2 that you did this morning of the pillbox?
```

- A Yes, it is.
- 4 Q What condition was the blood in on the -- at -- at that
 5 point in time? I mean, was it threaded, floating around,
 6 what -- how was it? What did it look like?
 - A This morning or in October?
- 8 Q October 1st.
 - A In October, there was -- as I remember, the blood was on, most of it that we took, was on pieces of plaster, very small pieces of plaster. There was other pieces that were just chips, very small chips that were in the container itself.
 - Q Chips of blood?
- A Yes.
 - Q And you extracted those from the container?
- 17 A Yes, we did.
 - Q And you put them all together in a -- in a solution to try and to prepare your extract?

MR. KOCHIS: I'm going to object. Vague as to "you". Was he doing it or was Dr. Blake doing it?

MR. NEGUS: Okay. Let's --

THE COURT: I understand that he was doing it with Dr. Blake observing.

MR. NEGUS: Well, that may not be true. Let me -I accept the objection.

15 16

3

7

9

10

11

12

13

14

18

19

20

21

22

23

24

25

THE COURT: All right.

- Q (BY MR. NEGUS:) The -- the work of extracting the sample from the pillbox, that is, physically moving out the flakes and the -- and the plaster, who did that?
- 5 A. I don't remember at this point.
- 6 Q Is it possible that it was you?
- 7 A. Yes, it is.

2

3

10

15

16

17

18

19

20

21

22

23

24

25

26

- 8 Q Once it was taken out of the pillbox, where was it put?
- 9 A It was placed into a plastic centrifuge tube.
 - Q Is that like a test tube with a stopper?
- 11 A It's a small test tube, if you will.
- 12 0 And who took -- who took charge of the extraction at that
 13 point in time? Was that Dr. Blake? I mean, physically
 14 doing the work.
 - A. I believe at that time Dr. Blake took over, if you will.

 But I'm -- I'm not clear on that. I'm not sure.
 - Q The -- the work that you were -- that -- that was being done at the time that you started it, did you know whether you would have enough blood to do both transferrin and haptoglobin?
 - A Well, we didn't know for sure. I thought that we did at that time, yes. But we didn't know for sure.

THE COURT: May I interrupt for just a moment to clarify.

First you took A-41 and you did some testing on it back on June 13th; is that correct?

 THE WITNESS: Yes, Your Honor.

THE COURT: And you preserved in the freezer the balance of the samples until October, when both you and Dr. Blake were going to do the Group II and the haptoglobin, right?

THE WITNESS: The Group III and the haptoglobin.

MR. NEGUS: Your Honor, I think that may be misleading. We are -- I'm jumping out of sequence in the -- in the process of testing A-41 at the present time just so that we could have a record that we could send up to Dr. Blake with a photograph so that we can get some -- some feedback at this point in time. There's a bunch of other steps that went in between. So I don't want to confuse you.

MR. KOCHIS: The only testing on A-41 wasn't limited to June the 13th. I think that's what Mr. Negus is saying.

MR. NEGUS: Yeah, and we'll -- I -- I leaped out of sequence, as it were.

THE COURT: Okay. But at least we have a sample on June 13th which was used to some extent in October, there was some joint testing, and there still may be some of the sample left. That's the point I'm getting at. So --

MR. NEGUS: Well, we're -- we're -- that's what I'm what's left is what I'm trying to --

THE COURT: All right. Go ahead.

MR. NEGUS: -- what I'm trying to get to. Okay.

(BY MR. NEGUS:) When you were going to do the -- the

0 -- 457

testing, though, it was -- it was -- you were attempting to use whatever blood you had left in order to make sure you got a result; is that correct?

- A That is true, correct.
- Q Now, at the Preliminary Hearing, did you testify that all the blood in A-41 had been consumed in analysis?
- A I believe at that time that was my thought, yes. And I believe so, yes.
- 9 Q And that was based on your then memory of what you had done in October; is that right?
- 11 A. Yes, sir.

2

3

5

6

7

- 12 Q You hadn't gone back to check the sample between the time
 13 you testified at the Preliminary Hearing in November
 14 and December and when you did the testing with Dr. Blake
 15 in October?
- 16 A That is correct, yes.
- Now, at some point in time, when was -- after October,

 when was the next time that you actually looked in at

 the -- what was remaining, if anything, of A-41?
- 20 A I believe it was a week ago Monday.
- 21 | Q And why did you do that?
- 22 A I was sorting through some other samples in the same
 23 envelope and came across A-41 and just opened it up, more
 24 out of curiosity's sake than anything else.
- 25 Q What did you see?
- 26 | A I saw the plaster that I remember remaining there after

6

7

8

9

10

11

14

15

16

20

23

24

25

26

Okay. Was that plaster plaster that had -- had the blood extracted from it or was it plaster which you didn't give to Dr. Blake to -- to use?

It was plaster that we had that remained in the container. I took some other plaster pieces out in October to place in the -- or, somebody took to -- the pieces out to put in the plastic test tube.

Okay. And -- and if -- if Dr. Blake were to say that that person was you, you wouldn't deny that; is that correct?

Since I can't remember, I can't deny it. So I don't 12 know. 13

So -- so whatever plaster that you used to extract the blood from to do the Group III and the haptoglobin run is not in that container anymore; is that right?

That was discarded. 17

Okay. That was after various means were used to get every 18 bit of useable blood out of it, right? 19

Or tried to, yes.

Well, as far as you could see, when you got through, 21 there was no -- nothing left, right? 22

As I remember, yes, that is correct.

How much -- now, yesterday you said that there's still some blood in there. How much are we talking about?

Again, extremely small quantity. I don't think you can

5

6

7 8

9 10

11

12 13

14

15 16

17

19

18

20 21

22

23

24

25 26

Q.

really describe it. It has to be looked at. There's -the best description from this photograph that I can show you is that I know that on one of these pieces of plaster you can see specks of blood, or what I believe to be blood.

- So -- well, these specks, are they like microscopic -well, I shouldn't use the word. Are they, like, less than a millimeter?
- I would say the specks that I can see on the photographs at least are probably a tenth of a millimeter or possibly a little bit less than that. There were also a couple of -- of small chips, maybe three-tenths or less of a millimeter floating free in the container, as I remember.
- When you originally got A-41 back in June, was -- it was a -- a long -- elongated drop; is that right?
- No, it was not. It was -- it was -- had been scraped off into the container pretty much in chips, so it -- it wasn't in any particular shape at all.
- Is there -- well, in terms of -- of trying to quantify how much blood is left, in your experience is there enough blood to do an electrophoretic run?

No, sir.

No.

- Is there -- is it even close?
 - Is there enough blood to do ABO absorption-elution using

the Howard-Martin technique? 2 No, sir. Is there enough blood to do anything? 3 Well, you definitely can get an ortho-tolidine; possibly a precipitin, the species determination; and possibly 5 6 the Lattes, depending on how you did it. You can't do -you -- you would get the ortho-tolidine and one or two of 7 8 the others, but not both. But your -- in your experience, you can get -- you can --9 Lattes is more sensitive than -- than the absorption-10 11 elution? I --12 13 I mean, you use less sample? Yes, I do. Do you know how much blood it takes to do a Gm test? 15 No, I do not. 16 Back to PSM, showing you a photograph which has been 17 marked as Exhibit H-356, which I'm asking you to assume, 18 until tomorrow, is photograph -- which is -- the contrast 19 has been increased of Run 255, were your reference samples 20 for that in slots 4 and 9 where the R is marked on the 21 photograph? 22 Yes, they are. 23 (No omissions) 24

26

Can you read either of those off the photograph? Nine appears to be -- well, at least from the photograph, 2 it appears to be a 2-1. Again, I -- my best call is 3 off the plate itself, What about 4? 5 Four I can't really read off the photograph. 6 After you saw that -- you didn't read it at the time; 7 right? 8 Evidently not, no, not according to my records. 9 Did you try and replace that series of samples at that 10 point in time? 11 No. One of my -- my standards did work, so I don't 12 think there was a problem with that. 13 Well, why didn't -- why didn't the one in number 4 14 turn out? 15 I don't really know. 16 Did -- are all your standards from the same source? 17 Sometimes yes, sometimes no, Generally I buy most of 18 my standards from SERI, Serological Research Institute, 19 as a dried -- acetone dried blood. 20 That's prepared by Mr. Wraxall or his assistants? 21 Well, it's prepared by whoever works up there. 22 And those -- those are -- you just store and use as --23 as it comes up in the work? 24

A If I need them, yes.

25

26

Q Okay. Showing you a photograph which I'd like to ask

```
0-1463
```

```
you to assume is run 256 done on June 12. Are the --
and that's H-355. Are the standards on that in the --
in the slot 4 and 8?

According to my records, yes.

