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THE STATE OF TEXAS () IN THE DISTRICT COURT
 ()
VS. () 38TH JUDICIAL DISTRICT
 ()
GILBERT ALEJANDRO () UVALDE COUNTY, TEXAS

HON. MICKEY R. PENNINGTON JUDGE PRESIDING

STATEMENT OF FACTS

APPEARANCES:

DISTRICT ATTORNEY'S OFFICE
By: ROGELIO F. MUNOZ, Esquire
Uvalde County Courthouse
Uvalde, Texas 78801
Appearing for the State;

LAW OFFICES OF R. EMMETT HARRIS
By: R. EMMETT HARRIS, Esquire
114 East North Street
Uvalde, Texas 78801
Appearing for the Defendant; and

GENE L. STEELE,
Certified Shorthand Reporter and
Notary Public.

* * * * *

FORM 740 PENGAD/INDY 1-800-631-6999

1 NO. 90-09-8445-CR

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3 VS. () 38TH JUDICIAL DISTRICT
4 GILBERT ALEJANDRO () UVALDE COUNTY, TEXAS

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20 Uvalde, Texas 78801
21 Appearing for the Defendant; and

22 GENE L. STEELE,
23 Certified Shorthand Reporter and
24 Notary Public.
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BE IT REMEMBERED that on Tuesday,
the 11th day of December, A.D., 1990, at approximately 9:00
o'clock a.m., came on to be heard the above-numbered and
styled cause, before the Honorable Mickey R. Pennington,
District Judge, 38th Judicial District, Uvalde County,
Texas, and the State by its attorney announced ready for
trial, as did the defendant in person and by his attorney, a
jury having been selected, empaneled, and sworn, the
following proceedings were had before the Court and jury;
to-wit:

* * * * *

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(Recess from 12:10 o'clock
p.m. to 1:15 o'clock p.m. on
Tuesday, December 11, 1990.)

* * * * *

FRED SALEM ZAIN,

the witness, being first duly cautioned and sworn to
tell the truth, the whole truth and nothing but the
truth, testified as follows:

DIRECT EXAMINATION

QUESTIONS BY MR. MUNOZ:

Q Would you tell us your name and how you are employed?

A Yes, sir. My name is Fred Salem Zain, spelled Z-a-i-n.
I'm employed with the Bexar County Medical Examiner's
Office and Crime Laboratory in San Antonio, Texas,
where I am in charge of particular lab functions of
what is called serology or the examination of blood and
body fluids, trace evidence and documents and firearms
and other specific duties concerning the crime
laboratory. Specifically I test and analyze physical
evidence for biochemical identification of blood and
other body fluids. That's what I do myself.

Q What training, education or experience have you
obtained to qualify you to conduct these examinations?

A My formal education consists of a Bachelor of Science
degree in biology with a minor in chemistry and an

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1 associate degree in applied sciences. I have a
2 master's degree in biological sciences.

3 For the last eighteen years,
4 sixteen of those spent in the field of forensics in law
5 enforcement, I have dealt with the development of
6 testing and methods that relate to the identification
7 of body fluids and blood typing methodologies. I have
8 published a variety of papers. I have done
9 postgraduate work in this field also.

10 Also, I'm an associate professor at
11 the University of Texas in criminalistics, which deals
12 with forensic applications of evidence. Also, I'm an
13 instructor at four police academies in the surrounding
14 area. I've been instrumental in the development of
15 some of the methods and techniques that we might talk
16 about here today.

17 I'm a member of the Southern
18 Association of Forensic Scientists, the Canadian
19 Society of Forensic Sciences, the American Academy of
20 Forensic Sciences, and I also belong to the
21 International Society of Hemogenetics, the National
22 Society of Electrophoresis, and the American Blood Bank
23 Association.

24 I'm also associated on the faculty
25 of the University of Texas Health Science Center, and

1 other colleges around Texas and outside of this state.
2 I have given a variety of lectures and seminars in
3 Texas and other states over the last year and a half
4 that I've been here and also over the prior fifteen or
5 sixteen years I moved here from West Virginia. There
6 are other items, but basically this is my formal
7 background.

8 Q Did you have occasion to conduct a series of analyses
9 or examinations in the case involving the sexual
10 assault of a lady name [REDACTED], which I think you
11 referred to as your lab Number 371.

12 A Yes, sir. I did receive some items at the crime
13 laboratory on May 29th, 1990, in reference to the
14 particular Ms. [REDACTED], as well as a Mr. Alejandro.

15 Q And what was the item that you received or that you
16 initially received for analysis?

17 A Well, if you will, I just will read the specific items
18 that were submitted to me. The specifics were listed
19 on a submission report form as one woman's slip, white,
20 and one sexual assault kit with blood and semen. Also
21 received was one woman's dress, pink with white
22 flowers, and one peach woman's gown. Also received was
23 one purple with white bows woman's robe, and two
24 quilts, which were multicolored.

25 Most of these items are marked as

1 originating from Ms. [REDACTED], as well as the sexual
2 assault kit, which was taken here at the Uvalde
3 Memorial Hospital. That was turned over to me and all
4 of these items were assigned the case number which you
5 referred to, and which I have as SD-90-371.

6 They were assigned that number at
7 that time, and they were all submitted for examination
8 and testing to see if there was any seminal fluid or
9 semen, as well as to see if there was any blood or hair
10 present on the items, and if so, to then determine from
11 whom the semen donor may have been.

12 Q Would you look at some of the items that are before you
13 and then tell us whether or not these are some of the
14 items that you examined, those that are here in front
15 of you at this time, and that you examined.

16 A So that y'all will know specifically what we do, when
17 evidence is received in any crime laboratory, no matter
18 where it is, the standard procedure is to assign it a
19 laboratory case number, and also for the person who may
20 be doing the analysis to put their initials, for
21 identification purposes, on the outside of this
22 container.

23 When I received it, I placed the
24 initials SD-90-371 on it and also my initials of SZ,
25 and that's for identification. This particular item

1 here is State's Exhibit Number 8, and this is one of
2 the bags that was received. This contains the purple
3 robe that I was talking about earlier.

4 I'm not going to show you my name
5 and the numbers, but they are all on the items in
6 various places. They may be too small for you to see.

7 This is the housecoat and the peach
8 colored gown and a pair of panties. You can see the
9 markings on those fairly easy. I received these items.

10 State's Exhibit Number 8, there are
11 cuttings there that you may see, and that's where I
12 removed certain parts of the stained material for
13 testing. State's Exhibit Number 7, the same way. It
14 contains the white slip, which I examined and removed
15 parts of the evidence that were there.

