- Q. I'm going to show you a piece of paper and ask you if you recognize the profile.
- MR. STAFFORD: What is this, a guessing game? I object to it unless it's identified.
- MR. YANNACONE: I'm asking the witness if he recognizes the profile. I think this witness, who has seen thousands of chromatograms, can tell us if he can recognize the profile or not.
- EXAMINER VAN SUSTEREN: It's proper. The witness can tell us if he knows or not.
- WITNESS: If it's supposed to be a particular chromatogram of one particular thing, I would not be able to identify it.
- Q. That isn't what I asked you, Mr. Coon. I asked you if you recognize the profile, the peculiar combination of peaks and values and their relative relationship?
- MR. STAFFORD: Oh, I object to this. Pure speculation. Looks like Mount Everest...
- Q. Assuming that, Mr. Coon, and assuming that this sheet labelled No. 2 is the same column with a different sample run through it, with the conditions between them the same, can you identify, after you have examined both of them, any difference between the two chromatograms?
- MR. STAFFORD: Object to the question. Makes assumptions which are not in evidence.
- EXAMINER VAN SUSTEREN: Well, we are having a problem here, Mr. Yannacone. Something is going into the record here that, if the graphs are not marked in any way, that what the witness has to say in regards to them becomes meaningless on the record.
- MR. YANNACONE: They can be marked. I have no objection.

- EXAMINER VAN SUSTEREN: Well, I'm just pointing out to you that you have two sheets of paper in front of the witness, and you are asking him for a comparison.
- MR. YANNACONE: If he could make the comparison, I would have them marked for identification. If he can't, then there's no further sense wasting time on this on the record.
- MR. STAFFORD: Supplement my objection; no proper foundation, your Honor.
- EXAMINER VAN SUSTEREN: You want them marked now?
- MR. YANNACONE: They can be marked now. . . Have them marked as a single exhibit, A and B.
- EXAMINER VAN SUSTEREN: That would be 152.

(Exhibit No. 152—copies of chromatograms, sheet No. 1 and sheet No. 2—marked for identification)

- MR. STAFFORD: Is there a pending question, your Honor?
- MR. YANNACONE: Sheets 1 and 2 are gas chromatographic analyses done of a pair of samples on the same column and under the same conditions, and standard laboratory conditions—
- MR. STAFFORD: I renew my objection, your Honor.
- EXAMINER VAN SUSTEREN: Did you name the compounds?
- MR. YANNACONE: And the sample—one contains a sample of polychlorinated biphenyls together with a mixture of other things. But both samples contain the same mixture of polychlorinated biphenyls.
- MR. STAFFORD: Well, that's what counsel says, but **I** object unless it's in evidence or he connects it up.
- MR. YANNACONE: I'm asking the witness simply if he can compare these two exhibits.

WITNESS: Yes, I can compare them.

Q. All right. Are there any differences?

A. There's one major difference.

Q. What's the major difference?

A. That's the difference in the peak height in this sample as compared to (indicating)—this injection as compared to this injection (indicating)...

Q. In a particular point?

A. At a particular point.

Q. Now I want you to take the green pen we have been using and— Or let me do it. I'm going to label the peaks beginning from left to right (marking exhibit) 1, 2,3, 4, 5, 6, 7, 8, 9, 10,11, 12, 13, 14, 15, 16. And we will stop at 16. Now comparing, using the same numbering, in sheet No. 1 we have numbered peaks from 1 through 16. In sheet No. 2 there's a peak at approximately the same place as peak No. 1, right?

- **Q. And two is the same?** A. Two.
- **Q. And three is the same?** A. Three.
- **Q. Four is the same?** A. Yes, sir.
- **Q. Five is the same?** A. Relatively, it's the same.
- **Q. Six is the same?** A. Right.
- **Q. Seven is the same?** A. It is the same.
- **Q. Eight is the same?** A. Yes.

A. Yes.

Q. Nine is the same?

A. Yes.

- **Q. Now is there a change in, difference in ten?** A. There is a difference in peak size, in height.
- **Q.** All right. And is there any change in eleven? A. It could be minor, but it doesn't appear to be significant.
- **Q. Any other changes in the chromatogram?** A. Yes.
- **Q. If you overlay them and hold them up to the light**—(Witness holds up documents)
- MR. STAFFORD: I object to further questions in this area, until Counsel advises what the purpose and relevancy of this fun and game is. You know? There's no foundation laid for this kind of questioning.
- EXAMINER VAN SUSTEREN: Mr. Coon has been established as an expert in his field. He is the director of chemistry at an internationally famous independent laboratory. And it's quite obvious Mr. Yannacone is testing his ability and stature as an analytical chemist, particularly in PCB's vis-a-vis DDT.
- Q. Now, Mr. Coon, did your institution analyze for Dan Anderson— a PCB food mixture.
- EXAMINER VAN SUSTEREN: If the witness recalls.

