Glenn Brown
Trial testimony
10/28/91

THE COURT: Good morning.

THE JURY: Good morning.

THE COURT: Thank you. Gentlemen.

(A conference was held at the bench.)

THE COURT: The Court recognizes (inaudible) Ladies and gentlemen of the jury, you notice Ms. 'Carr' is missing, and that's why we were somewhat delayed. We are waiting to (inaudible) Ms. 'Carr' (inaudible) where she is. I might remind all of you, you're great about showing up on time, but if any of you are -- if something comes up and you think you might be running late, call us. And that way we will know how to proceed. Ms. 'Carr' hasn't called us. So we weren't sure what the case was. So we'll proceed at this time. Mr. Kotoske, you may call your next witness.

MR. KOTOSKE: Thank you, sir. Philip Smith. Plaintiff calls as their next witness Philip Smith.

PHILIP SMITH,

of lawful age, having been first duly sworn testified as follows:

DIRECT EXAMINATION

QUESTIONS BY MR. KOTOSKE:

THE COURT: Sir, speak into the mike, please, as close as you can. Proceed.

Q. (By Mr. Kotoske) What is your educational

background? Can everybody hear?

THE JURY: No.

Q. (By Mr. Kotoske) What is your educational background?

A. I have a bachelor's degree with a major in biology and a minor in chemistry.

Q. In about 1971 did you begin employment with Industrial Bio-Test Laboratories?

A. Yes, I did.

Q. I'm going to call that IBT from now on.

A. All right.

Q. What was your job there?

A. I was hired as an assistant toxicologist.

Q. Now, when you hired on were toxicity tests being performed on rats using aroclors 1260, 1254 and 1242 manufactured by Monsanto?

A. Yes.

Q. That was the test material, those PCBs?

A. Yes.

Q. It's 1260, 1254 and 1242. Now, the animal tests that we are talking about were rat studies, correct?

A. Yes.

Q. And the studies were to determine the toxicity of these chemicals?

A. That is correct.

Q. Now, I want you to explain -- I don't need a great deal of detail, but the jury has to understand how a toxicity test is carried out. With respect, for example, to 1260, you had three test groups; is that right?

A. That is correct.

Q. Of these animals. And did you also have three test groups for 1254?

A. Yes.

Q. And three test groups for 1242?

A. Yes.

Q. However, you had one control group for all three animals?

A. Yes.

Q. You fed the test group PCBs; is that right?

A. That's correct.

Q. And the control group, of course, had a normal diet?

A. That's correct.

Q. You personally worked on these animal tests?

A. Yes, I did.

Q. You worked on these tests with a fellow named Paul Wright; is that correct?

A. Yes.

Q. What was his -- Excuse me. What was his role in connection with these PCB tests?

A. He was the section head of toxicology.

Q. Now, Paul Wright worked at Monsanto before he came to IBT; is that correct?

A. Yes.

Q. He stayed at IBT about 18 months; is that correct?

A. Yes.

Q. And then he returned to Monsanto; is that correct?

A. Yes.

Q. I'm interested in this 18-month period right now when he worked at IBT. I need to have you identify some people for us because their names are already before the jury, but they might not be (inaudible). The first name I want you to tell me is Otis Francher, spelled F-r-a-n-c-h-e-r. I haven't pronounced that correctly. Fancher?

A. Fancher. No R in the beginning.

Q. And we need to put one other detail in here. You started in 1971?

A. Yes.

Q. And how long did you work there?

A. Until June of 1977.

Q. All right. Now, let me start over again. Who was Otis Fancher?

A. When I started at the laboratory, Otis Fancher was the laboratory manager.

Q. And Paul Wright was hired how soon after you started?

A. Two, three months, at the most.

Q. He starts in 1971, and he works for 18 months. Who was Manuel Reyna, R-e-y-n-a?

A. He was an assistant toxicologist hired about five months after I started there, and he eventually became group leader of the rat toxicity department.

Q. Dr. Calandra, C-a-l-a-n-d-r-a?

A. Dr. Calandra was the president of the company.

Q. And Mar -- is it Marion Keplinger? How do you say his first name?

A. Marino.

Q. Marino Keplinger, K-e-p-l-i-n-g-e-r. Who was he?

A. He was the section head of toxicology when I started there. And when Dr. Fancher retired, Dr. Keplinger became the manager of the laboratory.

Q. All right. Those were the major players at the time you were there?

A. Yes.

Q. In a toxicity test such as these PCB tests on

rodents do you from time to time weigh the animals?