16 There again, on State's Exhibit
17 Number 9, this contains the other housecoat or robe-
18 type item. State's Exhibit Number 11 and State's
19 Exhibit Number 10 are both marked with my case number
20 and identification.

21 These all appear to be in a similar
22 condition in which I returned them, except that I had
23 them sealed when I returned them to the investigating
24 officer. That's those items there.

25 Q You told us that you were able to identify human blood

1 and semen on these items, including the rape kit?

2 A Yes, sir, that's correct.

3 Q How were you able to do that?

4 A Well, there are two-fold things you do. What you do
5 first of all is take the item and examine that item for
6 any possible visual staining. I think everybody has
7 seen what bloodstains look like. If there is any
8 visual staining, the chemical will determine whether
9 the stain there is in fact blood or not.

10 Secondly, you determine whether or
11 not it is human. Thirdly, if it is human, then you
12 proceed to identify as many specific components of the
13 blood as you can so as to identify who the donor of
14 that bloodstain is or where it originated from.

15 This is all done scientifically
16 with accepted methods and techniques, not only in the
17 specific field of forensics, but in the general field
18 and scientific field of biology and chemistry.

19 To identify semen stains, you
20 visually and microscopically look at the item and
21 determine whether there is any stain visible. If so,
22 then the stained material is checked chemically and the
23 reaction of the chemical test is then used for semen
24 identification, as well as microscopic identification.
25 Then you can get a positive identification of whether

1 or not it is semen.

2 Seeing how semen only originates
3 from the male individual, you can then also determine
4 the blood typings from that semen itself, which will be
5 the same blood typings as the semen donor may have in
6 their blood. In other words, if a male individual is a
7 blood type A, identified from his blood, the semen that
8 he possesses will also be a blood type A. This is not
9 only done with routine serological work, but it is also
10 done with advanced serological testings and analyses.

11 It's a combination of all of these
12 tests that you perform that you can then not only
13 identify what the substance is but from whom the semen
14 originated from. Likewise with bloodstaining, if the
15 biological materials can be identified, then it can
16 usually be determined from whom it originated.

17 Q Were you given a known sample of the blood of Gilbert
18 Alejandro to make a comparison to the items that were
19 submitted from the rape scene and the examination of
20 Ms. [REDACTED]?

21 A Yes, sir. There was a known blood specimen that was
22 submitted to me. Excuse me for a second here. Yes. I
23 believe it was submitted July 6th, 1990, of which it
24 was a known blood specimen. It also was tested and
25 examined, just like all of the other samples were, and

1 the results were compared to the results of the
2 evidence which I had previously tested and issued my
3 results or conclusions on.

4 Q Other than a DNA analysis, what are the characteristics
5 that you were able to tell were the characteristics of
6 the semen that you found on each of these items?

7 A The semen stain that was identified on the items that
8 we have talked about previously was a blood type A. It
9 also was from a secretor individual, and I'll explain
10 to you what that statement means. Also, it was of PGM
11 type one plus. A PGM blood type is a system just like
12 an ABO blood type is a system, and there are a variety
13 of blood typings within that particular system which
14 are identifiable as to each individual in here.

15 The blood typings that were
16 identified from the semen were the same as the ones
17 that were identified from the known blood specimen of
18 Mr. Alejandro. The secretor status simply means this,
19 that every individual secretes their ABO blood type in
20 their blood fluids, and eighty percent of the
21 population secrete the ABO type and body fluids that
22 can be identified.

23 Twenty percent of the population
24 secrete their ABO type body fluid in such low levels
25 that they cannot be identified. From this you come up

- 1 with the terminology secretor or non-secretor. All
2 that means is what I've already explained to you
3 previously.
- 4 Q So that Mr. Alejandro's known blood was blood type A?
- 5 A That's correct, sir.
- 6 Q You determined him to be a secretor?
- 7 A Yes, sir.
- 8 Q And he had a PGM of one plus?
- 9 A That's correct.
- 10 Q Now the sample that you took or that you identified
11 from the vaginal swabs of Ms. [REDACTED] indicated that
12 the individual that had deposited semen inside of her
13 had blood type A, and he was a secretor and had a PGM
14 of one plus?
- 15 A Yes, sir. It was also the same, not only on the
16 vaginal swabs, but also the same results were obtained
17 from the bedspread and the two robes and the slip.
- 18 Q So not only did you type and analyze the substance that
19 was inside of her body contained in the rape kit, but
20 you also typed and analyzed the semen that was in the
21 bedspread?
- 22 A That's correct, sir.
- 23 Q And you produced the same results in that regard?
- 24 A That's correct.
- 25 Q And you analyzed the semen stains on the two robes and

1 it produced the same results?

2 A Yes, sir.

3 Q You analyzed the semen stains on her slip and it
4 produced the same results?

5 A That's correct.

6 Q Why is it that you did an analysis on each one of these
7 items?

8 A Well, all items, when they are submitted for testing
9 and examination, they are processed in the same way.
10 We just don't check one item and if we do identify or
11 do not identify something then just not examine the
12 rest of the items.

13 All of the items that are submitted
14 to the crime laboratory are examined, and in the same
15 manner. Whatever is identified is tested in the same
16 manner, and of course the results, whether positive or
17 negative, are also reported in the same manner.

18 Q So it's just to make the test and the examination more
19 certain that you test everything that you possibly can
20 test, and everything that's provided for you to test
21 and that is available to you?

22 A It's the policy of the crime lab to examine all items
23 and to obtain as much information from each item that
24 is possible and then to report the results. That's why
25 it's done. The evidence is to help support in whatever

1 investigative purposes any agency may want to apply the
2 information towards.

3 Q The typing of the blood, the determining of whether a
4 person is a secretor, and the PGM determination, how
5 long has that been in existence in forensic science and
6 in forensic application?

7 A For a little over twenty something years. Some of the
8 methodologies in ABO typing has been used even longer
9 than that for forensic purposes. You have the protein
10 and enzyme analysis and the secretor status, and that
11 has been in existence in the realm of twenty years.
12 It's been in crime laboratory use for that long.

13 Q These kind of analyses and examinations are used, and
14 you have testified before in cases such as this one
15 where an effort was being made to determine whether a
16 certain individual had raped another person?

17 A Yes. Well, not only hundreds of times over my career
18 and certainly not only in this state, but in other
19 states I've testified to this, yes, sir.

20 Q In addition to the standard type of examinations and
21 comparisons, including the blood type and the secretor
22 status, and the PGM typing, you also perform what is
23 known as a DNA analysis?

