SUPERIOR COURT OF THE DISTRICT OF COLUMBIA

CRIMINAL DIVISION - FELONY BRANCH

- - - - - - - - - - - - - -x
UNITED STATES OF AMERICA, :
:
Plaintiff, :
:
v. : Criminal Action No.
: F-7330-99
IDA CHASE, :
:
Defendant. :
- - - - - - - - - - - - - -x

Washington, D.C.

Monday, January 31, 2005

The above-entitled action came on for a Jury Trial before the Honorable RHONDA REID-WINSTON, Associate Judge, in Courtroom Number 302, commencing at approximately 10:00 a.m.

THIS TRANSCRIPT REPRESENTS THE PRODUCT OF AN OFFICIAL REPORTER, ENGAGED BY THE COURT, WHO HAS PERSONALLY CERTIFIED THAT IT REPRESENTS THE TESTIMONY AND RECORDS OF TESTIMONY AND PROCEEDINGS IN THE CASE AS RECORDED.

APPEARANCES:

On behalf of the Government:
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KIM HERD, Esquire
Assistant United States Attorney

On behalf of the Defendant:
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Washington, D.C.

JACQUELINE L. WOOD,
Official Court Reporter Telephone: 879-1795

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WITNESSES

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On behalf of the Government:			
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table?

A Yes, we do.

Q Dr. Fisher, on cross you testified that you did not examine the hair from the Q-14 towel; is that correct?

A That's correct.

Q Did you examine a hair from the Q13 towel?

A The Q13.1 towel, yes. The Q13 towel, that hair has been designated Q13.1.

Q And that's the hair that you examined?

A Yes.

MS. HERD: No further questions, Your Honor.

THE COURT: May the witness be excused?

MS. HERD: Yes, Your Honor.

THE COURT: Ma'am, you maybe excused. Please don't discuss your testimony with anyone else.

(Witness excused.)

Whereupon,

FRANK SAMUEL BAECHTEL,

having been called as a witness by the Government, after having been duly sworn by the Deputy Clerk, was examined and testified as follows:

DIRECT EXAMINATION

BY MS. HERD:

Q Good morning.

A Good morning.

Q Would please tell us your name and spell it for us?

A My full name is Frank Samuel Baechtel. And Baechtel is spelled B-A-E-C-H-T-E-L.

Q Sir, are you currently employed?

A Yes, ma'am.

Q Where are you employed?

A By the FBI, and in particular the FBI laboratory.

Q How long have you been employed with the FBI?

A This July will start my 23rd year.

Q How long have you been employed with the FBI laboratory?

A This July will be 23 years. So I'm in my 22nd now.

Q Are you assigned to a certain section of the FBI laboratory?

A Yes. I'm assigned to DNA analysis unit one, which is responsible for nuclear DNA typing.

Q What is your title in DNA analysis one?

A I'm a biologist and function as a forensic

examiner.

Q How long have you been a biologist, slash, forensic examiner?

A For 10 years.

Q What are your job duties in that capacity?

A It's being my responsibility to manage certain forensic examinations particular to biological information evidence, mainly serological examination, which are tests to determine if something is blood or semen or saliva and then DNA profiling on nuclear DNA that might arise from finding those -- fluids.

Q Is your responsibility to conduct nuclear DNA analysis on cases?

A Yes.

Q Approximately how many nuclear DNA analyses have you conducted during the course of your career?

A Well, in the 10 years I've been in the case working unit, I've had 700 cases assigned to me. And each one of those cases -- if each one had DNA profiling, I would imagine that most of them have, there's at least five or so samples per case at a bare minimum, so we're talking several thousand.

And that doesn't include the samples that I would have dealt with before I joined the case

working unit. I was part of the research unit.

Q When you were in the research unit did you conduct DNA analysis as well?

A Yes, ma'am.

Q Sir, can you describe for us your formal education?

A I have a bachelor's degree in biology, chemistry, a masters degree and Ph.D in biochemistry.

Q Were you required to undergo specialized training for your role as a forensic examiner in the DNA one unit?

A Yes, ma'am.