A. Yes.

Q. Why?

A. To determine if the PCBs have any effect on the growth rate of the animals.

Q. Do you have knowledge of whether or not the data concerning the weight of the animals was falsified?

A. Yes, I do.

Q. I mean personal knowledge.

A. Yes, personal knowledge.

Q. Tell the jury how that happened.

A. At the time I was assisting in preparing the final report for these three compounds, I was going through the animal department study files, and a lot of the body weight data was not there. And I talked to Dr. Paul Wright about it. And he instructed me to make graphs for all of the body weights that we had in existence, plotting body weights versus length on tests, and he then instructed me to give him those graphs. And he returned the graphs to me with body weights written in for all the intervals that the body weight data was missing in the study records, and he instructed me to insert those weights into the final report for the aroclor studies.

Q. That was false, wasn't it?

A. Yes.

Q. I want to turn the subject to another component of toxicity studies, and that concerns the survivability of animals being fed aroclor, as well as the control group. What was the survivability of the animals that were being tested in this test?

A. Very poor. There were very few animals that survived the length of the study.

Q. And it's important, is it not -- Well, do you have personal knowledge of the survivability, you, yourself? What I mean by that is did you personally learn in the studies that the survivability was very poor?

MR. CARNEY: Let me object. It sounds like it's asking for hearsay information, not his own personal knowledge.

THE COURT: (Inaudible) a little bit, sir.

Q. (By Mr. Kotoske) I'm asking for your personal knowledge through this whole examination.

THE COURT: Tell him what you mean by personal knowledge.

Q. (By Mr. Kotoske) Well, do you have personal knowledge about the data survivability -- You worked right on these rat studies, didn't you?

A. Yes.

Q. All right. What was the survivability of the

animals?

MR. CARNEY: Your Honor, I'd like to -- I still think he's asking for hearsay, unless he actually knows what -- He was only there for about five months of the study. So unless he knows of his own knowledge.

THE COURT: I'm going to overrule at this time as long as (inaudible). Are you saying on every one of these questions his answer comes from the fact that he personally worked on these animals?

MR. KOTOSKE: Well, yes. That's what (inaudible).

THE COURT: And not something he was told?

MR. KOTOSKE: That's exactly right.

THE COURT: I'm going to overrule the objection.

Q. (By Mr. Kotoske) First let's do the background. What was the importance of survivability?

A. Survivability is one of the many parameters in the toxicity study that you look at to see if feeding PCBs had any effect on the animal's life span.

Q. Now, were you personally aware of the survivability of the animals in this test group -- in these test groups?

A. Yes.

Q. Okay. And how did you record that data? I

mean did you make notes, (inaudible) notes?

A. Some of the data was never recorded.

Q. Do you know from your own personal knowledge what the survivability was of these animals in this test?

A. I -- The number of animals that survived at the end of the study was low.

Q. How low was that?

A. I would say 10 percent or less.

Q. Survived?

A. Yes.

Q. Let's use 10 percent survived.

A. Some groups may have been a little more, and some groups a little less. The male groups usually had a lower survival rate than the female groups.

Q. Was there falsified data with respect to the survivability of the animals?

A. The mortality and survive tables in the final reports were falsified, yes.

Q. Now, I want to turn to what is called decomposition. What I mean by decomposition is that the animals in the test are so badly decomposed that they are worthless for a pathologist to examine the tissue. Do you understand that as what I mean by decomposition?

A. Yes.

Q. Do you have personal knowledge whether or not

these aroclor PCB studies had animals where they were so badly decomposed that they were worthless for any testing?

A. Yes. There were many animals that were so badly decomposed that they were worthless for pathological examination.

Q. Now, how many -- You know, I can't ask you to give me -- We have the reports here. You'll see that in a minute, but just roughly?

A. I would say 60 percent of the animals either had -- were too badly decomposed or there was absolutely no record of them leaving the studies. They just disappeared.

Q. Did Paul Wright know about the survivability statistics?

MR. CARNEY: Objection.

Q. (By Mr. Kotoske) Was he aware of the problems with survivability?

MR. CARNEY: Objection. It would call for --

THE COURT: Sustained as to form. You may (inaudible)

Q. (By Mr. Kotoske) Did you discuss the survivability of the animals, for example, with Paul Wright and the problems associated with them?

A. At the time of the final sacrifice we discussed the number of animals was getting low, and his

instructions were to go ahead and schedule the final sacrifice of the surviving animals.

Q. He was aware of the survivability problem then at the end of the study?

MR. CARNEY: Objection, Your Honor.