24 A Yes, sir. We have the capabilities to perform
25 additional advanced testing on forensic evidence. We

1 have worked on approximately two hundred and fifty to
2 three hundred forensic cases. We have worked about as
3 many cases right now or we are second to the FBI Crime
4 Lab in D.C. We have been fortunate to have the
5 methodology and the technique advanced to where we can
6 do additional testing. One reason being is that on a
7 lot of cases you may have samples that are degraded or
8 you cannot obtain the information, information that I
9 talked about previously.

10 Well, with DNA profiling we are
11 able to obtain information that ten years ago we were
12 not able to utilize forensic means to obtain.
13 Therefore, on cases where it is requested by the agency
14 we do have the capabilities and we will do DNA typing
15 or DNA profiling. DNA profiling is unique because it
16 does give an identity to particular body fluids without
17 any uncertainty as to the results obtained.

18 It is also means whereby sperm
19 cells, if they are present, especially in sexual
20 assault cases, we can then take those and give the
21 identity of the semen donor, whereas prior to the
22 specific type of testing, we could not go up to the
23 99.99 percent sure as to the possible semen donor.

24 Q Can you explain to the jury and to the Court what the
25 basic theory is behind the DNA profiling? What is the

1 characteristic that you are looking for that allows you
2 to make these comparisons with this certainty?

3 A Basically what we have talked about up to this point
4 has been genetic markers, blood characteristics, blood
5 typings. They are all one in the same. They are all
6 genetically inherited. They are all passed on from one
7 generation to the next.

8 DNA typing and profiles are the
9 same thing. It is your genetic inheritance as to your
10 particular makeup. Some DNA that you could readily
11 relate to gives you physical characteristics such as
12 brown hair, blue eyes, et cetera. There is additional
13 DNA that makes up the composition of the body that is
14 not used for your physical characteristics, but does
15 make up your genetic characteristics. This will also
16 help determine certain types of internal
17 characteristics.

18 What we are basically talking about
19 is a chemical makeup that is genetically inherited from
20 one generation to the next. Forensically we identify
21 this chemical makeup of the individual by testing. We
22 simply take a portion of the chemical makeup from a
23 cell and we separate it out. We go through several
24 steps to where we can visibly see what this chemical
25 makeup is.

1 The principles of DNA itself, the structure and the
2 mechanism and the chemical basis, that has been
3 utilized for much longer than that.

4 As far as the forensic community,
5 the accepted methodology throughout the United States,
6 Europe and other countries is by use of RFLP. That's
7 an abbreviation for a specific type of testing used in
8 forensic application. There are other types of DNA
9 testing which are at this point in a research type of
10 mode and are not generally accepted in the scientific
11 community or in the scientific community such as the
12 RFLP is.

13 Q How many tests have you performed of this type?

14 A As far as all types of testing, I've performed hundreds
15 of types of tests in the crime laboratory, and in the
16 entirety I've performed, well, approaching over ten
17 thousand tests of this kind within this last year.

18 Q Have you testified in other courts as to your findings
19 in these particular tests?

20 A Yes, sir. I've testified in a variety of courts within
21 Texas, as well as out of Texas.

22 Q In fact, did you testify as to one of these procedures
23 in another case in another court just this day?

24 A Yes. We were talking about some bloodstaining and test
25 analyses that were used there. I think the last case

1 was not in Bexar County but in Karnes City, Texas,
2 where I testified just recently, yes, in another case.

3 Q I imagine just as many times as you've determined that
4 a certain individual was the same person that had
5 donated or had left sperm in a person, you have also
6 had many situations where you have excluded a person,
7 is that right?

8 A Absolutely. The type of testing that is done in a
9 crime laboratory is to find out any and all information
10 that you can that will be beneficial and help in your
11 decisions.

12 There are a large number of cases
13 where the routine serological work does not give
14 complete enough information to possibly exclude an
15 individual as being a semen donor or depositing blood
16 or another body fluid on another, but the beauty of DNA
17 testing is that it can give you a hundred percent
18 certainty, for example, that a semen stain or
19 bloodstain did not originate from a particular
20 individual.

21 This also helps in the
22 investigations of a particular type of incident where
23 maybe an agency can, you know, direct their
24 investigation towards another avenue, other than where
25 they may have been proceeding at that time. We've

1 always actually had more cases where it has excluded
2 individuals rather than included individuals.

3 Q Mr. Zain, based on your analysis of the semen that was
4 contained inside and that was taken in the rape kit
5 from, according to the testimony in this case, from
6 inside the vagina of Ms. [REDACTED], as far as your
7 analysis of semen stains that were contained on the
8 bedspread and the two robes that belonged to Julia
9 Esparza, can you tell us whether or not those semen
10 stains, that semen deposit came from an individual
11 whose blood you examined and who you knew to be Gilbert
12 Alejandro?

13 A I'll reiterate what I specifically pointed out in my
14 report, which is that the banding patterns that were
15 identified from these items that you mentioned were
16 identical to the banding patterns of Mr. Alejandro. As
17 I stated in the report, they could only have originated
18 from him. There was no information whatsoever, beyond
19 a scientific reasonable degree, that the particular
20 semen stains that would show they originated other than
21 from him.

22 Q In State's Exhibit Number 17, your report, it indicates
23 your findings in this case, is that correct?

24 A Yes. This is a copy of my report, which I've signed,
25 and the statement which I just gave is in there.

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MR. MUNOZ: I would like to offer State's Exhibit Number 17.

MR. HARRIS: No objections, Your Honor. I have previously examined it.

THE COURT: State's Exhibit 17 will be admitted.

(State's Exhibit Number 17 accepted into evidence.)

MR. MUNOZ: I'll pass the witness.

* * * * *

CROSS-EXAMINATION

QUESTIONS BY MR. HARRIS:

Q Mr. Zain, my name is Emmett Harris and I represent Mr. Gilbert Alejandro. We have not met before this moment, have we?

A That's correct, sir.

Q As I see it we have kind of two choices in this case, and I may not see it right, and I understand that, but we either have to just haul off and take your word for it or we have to try to better understand what you are saying so that we are really convinced that we are doing something other than just blindly relying on your opinion.

A Correct.

Q Assume that one or more of these ladies and gentlemen

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1 are worried about doing it the second way. Just give
2 me some more details about the analyses, and before we
3 get to the DNA, let's start back with the more older
4 and more longly accepted procedures that you have
5 described.

6 A Okay.

7 Q Let's take the blood typing. Most of us have donated
8 blood or for one reason or another we have had our
9 blood typed before. If you are looking at two blood
10 samples and they are of the same type, A or O positive,
11 then that alone does not tell you, does it, that they
12 came from the same human being?

13 A With the example that you have given, if a person is an
14 A and another is an O, and there is a bloodstain, for
15 example, that is blood type B, then one hundred percent
16 both of those individuals would have been excluded as
17 being able to deposit that particular bloodstain.