And on those particular standards, you're using people
```

- 5 Q And on those particular standards, you're using people in the lab; is that right?
- 7 A Yes, I am.
- 8 Q And number 4 is in fact yourself?
- g A Yes, it is.
- 10 And did you get a readable result off that?
- 11 A Off myself, no.
- 14 A That is true.
- 15 Q And did you get a readable result off of that on the plate?
- 17 A Yes, I did.
- 18 Q Can you tell what it is from the photograph?
- 19 A No, I cannot.

21

22

- Q Did you do anything to change those samples after you got very, very faint result on the plate and couldn't read yours on the -- on the plate?
- 23 A. I don't remember whether I did or not.
- 24 A Showing you another photograph H-353 done the same day,
 25 June 12, run 257, you used the JJ person and got
 26 readable results that are very strong on the photograph

7a

and -- or at least part of them are? It appears to be a very fresh sample; is that right? 2 Well, it's a very strong sample, yes. 3 And the parts of the sample where -- where -- well, in PGM, I think we've already discussed this, but 5 the part which is not caused by aging is -- is the 6 strongest; is that right, the two bands of the four? 7 Yes. 8 On H-336, June 13, already -- we have already I think 9 discussed the reference samples in number 6, and you 10 can't read that; right? 11 No, sir, you can't. 12 On June 16, run 259, the reference sample is in slot 13 number 7, and you can't read it off the plate? 14 No, sir. There is some activity, but you can't read 15 it. 16 On June 24 the reference samples are in slots 4 and 9, 17 and they are readable; is that right? 18 Yes, they are. 19 It appears that in fact your -- the one that you did, 20 which is in slot 9, of yours is something you put in 21 fresh; is that right? 22 Well, it's a better sample than the previous one that 23

On the same date, June 24, you ran three standards; is

that correct, and -- which are marked with R's, and that's

26

25

24

you pointed out, yes.

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

Exhibit H-358, and the only one from you is readable?

Nell, on the picture, yes; that is true.

- And the standards appear to be fainter even than the other ones?
- A. The standards are fainter,
 - And then on 6-29 on the -- on the -- on the run where the results appear to be strong, there is a relatively faint standard which is still readable and another standard which is very strong; is that correct?
 - A Relatively, yes; that is true.
 - Q Okay. Do you know if the standard which is faint on that is the same standard that you had used in some of your previous plates? Is it from the same source?
- A. I don't know.
 - Q If that were -- is there any way that you could determine
 - A Not at this point, no.
 - Q If that were the case, would that -- would that be consistent with you having not good G6PD on the ones that you did before June 29 and better G6PD on the one that you did on June 29?
- A Okay. Mr. Negus, I don't -- I don't understand your line of questioning.
- You were getting results which -- on your standards and other things -- which were -- which were -- which were very, very faint, and some of them were strong? Some of them were faint; is that right, the standards?

3

5

6

7

8 9

10

11 12

13

14

15

16

17

18

19 20

21

22

23 24

25

26

That is true, yes.

And there's -- the -- the standard that on June 29 is -appears on that photograph as faint but still readable is the same type of 2-1 as the earlier standard you were using; is that correct?

- Well, it is, but the earlier type of standards I believe said that they were also esterase D 2-1; whereas, that standard said it was an esterase D 1, so I'd assume that it's a different sample.
- So then you can say it was different than the early ones?
- It's different from any of the esterase D 2-1's, PGM 2-1 standards, yes.
- The fact that there are so many standards which don't come out either on the plate or on the photographs, does that suggest to you a problem with -- with the runs that you were doing on PGM during that period?
- I wouldn't -- first of all, I wouldn't say that there's a lot of standards that aren't coming out on the plates. Certainly, there are some. The standards in the photographs, there are definitely some standards that you cannot read, and I would still agree that there is a possibility that the GGPD could be one of the problems.
- Well, do you know why you -- why you didn't investigate that during the period of time that you were doing these runs?

7b

- Q Yeah, in the reference samples that don't come out or the reference samples that are so much more faint than the other ones.
- A. I don't recall at this time. It could be that the reference samples I knew were older, older samples, to begin with. Again, I do not recall at this time.
- But the fact that there were some reference samples that were weak enough so that they didn't show up in the photograph, but, nonetheless, you felt were strong enough to call, that those samples appeared considerably weaker than the -- the known -- the unknown samples that you were working with, would that suggest to you again that there was no real problem with your samples, but rather with your G6PD?
- A I don't think there's a direct relation there. You're looking at your standard, which is prepared in a different way than your sample.
- Q Generally, it's easier to get your standard to come out than it is unknown samples where there's a problem; right?
- A. In general, yes. It depends on your standard.
- Well, the idea of a standard is to have something which
 is clear, unambiguous, and you can use as a reference
 to compare the others; right?
- A. That is true, yes.

4

3

6

5

7

9

11 12

13

14 15

16

17

18

19

20

21 22

23

24

25 26 And so when you're having problems with -- if you have a very weak standard, that's not an optimal reading condition, is it?

- A The optimum on a standard is that it's still readable. If it's still readable for my purposes that I can compare the other ones with it, then it's fine to me. For photographic purposes, obviously, you want your standard just as strong or stronger than your stains or unknowns.
- Q In the -- in the general field of serologists, is it considered good practice to not worry about whether your photographs come out?
- A. I've never really discussed with the other serologists that subject, so I really don't know.
- Well, in scientific work in general, is it considered good practice in doing experiments to neglect to provide documentation that others who come after you can use to determine whether you've analyzed things correctly?
- A. Okay. As far as that statement is concerned, again,
 I think you're comparing two different things. In the
 scientific field in general, normally you're dealing
 with an experiment where you're looking at reproducibility,
 rather than reading the original results. In forensic
 science, you do want to document your -- your results
 as best as possible.

(No omissions.)

2

3

6

7

8

9

10

11

12

13

14

15

And the -- the chapter that you -- that you provided the Court at the Preliminary Hearing from Saferstein's book, were you familiar with that chapter back in June when you were doing this work?

- 5 A I believe I was, but I'm not sure.
 - Q In that particular chapter, Dr. -- Dr. Sensabaugh makes a big point, does he not, about -- about the necessity of -of providing a record which other people can check, that being the -- the -- the best -- the best means of assuring the reliability of serological work? Isn't that true?
 - A He may state that you want to photograph your results.

 I don't -- I don't know exactly what he says.
 - Q But do you recall him talking about a situation in Germany where -- where in courts they require two people to analyze the sample and get the same result before they all -- they'll allow it to be admitted into evidence?

MR. KOCHIS: Your Honor, I would object. That would be irrelevant.

THE COURT: Goes to state of mind and the significance to be attached to photographs. Overruled.

THE WITNESS: I don't recall anything like that in the book.

Q (BY MR. NEGUS:) Going back to Exhibit H-337, in looking at the esterase -- the esterase D results, what -- what type was the standard that you used, if you can tell, from that plate?

16 17

18

20

19

21 22

23

24

25

- 1 A The type standard that I used was esterase D 2-1, PGM
 2 2-1.
- 3 Q Okay.
- A As I read it on the plate.
- Can -- with respect to the -- that particular -- that
 particular run, that particular piece of paper was
 Exhibit V at the Preliminary Hearing; is that correct?
- 8 A It appears that way, yes, from the notation.
- 9 Q And you provided those documents to the Court for the
 10 Preliminary Hearing; is that right?
- 11 A Yes, I did.

- 12 Q Looking at the standard on the -- on the photograph,
 13 does the standard appear to be a 2-1 to you?
- 14 A No, sir. From the photograph, I'd read it as a 1.
- 15 Q Is it possible that you -- that you -- that you mixed

 16 up your standards and in fact used the -- the standard

 17 that's in the number -- the same standard that was in

 18 the No. 4 slot on the June 29th run, 263, instead of the

 2-1 standard?
- 20 A. That's a possibility, but I -- at the same time, I still
 21 read the -- the plate at that time at least as a 2 -- as
 22 a 2-1 esterase D.
- Q Well, the -- the standard in -- in the -- in the
 photograph, I mean, it's -- from the photograph it appears
 pretty clearly 1, right?
 - A As I stated before, I would read it as a 1.

```
I mean, it's not ambiguous or anything, I mean.
     Q.
 2
         No, sir, I don't think so.
 3
         And the -- the difference that you have in the -- between
         the -- the 1 and the 2-1 has got to do with the relative
 5
         intensities of the first and the -- there you go, yeah --
 6
         the first and the second bands; is that right?
 7
         That's true.
 8
        And in the photograph, your standard pretty clearly has
 9
         a much -- a more intense 1 band than 2 band?
10
        From the photograph, yes.
11
        To your knowledge, is there any process in the way that
12
        you took photographs which would have been able to
13
        reverse those two intensities?
14
        There could be, but I'm not sure. I -- I don't know of
        any specifically.
15
        Well, would that suggest to you that there's something
16
        wrong with the photograph?
17
        Yes, it would.
18
        Okay. If there's something wrong with your reference in
19
        the photograph, would it also suggest to you that there
20
21
        could be something wrong with the -- the photographic
        documentation of the other unknown samples of the
22
        photograph?
23
        That is a possibility, yes.
24
```

For -- in that -- that's -- could you mark the -- the --

the one that is -- that's the reference there.

26

- Q So you put a circle around No. -- No. 7 there? Okay.

 And that's right next to --
- A No. 6.

3

14

15

16

17

18

19

20

21

22

23

24

25

- 5 Q Okay. Excuse me. It's No. -- yes, I'm sorry. That's right next to No. -- to No. 7, A-41; is that right?
- 7 A That's true, yes.
- 8 Q And from the photographs, the A-41 and the standard 9 look for all the world to be the same?
- 10 A. Yes, they do.
- 11 0 So if there's something wrong with the photograph as far

 12 as the standard is concerned, it's possible that A-41 was

 13 a 2-1 as well?
 - A Again, only reading from the photographs, you can make that assumption. I read it -- at the time, I read it as a 1. If you're reading from the photographs, they do appear similar, and they do appear as 1's.
 - Q So given the problem with that particular standard, the particular photograph that you have is not really -- can't provide documentation which another scientist could use to verify your reading of A-41 as far as esterase D; is that correct?
 - A I would agree with that, yes.
 - Q Showing you Exhibit H-344, is that a photograph of the run that you did for Group III -- excuse me, Group II on August 2nd, 1983?

2 And in the No. 5 position on that run, is that where A-41

3 is?

6

10

13

15

16

17

18

19

20

21

24

25

26

Yes, it is.

5 When you looked at the plate, you called that a Type B; is that correct?

7 Yes, I did.

8 And from the plate, you were -- were you sure that that 9 was a Type B and no other type?

Yes, I was.

11 Is it possible to tell from that photograph that it's a 12 Type B and no other type?

I believe you can.

14 How can you do that? I mean, why -- why do you say that?

The intensities of the bands. I don't see any a bands in there. It looks like a Type B. Plus I have a standard on both sides of it.

Well, does the -- you got a, looks like a, CB on one side and a BA on the other -- BA on the other side, and in the photograph the BA is -- is -- is fading considerably; is that right?

22 Well, the photograph -- the BA is faint, yes. But it's still very readable as a BA. 23

Is it possible that -- that the A-41 -- the A-41 in general is -- is fairly faint in that photograph? Is that correct?

I would say it's about average. I don't -- I wouldn't say it's real faint. 2 Well, certainly it's about the same faintness as your 3 standard? Yes, it is. Maybe a little fainter? Maybe slightly fainter, yes. And certainly -- certainly considerably fainter than the CB you have next to it, right? That is true. It's possible that the a bands, just because it's a little fainter, the a bands, which are fairly faint to begin with in the standard, just didn't show up in the -in the -- on the plate? No, sir, I don't believe so. For one thing, your -your b prime band or your b band in the C location is very -- is relatively intense and easily readable. And one of the clues I use to tell whether it's degraded too far --(No omissions)

23 24

5

7

9

10

11

12

13

14

15

16

17

18

19

20

21

22

25

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

Well, just for --

THE COURT: Counsel, I can understand a thorough examination or cross-examination, in effect, of this witness, so that you can show a transcript to Dr. Blake or other experts to assist you --

MR. NEGUS: We've long gone beyond that.

THE COURT: -- to assist you at time of trial, but are you really sticking to the Hitch issue?

MR, NEGUS: Yes, sir. I believe that in certain circumstances the prosecution's duty to preserve blood evidence for independent analysis by the defense may be less than, as far as preserving the actual blood in a situation where they provide complete photographic documentation, as the type that we have already had testimony in this particular motion, is the standard in the serological community and in what they think is required for reliability, so the questions that I've been asking today have --

THE COURT: On most of your questions, I can under-I just thought there you were simply, you know, cross-examining his credibility in the usual manner.

MR. NEGUS: No. I'm really -- I'm going because I think he said the opposite at the prelim.

THE COURT: Go ahead.

That you could -- my offer of proof is MR. NEGUS: that I believe at the prelim he said from the photograph.

24

Born 61 ? AR (or 64?) tallow

9-2

it could be either an A or a B.

THE WITNESS: I don't think I would have said that off this photograph.

MR. NEGUS: If I could read, Your Honor.

THE WITNESS: I -- it may have said -- it still looks like a B on the photograph to me.

MR. KOCHIS: I am going to need a volume, a page and a line.

MR. NEGUS: Eleven, Volume 11, page 38, lines 7 through 22. "Question --"

MR. KOCHIS: I have them.

MR. NEGUS: "Would you say that there's no other reasonable alternative than it being a B from that photograph?

"Answer: From the photograph?

"Question: Yeah.

"Answer: No.

"Question: What are the other reasonable alternatives from the photograph?

"Answer: First of all, the only reasonable call would be a B. You can put speculation in there that you're not picking up the a and the a prime bands in the photograph.

"Question: So you could conceivably then be a BA?

"Answer: --"

9a

.

16 17

1

2

3

5

6

7

8

9

10

11

12

13

14

15

18 19

20

21 22

23

24

25

3

5

7 8

9

12

13

11

14 15

16

17 18

19

20 21

22 23

24

25

26

Excuse me. Starting again on line 17:

"Question: So you could -- conceivably then could be a BA? That's another reasonable possibility?

"Answer: From the photograph, yes.

"Question: Are there any other reasonable possibilities from the photograph besides a BA?

"Answer: Not really, no."

- Showing you -- showing you Exhibit H-349, does that appear to be the results of the analysis that you did on June the 29th of A-41 for Group IV?
- A Yes, it does.
- Q Looking at the carbonic anhydrase in that particular photograph, you can't tell -- in the photograph that you've attached to the exhibit, you can't tell anything; is that correct?
- A No, sir, you cannot.
- On the original photograph, it's true, is it not, that you can't tell for sure whether A-41 was a lor not? Do you recall the original photograph that you took?
- A I believe just from the difficulty of photographing carbonic anhydrase, that that's probably a reasonable statement, yes.
- Q So then for -- also, with respect to the -- to the

haptoglobin from -- again, looking -- we don't -- do you happen to have the haptoglobin photograph of A-41 with you?

- A. Yes, I do.
- Q Looking at the original of that, you can't tell from looking at that, can you, that you're dealing with a 2-1M for A-41?
- A From the original photograph of that, you could say that it is definitely consistent with a 2-1M.
- Q Right, consistent with other things too; right?
- A I think still from the photograph, the most likely, or the best fit, is a 2-lM. Again, from the photograph, it also could be a 2-l.
- 14 Q So as far as your photographic documentation of -15 well, the transferrin and Gc, you save the plate itself;
 16 right?
 - A Yes, sir. For your information, I do -- although it has degraded to some extent, I also have the original plate from A-41.
 - 0 For the transferrin?
- 21 A For the haptoglobin.
 - Well, can you tell from the plate that as it exists
 now, the haptoglobin plate, that A-41 -- that it's a
 2-lM and not a 2-l?
 - A I believe, again, from the plate, again, the most likely and the best call from it is a 2-lM. Everything fits,

3

5

6

7

10

11

13

14

15

19

20

21

22

23

24

25

26

the intensities, the lack of bands above it, as it does in the photograph. It does not look like a 2-1; however, you know, given that that is not the original plate -- or in the original condition as we developed it that day, I would say that, you know, it is possible that you could not call it as a 2-1M now.

- And the -- back then to the transferrin, the transferrin plate still is in a -- is in a condition where you can -you can call the transferrin result on A-41 clearly and unequivocally from what you've preserved; is that right?
- Yes, it is. 12
 - And, likewise, you believe that with respect to the -to the peptidase A, you can tell from the photograph that you have a 2-1 and nothing else?
- A. Yes, sir. 16
- Or a 2-1 or a 2-8; is that right? Q. 17
- I believe that you can tell, basically, it's a 2-1. A. 18 With the other allele there, I believe it's a 2-1. have to do some more reading on that.
 - And the ADA and the AK, can you tell from those Q. photographs that you've got 1's and nothing else?
 - A. The AK, you definitely can. The ADA is -- looks like a 1, but it's -- I would prefer -- definitely prefer, as I always do, to call from the plate itself.
 - But I'm not asking what you prefer. I'm -- obviously, Q.

9b

26

the photograph?

From the photograph --