Q Can you describe that for us, please?

A First of all, I had to learn the administrative aspects of being an examiner. I had to learn the serological techniques that were in use at the time. I wasn't familiar with all of those when I joined that unit. And also, of course, the DNA as it was performed in that unit at the time, although I was part of the team that actually developed the methods used by our lab. So I had to make up in that regard.

And also since then I have taken additional coursework in molecular biology,

statistics and crime scene search recovering methods.

Q Dr. Baechtel, do you have any publications in the field of forensic DNA?

A Yes, ma'am.

Q Approximately how many?

A 20 some, 21, 22.

Q Have you testified previously as an expert in the field of nuclear DNA analysis?

A Yes.

Q Approximately how many times?

A This will be number 67.

Q Have those testimonies been in federal, state and local courts?

A Yes. Across the U.S.

MS. HERD: Your Honor, at this time the government proffers Dr. Baechtel as an expert in nuclear DNA analysis.

THE COURT: Any objection?

MS. FLAUM: No objection.

THE COURT: Ladies and gentlemen, the Court will receive this witness as an expert in nuclear DNA analysis. And the instruction that I have previously given you on how to treat the testimony of an expert applies to this witness as

well.

BY MS. HERD:

Q Were you asked to conduct nuclear DNA analysis of items of evidence and known samples in the case presently before the court?

A Yes, ma'am.

Q Dr. Baechtel, I'm showing you Government's Exhibit 247. Would you please take a look at that and tell me if you recognize it?

(Government's Exhibit No. 247 was marked for identification.)

THE WITNESS: Well, I recognize the laboratory number as well as the Q number that's been assigned to it.

BY MS. HERD:

Q Was there a Q number assigned to the item of evidence that you were requested to analyze?

A Yes, ma'am.

Q What Q number was that.

A What was submitted was submitted as Q35 and then there was also something else.

Q I'm showing you Government's Exhibit 27. Can you take a look at that and tell me what that is?

(Government's Exhibit No. 27 was

marked for identification.)

THE WITNESS: Yes. This is also of the same lab number and this also says Q35 on it. And this one also says Q35-1.

BY MS. HERD:

Q And what is the difference between Q35-1 and Q35?

A One is -- do you want me to tell them exactly what it is or -- one is a derivative of the other.

MS. HERD: At this time, Your Honor, the government moves Government Exhibit 27 and 247 into evidence.

THE COURT: Any objections?

MS. FLAUM: No objection.

THE COURT: They will be received.

(Government's Exhibit Nos. 27 and 247 were received in evidence.)

BY MS. HERD:

Q Dr. Baechtel, you just testified that one is a derivative of the other. What do you mean by that?

A Well, one of the items is a fingernail, and one of the items is the remainder of DNA that was originally extracted from that fingernail.

Q Had the fingernail previously been tested by another laboratory?

A Yes, ma'am.

Q Did you conduct DNA testing on the fingernail itself or on the extract from the fingernail from another laboratory?

A Well, actually we tried both. We tried to recover any DNA that might be remaining with the fingernail itself, and we recovered an undetectable amount. Which is not surprising since they had already been tested by another laboratory.

The other item, Q35-1, was the tube which held any remaining DNA that had been extracted from that fingernail by the previous laboratory.

I would point out that when that tube of small amount of material was received in our laboratory, any liquid in it had evaporated so the tube was dry. So it was necessary for us to add a liquid to it to redissolve any DNA that might be remaining dried on the walls of the tube of the analysis.

Q Were you able to conduct a DNA analysis of that remaining extract of the tube?

A Yes, ma'am.

Q What type of DNA analysis did you conduct

on that evidentiary item?

A It's called short tandem repeat DNA profiling, which includes a process of amplifying the small amount of DNA that's present and then determining what DNA types result from that amplification.

Q Did you conduct a full short tandem repeat analysis of what the FBI label Q35.1?

A What do you mean by --

Q Or Q35-1.

A 35-1. Yes. We attempted using one of the two systems that we utilize in the laboratory to obtain a full profile. However, a full profile was not obtained.

Q What system did you use?

