Q. Mr. Coon, is it a fair statement to state—and I am now reading from the testimony of Dr. Risebrough, page 655 of this case— "And it occasionally happens that two of these compounds... "—referring to polychlorinated biphenyls and DDT and its metabolites — "just might come out at exactly the same time. If so, together they would make one peak."—referring to the electron capture detector—-

"Now the interference which has arisen even with para, para prime DDT and one of the polychlorinated biphenyls —first of all, as Dr. Wurster said before, the function of a kind of column —..." —is first of all— "... if one uses a QF-1 column, there is no interference of pars, para prime DDT; the para, para prime DDT values reported when one uses this column are accurate."

Now do you have any disagreement with that statement? A. No, I can't disagree with it.

- Q. All right. Quote again, the beginning of the next paragraph: "One of the reasons for using two columns —first of all my machine, for example, is equipped with two columns, one of which is a QF-1 column, the other is a DC-200 column; one is polar, the other is nonpolar. Almost all of these individual compounds will come out at different\* times in each column. Therefore if dieldrin comes out at the same time with DDE on the DC-200 column, comes out at a different time on the QF-1, in that way we are able to gain much more information.
- "Now on the DC-200 column one of the PCB peaks comes out just slightly after para, para prime DDT, not at exactly the same time, but just slightly later."

Now you have no disagreement with that statement, do you, Mr. Coon?

A. No.

Q. Quote again: "Now this, if there is a large amount of both, they appear as one peak. If there is only—if there is a large amount of one compound and a relatively small amount of the other, then the retention time of this peak will vary slightly. And this can be readily seen if you look at the chromatograph."

**Would you disagree with that statement?** A. No.

Q. Quote: reading from page 656, the first full paragraph that begins on that page: "And I must say that the polychlorinated biphenyls which are found in the environment produce a characteristic pattern on the gas chromatograph, so after—so practically all you have do is just look at the gas chromatograph and tell the degree of polychlorinated biphenyl contamination?"

**Do you disagree with that statement, Mr. Coon?** A. I can't disagree with it. Q. All right. Now—

- MR. STAFFORD: You want to read the next one there, the next answer?
- MR. YANNACONE: If you wish to read it-
- MR. STAFFORD: You don't want to read it?
- MR. YANNACONE: No, I'm reading what I want to read; you can read what you want to read.
- MR. STAFFORD: All right, sir.
- MR. YANNACONE: I think we have gone through the chromatograms this way, and you will have your chance on redirect. Although, for the record, why not.
- "Question: Is it now common to find DDT metabolites and the polychlorinated biphenyls in residues of tissue?"
  - Doctor Risebrough's answer: "Yes, like DDT compounds, the polychlorinated biphenyls are now found all over the world. I have not yet found this in penguins, for example, from Antarctica. I have found only DDE residues. But I have found them in, just like the DDT compounds, in sea birds from Alaska, New Zealand and Chile and Australia and Antarctica. They are worldwide pollutants at this stage. And we believe that, like the DDT compounds, they are dispersed by air transport."
- **Q. You don't disagree with that, do you?** A. No.
- Q. You don't have any professional competence to comment on that particular statement, do you? You are not an ecologist? You are not familiar with the worldwide distribution of either DDT—
  - A. I have had no direct contact with the direct contamination of the world by PCB's.

## Q. Or DDT and DDE, have you?

- A. I have not—yes, I have too, I have applied DDT to my garden, but that's been the extent of it.
- **Q.** Then you can't form any opinion on worldwide contamination; you are not qualified, are you? A. No, I'm not.
- Q. All right. Now the next question; the question was—so we keep Mr. Stafford's following of the record accurate:

"Would a confirmation of peak identity of the gas chromatographic analysis by a thin layer chromatography help act as a check on the possible contamination with polychlorinated biphenyls?" Answer of Dr. Risebrough: "On thin layer systems the polychlorinated biphenyls tend to migrate with the DDE at the top of the thin layer plate. Para, para DDT and para, pan DDD migrate at a slower rate, so they are found further down at the bottom of the plate, they can be scraped off and reinjected into the gas chromatograph to give one peak. This is the standard means of confirming the-one of the means of confirming the identity of para, para. DUD and para, pan DDT. See, what has happened in the past is that these peaks have appeared on the gas chromatographs, and thin layer has been run and the presence of para, pan DDT and para, para DDD has been confirmed."

Now you don't disagree with the statement do you?

- A. I disagree with it to the extent that it did not happen in our laboratory in that particular way.
- Q. Mr. Coon, there's a number of thin layer plate bases, aren't there?
  - A. There are a few, yes.
- **Q. There's a number of thin layer solvents, aren't there?** A. Yes, there's quite a number.

## Q. And there's quite a number of thin layer developing agents, aren't there?

A. There are quite a few.

## Q. You have used one for your confirmation, haven't you, Mr. Coon?

A. We have used one mostly.