```
1
         what we're dealing with here is, except for the
 2
          situations like where you had Dr. Blake present,
 3
         we can't do that, so from the photograph, you can't
         be sure it's a 1? It just looks like it?
 4
         Well, it looks like a 1, yes,
 5
 6
         Can you say from the photograph that it's -- when you
         looked at the plate, you felt it was a 1 and nothing
 7
         else, the ADA on A-41?
 8
 9
         Yes.
         Can you say from the photograph it's a 1 and nothing
10
         else?
11
         Again, not as strongly as I can from the plate, but it
12
         does appear to be a 1 and nothing else.
13
         So do you believe that if you were checking the work
14
         of some other serologist in looking at that photograph,
15
         would you be confident that the other serologist's
16
         call was 100-percent correct?
17
         I see nothing to tell me that he did not, if I were
18
         looking at this as another serologist.
19
         But can you -- can you --
20
         Say absolutely certain? No.
21
         If I just -- another hypothetical. If I just handed
22
         you the photograph, and you didn't know what the other
23
         serologist could call it, could you call it a 1 from
24
```

13 8 - L - L C3

```
Unequivocally.
         From the photograph, I would call it a 1, yes.
2
         Well --
3
         But, certainly, I would not be -- my calls I don't do
         off photographs, so --
5
         There's a level of confidence that you have, basically,
6
         in serology when you have a result that's ambiguous,
7
         you don't call it; right?
8
         That is true, yes.
9
             (No omissions.)
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
```

26

1 From the photograph of the ADA, is that of sufficient 2 ambi -- unambiguity that you can call it? 3 From this photograph, I would say no. Why did you resume testing on A-41 on -- on June 28? 5 I may have been doing something in between. I don't remember. Other samples, possibly. 7 Well, why did you -- why did you restart working on A-41? 8 Because I -- I needed to get the work done, and I didn't 9 I just got around to it at that time. 10 On June 28th, on your Group II, you got no interpretable 11 results as to the -- the ADA and the acid phosphatase; 12 is that correct? 13 I believe so, yes. A. 14 Do you know why? 15 The most likely reason is that I used a -- a lower 16 quantity of blood than I normally do, trying to conserve sample. Obviously my efforts did not succeed. 17 The work that you did on June the 12th, the ABO typing 18 of A-41, was there anything ambiguous about the results 19 of ABO typing that you got on June the 12th? 20 21 A. Not that I can recall, no. Sometimes you -- you get faint reactions with other --22 with other antigens or you don't get as strong a reaction 23 as you -- as you think you should, but that didn't occur 24

in this particular case; is that right?

That is correct. I've got, as far as I can see, I got

0--482

good results.

1

2

4

5

6

7

8

- Q Why did you redo it on June the 29th?
- 3 A At this point, I do not know.
 - Q If -- if you -- given what's left in the -- what's left in the tin now, and then just the amount that you used on June 29th to do the ABO, if we still had that, could we do a complete electrophoretic run to recheck something you did or try and get PGM subtyping or --
- 9 A I think you probably could, yes.
- 10 Q On -- on August 1st, you received in the laboratory
 11 various samples from Mr. Cooper; is that right?
- 12 A Yes, we did.
- 13 Q At that point in time, was there any particular urgency 14 to analyze the rest of A-41?
- 15 A Just to try to get the timing out of the way. That's
 16 the urgency that I would -- I would say, get the work
 17 done.
- 18 Q Between -- between June 29th and August 12th -- well, on
 19 August 2nd, you -- you took a sample of Mr. Cooper's
 20 blood and you took a sample of A-41 and you ran -- ran
 21 them for Group II?
 - A That is true, yes.
- 23 Q Same time?

- 24 A. Yes, I did.
- 25 Q Why did you -- at that point in time you -- what you knew, there was maybe enough for two, maybe three more tests on

A-41?

1

2

3

5

A. Yes, I did.

Q And you didn't let the Defense know that you were doing that, did you?

- A. No, sir, I did not, I don't believe, at that time.
- 6 Q Why didn't you do that?
- I believe the subject was broached, as I recall, with
 either Mr. Longhetti or Bill Baird by myself. And what
 they did with it, I do not know. I'm not sure if it was
 at that time or a time previous or a time after, but it
 was broached.
- 12 Q What do you mean --
- 13 A I think it was before that time.
- 14 Q Okay. What -- what -- what -- what did you broach to
 15 Mr. Baird or Mr. Longhetti? What --
 - A. The possible idea of getting somebody from the Defense in there to, I guess, co-test all the samples.
 - Q And do you remember which one it was of those two?
- 19 A. I think it might have been Bill Baird, but I'm not sure.
- 20 Q. And what did he tell you?
 - MR. KOCHIS: Well, I would object. That would call for hearsay.

THE COURT: Overruled on this issue.

THE WITNESS: I do not recall. It may have been before we had a suspect in custody and it -- I don't recall exactly what he said.

25

24

16

17

18

21

22

23

```
(BY MR. NEGUS:) Well, on August 2nd, when you did Mr.
  2
         Cooper's sample -- the same time you did A-41, you had a
  3
         suspect in custody, right?
         That's true, yes.
 5
         And Mr. Cooper was arraigned the day before, the same
 6
         time that you got the blood sample, right?
         I don't know when he was arraigned, but I got the blood
 7
 8
         sample the day before.
         At that point in time, had you been told by Bill Baird
 9
10
         not to -- not to let the Defense know?
         I don't recall anything like that, no.
11
12
         Had you been told by him to let the Defense know?
13
         I mean, do you have any idea what you were told?
14
         At that time, I -- I don't recall whether he -- I broached
15
         the subject with him at some time previous. I don't
16
         recall him telling me anything at that time, yes or no
17
         or either way.
18
        Why didn't you, before you went ahead and used up a large
19
        percentage of what was remaining of A-41, why didn't you
20
        attempt to get in touch with somebody and discuss that
21
        issue?
22
        I don't know at this point.
23
            THE COURT: Have you come to a convenient stop point?
24
            MR. NEGUS: Well, it's always a convenient stop,
25
    Your Honor.
26
```

```
THE COURT: Well, I want to give you the option. I never know. You might want to finish and have no other questions.
```

All right. We'll take the noon recess until 1:30.
(Whereupon the noon recess was taken at
12:02 p.m.)

_