A We used one that is called cofiler.

Q Sir, did you also conduct STR analysis of known blood samples in this case?

A Yes, ma'am.

Q Sir, I'm showing you Government's Exhibits 248 and 8. Can you take a look at these and tell me if you recognize those?

(Government's Exhibits Nos. 248 and 8 were marked for identification.)

THE WITNESS: By the FBI number and the K number on the envelope, yes, ma'am. I'm familiar with those numbers. The numbers and the K1.

BY MS. HERD:

Q What K number is on there?

A This is K1, none sample number one.

Q Were you asked to conduct nuclear DNA analysis of a known item called K1?

A Yes.

Q Does Government's Exhibit 8 and Government's Exhibit 248 consist of the by-product of that analysis?

A Yes. It says victim known sample extraction, K1.

MS. HERD: Your Honor, at this time the government moves 248 into evidence.

THE COURT: Any objection?

MS. FLAUM: No objection.

THE COURT: It will be received.

(Government's Exhibit No. 248 was received in evidence.)

BY MS. HERD:

Q Also, Dr. Baechtel, I'm showing you Government's Exhibits 249 and 250. Can you take a look at that and tell me if you recognize that?

(Government's Exhibits Nos. 249 and 250 were marked for identification.)

THE WITNESS: Yes. Once again, this is the appropriate FBI lab number for this case, FBI lab number. And This is K29.2, which is the other known that I analyzed.

MS. HERD: At this time, the government also moves Government's Exhibit 8 into evidence.

THE COURT: Any objection?

MS. FLAUM: No.

THE COURT: It will be received.

(Government's Exhibit No. 8 was received into evidence.)

MS. HERD: Also, Your Honor, the government moves Government Exhibits 249 and 250 into evidence.

THE COURT: Any objection to those?

MS. FLAUM: No, Your Honor.

(Government Exhibit Nos. 249 and 250 were received into evidence.)

BY MS. HERD:

Q Dr. Baechtel, what type of DNA analysis did you conduct on the sample that was labeled K1 and the sample that was labeled Q29.2.

A The same, STR analysis of what is known as -- as the cofiler typing system.

Q Is there another system other than cofiler that is used in STR analysis?

A Yes. We also use another system that is called profiler plus ID.

Q In this case was there a reason that the samples were subjected to cofiler?

A Not a deliberate reason, no, ma'am.

Q What do you mean by that?

A Ordinarily, although it is not required by the protocol, ordinarily the sample is first amplified at the profiler plus ID typing locations. And that is because that system has nine different DNA -- well, actually 10 if you count the gender or sex typing. It has 10 different locations at which we can determine what a person's DNA profile is.

In comparison or in contrast, the cofiler system, while it has a number of new locations, it has four new locations in which we can type, it also has three locations which are common also to the profiler system.

We would ordinarily do the profiler plus first. And quite frankly, my biologist who works with me typed this limited sample first using the

cofiler system instead of the profiler plus. We are fortunate, however, in that DNA types in the cofiler and profiler system are the same at two, three different locations. The data is usable.

Q Was data generated as a result of the cofiler analysis conducted on the Q35-1 evidence item and the K1 and K29.2 known samples?

A Yes, ma'am.

Q Dr. Baechtel, I'm showing you Government Exhibit 254. Please take a look at this and tell me if you recognize this?

(Government's Exhibit No. 254 was marked for identification.)

THE WITNESS: I do. That's part of my case file notes.

BY MS. HERD:

Q Is it a chart?

A Yes. It's a chart which on the left side you will see lists the sample numbers and in successive columns across it, it lists the different locations in DNA which we test in this cofiler system.

Q Does this exhibit consist of a blowup of a chart that you prepared in reference to the items of evidence you have been testifying about this

morning?

A Yes, ma'am.

Q Would it assist you to use this chart in explaining your results to the jury?

A Certainly.

MS. HERD: Your Honor, at this time the government moves 254 into evidence.

THE COURT: Any objection?

MS. FLAUM: No objection.

THE COURT: Received.

(Government's Exhibit No. 254 was received into evidence.)