THE COURT: Sustained as to form.

Q. (By Mr. Kotoske) How did he become aware of that?

A. We discussed the number of survivors.

Q. You actually participated in discussions with Paul Wright?

A. Yes.

Q. Did you actually participate in discussions with Paul Wright as to the decomposition problem?

A. Not specifically, no.

Q. All right. How about the weight problem? Did you actually discuss that with Paul Wright?

A. Yes.

Q. With respect to these studies done by IBT for Monsanto, did you consider it to be a shameful or an irregular study?

A. At the time that the study was done, no. It was pretty well standard operating procedure for everything.

Q. Everything at IBT?

A. In the rat department.
Q. This is the way IBT carried out its affairs; is that true?
A. In that period of time, yes.
Q. Did it come to your knowledge that Monsanto asked to see these studies before the final report was prepared?
A. I didn't know that Monsanto had asked to see the specific studies.
Q. Did Monsanto ever ask to make corrections in these studies before they were put in their final form?
MR. CARNEY: I'm going to object, Your Honor. I don't think the witness has the knowledge, and that's what we're talking about.
Q. (By Mr. Kotoske) The procedures.
THE COURT: Well, let's lay a foundation. If he did, let's lay the preliminary foundation, Mr. Kotoske.
MR. KOTOSKE: I will.
Q. (By Mr. Kotoske) Do you know personally whether or not Monsanto asked to see these studies before -- the results of these studies before they were put in final form?
MR. CARNEY: Let me just make sure I understand. Are we talking about the 1971 studies that were out in November?

THE COURT: Let's define the studies.

Q. (By Mr. Kotoske) Well, let's stop. I'll show you the studies. I'm showing the witness Exhibit 12, which are the actual studies, and let's identify them for the record, and then I'll just (inaudible). If you will turn, you can see, Mr. Smith, where I have paginated these studies in the lower right-hand corner, 307, 321 and so forth. Not this number, not the Bates number.

A. Uh-huh.

Q. That's what I mean when I refer to page numbers. Let's start with the aroclor study done on 1260, and that study starts on page 262, and it runs to page 346. Just check if that's correct.

A. 346.

Q. 346?

A. Yes.

Q. Okay. That is the study done on aroclor 1260; is that true?

A. Yes, it is.

Q. And this is the study we have been talking about with respect to that 1260?

A. Yes, it is.

Q. And it is entitled, "Report to Monsanto Company, two-year oral toxicity with aroclor 1260 in albino rats;" is that correct?

A. That's correct.

Q. And it is dated November 12, 1971; is that correct?

A. That is correct.

Q. And your signature appears on that study on page 264?

A. Yes, it does.

Q. And it is also signed by Dr. Paul L. Wright, Ph.D., section head, toxicology; is it not?

A. Yes, it is.

Q. Now, if you'll bear with me, let us turn to the aroclor study on 1254. It begins on page 347, and ends on 434?

A. That's correct.

Q. And it is entitled "Report to Monsanto Company, two-year chronic oral toxicity with aroclor 1254," and it's dated November 12, 1971; is that correct?

A. That's correct.

Q. Now, if you'll turn to page 349, you see the signature of Paul Wright?

A. Yes, I do.

Q. And a signature that purports to be your signature; is that true?

A. That's true.

Q. Let's go to 1242. It begins on page 435 and

ends on 521.

A. Yes.

Q. All right. Is that the aroclor study that was done -- Pardon. Was that the toxicity study done on aroclor 1242?

A. Yes.

Q. And it's entitled "Report to Monsanto Company, two-year chronic oral toxicity with aroclor 1242," and it is dated November 12, 1971.

A. That's correct.

Q. If you'll turn to page 437, you see that it is signed by Paul L. Wright, Ph.D., section head, toxicology?

A. That's right.

Q. And is that your signature?

A. Yes, it is.

Q. As assistant toxicologist, rat toxicity. Now, those are the reports that you were referring to. Each of these reports contains a variety of information about all of the studies done reportedly on these animals, including tables and so forth, does it not?

A. That is correct.

Q. And you're familiar with those tables in these studies?

A. Yes, I am.

Q. Is the information in there false?
A. Yes.
Q. Did Paul Wright at the time he signed these letters knew that the information contained there was false?
MR. CARNEY: Objection, Your Honor.
THE COURT: Sustained as to form.
Q. (By Mr. Kotoske) Did you discuss the falsity of the reports with Paul Wright?
A. I did not discuss the falsity of the reports with him.
Q. Anybody who had any information concerning what happened out there at IBT would know the information contained in those studies was false?
MR. CARNEY: Objection. Your Honor --
THE COURT: Sustained as to form.
MR. KOTOSKE: I don't see the problem, Your Honor.
(Ms. Pape replaced Ms. Carter.)