```
ONTARIO, CALIFORNIA; WEDNESDAY, JULY 11, 1984; 1:35 P.M.
  1
      DEPARTMENT NO. 3
                                  HON. RICHARD C. GARNER, JUDGE
 2
              (Appearances as heretofore mentioned.)
 3
              THE COURT: All right. Continue.
                          DIRECT EXAMINATION (Resumed)
 7
     BY MR. NEGUS:
 8
         On -- on August 2, had you completed a genetic workup
 9
         on Kevin Cooper?
10
     A,
         No, I had not.
11
         Were you at that point in time sure that you could get
12
         three more electrophoretic runs out of A-41?
13
     A.
         I was pretty confident, yes.
14
         Did you ever tell Mr. Kochis that you thought that just
     Q
15
         one more test could be done with it?
16
         I don't recall.
17
         The -- is there any reason why you wanted to go ahead
18
         and do A-41 before you completed your genetic workup
19
         of Mr. Cooper?
20
         Basically, because I felt that A -- well, EAP is
21
         generally a good discriminator, so I ran it through --
22
         I wanted to get the EAP result,
23
         In this particular case, what -- how -- what is your --
24
         what is your -- what -- it was a long lunch. How did
25
         you type Mr. Cooper's EAP?
26
```

No. Again, I don't know enough about Gm to really tell

Showing you Exhibit K-10b and specifically page 379 of

that, that's Dr. Sensabaugh's chapter in the Saferstein

26

22

23

24

25

you.

book. Does that list the different types and the breakdowns for Gm in white, Black and Asian populations?

- A. Yes, it does.
- And there's none -- just looking at that, you can indicate there's none -- none of the white types that overlap into the others and none of the Black types overlap; is that correct?
- A If you're taking all three --
- Q That's what you do, isn't it?
- A. Haplotypes together?
- Q Yes.

MR. KOCHIS: Well, Your Honor, I'm going to object. It calls for hearsay. He's not familiar with the Gm. I don't believe there's any foundation that he relied on that in doing his analysis or choosing which test to --

THE COURT: Under what basis can you get it in, Mr. Negus?

MR. NEGUS: It's already in evidence.

THE COURT: Why question the witness about it?

MR. NEGUS: Well, what the -- he came up with the idea of doing Gm testing yesterday, and I would make -- I believe, based on what I have been told, that there's not enough blood left to do that; that basically it takes about the same amount of blood to do Gm testing as it does to do an electrophoretic run, and we're dealing with a sample limited situation. I'm asking him -- the precise

lla

01149D

 interpreted, it will be significant as far as the steps he did to get the most information out of the limited sample.

THE COURT: Are you prepared to argue, Counsel, both of you, perhaps, on what should happen with the remaining portion of A-41?

data I'm about to ask him about is not set forth in the

can interpret the data, and I think that once the data is

I need him to interpret the data. Any serologist

MR. KOCHIS: I'm not completely prepared because the photographs that were taken apparently don't allow Mr. Negus to make a determination as to what he wants done with the remaining sample. I haven't had an opportunity to send a photograph to an expert to get that expert's opinion as to whether or not there's enough in the sample to conduct an analysis.

THE COURT: My inclination at this time would be to permit Mr. Negus and his expert to test it in whatever manner they wish, with your expert's supervision.

MR. KOCHIS; Well, before you make that decision -THE COURT; All right. I haven't made the decision
fully, but if I did that and made the decision early on,
we might obviate a lot of time here.

MR. NEGUS: I don't think we will.

THE COURT; Nothing I can do can save us any time.

MR. KOCHIS: That's not true, Your Honor.

MR. NEGUS: If I could save time, Judge, I'd be glad to, if I thought that that would save time.

THE COURT: I was just simply responding to what you indicated.

MR. NEGUS: What I'm saying is that my -- from what I've been led to believe from Mr. Forbush's description, Mr. Gregonis' description, and the limited information I can get out of the photograph, plus talking to Dr. Blake on the telephone, is that whatever's left, they can't do anything with. Okay. That's -- so I am proceeding at this point in time on that assumption, that you can't do anything with what's left, and I think that we'll be able to prove that eventually, but -- but I have Mr. Gregonis here, and I'm trying --

THE COURT: If you -- if that be your position, then you should have no quarrel with him in making the effort then.

MR. NEGUS: Once I verify from getting a color photo to Dr. Blake, plus getting him a copy of the transcript of what Mr. Gregonis said this morning, that's probably going to be my position is they can do whatever they want with it if Dr. Blake tells me he doesn't think anything can be done with it, because they are the ones which will have -- I'm only interested in that sample, Your Honor, if there's enough there for me to re-test an electrophoretic run, and because that's what I would like to do, and that's

what I've been prevented from doing. If I can't do an electrophoretic run on it -- and Mr. Gregonis says I can't -then what they want to do with it, I'm less -- I'm less interested in. It's only when I heard that -- it's only when I was of the opinion that I could do an electrophoretic run on it that I was interested.

THE COURT: Why try to prove that they can't make this further testing on it that he indicated this morning he would like to do, since you're not really interested in that? As long as I'm going to give you the opportunity to run it --

If they could -- if they could do it, MR. NEGUS: if they could do that test, I'd be interested in it, but I have been told that they can't -- that there's not enough to do even that test.

THE COURT: I don't understand why you take time trying to prove they can't, under the circumstances.

MR. NEGUS: I'm not trying to prove -- Judge, I'm not trying to prove they can't at the present time. I'm willing to let them do it. What I'm just doing is just setting my record, because in the event that they can't, which I have been led to believe that they can't, I think that's another thing which goes to the materiality of Mr. Gregonis' wasting the sample when he did the second ABO test.

(No omissions.)

1

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

THE COURT: Go ahead, Mr. Negus.

- Q (BY MR. NEGUS:) Looking at what's -- what's in Mr.

 Sensabaugh, none of the -- the -- none of the haplotypes
 recur from one racial group to another; is that true?
- 5 A. No.
- 6 0 When -- which one does?
- 7 A There's one in the Asian population that's called IgG or
 8 IgG1, which is a 1,17, IgG3 which is a two one. That also
 9 occurs in the Caucasian population. And there's also --
- 10 0 I understand.
- 11 A -- the same type with -- there's two that occur between
 12 the Caucasian and the Asian population.
- 13 Q. Okay. What is the general overall discriminatory
 14 probability -- discriminatory power of the Gm for
 15 Caucasians?
- 16 A. Just a rough estimate, it's approximately .45, between
 17 .45 and .50. It's the numbers I get.
- 18 Q. I think maybe you have -- could that .2 you have there
 19 in your total be a .04? You have five numbers when you
 20 should have four.
- 21 A That's correct.
- 22 Q So it's about a .66?
- 23 | A. I'd agree, yes.
- 24 Q And the -- for Blacks, it's about the same?
- 25 A Roughly around that area, yeah, I would say so.
- 26 Q So for either whites or Blacks, the Gm would be half again

6

7

8

9

10

23

26

as inform -- or, half again as likely to be informative
as doing a Group II?

That is true, yes. If you want to put it that way, the

- A That is true, yes. If you want to put it that way, the discriminate -- discriminating power, it's half or 50 percent larger.
- Q Well, the discriminating power is a way of putting that, in lay terms, is -- it's -- it's -- it's the likelihood it's going to give you useful information; is that --
- A I don't think you can compare that. I think you have to leave it as the definition of discriminating power.
- 11 Q You mentioned -- by the way, does Gm, does it survive 12 fairly well?
- 13 A I understand it's a very stable antigen.
- 14 Q Ranking just a little bit below ABO in its general stability?
- 16 A. As I understand, yes.
- 17 Q Are there any other antigens which you know of that -
 18 that you don't do but other -- other people test for that

 19 have relatively good discriminatory powers that can be

 20 gotten out of dried blood?
- 21 A Well, there's the Rh antigens, the MN system, such things
 22 like that.
 - Q Those are hard to get out of dried blood, though, right?
- 24 A Takes a lot of quantity, but I wouldn't say that it's hard.
 - Q In terms of quantity, more than an electrophoretic run?

0 - - 405

2 Okay. Any that -- that don't -- don't involve a -- having a really big sample? 3

4 Not that I know of, no.

The -- in the particular circumstance of Mr. Cooper, the 5 transferrin and haptoglobin tests that you did after you consulted the Defense had greater discriminatory powers than just the average results for Gm; is that true?

The transferrin and haptoglobins that we did with the 9 Defense expert, yes, they do. 10

Both those had discriminatory powers for Mr. Cooper --11

For --12

6

7

8

18

19

20

21

22

23

24

25

26

-- other than -- of in the nineties; is that right? 13

Exactly, for Mr. Cooper. 14

And that's what the test was set up to -- those particular 15 tests were set up to -- to particularly test, that 16 particular question, Mr. Cooper, in 8-2? 17

That is true, yes.

When did you first talk to the -- to the District Attorney's Office concerning the scarcity of A-41?

I don't recall.

Was it after you had done the Group II on August 2nd or before?

I don't recall.

At some point in time, did you have a conversation with Mr. Kochis in the crime lab during which he made a phone

```
call to me?
```

3

- 2 A Yes, I believe I did.
 - At that point in time, were you providing Mr. Kochis
 with the results of your analysis up to that point in
 time?
- 6 A I don't -- I don't recall the exact conversation, so I
 7 can't tell you.
- 8 Q But do you remember giving him results as to what you'd 9 found on A-41 to relay to me?
- 10 A At that time, I don't -- during the phone calls, I don't

 11 know. I don't remember. I may have; I'm not sure.
- 12 Q At that point in time, you did have -- you did have the
 13 information available to you from your analysis of Group
 14 II on August the 2nd; is that right?
- 15 A At which point in time?
- 16 Q On -- on 8 -- August 4th, 1983, at approximately 10:20
 17 in the morning.
- 18 A. And had the result of what?
- 19 Q Your analysis of A-41, Group II, that you had run on 20 August 2nd.
- 21 A Yes, sir, I did.
- 22 Q Do you recall ever telling Mr. Kochis, in the context
 23 where he was trying to relay the information on to me,
 24 that you had done ABO, Group I, Group IV, but had not
 25 done Group II?
- 26 A I don't recall a conversation like that, no.

- 4 A I'm sure I had a discussion that way, but I'm -- I don't recall at what point or what day. I don't know.
- 6 Q On the 5th of August, did you have a telephone conversa-7 tion with Ed Blake?
- 8 A I don't recall the specific date, but I know I called9 him around that time.
- Okay. At some point in time, well, you -- when -- at some point in time, did you give to Mr. Kochis a list of three people that you thought were qualified to act as serological advisers to the defendant in this case?
- 14 A Yes, sir, I did.
- 15 Q And Dr. Blake was one of those?
- 16 A. Yes, he was.

25

- 17 Q Shortly after you gave that, Dr. Blake then contacted

 18 you and indicated that he was in fact working for me in

 19 this particular case?
- 20 A. I believe so, but I don't -- I don't recall whether it
 21 was shortly after or not. I don't know. I know that he
 22 did call me at some point telling me -- either I called
 23 him or he called me, telling me that he was on the case.
 - There were in fact, during the month of August, more than one call that was eventually made; is that right?
- 26 A Again, I don't recall.

6 - - - - 9 8

Do you recall making arrangements with Dr. Blake in that first telephone conversation to send him the photographs that you had taken of your peptidase A results?

I don't recall whether it was during the first -- the first telephone call, but I do know that it was there at some point in time where we had a telephone call where we made those arrangements, yes.

(No omissions.)

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

21

22

23

24

25

26

```
Q And did he get some results from A-41 from you at that
time?
```

THE COURT: Some results?

MR, NEGUS: Yeah.

THE COURT: That is, he told him what his answer --

- Q BY MR. NEGUS: Right. Did you tell Dr. Blake your finding as to some of the tests on A-41?
- A I don't recall. I know I did at some point, but I don't know whether it was at -- at that time or not.
- Q Do you recall when you did talk to Dr. Blake first about your findings indicating to him ABO, EsD, PGM, CA II, PEP A results, but not saying anything about Group II?
- A. I don't recall anything like that, no. I -- I just don't remember.
- Q. The first formal report that you had -- you submitted to anyone as a written report as to any of your serological findings was dated on August the 10th, 1983; is that correct?
- 20 A. That is true, yes.
 - Do you recall Mr. Forbush, one of the prosecutors,
 either Mr. Kottmeier or Mr. Kochis, and myself coming
 to the crime lab on approximately August the 16th
 after you'd submitted your formal report?
 - A I know that you came to the crime lab in August sometime, but I don't -- I can't tell you whether it

13a

was before or after I submitted my formal report and whether it was before or after August 16 or on that date.

- Q Do you remember any conversation with me in which I expressed surprise that you'd already done the Group II?
- A No, I don't.

2

3

5

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

- On -- at some point in time in August, around August

 17, did you receive a phone call from Ed Blake
 indicating to you that he had finished his work of
 typing the blood of Kevin Cooper?
- A. I don't recall.
- Q Did you ever receive such a phone call from him?
- A. I don't remember whether I have or have not. I -I can't say.
- Q Did you receive like maybe five or ten different phone calls from Ed Blake at various times on this case?
- A. I can't say the amount of calls that I received from Dr. Blake.
- Sometime in the -- in the beginning -- or excuse me -in the middle of August, did you become aware from Dr. Blake that the defense was ready to begin testing on A-41 whenever you were?

MR. KOCHIS: Objection. That would call for hearsay, and it's not relevant unless it's offered for the truth of the matter asserted.

MR. NEGUS: It's just --

THE COURT; No. I will overrule the objection, Mr. Kochis,

Did you?

2

3

5

6

7

8

9

10

11

12

13

14

15

16

18

THE WITNESS: I don't recall the date or even if it was in August. I don't know.

THE COURT: Are you asking if that also occurred at the same conversation?

MR, NEGUS: Yes.

THE WITNESS: I don't know whether it occurred in the same conversation, but I do know that I indicated at some point that I had not done the transferrin, Gc and haptoglobin yet on the blood, and that I wanted to do that prior to any testing that had to be done.

- Q BY MR. NEGUS: You did your haptoglobin testing on Mr. Cooper's blood on the 25th of August?
- A I believe that's one date that I've done it, yes.
- 20 Q The first one?
- 21 A. Yes.
- 22 Q I'm just interested in the first one at this point in
 23 time, and then your first Group III test was done sometime
 24 in the end of September?
 - A. I don't recall, and I don't see a note. I do know that
 I had sent the -- some serum down to LASO to have them

Provided that it hadn't degraded beyond reading at

There's no way you could say for sure without having

done it, but just the probabilities are somewhat greater?

that time, yes, I believe there would have.

waiting until October?

run the Group III, since I did not have one of the

antisera at that time, at least. I don't -- I can't

25 26

22

23

24

13b

.

A-41; right?

- A. There were some procedures that obviously were blind testing of A-41, but they were not specifically set up that way.
- 5 Q And there were some that weren't?
 - A. Correct,

- And, for example, on the -- on the second, if you'd wanted to blind test A-41, you could have done it before running Mr. Cooper's blood?
 - A. That is true, yes. As it turned out, because of the typing I got on Mr. Cooper's blood, at least, the EAP on that was a blind test.
 - Q But you didn't make those results known to anybody until after you got Mr. Cooper's result on the 4th; is that correct?
 - A. I don't recall whether I did or did not.
 - And it was on the -- the 4th of August that you did -you did get a readable result from Mr. Cooper's blood
 on the acid phosphatase and other Group II enzymes;
 correct?
 - A. That is correct, yes. Actually, it may have been on the 5th. I'm -- I'd have to look at the original data sheet as to whether I had run the plate overnight starting on the 4th.

(No omissions.)