WITNESS: No, I don't recall we did.

Q. Did you prepare a PCB food mixture for Dan Anderson?

A. I did not so prepare one.

Q. Do you know whether your institution did?

A. He came over and asked me if he could have somebody in our organization help him prepare a mixture, and I put him in contact with one of our people, and I would have to presume that this did happen.

- Q. And if I tell you now that the chromatogram shown on sheet No. 1 of exhibit 152 is the chromatogram of that mixture, and sheet No. 2 is a chromatogram of that mixture with a single addition, can you by looking at those two chromatograms tell us what if any changes were made in the mixture? Just, can you tell us? A. No, I can't tell you.
- Q. Now I'm going to show you another sheet which should bear the same exhibit number, only sheet No. 3 of it, and ask you if you can relate that chromatogram, taken under the same conditions, on the same column as those shown on sheets 1 and 2 of exhibit 152, and tell us if there's any similarity among them?

MR. STAFFORD: Same objection.

EXAMINER VAN SUSTEREN: Overruled.

(Witness examines documents)

WITNESS: There are a number of similarities.

- Q. There are. Now if I tell you that added to the PCB mixture demonstrated as analyzed on sheet No. 1, there was a small quantity of DDE, and that shows in the difference you identified in sheet No. 2, and that sheet No. 3 represents the chromatogram on a QF-1 column under the same conditions as the chromatogram in sheet No. 1 of the material from an egg of a mallard duck fed the mixture in sheet No. 1, can you by examining and comparing those two, sheet No. 1 and sheet No. 3, indicate whether or not there is any passage of any of the material indicated on sheet No. 1 through to the egg in sheet No. 3?
 - A. There would appear to be a good amount of the material shown in 1 having gone through and showing in the egg analysis.

- Q. Now, Mr. Coon, do you really know what hydrolysis is?
 - **A.** Well, it involves a good number of things which fall under a broad classification roughly of treatment which would permit changes to occur. It's a broad term.
- Q. Well, isn't hydrolysis really the dissociation of an ionic compound or polar compound in water with the resulting separation into an acid and a basic fragment?
 - **A.** Yes, this could be one definition of hydrolysis and probably as close as any.
- Q. And you can't really do this with a nonpolar substance like polychlorinated biphenyls or DDT, can you? What you are really doing is saponifying, aren't you?
 - A. You are saponifying them, yes.
- Q. And what you are doing in the chemical procedure underlying chromatograms 9 and 10 is dechlorinating the DDT and the DDD, aren't you?
 - A. Yes, you are actually stripping off chlorine.
- Q. Is there any reason why you don't dechlorinate the polychlorinated biphenyls by the same process, if you know?
 - A. Yes, there are certain molecules of chlorine which in certain positions on organic compounds become more stable and less liable to removal by saponification steps.
- Q. Now, Mr. Coon, isn't it true that several months ago Dr. Risebrough sent you a copy of a paper which is now in press in the Bulletin of Applied Pharmacology and Toxicology which discusses methods for determining PCB's and distinguishing them from DDT compounds? A. He sent me such a paper.
- Q. You read it?
 - A. Yes, I did.
- Q. Have any objections?
 - A. Not to the paper in toto.

- MR. STAFFORD: I wonder if I could see that paper, Mr. Examiner. If it's going to be subject to cross-examination, I'd like to take a look at it.
- MR. YANNACONE: I'm not talking about the paper yet. When we get through, maybe we will decide whether it's going to be an exhibit.
- MR. STAFFORD: I have made my request. May I see the paper.
- EXAMINER VAN SUSTEREN: He has merely asked the witness if he was acquainted with a certain paper and whether he agreed with it. We haven't gone into the content of it in any way.
- MR. STAFFORD: I don't know how you can come to the conclusion you agree with anything without—What is he agreeing to, the form, or the context?
- EXAMINER VAN SUSTEREN: Well, the witness-
- MR. STAFFORD: If it's subject to cross-examination, I think as Counsel for this witness I'm entitled to see the paper, and I'm making the formal request for it.
- EXAMINER VAN SUSTEREN: Well, the witness has already stated that he's aware of it, has received it, has studied it, and he has ventured an opinion as to his agreement. Exactly what this paper says or does or anything else, we don't know. If Mr. Yannacone stops right now, it's quite obvious that what he's extracted from Mr. Coon is worthless. And it depends—we have to depend upon Mr. Yannacone then just how far he wants to go.
- MR. STAFFORD: The answer is "no", I take it, to my request?
- EXAMINER VAN SUSTEREN: The objection is overruled. And, in other words, Mr. Stafford, I'm telling you as gently— ... as gently as possible it was premature.
- MR. YANNACONE: Quite premature.
- EXAMINATION BY MR. YANNACONE

