



1 VICTORVILLE, CALIFORNIA; JANUARY 25, 2011;  
2 DEPARTMENT NO. V-2 HONORABLE JOHN M. TOMBERLIN, JUDGE  
3 P.M. SESSION

4 (Appearances as heretofore mentioned.)

5 (Shawna Manning, Official Reporter, CSR No. 12827.)

6 -oOo-

7 (Whereupon the following proceedings were held in open  
8 court in the presence of the jury:)

9 THE BAILIFF: Remain seated. Come to order.

10 Court is now in session.

11 THE COURT: Good afternoon, ladies and  
12 gentlemen. Back on the record in the case of People  
13 of the State of California versus John Henry Yablonsky  
14 who is here with his attorney, David Sanders.  
15 John Thomas is here along with his investigating  
16 officer, Detective Alexander. On the witness stand is  
17 Monica Siewertsen, and she's still under oath in  
18 direct examination.

19 You may continue.

20 MR. THOMAS: Thank you, your Honor.

21 BY MR. THOMAS:

22 Q Before the lunch hour, we were talking about  
23 the analysis that was done on Item A dash 11.

24 Do you recall that?

25 A Yes.

26 Q When was that actual analysis done?

27 A Between January 7th and January 13th of 2003,  
28 referring to the front page of my report.

1 Q Okay. You said there was an analysis done on  
2 the non-sperm fraction and an analysis done on the sperm  
3 fraction; is that correct?

4 A They would be done at the same time.

5 Q Then as far as your analysis goes, you were  
6 able to obtain a full DNA profile as far as those 13  
7 markers are concerned on both the non-sperm fraction and  
8 the sperm fraction?

9 A That's correct.

10 Q I'm going to show you what's been marked  
11 Exhibit 44.

12 May I approach the witness?

13 THE COURT: You may.

14 BY MR. THOMAS:

15 Q Showing you Exhibit 44, and I've put it up on  
16 the screen there.

17 If you can, explain to the jury what exactly  
18 Exhibit 44 is.

19 (Whereupon Exhibit 44 was marked  
20 for identification.)

21 THE WITNESS: This is the table, which is  
22 included in my report. It's the numerical results  
23 regarding the DNA typing profiles I obtained from the  
24 non-sperm and sperm fractions from the vaginal swab.  
25 The left-hand column is the actual item that was  
26 examined. The top is the non-sperm and the bottom  
27 here is the sperm fraction.

28 There's two separate tables. During this

1 analysis, we attempt to look at the 13 areas along the  
2 DNA molecule and the sex determining chromosome. We do  
3 that using two commercially available kits that look at  
4 nine and seven locations combined. Three areas; this  
5 area here, which is the area on the sex determining  
6 chromosomes; this area here on Chromosome Number 7, and  
7 the area on Chromosome Number 3, which is, I believe,  
8 here if I can see correctly and up here on the top.

9 Those areas are the same areas, and they're  
10 looked at using both kits. That serves as an internal  
11 quality control to ensure that the same sample is being  
12 analyzed in both situations. We expect the same  
13 results. The first row at the top contains those  
14 addresses on the DNA molecule that I mentioned earlier.  
15 Those are the particular areas that we're looking at.

16 The first actual result area is the area on the  
17 X and the Y chromosome. As I mentioned earlier, an area  
18 where it has an X means that that particular biological  
19 sample was donated by a female, and the area that has  
20 the X and Y, that particular sample was donated by a  
21 male.

22 The next area as we look at it, basically once  
23 we've determined the DNA typing profile for the  
24 questioned samples, we put that in this particular table  
25 and that would be a record of the actual DNA typing  
26 profile that was obtained.

27 Q Then as far as the particular profile or  
28 profiles that you obtained from this particular sample,

1 how would you go about excluding certain individuals or  
2 including certain individuals?

3 A Often -- most of the time in forensic  
4 situations, DNA analysis is a comparative process. I  
5 can't obtain a DNA typing profile and say, I know this  
6 profile came from this individual just by obtaining the  
7 profile. I have questioned samples, which I have DNA  
8 profiles from, and I have reference samples, which I  
9 obtain DNA typing profiles from. A reference sample is  
10 a sample that's collected from a particular individual,  
11 so we know the source of that sample.

12 Often in forensic situations, you would have  
13 the DNA typing profile that you obtained from a  
14 questioned sample. You would have a DNA profile that  
15 you obtained from a reference sample or known sample,  
16 and you would compare the two results.