```
Do you have that data sheet with you?
  2
         No, I do not.
  3
         I think -- maybe I'm wrong.
  4
              Showing you, then, a Xerox copy of the Group II,
 5
         that's in which Mr. Cooper's blood is, can you tell from
 6
         that when you got the results?
 7
         I believe, from these, I would have gotten the results
 8
         on August the 5th, the next morning.
 9
         Okay. You believe, but are you -- are you --
10
         No. I started my results on August 4th at approximately
11
         5:30 at night and I developed it on August the 5th at
         10:05.
12
13
         Okay. Were there any of the samples that Mr. Stockwell
14
         took out of the Ryen master bedroom that showed any
15
         indication that there was more than one person's blood
16
         mixed in them?
17
         Yes, there are.
18
         How many?
19
         From the original, at least two.
        Which were those?
20
        That would be A-36 and A-3. A-3, as I understand it,
21
        was from outside the residence.
22
        What is it -- what is it that gives you an indication
23
        that you have mixed blood on A-3?
24
        I believe on that one I looked at the electrophoresis
25
```

patterns, and they -- they were consistent, at least, with

4

- Q Which electrophoresis patterns?
- A I don't recall at this time. I just know that I based my opinion on that phenomenon.
- 6 Q And what about A-36? Why did you think that was
 7 possibly mixed?
- 8 A. That one I thought was a possible mixed bloodstain
 9 because I found both the A and the B antigens along with
 10 the B antibody, which, to me, is -- it -- you cannot have
 11 the B antibody along with the A and B antigens.
- 12 Q So that would be an indication that a person whose
 13 blood type was AB had had their blood mixed with a
 14 person whose blood type was B?
- 15 A. That's one of the possibilities, yes.
- 16 Q That would be the most likely, that would be most consistent?
- 18 A. I would say so, yes, sir.
- 19 Q Now, in that particular --
- 20 A. Excuse me. You're saying a person who's an AB mixed 21 with a B?
- 22 Q Which was the antibody that you had.
- A. It's most likely that it's a person that's -- who's an AB mixed with a person who's an A.
- 25 Q I'm sorry. Maybe I miss --
- 26 A. I had the B antibody.

1 Q Okay. So, because -- that would be because an AB wouldn't
2 have any antibodies, and the person who is a type A would
3 have a B antibody?

- A. That is true, yes.
- When you took the blood out of that, blood was in a -A-36 was in a pillbox; is that right?
- 7 A. Yes, it was.
- 8 Q And what -- was it flakes?
- A. I don't remember. It's described as being scrapings,so it's possible that it is.
- 11 Q It wasn't a thread sample?
- 12 A. Again, it's described in Mr. Stockwell's evidence report
 13 at least as being scrapings.
- 14 | Q And in your summary, did you likewise describe it?
- 15 A No. I have on mine, in my notes, I have one metal
 16 pillbox identified as being blood from the dresser.
 - When you took the blood out of that particular container, was there any way for you to tell whether the blood had been mixed when it was still in a wet state when it arrived at the particular spot where Mr. Stockwell scraped it from or whether drops of blood from different people had become mixed in the container?
 - A. No, sir, there was not, not that I recall at this point.
 - Either of those two possibilities would be consistent
 with the results that you got; is that correct?
 - A. Yes.

25 26

17

18

19

20

21

22

23

24

0-1500

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1 A-35 was taken from the closet doors labeled by Mr. Stockwell as coming somewhere on -- the closet doors in 2 3 the -- behind Douglas Ryen; is that correct?

- A. Says one metal pillbox identified as being blood from closet doors on west side.
- Q. That would be the closet doors that would have been, as you were explaining the scene, behind Douglas Ryen?
- I assume so, but for sure, I think ask Mr. Stockwell.
- Okay. Showing you two photographs, H-79 and H-80, which show, first off, two different types -- two different patterns of blood, one of which, on the photograph, H-79, is labeled A, the other on the photograph, B, and then another photograph which shows those after they're both -after they're scraped off, was there any way which you examined A-35 that you would be able to distinguish drops that had been collected from the pattern labeled A in that pillbox from drops from the pattern labeled B?
- No.
- When you -- when you took out the -- the samples to -to -- to prepare them, do you recall whether you took out different flakes for each test or whether you prepared one big extract which you used on all the testing that you did in early June?
- The samples, at least the great majority of them, were in such a condition that they were pretty much mixed up to begin with. They were anywhere from a powder type of

26

sample to very small flakes. So, therefore, it's a mixture of what was in the sample itself. (No omissions.)

13

14

15

16

17

18

19

20

21

22

23

24

25

26

- Okay. What -- what I'm -- I guess it was not a very well-asked question. What I'm asking is when you took portions of those flakes/powder out to prepare your samples for the different tests that you did on A-35, you did four different tests for typing, ABO, Group I, Group II, Group IV in June of 1983; is that right?
- I count a total of seven tests. That would include ortho-tolidine, human, absorption-elution for ABO, Lattes for ABO, Group I, Group II and Group IV.
- Okay, With respect to the -- to the PGM, you didn't get a readable result; is that right?
- That is correct, yes.
- And showing you Exhibit H-337 and photograph H-336 with a little number 5 written down below one of the samples. The one with the little number 5 below it is the A-35; is that correct, for PGM?
- From my data sheet, yes.
- Well, that's the only record we have; right, is your Q. data sheet?
- A. Obviously, yes.
- Does -- why is that A-35 not interpretable? Q.
- Most likely because when I read it, it was before the A. streaking from -- the sample that I had obviously cut out of the plate had streaked over into that sample. I had read it at an earlier date or earlier time before all that fuzziness or whatever would occur.

15a

- Q Well, you -- you -- you typed it as unreadable; right?
- A Well, why is it unreadable at this time?
- Q No. I'm asking you why is it unreadable when you typed it.
- A I don't know. I can't tell you, There wasn't enough PGM there.
- Q. What?

- A. The obvious answer to me is that there wasn't enough PGM there to type.
- Q But do you remember whether that was the reason or was there something ambiguous about what results you did get?
- A I don't remember at this time. It does say on my data sheet that both C-8 and A-35 were streaked and un-readable. It's possible that A-35 was streaked because of C-8 being next to it, being a postmortem sample, I believe would have bled into it.
- Q If I already asked this question, forgive me. My mind is -- but did -- did you prepare all the -- all the samples that you ran on A-35 at the same time, that is, put them into the -- into the reducing agent and put them into a form where you could put them on a thread and stick them in the gel or were they all done separately?
- A. They were all -- part of the preparation was done at one time, yes.

3

7

8

10

11

12

16

17

18

26

The part of the preparation that I do is I will take a sample of whatever I'm doing and divide it up into several different tubes, and then -- at one time in a dry state and then as I get to them, I'll pull those tubes into a cup or a beaker labeled for whatever group system or antigen or whatever I'm typing for, and as I get to it, I'll do it. I'll usually have a number of samples in there to run at one time.

- Well, do you -- do you make an extract in order to put
 them into these little tubes?
- 13 A No, I do not.
- Q Just stick the powder or whatever it is in the tube?
- 15 A Yes, I do.
 - Q. And then when each -- each -- you have a different tube then for each electrophoretic run that you're going to do?
- 19 A Yes, I do.
- 20 As to sample A-37 and the results that you got on the
 21 ABO typing, you noted that there was a weaker A than
 22 there was a B; is that correct?
- 23 A. That is correct, yes.
- 24 Q Is that consistent with blood that has been mixed?
- 25 A It could be, yes.
 - Q If you mix on, for example, acid phosphatase a Type B

```
with a Type BA, are you necessarily going to be able
         to tell that?
 2
         Not necessarily, no.
 3
         The A-37 were thread samples; is that right?
 4
         Yes, they are.
5
         Did you just put those then into your -- into your
6
         testing -- into your test without -- without any other
7
         preparation other than just the addition of the
8
         reducing agent?
9
         At this time I don't remember.
10
         Is that your normal procedure?
11
         It depends on the type of thread sample it is.
12
         it's got a lot of -- a lot of blood on it, I'll usually
13
         scrape some off and use that, and then use the thread
14
         itself in another procedure. It depends on the sample,
15
         and I don't remember what this one was like at this
16
         time.
17
         And I take it there's no record kept of that; is that
18
         right?
19
         What it's like, no.
20
         A-38 you only got two of the enzymes that you ran to
21
         come out; is that right?
22
         That is correct.
23
         One was acid phosphatase and the other was the AK?
24
         That is correct, yes. I have also -- on June 21 I
```

also got haptoglobin to come out on that.

26