18 If the bloodstain was just the
19 reverse of that, then you could exclude the A. You can
20 exclude, by routine work, if it is different, if there
21 is one difference in a blood type, then you can exclude
22 it a hundred percent, if that answers your question.

23 Q Partly.

24 A Okay.

25 Q But of course your report, having included Gilbert, I'm

1 a lot more interested in inclusion there than
2 exclusion, but from your report if you and I sat down
3 and looked at a sample of your blood and maybe there
4 was something readily discernible visually -- You
5 talked about visually looking at blood types. I assume
6 that mine would be red and yours likewise.

7 A Correct, hopefully.

8 Q At that point they are looking alike?

9 A Correct.

10 Q Unless maybe yours is blue. Let's say that both of us
11 are relatively red, what then is the next step in the
12 typing? What is the next step from a visual
13 comparison?

14 A What I was referring to visually was in stains and not
15 liquid blood. You can determine from clotting items
16 where blood may have been deposited. If in fact there
17 is a green stain, then visually you are going to
18 determine that is not blood. But if there is a red or
19 faint staining, then that draws your attention to the
20 testing on those particular stains. That's what I
21 meant by visual. Liquid blood, you know, most
22 everybody's would look pretty much the same.

23 Q The types, I think I know that there are such things as
24 type A and I know there is O positive, because somebody
25 told me that, but what are the various types of blood?

1 Just review that for us.

2 A Well, for A, B, O typing, I think I went over this
3 briefly before, but the four blood typings in that
4 system is A, B, AB or O. Every one of us in this room
5 will be one of those four.

6 Q Everyone in this whole territory from San Antonio on
7 back would fall within one of those four?

8 A Yes.

9 Q And there would be countless, well, maybe not
10 countless, but lots of us between here and San Antonio
11 involved, correct?

12 A From the population base of which I work with in making
13 my determinations, in Bexar County and the outer region
14 communities, the population involved is approximately
15 fifty-five percent Hispanic, which are blood type O,
16 and then thirty-five percent are blood Type A and the
17 remainder is about eight percent B and then two percent
18 AB, you know, as far as an approximation. That's based
19 on what is called gene frequencies, and not statistics.
20 These are gene frequencies of the region as to what the
21 inheritance of certain types of blood will be found in
22 the individuals involved.

23 Q You gave us percentages applicable to the Hispanic
24 population?

25 A Right.

1 Q What would be the percentages if you didn't limit it to
2 the Hispanic population? Let's take the population of
3 Texas, if that's a legitimate boundary to you.

4 A Let's just the United States because on papers that I
5 have published in the past, you know, as far as
6 regional groups, they have been fairly consistent
7 across the United States.

8 Q That's fine.

9 A The normal range, for example, of a blood type across
10 the United States, that would be about forty-five
11 percent of the population, as a total mix, that would
12 be AB and blood type O, and then approximately forty
13 percent are type A and about ten percent are type B and
14 the remainder would be type AB. That's just a national
15 average.

16 So you can see there is a
17 difference based primarily just on the Hispanic
18 population, which is sort of surprising but then not
19 too surprising with the generations of that particular
20 ethnic group being in this area.

21 Q If all we had then was the ability to look at, and
22 let's assume for the moment that you can take a semen
23 sample but you are not fortunate enough to have one
24 produced by a "secretor" type person, but there is
25 enough content to where you can type blood from it, and

1 you've got a semen sample in a test tube vial and a
2 blood sample in another one, and all you know for sure
3 is that they are produced by someone having the same
4 blood type, either A, B, AB or OAB or B, then at that
5 point all we know is that someone or perhaps some two
6 people from these large numbers that you have described
7 produced those two liquids, isn't that right?

8 A Yes, sir. If a person, for example, was a secretor,
9 which is what we are talking about right now, this
10 situation right now, it would be approximately thirty-
11 two percent of the population that would be A
12 secretors.

13 If you take into consideration that
14 we are talking about a semen stain, then we would be
15 talking about approximately sixteen percent of the male
16 population. Then with the addition of any other blood
17 typings, based on gene frequencies, it would then
18 reduce that, to save a little time, to that which was
19 identified from the semen stains as well as the same
20 blood typings that we have talked about. Mr. Alejandro
21 occurred in 6.7 percent of the general population.

22 Q That includes a lot of folks, doesn't it?

23 A Which would exclude 93.3 or whatever it is, but not to
24 play with numbers, 6.7 percent of the general
25 population would be like six people in a hundred or

1 seven people in a hundred, you know, approximately.

2 Q Before we get off of that, maybe all twelve of these
3 people know here and the only one that doesn't know
4 this is me, but how do you determine what blood type is
5 or what type a blood sample is?

6 A Well, we have been referring to ABO typing all along,
7 so we will just use that. A very small portion is
8 utilized. Say, for example, for liquid blood you place
9 three small drops in a vial and then you add a
10 commercial agent and it will react positively if it's
11 an A, positively if it's B and positively if it's O, or
12 positively if it's AB. Likewise, if there is no
13 reaction then it is not that blood type. It takes
14 about five minutes to determine it from a liquid blood
15 sample.

16 To determine it from a dried
17 bloodstain, it takes approximately two hours. The same
18 procedure is used but you have to go through the method
19 of absorption. This has to be done because you are
20 obtaining information from a stain instead of from a
21 liquid sample of blood or other body fluid.

22 Q How do you determine that the reaction has occurred or
23 not occurred when you drop the commercial fluid in?

24 A Oh, it's visual and microscopic. If it's positive, it
25 will clump together in a clumping process, which is

1 called agglutination. But if it is not, if there is no
2 reaction, then it will be a negative result. These are
3 also governed by standards and controls for quality,
4 quality controls in testing.

5 Q Let's talk about secretors and non-secretors for a
6 moment. What is it that a secretor, a person that you
7 have classified as a secretor, what is it that he has
8 present in his semen that a non-secretor does not?

9 A Nothing different, but just the amount of levels that
10 the person secretes at is the only difference.

11 Q What is it that is secreted in varying levels, whether
12 it's on a high level or a low level?

13 A The specific name is called blood group substance,
14 which relates to the blood typing I mentioned earlier,
15 to the ABO typing system. There is another specific
16 blood typing, which is called a fluid blood type, which
17 is derived from the blood. This determines the
18 secretor status, and this is from the blood and not
19 from the body fluid itself.

20 So then you have a countercheck of
21 being able, one, to determine the status from the body
22 fluid itself, as well as determine the status from the
23 whole blood sample of the individual. There is a
24 countercheck for a determination there.

25 Q How do we do that? How do we spot the little rascals

1 and know what they are or whether you have enough of
2 them to make a conclusion?