- Q. Mr. Coon, have you done analyses before for the National Agricultural Chemical Association or its Task Force on DDT? When I say "you", I mean the institution.
 - A. Would you define who the client is in this case?
- Q. The same client that you did the examination of the Bear Creek Coho for.
- WITNESS: I was not aware of any—I'm not aware of any samples we have done for them before the work we are presently doing for them.
- EXAMINATION BY MR. YANNACONE
- Q. All right. Who is the client that asked you to examine this Bear Creek Coho?
- MR. STAFFORD: Willard Stafford asked him to do it.
- WITNESS: That would be my answer, it would be Mr. Stafford.
- Q. Did you agree upon a fee before you embarked on the examination?
 - A. We gave them two fees.

Q. What were the two fees?

- A. One was for price of analysis, and the other was for time which could be spent in such as this, or whatever consultation we may have.
- Q. In other words, you are being paid a fee for the time you are investing in this hearing, aren't you, Mr. Coon?
 - A. Yes, we are—I'm not, no.

Q. Well, who is?

A. The WARF Institute, Inc.

- Q. If Doctor Hickey, Professor Hickey, asked WARF to come down and testify as to the validity of certain results that were published in a paper in which you have your name attached, you'd charge him a fee, wouldn't you?
- EXAMINER VAN SUSTEREN : Now I'm going to interrupt. Now just a moment—
- MR. YANNACONE: I will withdraw the question. I'm sorry.
- EXAMINER VAN SUSTEREN: For the plain and simple purpose that I just don't think this witness has been qualified as one of the policy makers of the foundation or incorporation.
- MR. YANNACONE: Not foundation-
- EXAMINER VAN SUSTEREN: Corporation.
- Q. Are you an officer, stockholder, or director of the corporation called WARF?
 - A. Not any of those.
- **Q. You are just an employee?** A. I am an employee of WARF Institute.
- Q. Who is your boss at WARF?
 - A. My direct boss would be Doctor John Birdsall, and indirectly Mr. Philip Derse.
- **q. Has WARF Institute ever testified or sent a member of its staff to testify in litigation before?**
- MR. STAFFORD: What's this? Did-
- WITNESS: Many, many times.
- **Q. This is a standard policy?** A. It is.
- **Q. Mr. Coon, WARF Institute then makes analyses for the purpose on occasion of use in litigation, don't they?** A. Yes, we do.

- Q. And this Coho, Bear Creek Coho is one such, isn't it? A. Yes.
- MR. STAFFORD: That's a legal conclusion. Obviously it is.

WITNESS: Yes. I'm doing it for Mr. Stafford at his request.

Q. And you knew it was for the purpose of litigation in this hearing, right?

A. He gave it to us for that particular purpose.

- Q. Did he give you any other assignment as to the extent of the analysis?
 - A. His initial instructions were to analyze this particular sample for DDT and metabolites.

Q. What are his present instructions, if any?

A. Well, his present instructions, after we had shown him the chromatogram, was that we should proceed to the hydrolyzed step.

Q. And now that you have done that, any further instructions, or are you finally finished?

- EXAMINER VAN SUSTEREN: Well now, Counsel, we are beginning to touch—
- MR. STAFFORD: It's a little privileged, I think.
- EXAMINER VAN SUSTEREN: ----on privileged grounds.
- MR. YANNACONE: All right. I'll withdraw the question. I'm sorry.
- Q. Now, Mr. Coon, are you ready to prepare a report for your client on that chromatogram?
 - A. At this moment?

Q. Within the near future?

A. We will prepare a report for our client on this, this and anything else we may so do.

Q. Are you going to prepare it in writing?

MR. STAFFORD: Oh, this is all privileged, and I object to it.

EXAMINER VAN SUSTEREN: The objection is sustained. MR. YANNACONE: I have no further questions.