```
What was the haptoglobin type?
         A Type 1. That's of this year.
         Do you know why the PGM and the EsD and the Group IV
         and the ADA didn't come out?
5
         You mean the AK didn't come out?
         I'm sorry. I may have misremembered. I thought --
 6
         Why? I don't know at this time. It may be a lack of
7
         the amount of sample that is there.
8
         Is there still some left in A-38?
9
         I do not recall.
10
             MR. NEGUS: Could we take our break now?
11
             THE COURT: I'd like to talk to counsel.
12
     do it on the record, but not so much of the case, but
13
     about travel plans and things like this, and perhaps hours
14
     and dates of operation for the Court. Would it be better
15
     for you if I did that at the end of the day?
16
             MR. NEGUS: We can do it now.
17
             THE COURT; Would the reporter and counsel then
18
     step to chambers.
19
             We'll take the recess otherwise.
20
             (Whereupon, a discussion was had in chambers
21
             regarding San Diego accommodations, reported
22
             but not transcribed herein.
23
             (No omissions.) /
24
25
```

4884-1

(Whereupon, the following proceedings were had in chambers:)

THE COURT: The reporter, take it all down. Then at the end of this -- at the end of this, if you can tell me whether or not you want her to type it up with the rest of the materials. It may not need to be.

I'm having a little trouble planning. I'll tell you some of my concerns, and then it will be made clear later.

- (A), I don't know whether or not I can serve as a judge of both counties simultaneously. For instance, could I work four days a week in San Diego and one day a week here?
- (B), I told the judge down there when I -- just early on, way back when, that I would be happy to work one day a week for San Diego while I was down there. I see you shaking your head. It's kind of dumb of me, but I kind of told them that. I don't know if I'm going to be equitably estopped in some manner if I tell him otherwise at some stage.
- (C), you may get into this personal travel plans problems, conceivably, like I'm going to be. For instance, I just received today a memo from our executive officer telling me what the board will do as far as a per diem for me is concerned. This means that for each day that you sit in San Diego County hearing this case, I will get a per diem, guote, end of quote, in San Diego County hearing this case. Of course, I will have chambers time and study time, like you will. What I'm wondering, are you gentlemen kind of

tentatively planning to be there four days a week and coming back to your offices here closer to the scene the one day a week? Would you like to go a schedule perhaps like they are doing at De Lorean? They start at 8 o'clock in the morning with the jurors there, and they terminate — they go straight through. I'm sure they must have a couple recesses, but they go straight through and quit at 1:30, giving everybody time to work outside of court. That's 8 to 1:30 in De Lorean. As I calculated that, with two 20-minute recesses, that would be four hours and 50 minutes of actual trial time per day. If we went from 9 o'clock in the morning to 12 and from 1:30 to 4, that would be five hours or ten minutes more.

MR. NEGUS: I can't do any more than I'm doing now, unless you want to get somebody to prop me up.

THE COURT: Well, trial's going to be easier for you.

MR. KOCHIS: No. I think what he's saying --

THE COURT: I'm not trying to get you to do any more. How did we slice it, Dave? I'm not trying to get you to work five days a week even.

MR. NEGUS: All I'm saying is I can manage barely four and a half hours a day. I really can't go beyond that and still stand up at the end of the day. My mind is a mush for two hours --

MR. KOCHIS: I think the judge's question is, though, if we're only actually going four and a half hours a day, do you want to handle it in a fashion that would give us

)

_

1 0

substantial periods of time every day to work outside of court, go straight from 8 to 1, or do you want to split it and use the whole day up?

THE COURT: You don't even have to give me answers on this now.

Do you know how your per diem is going to be working?

MR. KOCHIS: No one will give me an answer.

MR. NEGUS: I have a phone call in -- I got a message to call Mr. Norris, who's been recently appointed by my office, and I guess he's involved in that kind of stuff. I don't know what he's going to tell me. It may not even be about that, but I -- I'm not willing to go to San Diego on the per diem that they are talking about going to do because I'm not going to pay for my time in San Diego out of my own pocket.

MR. KOCHIS: Judge, the one question you brought up is virtually every witness lives in this county, including my experts, and a number of the law --

THE COURT: 8 o'clock in the morning would be too early?

MR. KOCHIS: I'm talking about Fridays. There's no question in my mind that if I want to interview witnesses prior to the time I put them on the stand again, I can't see bringing them all to San Diego on a Friday, as opposed to me coming up here, so I know there's going to be some Fridays when I'm going to be right here in Ontario or at the crime lab

 working on the case, and I don't know yet what accommodations the D.A. is going to give us down there in terms of office space, so I foresee a lot of Fridays and Saturdays in this county in this office.

MR. NEGUS: I hate to agree with Mr. Kottmeier, but we're supposed to be doing settled statements on these in chambers conferences right now for an appeal, and I'd just as soon not do settled statements.

THE COURT: But this is necessary considerations, actually. It sounded more and more like, to me, I ought to get out of San Diego. And I know good and well if I come home on Thursday nights I'm going to be working here on Fridays.

MR. KOCHIS: I don't know.

THE COURT: Which I don't mind.

MR. KOCHIS: I'm willing to prepare any affidavits you need, and so is Mr. Negus, that when things come up, for example, like we stipulate to Dr. Root's testimony for this hearing, that was three volumes, that was 60 slides.

THE COURT: I read that.

MR. KOCHIS: I would expect you to be doing that on Friday and not on the weekends.

THE COURT: I do most of my work nights, actually, and early in the mornings.

MR. KOCHIS: And I think to answer one of the questions you have impliedly asked, I don't think Mr. Negus and I or Mr. Kottmeier and Mr. Negus and I plan on being in a

همدهم بدوس توسیم بروی

situation where we're moving into San Diego every Monday morning and moving out of San Diego every Thursday night.

If I'm going to try the case, I'm going to be placed somewhere where I have the place seven days a week, and I don't have to, every time I leave San Diego, take every piece of clothing and file with me. I don't think it's reasonable.

MR. NEGUS: That's my intention.

THE COURT: I'm working myself on -- in fact, you mentioned at one time, Dennis, housing concerns. From last weekend I have the San Diego Union and the La Jolla Light.

You can circulate those for your own benefit. That will give you an idea what you're looking at in the way of apartments or condos, which is what I have been investigating down there for myself.

But you will perhaps run into the same problem that I'm running into. They have agreed to kind of compromise on me into where I will receive \$67.37 per day per diem. The normal county per diem is like 52.47. I'm not sure; it may be higher for San Diego.

MR. KOTTMEIER: If it's higher, it's only ten percent higher.

MR. NEGUS: Well, they're going to have problems. I mean, I --

THE COURT: But the point I'm mentioning is that if the trial is going only --

MR. KOCHIS: Four days a week.

THE COURT: -- four days a week ---

MR. KOCHIS: You only get a four-day per diem. 2

> THE COURT: -- you only get a four-day per diem. I just don't know about that.

> MR. NEGUS: Well, I have called my office, and I assume what Mr. Kochis says he told whoever he has to tell that. As far as rents are concerned, I am not going to move out and move in every day. Somebody told me that there was somebody --

> THE COURT: I don't understand. Why do you move out and in, anyway, even if you stayed in a hotel?

MR. NEGUS: I mean, I'm not going to move in on Monday and move out on Thursday every week.

THE COURT: Oh, no, no.

MR. NEGUS: And, therefore, I'm not going to stay in a motel that you can get for \$25 a night, either, in San Diego. My druthers would be to stay in an apartment. But I have been told there is somebody in the administration of this county somewhere that thinks that that sagainst some regulation that somebody has somewhere.

THE COURT: Well, I've got -- I've got some -- you've got some precedent here. You ought to have. I don't -- well, you ought to have some coordinated -- you see, this would be something that the administrator of the old Law and Justice Agency could have worked on for you, because he would have represented -- and I assume that you're going to have Forbush

3

5 6

9

10

11

12

13

14

15

16

17 18

19

20

21

22

23

24

25

3

4

5

6

7

8

9

10

11

12

13 14

15

16

17

18

19

20

21 22

23

24

25

26

with you and you're going to have Arthur also down there all the time. And so it's going to be a lot of personnel down in San Diego. And there ought to be some coordination among them.

MR. NEGUS: Well, Forbush is a different -- is actually a separate problem, because he's 97.9 money. And so I have to negotiate that with Judge Kayashima.

But I think we're going to have -- I -- I don't know. I hope that what you say is not indicative of what we say, because we're going to have problems. I'm not going to lose money on it.

MR. KOTTMEIER: I can tell you from past experiences that we are probably going to face a real war over the housing arrangements and the thoughts that all of us have expressed. I have run into problems with the Auditor's Office to such an extent that I just wound up paying it out of my own pocket and forgetting it.

THE COURT: Let me --

MR. NEGUS: I'm not going to do that.

THE COURT: For your benefit, for whatever it certainly may be worth to you, I'll have my secretary make a copy of this for each of you. And it has something from the auditor and something from Dave Baker, a couple from Dave Baker in here. And they are not comparable in some way regarding judges assigned out of the county.

It starts off by a special Government Code Section and

.

"You are paid the same as a supreme court justice would receive except as set by the rules and regulations of the Board of Control of the state."

And so I thought, based upon that, that I would receive \$67 per day per diem or 70. There was some confusion about that.