3 A The chemical content in the body is what you are
4 identifying. By secretor status, the ABO blood typing
5 from the particular substance is determined in a
6 similar manner as what I described to you earlier.

7 In the ABO typing the determination
8 from a stain material is likened to the determination,
9 which I also applied earlier, in determining the ABO
10 type. All of these general reactions are grouped into
11 the classification of what is called scientifically
12 antigens, antibody type of reactions.

13 Where antigenic material is present
14 on cells and in the body fluids, well, antibodies are
15 also present, which will react opposite of what you are
16 trying to possibly determine, but the chemical
17 consonant we want is what the Lewis is based upon,
18 which is a cellular reaction that is a positive
19 visually or that is a negative visually. It can also
20 be determined microscopically as far as sensitivity.

21 As to your original question on
22 what is the difference, it's simply just the quantity
23 of the material and not the material itself. Everyone
24 will secrete their ABO blood typing substance and their
25 body fluids. The secretor and non-secretor is just a

1 clearcut way of saying that eighty percent will secrete
2 at levels that can be identified by what I've already
3 explained, and twenty percent cannot.

4 Q What is it that is in the semen? Is it the blood
5 itself or is it some chemical particle that you draw
6 between the semen and the blood?

7 A Like I explained, in semen, vaginal fluids, saliva and
8 your body fluids, in those you will see your blood
9 group active substance, which is synonymous with the
10 antigenic responses derived from the blood. It's not
11 blood cells. It's the blood group active substance,
12 which is also genetically determined and also is
13 synonymous with the blood typing, the typing of the
14 blood itself.

15 Q I think you said there was something called a PGM type
16 one plus, is that right?

17 A Yes, sir.

18 Q What is PGM? What do those letters stand for?

19 A PGM is an abbreviation for phosphoglucomutase, and that
20 last word, that particular word is called a protein
21 enzyme. That is involved in or found in the blood and
22 it's found in the muscle and other tissue in each
23 individual. It is primarily what is called an enzyme,
24 and that can be used as a characteristic blood type.
25 It is determined from the blood. It is also identified

1 from semen, vaginal fluid and other body tissues.

2 The PGM blood type of an individual
3 will be the same no matter what tissue it is derived
4 from in that individual. There are ten types within
5 the PGM typing system. Mr. Alejandro is a type one
6 plus. There are individuals that are type one minus,
7 one plus one minus, two plus, two plus and one minus,
8 two plus and one minus; two minus, one plus; two minus,
9 one minus; as well as two plus, two minus. The typing
10 systems that are available for each one of us in this
11 room will fall into one or the other of those
12 particular types in the PGM system.

13 Q Without making you go through the pluses and minuses,
14 if it's all right with you, just go through one to ten
15 and tell us how many are in each one of those types.
16 You can just use the broad approach and tell us how
17 much of the United States population is in the first
18 kind of the PGM.

19 A I do not know right off the top of my head on that
20 because you get into, for example, on a two minus
21 individual, it's like .5 percent. In other words,
22 that's half of a percent of the population. All I can
23 tell you is that in these blood types here is a
24 combination. That's all I refreshed my memory on.

25 Q Without testing your memory, and without playing games

1 on all of the percentages as to all ten, just give us a
2 range. If a category or a type has five percent of the
3 population inclusive in that, then just give us that.

4 Well, is that the low number?

5 A The lowest would be approximately .2 percent up to
6 forty percent, in that range. But those ten will total
7 up to a hundred percent.

8 Q I understand. All of us fall theoretically in one of
9 those groups, in the larger and smaller groups, and
10 they vary between .2 percent all the way up to forty
11 percent, is that correct?

12 A Everyone in this room as well as everywhere else would
13 fall into one of those groups.

14 Q How many of us would fall into the one plus? What
15 percentage would be applicable there? By us, I'm
16 talking about the United States.

17 A I do not recall specifically on the one plus. I
18 wouldn't want to say one thing and be incorrect on it.

19 Q Do you think it's at the high end or the low end of the
20 scale?

21 A It would be between twenty-five and forty percent,
22 somewhere in that range.

23 Q As much as twenty-five to forty out of a hundred people
24 would be type one plus?

25 A Twenty-five, yes.

1 Q Again, if I understand this, the next most complicated
2 and newest kind of analysis that you have described
3 here today is within the area of the DNA. Help me on
4 the initials here. Perhaps some of the jurors know
5 already, but for me, just tell me what DNA stands for.

6 A DNA is deoxyribonucleic acid. We just use the
7 abbreviation DNA to conserve room and space. It's
8 actually deoxyribonucleic acid, but that's what that
9 particular abbreviation stands for.

10 Q You gave us a percentage awhile ago of 9.999. I guess
11 you just arbitrarily ended up with that last nine.
12 Could you go on beyond that or is that given number of
13 nine a place where you could stop at?

14 A What I was referring to is that in blood typing
15 analysis the number of blood typing systems that have
16 been available up to, say, five years ago was such that
17 you could say, "We have excluded up to 99.999
18 indefinitely of a given population as being the
19 depositor of the semen or another body fluid based on
20 the blood characteristics themselves." Analogous to
21 that we could say that we excluded 93.7 percent of the
22 population based on the blood typings that we have just
23 went over, comparison-wise.

24 Q Let's shift from exclusion to inclusion. You've talked
25 about things being generally accepted and consensus and

1 so forth. Is there what you would describe as a
2 generally accepted consensus as to how, measured by a
3 percentage, how positive you can be in the inclusion
4 process of saying that semen and blood were produced by
5 the same human being?

6 A Yes, sir, a hundred percent.

7 Q And what would you put that to?

8 A I would say, and this is not just myself, but it is a
9 general and a specific consensus known verbally and in
10 literature of geneticists around the world that DNA has
11 even been stereotyped as fingerprinting. We call it
12 profile, not to be prejudicial, but we call DNA profile
13 because that's what it is. It actually profiles an
14 individual as to a hundred percent identity, except for
15 identical twins.

16 Q What is it that we are saying about identical twins?

17 Are we saying that their genetic factors, their banding
18 patterns, their markers are in fact identical or do
19 they vary to some extent?

20 A To my knowledge the literature, and it is still being
21 researched because of the standpoint of the multitude
22 of information involved, but to my knowledge they do
23 have identical banding patterns. That is, sir, we are
24 talking about identical twins now and not just twins
25 themselves. But, there again, the population whereby

1 identical twins fall into is very small. You know,
2 worldwide there is not that many of them.

3 Q Are there in fact tests and data produced by those
4 tests that prove somewhere there is one or perhaps more
5 than one set of identical twins who literally have
6 identical genetic markers and banding patterns as
7 established by testing?