BY MS. HERD:

Q Sir, I would like to show you Government 255. Would you have a look at that and tell me if you recognize that?

(Government's Exhibit No. 255 was marked for identification.)

THE WITNESS: I do.

BY MS. HERD:

Q What is this?

A This is the table that's at the end of my official report that was, released, which shows the DNA types at the cofiler locations for the two known samples, K1 and K29.2.

Q Did you prepare this table?

A Yes.

Q Is this an enlargement of the table?

A It is.

Q Would it assist you in explaining your conclusions to the jury to refer to this table?

A Yes, ma'am.

MS. HERD: Your Honor, at this time the government moves 255 into evidence.

THE COURT: Any objection?

MS. FLAUM: No objection.

(Government's Exhibit No. 255 was received into evidence.)

MS. HERD: Your Honor, may the witness come down from the witness stand to explain this to the jury?

THE COURT: Yes.

BY MS. HERD:

Q Dr. Baechtel, I would like you to look at Government Exhibit 254. And in using it, explain your conclusions to the jury.

A First of all, I mentioned in this column are the samples that were subjected to analysis. For example, here's Q35, which is the redissolved material from the tube from the analysis conducted

by the previous laboratory. That would have been the DNA that was recovered from that fingernail.

QB, that's a control, that's a blank. That tells us that our chemicals don't have any contaminants in them.

The next sample, K1, is the one known sample that we have been chatting about.

K29.2 is the other known.

KB, these are also controls that tell us the chemicals we use to prepare the known samples.

This -- FSB is a positive control. That's a sample that is amplified and typed through every case. And, of course, we know what its type is. And its typed to make certain that the typing procedure is working properly. And finally, this is another type of control. This is a negative control that tells us that -- let's us know if there is any contamination in the chemicals used for amplification.

Now, each one of these columns represent a different location in a person's DNA. These locations are in every one of our DNA. Everyone of us has some kind of genetic information at these locations.

The first thing I am going to draw your

attention to is this column in the middle which is abbreviated "anla" evidence, anlagen. That's a sex and gender typing notation. By typing of that location, we can determine whether the donor of that sample is a male or a female.

If they are a female, only an X DNA type will appear. If they are a male, an X as well as a Y will appear.

For example, you will notice in the positive control, who is a male, there is an X and a Y. You will notice for K1 an X and a Y, that person is a male. K29.2, also an X, Y is apparent, and that person is a male.

Now, interestingly enough, for Q35 the extract from the fingernail clipping there is only an X. That person, the donor of that DNA is a female.

The only other location for this sample where you see numbers is this first one called D3S1358. You will see the numbers 15 and 16 in parentheses. 15 and 16 are the two DNA types that I saw at that location. And the fact they have parentheses around them means that the strength or intensity of that signal was very low. In fact, it's low that we consider it inconclusive to match

someone to that profile.

The fact that it's inconclusive because its intensity is low does not prevent me from excluding someone as a contributor. So that's real important. If it is above a certain level and the DNA types are the same as someone, we can use that information to say that person is a possible contributor.

On the other hand, even though they are below that level, I can still use that information to say that someone could not possibly be a contributor.

And you will notice for the rest of these locations there are no known numbers. That's because I got no data. There was nothing apparent. This sample is as lost through these types through degradation, in my opinion.

Q What do you mean by "degradation"?

A DNA is like any -- it's a biological assessment. It's subject over time to degradation. The way I like to explain it, DNA as we recover it, comes in strands. Over time those strands can just break up. As they began to break up, you begin to lose the ability to detect some of these locations.

It's like when you buy a box of spaghetti

and bring it home from the store, they are all nice long pieces. After you have been in and out of the cupboard with them a few times, you start to get a few crumbles in there, don't you. Well, DNA is sort of like that. After a period of time it will begin to break down.

The reason why we obtain at least some information here, although it is inconclusive, is because this location in DNA and the type we get from anlagen is a very small piece. So in spite of the fact that the DNA is breaking down, there was enough left intact that I could get information from those locations.