17 If we, for discussion sake, say that the first  
18 line here is from a questioned sample and the second  
19 line is from a reference sample, the result at the first  
20 area is -- I can't see that. Is a 12, 15. The result  
21 for our hypothetical reference sample is a 12. A 12 is  
22 different than a 12, 15. Remember the 12 refers to a  
23 12, 12. That particular individual, if that were a  
24 reference sample, would have inherited two copies of  
25 that one result.

26 Just using this one area if hypothetically this  
27 were a questioned sample and a reference sample, I would  
28 be able to exclude this individual as being the possible

1 source of this questioned sample because the 12, 15 is  
2 not the same as 12.

3 If, coincidentally, that result was the same, I  
4 would then move to the next area and compare the results  
5 from the questioned sample with the results from the  
6 reference sample.

7 In this case, I actually just have the one  
8 questioned sample, which was artificially divided into  
9 two in an attempt to obtain the female component of that  
10 fraction and the male component of that fraction.

11 Q As far as the first row of numbers, that sample  
12 would that be considered a reference sample for  
13 Rita Cobb's DNA?

14 A In this particular case, this sample is a  
15 vaginal swab, and in that situation a female component  
16 would be vaginal cells taken from the vaginal lining.  
17 That would be considered a reference sample from that  
18 individual.

19 Q And then I notice in one of the columns on the  
20 second column, going across under, I believe, it's  
21 D371358, there's a 15 coma 18 and then underneath it  
22 says with very weak 17.

23 What, if anything, does that indicate to you?

24 A When we have a single source sample, a sample  
25 that comes from one individual, we would not expect to  
26 see more than two results because we only have two  
27 copies of each of the areas that we look at. In this  
28 situation, I actually have three results. That

1 indicates to me that this was more than one person  
2 contributing to that DNA typing result.

3 In this particular situation, remember that  
4 this is one sample. It was a vaginal swab that was  
5 artificially separated into two components in an attempt  
6 to obtain a female profile and a male profile. The  
7 15, 18 is the stronger result at this particular  
8 location. That would be consistent with being the major  
9 contributor of that -- that particular result, which  
10 would go along with the rest of the results that were  
11 obtained from that faction.

12 The weak 17 is consistent with the female  
13 portion of that sample, which is not unexpected. If we  
14 have one sample that we artificially divided into two,  
15 it's just an enrichment process where that's not an  
16 absolute. All of the female cells don't have to be  
17 present in the one fraction, and all the male cells  
18 don't have to be present in the second fraction.

19 In this particular situation, there is a very  
20 good separation of the two contributors. At this one  
21 location, there is a small amount of female DNA that's  
22 present in that sperm fraction of the sample.

23 Q Then that sperm fraction of the sample would be  
24 the unknown male donor?

25 A That's correct.

26 Q And then did you do some sort of statistical  
27 analysis as to that particular male profile and how  
28 often we can expect that to show up in random

1 individuals?

2 A Yes. As I had mentioned earlier, once we  
3 obtain a DNA typing result or a DNA typing profile, the  
4 next step would be to give an indication of how common  
5 or rare that particular profile is in the population.  
6 This particular profile, the one that the major  
7 component in this particular location and the rest of  
8 the results of the sperm fraction of that vaginal swab,  
9 are from a single male donor. That profile can be  
10 expected to occur at random among the following number  
11 of unrelated individuals.

12 We indicate or do a statistical estimated  
13 frequency of occurrence among three population groups,  
14 Caucasians, African Americans, and Southwestern  
15 Hispanics. In all three of those groups, that profile  
16 would be found on less than 1 in 6 billion individuals.

17 The reason we use three different population  
18 groups is those are the three most common groups that  
19 are present in the random population. It's to show that  
20 that particular profile is a rare profile in all  
21 populations. It's not very common in one population and  
22 very rare in another. It's very rare in all three of  
23 those population groups.

24 Q Okay. Then as far as the one-in-six-billion  
25 figure, that -- that's not the real number that you  
26 actually calculated; is it?

27 A No, it's not.

28 Q Going to the Caucasian males, what was the

1 actual number?

2 A 1.9 times 10 to the 14th. A billion is a 1  
3 with nine zeros behind it. This particular value would  
4 be 1.9 with 14 zeros. So it is more rare than the 1 in  
5 6 billion. The reason that I'm giving you the number of  
6 6 billion is because the approximate world's population  
7 is between 6 and 7 billion. It's sort of a reference  
8 point.