8 A I do not recall any literature that I could cite where
9 that has been stated. But it's within the realm that
10 it could be, you know, possible as to a specific
11 identity, you know, to the best of my knowledge.

12 Q What is the general assumption concerning those of us
13 who are not either twins or identical to each other?
14 Is the assumption that your genetic markers and banding
15 patterns would necessarily be different from mine?

16 A It is a proven fact, from the standpoint of, there
17 again, fingerprinting, that fingerprinting is actually
18 inherited by DNA cells. Your fingerprints of each
19 individual is an individual identity in itself, and
20 that is governed by the DNA itself.

21 Q Fingerprinting may be in effect the cause of DNA then?

22 A Well, DNA is the building block of every cell in the
23 body, so there you can get the specific identity in the
24 general scientific community. That's just like what I
25 stated earlier with the medical community, you know, as

1 far as metabolic disease and genetic inheritance of
2 certain diseases. That can be governed by DNA testing.
3 The DNA profile of an individual in that regard is
4 unique to each and every individual.

5 Q That is, after all, the underlying assumption that
6 makes the rest of it make sense, isn't it, that each
7 one of us has a unique genetic makeup which, if studied
8 with enough detail and acuteness, sir, will
9 sufficiently identify us and exclude us from the entire
10 rest of the world. Isn't that the underlying
11 assumption?

12 A I would have to agree with you as far as the assumption
13 because from a non-scientific viewpoint, the assumption
14 would be correct because simply not everyone in the
15 world has had DNA testing profiling done on this.

16 Q Absolutely. That was going to be my next question.

17 A And neither has everybody in the world been
18 fingerprinted, but it's still a reasonable scientific
19 statement to say that the identity and the profile,
20 when it does match up, is a hundred percent as far as
21 that match-up.

22 Q Based on the idea that nobody is exactly the same, and
23 if you have two samples that have the same markers,
24 then they must have come from the same person, because
25 only one human could have that particular genetic

1 makeup, is that correct?

2 A That's correct.

3 Q How do we know that that is true, not having tested a
4 whole lot of folks here?

5 A Well, I won't say that --

6 Q Well, here is the reason that I think the answer is
7 important here. We are not talking about paternity
8 here, and perhaps the only obligation involved in that
9 would be to pay child support to somebody for somebody
10 who may be or may not be his child. Here we are
11 talking about liberty, and we are talking about the
12 penitentiary.

13 So how are we sure enough that that
14 genetic makeup is totally unlike yours, so you can say
15 to hang someone based on that assumption, when we
16 haven't tested everybody?

17 A It's not a comparison that is made in a crime
18 laboratory or any other laboratory, as far as comparing
19 me to you or whatever. It's just simply the results of
20 the testing and analysis that, one, it did match up
21 according to the test results on all testing.

22 Secondly, all testing that is
23 feasible and that can be done has been done, and
24 nothing excluded the individual from that viewpoint.
25 The uniqueness of the test is substantiated by

1 publication after publication.

2 Therefore, the validation of the
3 testing, and excluding statistics--we do not report
4 statistics, but we report a match or no-match simply so
5 that there will not be, as you call it, a numbers
6 game--the validation of the testing is in the banding
7 patterns that we have found, and it is based on our
8 experience and the experience of other laboratories
9 that use the DNA testing.

10 From this we can say, when it's a
11 match, that there is a hundred percent identity. Then
12 when it is not a match it's a hundred percent exclusion
13 as to that individual. That's the best I can state it.

14 Q Well, have we actually found, we being the scientific
15 community, which I've already proven I'm not any part
16 of by my questioning, but haven't we found so far no
17 match or have we found two human beings in the world
18 that have identical matches? Which is it?

19 A There again, from my personal knowledge, other than the
20 possibility of identical twins being the exception to
21 the rule, there has been no two individuals that have
22 had the same DNA profile.

23 Q That's one of the reasons why the scientific community
24 says everybody is different is because so far at least
25 we haven't found anybody that is just alike?

1 A Well, it's also from the standpoint of genetic
2 inheritance, which is based on a publication done by a
3 gentleman, but then he gets into gene frequency of the
4 population, and that's not really tangible. This is
5 something that you can grab a hold of.

6 Q Is there any way of even roughly estimating what
7 percentage of the current world population of human
8 beings is that we have any genetic data on?

9 A As far as DNA profiles, DNA testing, there has been
10 hundreds of thousands of people involved in this. I
11 know that for a fact from just the crime laboratories
12 in the United States, and that is not counting Europe
13 and other countries around the world that have done DNA
14 profiling. As far as specific numbers, I wouldn't want
15 to offer a figure on that.

16 Q But conservatively speaking, you would say hundreds of
17 thousands of people though?

18 A Minimally, yes.

19 Q Let's try to put that in perspective. I don't know
20 this, but maybe you do. What's the current estimated
21 world population right now?

22 A I really don't know. It's hard enough keeping track of
23 the local population, let alone worldwide.

24 Q Genetic data availability, I take it that would be
25 different just according to what spot on the globe you

1 went sculling around trying to find that data, is that
2 right?

3 A As far as DNA, no.

4 Q The availability as to what we know about testing in
5 this matter would certainly tell us that there would be
6 more testing of people in the United States than we
7 would have in Bolivia, isn't that correct?

8 A As far as what area may be facilitating that type of
9 testing, yes.

10 Q That's what I'm talking about.

11 A As to the same type of testing or technique that would
12 be utilized, it would depend on how many or where, so I
13 would agree with you there, yes. It would depend on
14 where it was, yes.

15 Q We have tested more people in the United States
16 probably than have been tested in India or China?

17 A From our standpoint, yes. From the metropolitan
18 department and Scotland Yard, you know, they may be
19 doing independent studies. I haven't talked to anybody
20 there in the last six months. What I will offer is
21 that on blood typing data, gene frequency data, which
22 is what you are relating to, as far as DNA testing,
23 that has been done to some degree around the world.

24 In Europe in the 1950's they were
25 using protein enzyme typing, such as PGM, for paternity

1 and so on. It wasn't until twenty years later that the
2 United States did that. So if you say we have done
3 more in the United States than Europe, it may be pretty
4 much equal on that.

5 What I can say is that at the
6 symposiums the techniques and the validation studies
7 and the acceptance of this type of testing that has
8 been utilized, that regard I would say there has not
9 been -- Well, everybody will state, and I say
10 everybody, and that means everybody that does this type
11 of testing, they will state as to the exactness as to
12 identity based on their local community, their state
13 community or whatever.

14 What is now being structured across
15 the United States is a national data bank such that the
16 way it looks now, within the next five years, there
17 will be a national profile of genetic DNA profiles
18 available for comparison purposes, you know, for
19 whatever reason.