Q Dr. Baechtel, based on the type that you obtained for K29.2 and K1, can you make any determinations as to whether or not either of these individuals could be a contributor to the Q35 evidentiary item?

A Neither individual could be. Number one, because both of these individuals are male, and this DNA sample is from a female.

And number two, even though these numbers are inconclusive, they can be used for exclusion. What I saw were types 15 and 16, this individual was a 16, 18. The numbers are different that the person

can contribute. These numbers for this person are 14 and 16, once again, an exclusion.

Q Sir, if an individual were a male, could he be a contributor of the Q35 evidentiary item?

A No, ma'am.

Q And sir, assuming the defendant had a DNA type at this particular location, D3S1358 of 15, 17 would she be included or excluded?

A That would be an exclusion based on that location.

Q Is an exclusion at one location all that is required from an exclusion from the sample?

A Yes.

Q Sir, also showing you Government Exhibit 255. Can you explain to the jury what this is?

A This is actually from my case notes -- this, actually, is from the report where I included the complete cofiler DNA type from both individuals, the donors of K1 and K29.2.

Q Is the same information depicted on Government's Exhibit 254?

A Yes.

Q Is 255 a different format?

A Yes. This is in my case note. And from these I generate a final report. These two columns

or rows are similar to those two rows.

Q Thank you, sir.

Sir, I would also like to show you what is already in evidence as Government Exhibit 227. Please take a look at that.

I would direct your attention to the profiler result for specimen No. 213.1. Can you take a look at that and indicate to me whether the contributor of K1 and K29.2 in Government Exhibit 255 -- let's start with K1, whether or not K1 would be included or excluded as a contributor of the Q13.1 specimen?

A Excluded.

Q Why is that?

A Because K1 is a 16, 18 and this particular sample shows a 16, 16. And there is no 18 here, therefore, it's an exclusion.

Q Sir, what about with respect to K29.2. Can you please take a look at the cofiler result you obtained for that known sample and tell me whether in comparing it with Q13.1 pubic hair, that is or is not a possible contributor?

A This individual is also excluded because this individual is a 14, 16, and there is no 14 -- type here.

Q Thank you, sir. You may resume the stand.

One more question, sir.

I'm showing you Government's Exhibit 228 and asking you to look at the known profile in 228 which is already evidence, asking you to look at the K1 Buckman profile result and compare it to the Q35 sample. Would that person in K1 -- be included or excluded?

A This person would also be excluded. This person 15, 17, whereas the top here is a 15, 16. So this second type is wrong, so that person also is excluded.

Q Thank you, sir.

Sir, once you were done with the evidence in this case, to wit, Government's Exhibits 249, 258, 27, 247 and 248, what did you do with these items?

A Those items were returned to our evidence processing unit, who in turn returns them to the Metropolitan Police Department.

MS. HERD: Thank you. Court's indulgence.

I have no further questions.

THE COURT: Cross examination.

CROSS EXAMINATION

BY MS. FLAUM:

Q Good morning, Doctor. You indicated a couple times that a previous laboratory had conducted examinations on the Q35 fingernail prior to it coming into your custody; correct?

A Yes.

Q And that laboratory was a laboratory called Lab Core; is that correct?

A That's not the lab I am aware of. No, ma'am.

Q Is the laboratory called Cellmark?

A Yes.

Q And the degradation that you said you observed with respect to the Q35 fingernail, the fact that some of the DNA was broken into pieces, that degradation is consistent with another lab having conducted nuclear DNA testing on that fingernail; correct?

A Well, just because another lab does an analysis doesn't automatically mean that there would be degradation. However, I believe that examination by the other lab was done some months ago, and then the materials were returned to Metropolitan Police. And over time and evaporation, the degradation, in my opinion, occurred.

Q Because of the degradation, you were not

able to generate a complete DNA profile of the fingernail, but you were able to observe the genes at the gender location and also at that one other location, that D3S1358 location?

A That's right.

Q So, in other words, while you were not able to obtain a full 13-point DNA profile, you were able to observe the genes at one of those 13 points; correct?

A Well, as you said, two of those points both the gender as well as the STR location, yes.