9 Q Okay. As far as the statistical occurrence at  
10 random of this particular DNA profile, you would have to  
11 have several earths in order to come up with somebody at  
12 random that would have this particular profile?

13 A You would not expect -- it's possible that you  
14 could find someone else in the world's population that  
15 had this profile. It's also possible that you could  
16 sample ten earth's populations and not find it. It's a  
17 very rare DNA typing profile. It's a rare event.

18 Q Then as far as the calculations regarding this  
19 profile and your expected occurrence in African American  
20 males, what was that calculation?

21 A That was calculated as 1.1 times 10 to the  
22 16th. That would be a one with 16 zeros behind it.

23 Q That's even more rare in the African American  
24 population?

25 A Potentially, but, again, this is not a  
26 calculation to determine which population group it may  
27 have come from. It's just there -- the calculation is  
28 to show that this is a rare profile in all the

1 population groups.

2           Every time you sample a group of people in  
3 order to determine an estimated frequency of occurrence,  
4 if you come up with a particular result and then you do  
5 the exact same samples over again with another group,  
6 you're going to get slightly different results with that  
7 group. The same if you were to take a dice and you were  
8 to throw it 50 times and record how often you saw each  
9 one. If you were to do that same experiment over again,  
10 you would not get the exact same results. You'd get  
11 very close to the same results, but you wouldn't get the  
12 same results.

13           These calculations, there's not an exact  
14 difference between population groups. It's to show that  
15 it's a rare event in all population groups.

16           Q     Then as far as the population group of  
17 Southwestern Hispanic males, what was the calculation  
18 that you came up with?

19           A     That value was 3.2 times 10 to the 13th. So  
20 that would be a three with 13 zeros behind it.

21           Q     How many zeros do you need to get into the  
22 trillions?

23           A     Excuse my hesitation. I'm Canadian and  
24 trillions, billions are different in America than in  
25 Canada. A billion is one with nine zeros behind it. A  
26 trillion is a one with 12 zeros behind it.

27           THE COURT:   Would you say that again? In  
28 Canada, it's different?

1 THE WITNESS: In English or British at one  
2 point billions and trillions were switched. I believe  
3 now they use -- it's the same way. It's one of those  
4 things that I get confused about. So I prefer to use  
5 one with nine zeros, 12 zeros, 15 zeros behind it to  
6 prevent any confusion.

7 THE COURT: You didn't prevent confusion with  
8 me. I never heard that before, and I look for  
9 something new to learn every day. You say that at  
10 some point people in Britain might have said a billion  
11 meaning a trillion?

12 THE WITNESS: It was used the other way, yes.

13 THE COURT: Thank you. Did they become  
14 enlightened now?

15 THE WITNESS: As a matter of speaking, yes.

16 THE COURT: Should we defer to theirs?

17 THE WITNESS: We're in America so a billion  
18 is a one with nine zeros behind it and a trillion is a  
19 one with 12 zeros behind it.

20 THE COURT: Thank you. Sorry for  
21 interrupting.

22 MR. THOMAS: That's all right.

23 BY MR. THOMAS:

24 Q So going back to the chart, I think it was  
25 Exhibit 44, if we were to go out and we found a person,  
26 and I'm speaking just of the sperm fraction from the  
27 vaginal swab, if we were to find a person that matched  
28 that particular profile that's up there at all

1 13 locations, then would you have an opinion as to  
2 whether or not that person was the donor of that  
3 particular profile that you find up there?

4 A The calculated frequency of that profile is  
5 much less than 1 in 6 billion. So that would be a very  
6 rare event. In my opinion, it would be an unlikely  
7 occurrence for that to happen twice.

8 Q Then was there anything in your analysis in  
9 this case that caused any concern on your part that this  
10 analysis that you did was somehow not done correctly?

11 A No. The positive and negative controls at each  
12 of the steps were performed correctly. As I mentioned  
13 earlier, the case notes and report were reviewed by a  
14 second qualified individual before the report was put  
15 out.

16 Q You performed all these tests in accordance  
17 with the training that you received?

18 A Yes.

19 MR. THOMAS: Nothing further.

20 THE COURT: Mr. Sanders, you may inquire.

21 MR. SANDERS: Thank you.

22 **CROSS-EXAMINATION**

23 BY MR. SANDERS:

24 Q Ms. Siewertsen, when you received the samples  
25 in order to count the alleles --

26 A Okay.

27 Q -- you did not extract that sample? It was  
28 given to you, you just received a little vial; correct?