20 Q By the way, perhaps this is an aside, but how will we
21 know whether our own profile finds its way into this
22 national data bank or whatever?

23 A It is being structured different by different states.
24 As far as certain types of programs, we have either the
25 incarcerated individuals or, say, cases from a

1 standpoint of where there is no suspect, and this is in
2 any type of a criminal case. The information, for
3 example, is still profiled and placed in this bank. I
4 guess one way to find out is to have a DNA done of
5 yourself and then have it submitted and see if you
6 matched up anywhere.

7 Q Suppose that happened and suppose I trot out here to
8 the Uvalde Memorial Hospital and I give them whatever
9 fluids of mine they need to make that analysis, but lo
10 and behold I match identical with another human being
11 alive or formerly alive on this earth, and that was the
12 only time that had ever happened, but just suppose that
13 happened.

14 First of all, I understand that you
15 would put the possibility way out on the tail end of
16 all of those nines, but is that possible?

17 A You mean that you would match up with another
18 individual?

19 Q Yes, sir, an individual that I had never laid eyes on.

20 A I would say not from an identity standpoint.

21 Q Suppose that it did, because we don't know that's not
22 the case. We don't think it is, and I understand that,
23 but suppose that happened. Suppose it only happened
24 one time. Where does that leave us with our underlying
25 assumption?

1 A Well, simply from the standpoint, if it did occur, it
2 would stand some looking into of why it may have
3 occurred.

4 Q And suppose it happened a dozen times and there are a
5 dozen instances where, contrary to all of these other
6 folks who were unique, there was matching of genetic
7 markers?

8 A Well, one, I don't think that would occur. I do not
9 believe that. We are assuming or making a lot of
10 assumptions that that would be the case, but I don't
11 believe it would.

12 Secondly, the foundation on why the
13 comparisons would even have been made would prove
14 invalid. But the DNA profile of yours, the only way it
15 would even closely resemble anybody else's would be in
16 your own hereditary background of your family. Even
17 then it would not be an identical match. It would just
18 have certain characteristics that might be similar.

19 Q Which would be true if what we assume is in fact
20 correct, but we might be wrong. At one point in our
21 history let's say we could have gotten someone with
22 credentials such as yours to testify, and we wouldn't
23 have looked in this room but we could have gotten a
24 scientific, astute and trained human being to testify
25 that without a doubt he was 99.99 percent sure that the

1 earth was flat, and folks that knew such things as that
2 said that at one time it was, which we now know that to
3 be wrong, so couldn't we possibly be wrong about this?

4 A From a scientific standpoint, and based on that and not
5 statistics, and that's why I think we are sort of
6 drifting off here, because when we get into statistical
7 data, then possibilities and probabilities enter in.
8 When we get into the biological data, based on gene
9 frequencies and genetics of heredity, which are
10 established laws of heredity that make up each
11 individual, then there is quite a difference involved.
12 I would not profess to be a statistician, but I do try
13 to pose the scientific facts as I think they exist.

14 Q I think I'm fixing to age myself, and probably not you,
15 but tell me if I'm right on this. Wasn't it taught,
16 until fairly recently, say through the '50's, that the
17 smallest building block in nature or blocks were the
18 nucleus, the protein and the neutron that spun around
19 and created an atom? Wasn't there a time within our
20 lifetime when we taught that was as far as you could
21 get in breaking things down in their smallest part?

22 A From a molecular standpoint, yes.

23 Q A lot of folks that were smarter than I thought that to
24 be the case, but recently hasn't it been determined
25 that there is something smaller than that, which is

1 called the quark?

2 A I believe so.

3 Q These are really small as compared to these other
4 things which we thought were the littlest things; is
5 that correct?

6 A And the question from the standpoint of DNA, is it the
7 building block from the chemical breakdown of each
8 individual?

9 Q Exactly.

10 A The other standpoint, which I did mention earlier that
11 there is testing, some types of DNA testing, that I
12 said were not accepted because it actually is
13 manufactured evidence or reproduced cellular material.
14 That's why we are talking about really a routine DNA
15 type of testing here today. That is counteracted by
16 another type, which I wouldn't be here trying to
17 explain at this moment if it would have been that type
18 of testing that was used. But to answer your question,
19 that's correct.

20 Q If I talk to those folks later on about quarks -- and I
21 didn't just dream that up. There is in fact something
22 that we call now a quark and that is a lot littler than
23 the atom or the proton or neutron, isn't it?

24 A I do not recall the specific unit name.

25 Q Have you read Stephen Hawkins book "The Brief History

1 of Time"?

2 A No, sir, I haven't.

3 Q He talks about quarks in there.

4 A That sounds good to me.

5 Q One other set of initials and then I'll leave the
6 initials alone. I think you said RFLP.

7 A Restriction fragment length polymorphism, that is the
8 type of DNA testing which we use and which is the type
9 of DNA that is utilized for identification, which is a
10 better way to say that. That's an abbreviated study
11 that shows the segment of DNA that is tested and the
12 identities made from it.

13 Q Do I understand you to be saying that is the realm of
14 study that we are not as sure about yet or that is the
15 one that we are sure about?

16 A That's the one we are sure about.

17 Q The area that we are pioneering below that are more
18 minute than that and that has not yet been accepted?

19 A No, it's not more minute and it's not different. It's
20 the same DNA. It's just an abbreviated PCR. It's a
21 type of DNA technology where if you have one cell you
22 replica the material of that cell. That is called more
23 or less manufacturing DNA, which is probably about five
24 years down the road.

25 But it doesn't have anything to do

1 with or it is not different than DNA. It's not any
2 different than what we are talking about. It's just a
3 different type of testing technique that is utilized
4 when you have a very small amount of DNA material that
5 you cannot get a profile from. That's the only
6 difference.

7 Q One other area and I promise I'll quit; mutation. Is
8 it possible for someone's genetic composition to
9 mutate? If so, how or what would cause that?

10 A First of all, yes, it is. And, secondly, it's --

11 Q Excuse me. Let me interrupt you if I may, and not to
12 be rude. Let me be sure that I have got this going in
13 my own mind, if that's possible. Does that mean,
14 without going further, that it would be possible at one
15 point on the calendar, from any genetic makeup, to be
16 one kind, and on the other side of the mutation
17 process--forgetting what caused it or may happen--be
18 different?

19 A What I was taking your question specifically to be was
20 can you have a mutation in gene structure which would,
21 and let's just get down to the bottom line, which would
22 cause a different profile from one end to the other.
23 That's what you are looking at. That can occur.