But then, after I get all ready to do that, then I find out that there is a fine print down below that says, "Except if you're assigned for more than 30 days at a time, then you only get 60 percent of that," which cuts you back to about \$38 per day, which is insufficient, inadequate.

So then they kind of negotiated separately based upon those things with the board. And I'll give you a copy of this. You can read it.

But, to some extent, there's information in here that might be comparable to you. And you guys ought to be working on this, because they do get special board approval for me.

Well, as far as -- I think I'm going to, if I can, try and get a light calendar here if I can get out of San Diego on Friday. And I would prefer to spend as much time here and come home. In addition to this, of course, I'll get twenty-eight cents a mile for one weekend round trip. I'll come home. So it's in addition to the per diem.

So you should -- you'll have to get miles. They will pay me miles back and forth down there. But that way I should not lose money, and you'll find that you can get a lot of

apartments down there for \$500 a month or \$600 a month, depending on where you want to stay.

MR. NEGUS: If they let us have an apartment.

THE COURT: They are not very big.

MR. NEGUS: No. What I'm saying is the board — somebody told me that there is a regulation that you are not allowed to use county money to rent an apartment; you have to get a hotel. And that's —

MR. KOTTMEIER: That doesn't make any difference,

Dave. You can have a board action passed that will allow for
that to be done if your office will support it.

what I intend to do is go to the board when we have made the arrangements, when we find out how much it is, and in effect just say, "This is the amount of the bill for rent per month that is going to be paid by the D.A.'s Office budget," period. "And now I want five votes 'aye' and no 'nays,' and let's move on our way."

MR. NEGUS: When you do that, let me know so we can try and go in together, maybe.

MR. KOTTMEIER: Well, you're going to have to convince Don Norris first and Dave McKenna to support the position.

THE COURT: The average cost of accommodations in a motel down here -- Dave Baker has surveyed those -- is \$58.94 a day.

MR. NEGUS: Okay.

THE COURT: And you can save the county money, and

that's in here, also, in the package that I'll give to you.

MR. NEGUS: Okay. That is the kind of -- that's the information I would like to see.

THE COURT: Yes. Okay.

Well, as far as my questions are concerned, I think that what I have time enough to work on --

MR. NEGUS: We don't have to decide it right now, but I wouldn't be averse if we can get -- let's see. If we went from 9 to 2 with two breaks --

MR. KOTTMEIER: I'm thinking about I've got to reflect on what they say about juries' ability to absorb.

MR. NEGUS: Yes. That's --

THE COURT: I don't understand how they can do that.

I talked to the De Lorean judge himself, and he tells me he's working it in before and after De Lorean. That's the hardest working judge I have ever seen, state or federal. But I don't see how they can get jurors there at 8 o'clock in the morning. But they're doing it. I'm not sure I'm all that much in favor of that kind of plan.

I simply wanted to talk it over with you. I would prefer to go not from 9:30 but start at 9. Your timing in the morning is kind of lost. You can't really do too much in the morning. So I'd like to start at 9 to 12 and then 1:30 to 4 and stop at 4.

MR. NEGUS: That's an extra half-hour. What I'm telling you --

THE COURT: Well, a half-hour during the course of trial. And technically if we drag out, particularly as we drag out the Voir Dire that, you know, take a couple of months on Voir Dire --

MR. NEGUS: I'm just telling you I can't do it,
Judge. I mean, it's --

MR. KOCHIS: Well, I think for Voir Dire, certainly for Witherspoon, it's not going to be like the trial. And I hope we can do 9 to 12 and 1:30 to 4 on Witherspoon.

MR. NEGUS: There's just only so much you can do with your strength.

THE COURT: But you're doing things now. You're studying records and doing things now that you won't be doing in trial.

MR. NEGUS: Well, I don't think that's true.

THE COURT: The trial may not be as difficult for you as what you're doing right now.

MR. NEGUS: I don't think that's true, Judge. I know that's not true. And, I mean, the reason you're wrong is because the stress of trial is ten times greater than it is now. Now I don't have to do as much work as I will at trial because I can make mistakes and it's not going to kill me. Mr. Kochis and I both know from trial experience when you're in front of a jury you don't want to make any mistakes, and you have to have things even more prepared. I mean, there it is just not true.

I haven't kept up with the dailies. I mean, I try. I read them. But I, you know, I'm months behind in -- in making notes on it. And I can't get that way when I'm in -- when I'm in trial. It's -- it is -- I am barely able to do what we do now.

THE COURT: I talked with Judge Low down there. He will not be giving me a morning calendar, which is why I started thinking about that. So maybe it would be -- maybe you would prefer, then, going from 9 --

MR. NEGUS: I'll go from --

THE COURT: -- until 3:30.

MR. NEGUS: What I was going to say, I'll go from 9 to 11:30, 1 to 3:30, or I'll even -- I'd even consider 9 to 11:30, 12:30 to 3. But it's the time in court --

THE COURT: Let's go from 9 to 12 and 1:30 to 3:30.

MR. NEGUS: Is there -- well --

THE COURT: That's cutting it the same way. But that gets you out earlier in the day. It might be better for --

MR. NEGUS: It gets me out earlier. I'm willing to try that. If it comes down to where that --

THE COURT: You see how antsy I am?

MR. NEGUS: I know. But it's, you know -- you know, my plans are -- I know yours.

THE COURT: The courts down there are one long string of courts in a five-story building. It's not a high-rise at all. But they're more modern than what we've got at our

county. They've got a nice setup for us. It's Courtroom 30 upstairs.

MR. NEGUS: 30 or 33?

THE COURT: 30. Okay? I gave you wrong information before. It's 30 on the fifth floor. All civil courts up there with the exception of -- and we're right smack in the middle of them, except we've got a nice holding tank right close by. I don't know where they're going to -- I don't know where we're going to work on dailies. I just don't know. There may be a jury room right close. I assume that there is. But I didn't check that out. We'll have to find that out.

There's one problem there, but that's a problem that we're going to have with about every other -- wherever we might go, and that is having enough room for alternates.

It's got 14 seats in the jury box, room to put three, two more, maybe three more, no more than three more, as I recall. I'd like to have at least six alternates in a case like this.

The only way we're going to be able to do it -- we'll just have to wait until we get down there on stuff like this when you'll look at it -- it would be to put them in front of the box. It's going to be very difficult to find room for all the jurors. Other than that, the courtroom setup is going to be all right.

I would assume that you would make your separate arrangements to find offices in your counterparts down there.

2

3

5

6

7

8

9 10

11

12 13

14

15

16

17

18

19

20 21

22

23

24

25

26

They are both in the building.

MR. NEGUS: I have been led to believe that I can have office space in the new Public Defender's Office down there.

THE COURT: The new Public Defender's?

MR. NEGUS: Well, for years they never had a Public Defender's Office. They just --

THE COURT: I saw a sign there that said "Public Defender" on the third floor.

MR. NEGUS: Now they have a Public Defender's Office. What they've done is they've hired some guys to just handle all the heavy, the really heavy felonies that the private bar doesn't want to do as part of their contract system. And so they are just starting up. They have -- they have room for me, I've been told by Dave, my boss.

THE COURT: Anything else that we need to discuss? You have kind of answered my questions for me. you -- If I can help you as far as as locale is concerned down there, everybody's taste is different, and you'll talk to people down there, when you see some of those things circled in there. As far as I'm concerned, I won't find time to play tennis but somewhat at night, so I'm -- for years I've been playing tennis now at the La Jolla Tennis Club, which is a good place for me to get matched. So I've tried to be located around there. But the Mission Valley has got a lot of nice places, and it would be convenient for you. There is some downtown now.

THE COURT: You'll see -- you'll see ads in there for Balboa Park Section, which would probably be very convenient and close in to the court. I never considered any of that, because I have special desires when I get down there because of my extracurricular tennis activities, but it's not all that bad. I think you can probably -- there's a lot -- if you like to live in little houses or little cottages on the beach, they've got those for you. You can find some of those quite reasonable, but they're old, like 1930's stuff, most of them. The beaches are beautiful, even got a few Blacks around.

MR. NEGUS: Not very many.

THE COURT: Okay. Thank you very much for the collaboration.

MR. KOCHIS: Can we take a break?

THE COURT: Counsel, on the record, would you stipulate that the reporter not include this section, but make a note that the notes are to be prepared upon request of one counsel for such a statement?

MR. NEGUS: Yes, sir.

MR. KOCHIS: Yes.

(No omissions.)

THE COURT: Thank you, Counsel. Proceed.

Q (BY MR. NEGUS:) The A-3, which is a -- a rope that was
 found outside, were you able to get some results from
 that, but not -- but not complete?

A. That is true, yes.

Q And why -- why did you think you didn't get complete results?

A One of the possibilities is that I was informed that it was outside, apparently on either black -- black top or cement, and it's possible that it -- the sun degraded what was there. Another possibility is the substrate it was on, that the nylon rope, for some reason, inhibits or degrades, the enzymes.

Well, of the ones that you did, the only ones that - well, you got a negative reaction on the ABO antibodies,
 but that was consistent with the -- with the antigens that
 you had, right?

A That is true, yes.

And then you -- you -- you got a -- you weren't able to
 get the esterase D to come out on several tries; is that
 right?

22 | A Three tries, yes, that is correct.

Q Okay. But, aside from that, was there anything else that you couldn't get to come out?

A. I did not get the PGM subtyping, the Gc or transferrin.

I have not attempted to do haptoglobin yet. The first

Topping and and