Q And as you have testified, a partial profile like that can't be used to declare a match between a piece of evidence and a known contributor but can be used to concluded that a person could not have contributed that evidence; correct?

A Not quite. Can I clarify?

Q Please.

A What I said was, first of all, a partial profile can be used to match to an individual if the intensity of the DNA signal after the amplification is high enough at any location that we are going to say matches.

What I was trying to tell you was even though the intensity of the signal at this one

location, D3, is below that level, I can't use that information to match to someone, but that information is absolutely valuable for exclusion. And the person would be excluded because they are not the same genetic type.

Q With respect to the DNA that you were able to observe at the D3S1358 location, you observed the DNA types there of 15, 16; is that correct?

A Yes, ma'am.

Q And are you familiar, Dr. Baechtel, with the DNA profile of Ida Chase at that particular location?

A No, ma'am, I'm not.

Q Let me ask it hypothetically, then. If you were to learn that Ida Chase's DNA type at the D3S1358 location was not 15, 16, what would that mean in terms of whether or not Ida Chase could have been the contributor of that Q35 fingernail?

A Based on what you told me I would exclude Ida Chase also as the contributor of that DNA.

Q You also indicated that you examined the DNA results with respect to the nuclear DNA typing of a hair designated Q13-1; correct?

A I made that comparison right here with Ms. Herd.

Q With respect to the Q13.1 hair, that's a full DNA profile; correct?

A I recall it was. Yes.

Q What you just did for this jury was compare that DNA profile, Q13.1, that hair to DNA profile from Julius Adelman and also a DNA profile of a man by the name of Douglas Murray; correct?

A Yes, ma'am.

Q What you told us is that the DNA profiles of that two people, the DNA profile of that hair were different; correct?

A They are.

Q The FBI also previously determined the DNA profile of Charles Chase; correct?

A I believe that was also shown for the first time.

Q And just to be clear, the DNA from file of Charles Chase is also different than the DNA profile of the Q13.1 hair; correct?

A Yes.

Q In every day terms it means that neither Charles Chase nor Julius Adelman nor Douglas Murray could have contributed that Q 13.1 hair; correct?

A That's what it means.

Q What we do know, however, about the source

of that Q13.1 hair is that that person was a male, not a female; correct?

A I didn't see any gender marker. She only had the STR types. I don't --

Q If the anlagen marker for the Q13.1 hair indicated that the donor of the Q-3.1 hair was male, that would mean a man not a woman had to have contributed that hair; is that correct?

A That's correct.

Q And my final question, Doctor, is with respect to the examination that you conducted on that Q35 fingernail from the decedent's vehicle, when did you conduct that examination?

A That was done in November. I'm sorry it was done in December.

Q December of?

A Of this year, 2004.

Q When were you requested to do that examination?

A That case came in to us on November the 26th of last year, 2004.

MS. FLAUM: Nothing further. Thank you.

THE COURT: Redirect?

MS. HERD: No questions, Your Honor.

THE COURT: May the witness be excused?

MS. HERD: Yes, Your Honor.

THE COURT: Sir, you maybe excused. Please don't discuss your testimony with anyone else.

(Witness excused.)

(Whereupon, other proceedings were had but are not transcribed herein.)

END OF EXCERPT - CONSTANCE FISHER AND FRANK BAECHTEL TESTIMONY ONLY.

CERTIFICATE OF REPORTER

I, JACQUELINE L. WOOD, an Official Court Reporter for the Superior Court of the District of Columbia, do hereby certify that I reported by machine shorthand, in my official capacity, the proceedings had and testimony adduced, upon the Jury Trial in the case of the UNITED STATES OF AMERICA v. IDA CHASE, Criminal Action No. F-7330-99, in said Court on Monday, January 31, 2005.

I further certify that the foregoing 63 pages constitute the official transcript of said proceedings, as taken from said shorthand notes, my computer realtime display, together with the audiotape recordings of said proceedings.

In witness whereof, I have hereby subscribed my name, this 22nd day of April 2005.

Jacqueline L. Wood

OFFICIAL COURT REPORTER