24 But what happens when you do a
25 variety, and this is the key, when you do a variety of

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DNA tests, say, like we have done on these semen specimens for instance, it's not just one test to get one profile, it's not one test and you get a match and then you stop there because it's a match, but you do a variety of separate and individual DNA tests.

These separate and individual DNA tests will utilize different sequences of DNA and then you get matches on each one of these tests, which then readily assures you beyond a reasonable scientific doubt that there is a hundred percent identity.

If I were to, say, run one test on the sperm cells that were removed from the semen stains, and we got a match and we said, "Here it is. It couldn't have come from anybody else," well, that would not be scientifically sound.

We use different sequences so that after each test that we do it becomes more readily assured that it is in fact from an individual and that it comes from the least population that the identity could come from. If nothing else, it would be identified as being right on a million people. If you do four tests, then you get it into the hundreds of millions of people.

Like I explained earlier, we do not report and you do not see in that report any type of

1 population statistics or bases whatever concerning
2 that. We just said that I had banding patterns that
3 virtually assured the identity of the semen depositor
4 that we compared the banding profiles to.

5 Q I may have got lost there. Was there more than one
6 test of banding patterns done or are you talking about
7 a series of, say, four tests? Did you mean by that
8 blood type tests or other tests and then the DNA
9 testing or are you saying you did multiple tests within
10 the DNA area?

11 A Multiple tests. The routine serological work was done
12 and then the individual DNA testing was done using
13 different sequencing from the DNA present. That was
14 performed also. The identity was based on the
15 individual DNA test from the same material that was
16 identified.

17 Q If you are right about that underlying assumption, and
18 that a match means a match period, 99.99 across the
19 board accuracy or inclusion or exclusion, if you are
20 right about that, then why do you as the scientist feel
21 it necessary to test two, three and four times if you
22 are that certain? You've got a banding match up on
23 that test so, bingo, school is out; that's it.

24 A Well, like on all tests, you can simply do the DNA
25 testing and not do the preliminary testing. My answer

1 to both, the one that you posed and the one I posed, is
2 that we do, like I explained earlier, any and all tests
3 so as to gather in and have all the information that
4 may be obtainable for whoever's benefit. If we can do
5 the routine serological testing and say, for example,
6 Mr. Alejandro was a B secretor and an A secretion was
7 identified from this semen, then he's a hundred percent
8 excluded.

9 The same thing would be true on all
10 of the testing. You have to take all of the
11 information and put it together and present it.
12 Therefore, when you do DNA testing you do the variety
13 and not for reassurement or not because it needs to be
14 done, but we do it because they are separate and
15 individual tests that just add to the cumulative
16 information that we present.

17 Q It's not done just to be sure then?

18 A No, sir, it is not done just to be sure. It is not for
19 duplication or replication or for identification. They
20 are separate and individual tests that will just add
21 information and if in fact, like I say, there is a
22 difference in the banding patterns, then it's a hundred
23 percent exclusion.

24 Q If these folks buy this science, as many obviously
25 have, and if based on that they decide Gilbert

1 Alejandro is guilty and then five years from now--and
2 lots can happen in research, in science--you discover
3 that maybe we weren't really that sure, then how do you
4 think you are going to feel?

5 A Well, sir, I --

6 Q I mean if it's on the other side of a guilty verdict.

7 A Well, sir, the only way, and we are getting personal
8 here, but the only way I can really answer that is to
9 say that if that was said eighteen years ago or let's
10 say, fifteen years ago, when I testified as an expert
11 witness, and when all of this ABO typing and secretor
12 status was beginning, I can just answer and say that I
13 can truthfully say that I have never yielded any
14 information to the jury that hasn't been a hundred
15 percent accurate and correct.

16 If different tests and methodology
17 and knowledge comes about in the future and it becomes
18 a question that that needs to be done or applied, then
19 I would highly recommend that it needs to be done. I'm
20 not saying it needs to be done because of any
21 uncertainty that I would have at this time and place in
22 life, because I'm a hundred percent sure, based on all
23 of the tests and the results, as to what I've reported
24 to you now, just like I have been in the past.

25 Q I don't question that. I'm saying that science looks

1 up and discovers that it was wrong. Then how are we
2 going to fix that with Gilbert, if the world isn't
3 flat?

4 A Well, those are based on assumptions of curiosity.
5 There is really no assumptions that have been delivered
6 to the jury today that haven't been scientifically
7 based.

8 MR. HARRIS: That's all I have,
9 Judge. Thank you.

10 MR. MUNOZ: No other questions, and
11 the State is going to rest.

12 THE COURT: May this witness be
13 excused from further testimony?

14 MR. MUNOZ: Yes, please.

15 MR. HARRIS: No objections.

16 THE COURT: You may be excused,
17 Mr. Zain. Thank you very much for coming.

18 MR. MUNOZ: And the State does
19 rest.

20 THE COURT: Let's take about a ten
21 minute recess here. If everyone in the courtroom will
22 just keep their places until the jury is out of the
23 courtroom. After they leave we will be in recess for
24 about ten minutes.

25 (Recess from 2:35 o'clock

1 STATE OF TEXAS ()
2 COUNTY OF UVALDE ()

3 I, GENE L. STEELE, Official Court
4 Reporter in and for the 38th Judicial District Court of
5 Uvalde County, State of Texas, do hereby certify that the
6 above and foregoing contains a true and correct
7 transcription of all proceedings in the above-styled and
8 numbered cause, all of which occurred in open court or in
9 chambers and were reported by me.

10 I FURTHER CERTIFY that this
11 transcription of the record of the proceedings truly and
12 correctly reflects the exhibits, if any, offered by the
13 respective parties.

14 WITNESS my hand this the ____ day
15 of _____, A.D., 1995.

17 (S)
18 GENE L. STEELE
19 Official Court Reporter
20 Certificate No. 908
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ATTORNEY'S APPROVAL

We, the undersigned attorneys of record for the respective parties, do hereby agree that the foregoing pages constitute a true and correct transcription of the statement of facts, and other proceedings in the above-styled and numbered cause, all of which occurred in open court or in chambers and were reported by the official court reporter.

SIGNED this the _____ day of _____, A.D., 1995.

ROGELIO F. MUNOZ
Attorney for the State

SIGNED this the _____ day of _____, A.D., 1995.

R. EMMETT HARRIS
Attorney for the Defendant

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COURT'S APPROVAL

The within and foregoing pages, including this page, having been examined by the court, are found to be a true and correct transcription of the statement of facts and other proceedings, all of which occurred in open court or in chambers and were reported by the official court reporter.

SIGNED this the _____ day of _____, A.D., 1995.

MICKEY R. PENNINGTON
District Judge
38th Judicial District
Uvalde County, Texas
JUDGE PRESIDING