```
time I attempted the EAP, or, the acid phosphatase, it was inconclusive.

Okay. You couldn't tell between the B or BA?

That is correct.

Or it could have been mixed?

A That's one of the reasons why I'm basing my opinion that
```

7 it could be a mixed sample.
8 Q Okay. Did -- each time, this -- the whole -- it's about

g a seven or eight foot hunk of rope; is that right?

10 A I don't know the exact length, but I -- six to eight feet
11 sounds about right.

12 Q And didn't you -- didn't you -- oh, seven foot eight,
13 approximately?

14 A. Excuse me?

23

24

25

26

15 Q Approximately seven foot eight inches long; is that right?

16 A Yes. It's right in my notes. It says seven foot eight inches long.

18 Q And most of the length of that had stuff on it that looked 19 like it might be blood?

20 A That I do not -- not remember at this time.

21 Q Now, you said that the -- the -- it might be something
22 about the substrate. I mean, why do you say that?

A Because there are problems with some substrates. In particular, one that I know of for sure is blue denim jeans. The nylon rope I found in this case, at least in two incidences, I found some problems with determining

د معیدست پیدستان آدرده سیمارستان ایک

0--57

the enzyme types.

- Q Okay. The -- with the nylon rope, though, certainly if the rope is sitting out on asphalt for -- in the sun for seven or eight hours, that would be -- that, coupled with the possibility of mixed blood, that would be a complete explanation for why you didn't get anything without -- without having to -- to -- to consider the substrate, would it not?
- A. That is an explanation, yes. Until I do tests on the substrate and such like that, I can't eliminate the substrate as a possibility.
- Well, in -- in the -- in the literature, serological literature, are you familiar with a study that was done by Aerospace Corporation in conjunction with Dr. Sparks, that testified at the Kelly-Frye hearing and was published first separately and then in the Journal of Forensic Sciences about the stability of enzymes on various substrates?
- A No, I'm not. Not that I recall. I have seen things like that, but I don't recall whether it was -- it was this specific one.
- Q Well, there was -- let me see. In -- well, you were working for the crime lab in July of 1980; is that right?
- A That is correct, yes.
- And the Journal of Forensic Sciences was, at that point in time, being circulated around amongst the various

criminalists?

A That is true, yes.

2

6

7

8

12

13

14

15

21

22

23

25

26

- 3 Q And you were reading any articles in it that had to do 4 with serology?
- 5 A Or trying to, yes.
 - Q Now, do you recall having --

THE COURT: Excuse me, Counsel.

Mr. Forbush, I have been particularly lenient with Mr. Cooper, you know, letting him read books and newspapers there at the desk. But it jars me a little bit to see you do it, sir.

Go ahead.

- Q (BY MR. NEGUS:) Do you recall having seen an article
 titled The Detectability of Selected Genetic Markers in
 Dried Blood on Aged Stains in the July, 1980, Volume 25 on that?
- 16 A No, sir. Not specifically, no.
- 17 Q Did -- you were familiar basically with the Aerospace 18 study; is that right?
- 19 A I am familiar with some of the work that Brian Wraxall has
 20 done. I'm not familiar with the entire Aerospace study.
 - Q Not the -- not the study -- there was a bunch of different studies done by Aerospace, one was the multisystem study that Brian Wraxall was involved in, right --
- 24 A Yes.
 - Q -- and then there was also another study that's referred to in -- in the -- in all the literature as the study

A

which has been done on -- on -- on the persistence of enzymes over a period of time by the Aerospace Corporation in the '70's, which finally made it actually into print in the journals in 1980?

- A I don't recall specifically, no. I don't -- I don't make it a point of memorizing titles or journals. So I don't know whether this is the Aerospace study that I gather my data from or whether it's something else.
- Q Well, let me just go a little bit further, then. You remember having looked at a series of charts that had to do with testing dry blood on various substrates at various -- under various conditions of relative humidity, a bunch of different ones?
- A I do remember charts, but I don't remember those specific charts there, no.
- Q Well, do you remember seeing charts which showed that nylon -- there was no problem with typing nylon with 26 week periods on a variety of different enzymes, antigens and --
- My -- my basis for wanting to test the rope in particular,
 Mr. Negus, is that the nylons that I have seen have been
 a material type of nylon like you may find in a tent or a
 garment of some sort. As far as the nylon rope itself,
 I do not know how they treat that, if they treat it any
 way differently than they do a garment material. And
 that's why I'm curious as to whether the substrate, and,

in particular, what in the treatment of that nylon may be different and affects the blood differently than a garment type of nylon.

1

2

3

5

6

15

16

17

18

19

20

21

23

24

25

- Q Okay. Well, it's at least, as far as the garment type of nylons are concerned, that's a fairly common substance to -- to do typing from; is that right?
- 7 A I would say no, not in my experience. I don't do it very 8 often.
- Q Don't you get nylons in rape cases or anything?
- 10 A It's mostly -- I do occasionally, but I would say the

 11 more common ones are the cottons off of blue denim jeans,

 12 T-shirts, polyester type of things, dacron, polyesters.

 13 But I wouldn't say that nylons in particular are -- are

 14 common.
 - Q There's -- there's sort of a -- a common knolwedge amongst the serological community which gets discussed at meetings and study groups about the ABO problem with blue denim; is that correct?
 - A. I think there's a general problem with blue denim. I don't know as there's a problem just with ABO.
 - Q Well, is it a problem with ABO most likely that the sizing that they use on the -- on the jeans has chemical structures similar to the -- to the structure of the antigens and that causes problems with the antigens?
 - A I have never heard that explanation, no.
 - Q There's no such -- you haven't -- have you heard people

discussing the -- the great problems they have had getting enzymes off nylons?

A. No.

- There's no information that you have at the present time as to any experiments which have demonstrated either nylon or nylon rope causes any problems typing; is that correct?
- A. That is correct, yes.
 - Q With respect to -- to Item J-9, you -- you weren't able to get any enzymes off that; is that right?
 - A. That is correct, yes.

Excuse me. I have. I -- I got ADA, AK and carbonic anhydrase off of J-9.

- Q Okay. But you weren't able to get any other ones?
- A So far, yes, that is true.

(No omissions.)

Q And you've tried; is that correct?

A Yes. I've tried esterase D, PGM, EAP and peptidase A for enzymes, along with PGM subtyping, Gc and transferrin.

- Q Just based on the -- there was plenty of blood on that J-9 to type, was there not?
- 7 A. I think there was sufficient quantity, yes.
 - No given -- well, did J-9 appear to be consistent with coming from the same piece of rope as A-3, or same type of rope?
 - A So far, yes. I would say yes. It's -- they're both about eighth-inch nylon ropes. They're white, appear to have somewhat similar weaves; however, I -- I believe at this time, or shortly around this time, it's been requested that they be compared physically.
 - Q By you or by somebody else?
 - A Not by myself; by someone else in the crime laboratory.
- 18 Q Who is that?
 - A. I'm not sure, but I believe it's Craig Ogino.
 - Q Given the history of the A-3 compared to J-9, leaving aside the issue of J-9 having been put in a plastic bag for a period of time, if you leave that bag out, you should be more likely to get results from J-9 than A-3; is that correct?
 - A. Given the -- assuming that J-9 remained -- was not outside, for instance, someplace hot for awhile and it

remained where it was until we discovered it, yes, I would agree that it's more likely, if there were similar quantities of blood on A-3 and J-9, to get the enzyme typing from J-9.

Well, if you accept the hypothesis that J-9 and A-3 were somehow involved in the -- in the Ryen homicides, unless you assumed that J-9 had been lying out in the sun for a couple days and somebody came in and planted it in the closet before it was found, just with the -- with the theory of the crime that you're operating on, J-9 should have given better results than A-3; is that right?

MR. KOCHIS: Well, Your Honor, I am going to object.

I think it will call for speculation because there are a
number of factors that can affect the ability of serology,
and those haven't been mentioned.

THE COURT: Counsel, he's got enough expertise to cover them all. I will permit the answer. Overruled,

BY MR. NEGUS; If J-9 was somehow connected with the
 Ryen homicides, it would have been -- from what you
 know, it would have been placed into that closet
 sometime during the night hours of June the 4th-June the
 5th; right?

THE WITNESS: Could you repeat your question?

THE COURT: That wasn't technically the question entirely.

٠.

Ź

2

4

5 6

7

8

9

10 11

12

13

14

15

16

17

18 19

20

21

22 23

24

25

26

MR. NEGUS; I know. I knew that question I wasn't going to be able to rephrase it, so I'm trying to break it down.

THE COURT: I will sustain the objection to that question. That does not depend upon his expertise now.

- BY MR. NEGUS: If one accepts as a hypothetical that the rope was placed in that closet sometime on the night of June the 4th to June the 5th, then it should give better results than A-3, leaving aside the plastic bag; correct?
- A If there are similar quantities of blood, yes.
- Q If there's sufficient quantities of blood to type?
- A. I'd agree, yes.
- Q And there were?
- A. Yes, there were,
- Q Given that difference in history and the fact that you were able to get more off A-3 than you were off J-9, isn't the most reasonable explanation for the failure to get more off J-9 the fact that it was packaged in a plastic bag?
- A That is an explanation. Another good explanation is simple quantity of blood on A-3, as opposed to that on J-9. There is more blood on A-3,
- But if there's enough blood to type, that shouldn't -that shouldn't be determinative; right?
- A That's why I say if there were similar quantities, yes,

0-1540

17a

 but it is possible simply by -- that's why I'm proposing the substrate may be a problem. It not necessarily is, because you're dealing with -- if there's more blood on A-3, then those factors affecting the enzyme typing will have -- be diluted out, so to speak, by the larger quantity of blood; whereas, there's less blood on J-9, then the substrate factors may have effects on the blood on J-9.

- As you sit here right now, there's no fact that you know which is inconsistent with the plastic bag having caused that deterioration; is that correct?
- A | That is fair, yes.
 - However, the -- any -- the hypothesis that a substrate somehow affected J-9 has yet to be proven?
- A That is true, yes.
- Q And, obviously, it may never be proven?
- A. Well, it may be disproven, as far as I know, but it may be proven.
- Q Have you done any experiments on the effect of the Dura-Print process on blood typing?
- A Yes, I have.
- Q What were those experiments?
- The experiments were pretty much preliminary in scope, but they included five blood samples on cloth. I place the blood on there, let them dry overnight, cut the stains in half. I treat it, part of each stain, with

Dura-Print, I left the other half of the stain
untreated, and then I proceeded to do a number of
analyses.

- Q When did you do that?
- 5 A I'm not sure of the date. I believe it was before the beginning of this year.
- 7 Q That -- was it back in November of 1983?
- 8 A That sounds reasonable, but I'd have to take a look at my notes to make sure.
- 10 Q Do you have them here?
- 11 A I believe I have some. This would be -- I did some 12 tests at least in November of '83.
- 13 Q And which runs were those?
- 14 A The one notes that I have here is Group II.
- 15 Q It has a number to it?
- 16 A Well, number 177.
- What further tests do you propose to do to determine
 whether or not Dura-Print affects the blood typing,
 if any?
 - A First of all, if -- if I have the time, I am going to do a series of tests on different substrates, including an ax, various materials, blue denim materials, cotton sheeting, nylon rope is one or nylon fabric, actually, and then metal and glass surfaces.
 - Q In doing those tests, do you propose to do anything to try and distinguish between thin stains and thick stains?

25 26

20

21

22

23

24

.

- A Yes, I do, especially on the glass and metal surfaces.
- Q And how do you do that?
 - A Basically, what I propose to do is take areas of the glass and metal and simply take known quantities of blood and pipette them out onto the areas and spread -- spread them as carefully as I can over the surface, and then do that with various quantities to show different -- or try to get different thicknesses.
 - Q So if you take a -- if you take, you know, a tenth of a milliliter of blood and you spread it out over a large area or a small area, you're going to have different -you just know by pure volume that you're going to get different -- different thicknesses; is that correct?
 - A. Yes.
 - When you did your experiments in November, what Super Glue or Dura-Print process did you use?
 - A I used the -- actually, the people in the Identification
 Bureau did the analysis or did the Super Gluing. I
 think it was Ann Punter -- I'm not sure -- who helped
 me on that, and they used, I believe, the Dura-Print
 product.
 - Q Okay, and how was that set up?
 - A It was set up inside of a fish tank. The chemicals -I believe we used three pads, as they call them, put
 on it, the wet chemical with all the stains inside,
 and let them fume for I think it was probably about

3

5

6

8

9

10

11

12

17

18

19

20

26

1 Q And then what did you do?

A. Then I took those samples out and -- taking the untreated samples, I cut them up into various portions for their analysis, putting them in different tubes for different analyses and placed them in the freezer, waiting for analyses.

- 7 Q And you completed that particular work or no?
 - A I believe I still have some samples that need to be examined in particular for, I think, haptoglobin and a couple of others. I intend pretty much to abandon that right now and -- and start on the longer, more thorough study.
- Q Showing you Exhibit H-361, an article presented at the Southern Association of Criminalists last spring, are you familiar with that?
- 16 A. I have read it.
 - Q And do you see anything critical -- is there -- is there anything wrong with the methodology that those people used in attempting to assess the affects of Super Glue on various -- on blood typing?
- 21 A Not that I can really see, no.
- Q In terms of -- in terms of the affects of things like -like -- like Super Glue or Dura-Print have the same
 activity ingredient in them; is that correct?
- 25 A. They are both cyanoacrylades, yes.
 - Q That which differs about them is the methodology used to

0-1545

3

5 6

7

8

9

10

11

12

13

14

15

16

17 18

19

20

21 22

23

24

25

26

do the -- do the fuming, basically; is that right?

It seems to me that the -- the thing that differs about them is the Super -- or, the Dura-Print, I believe, is both the methyl and the ethyl ester of acrylade, and the Dura -- or, the Super Glue -- I'm not sure. It's one or the other, but it's not both.

- Well, is the Dura-Print, you put them on a little pad and you mix them, and it -- it sort of spontaneously fumes? Is that right?
- That is it, essentially, yes. Sometimes, as reported by people, sometimes it fumes, sometimes they do not.
- Sometimes it doesn't work?
- I'm not really sure. I'm not that familiar with the Super Glue process to tell you whether it does or doesn't -- does not.
- In -- in dealing with the effect of the cya -- the various cyanoacrylic esters, however applied, they can have a cumulative effect to -- to other causes of sample degeneration; is that correct?
 - I -- well, currently I have seen various reports. one seems to indicate that it is a dilution effect, if you will, of the blood. It reduces the activity of the items that you're looking for. Other reports, including one presented at the Monterey meeting of the California Association of Criminalists this last spring, state that there really isn't an effect of the Dura-Print on various

enzyme and antigen factors. There's probably another three reports out that I know of that have either one or the other. It's either a dilution effect, if you will, or activity effect, or it's no effect at all.

- Okay. In terms of those people that say that there is

 an effect on activity and those people who say that

 there isn't, can that partly be a result of just different

 methodologies being used?
- A Either the -- different methodology or the skill of the technician or different -- well, just different experimental procedures.
- Right. One possible explanation is that if you have a strong, robust sample with sufficient quantity or a thick sample or something, that the Dura-Print will have no observable effect, but on a thinner or more aged or partially heated sample, it can have an effect. Is that a reasonable hypothesis?
- Well, I would pretty much leave out the more aged or partially heated but include the thinner as the -- one of the things that I want to investigate, the thickness of the sample as to whether it has any bearing on the ability to get enzymes after Dura-Print.
- Q Okay. But if -- in your -- if your hypothesis that being out on the asphalt did have some effect, for example, on the nylon rope or if you were correct, that the substrate had some effect on the nylon rope and so you have

a general diminishing effect, could the Dura-Print be cumulative to that?

Well, again, I think you're comparing two different

4

things. If you're -- if you're looking at -- that's

5

one of the reasons I wanted to do the study, also. If there's no effect, as some of the papers indicate, then

7

I would say no, there wouldn't be a cumulative effect.

8

If there is an effect as a dilution type of effect, then

9

I would say yes, that it would be a cumulative type of

10

11

12

13

14

effect.

strong samples?

is that right?

Q Do you recall enough about the methodologies of the paper other than the one that I -- that I presented you there to say whether or not the methodologies of those who got no effect was sufficiently fine to -- to -- to rule out the possibility that they just used really

15 16

17

18

A. I believe, at least in the one in Orange County, they tried to use different varying thicknesses. As to whether they were thinner or thicker or whatever than this study that you just presented me, I don't know.

19

21

22

Q. Okay. Well, if -- if the -- if the problem is -- well, basically the -- the -- the -- what the cyanoacrylic does is forms sort of a plastic coating around whatever it comes in contact with, is a very thin plastic coating;

23 24

A I would say yes, just based on what I know about

25

26

cyanoacrylades. They're Super Glue.

3

And what -- what -- they -- what -- they -- the reason why that they are effective as far as fingerprints is concerned is that they are particularly susceptible to forming plastic coating around amino acids; is that right?

5

A. I can't say amino acids, but in particular, something in the fingerprints.

7

Q Okay. You don't know whether it's amino acids or something else?

9

A. No, I do not.

11

Q Okay. There are amino acids which are secreted when you touch something, right?

12 13

A Some people do, yes. I would say most people do not.

At least to an appreciable amount.

14 15

16

Q Well, is one possibility that the effect, if there is one, of Dura-Print on blood, that this plastic coating around the protein affects its electrophoretic mobility so it just doesn't move?

17 18

19

20

A. Using your last statement as the answer to my question, so it is a possibility that makes it so that it just doesn't move, yes.

21

22

23

Q Is it possible that that effect could be cumulative to effects of age or heat without necessarily depending upon thickness?

24

A. I think there's a degree that you have to look at. I
think you have to look at the thickness, but I -- I would

agree with that, it could be cumulative.

Q So there's -- okay. So there's different independent variables, thickness is one possible independent variable, prior history of sample is another?

A Yes, sir.

THE COURT: All right. We'll break it at this time. 9:30 tomorrow. Thank you.

(Whereupon the proceedings were adjourned at 3:58 p.m.)