THE COURT: You're asking what someone knew in their own mind. You didn't say whether these existed; therefore, the jury can make that assumption.

Q. Are the tables contained in these studies concerning the weight of the animals false?

A. I'm sorry. I didn't hear the first part of the question.

Q. Is the information in here concerning the weight of the animals false?

A. Yes, it is.

Q. Is the information from your personal knowledge as to the survivabilities of these animals as reported in these reports false?

A. Yes, it is.

Q. With respect to decomposition of animals available for pathological testing, is the information contained in this report false?

A. I don't think any information regarding decomposition of animals was included in the report.

Q. Was it a custom and practice at the time that you worked at IBT--was it the custom and practice of IBT at the time that you worked there to falsify animal testing studies? Was that a general thing that was done?

A. At a period of time where these studies were run and for a while after that, yes.

Q. I want to talk to you about Monsanto people visiting IBT while these studies were going on up until the conclusion of the studies, and I'm gonna mention some very specific names and I want you to tell me whether these people from Monsanto ever came to IBT. Did a Dr. Levinskas ever come to IBT?

MR. CARNEY: I just want to make sure I understand the question as to this period of time. I think he said up until these reports were done. I think the doses were done in the summer of '71 and the reports were done--.

MR. KOTOSKE: What's the objection?

MR. CARNEY: Well, I'm not clear as to the time we're talking about here.

THE COURT: Identify what period, please.

Q. During what period of time would Dr. Levinskas have visited IBT?

A. I would say more like '72 to '75, '76.

Q. Did he ever ask--let's fill in some blanks here. Who was Dr. Levinskas?

A. He was from Monsanto Company and I believe he was the medical director at one point in time.

Q. Now, did Dr. Levinskas ever ask you any questions about the information that was contained in these reports that you told us were false?

A. No.

Q. Did he ever ask you to visit the animal testing program to see what was actually going on with the survivability of the animals and the decomposition?

A. No.

Q. Did he ever say, Phil, let me see how you are conducting these studies?

A. No.

Q. I want to ask you about something. Elmer Wheeler. He's been identified in this trial as the assistant to Dr. Emmet Kelly from Monsanto. Do you recall if he ever visited Mon--IBT?

A. There were inner office memos indicating that Dr. Wheeler was coming for a visit on several occasions.

Q. Did you ever meet with him?

A. No, I did not.

Q. Do you know if Paul Wright ever met with him?

A. No, I don't.

Q. So Mr. Wheeler never asked you to visit the animals and see what condition they were in?

MR. CARNEY: Object, Your Honor. He didn't have any discussions.

THE COURT: I'll sustain. He never saw him (inaudible).

Q. How about Emmet Kelly? Did Mr. Emmet Kelly, the head of toxicology before Mr. Levinskas, ever visit IBT?

MR. CARNEY: Just for the record, he is in charge of the medical department, not toxicology. Just to be precise.

THE COURT: (Inaudible).

Q. Did Mr. Kelly ever visit IBT?

A. There were inner office memos indicating that Dr. Kelly was coming to the Bio-Test for a visit.

MR. CARNEY: Your Honor, I'm gonna move to strike those answers where he's talking about hearsay evidence and seeing a memo.

THE COURT: Sustained. Let's proceed. Go ahead.

Q. Did you ever meet with Dr. Kelly?

A. No, I did not.

Q. Do you have any information at all that he ever saw the condition of the rat studies?

MR. CARNEY: Obviously, Judge, he never met the man. He doesn't have any way of knowing.

THE COURT: I think he's referring to some documents.

MR. KOTOSKE: No, I'm not. I'm talking about conditions at his laboratories. The (inaudible).

THE COURT: I'll sustain as to form. You may rephrase.

Q. Do you have any information at all that Dr. Kelly ever questioned these false reports on PCB studies?

MR. CARNEY: Objection, Your Honor. He's never discussed anything with the man or met the man.

THE COURT: Sustained. Proceed.

Q. Papageorge--William Papageorge. Did he ever visit IBT?

A. I have no idea.

Q. The only person that you know that had personal knowledge of that, knew of the falsity in these reports was Paul Wright?

A. That is correct.

Q. Did Paul Wright have that information before he returned to Monsanto?

A. Yes, he did.

Q. Did you ever see Paul Wright change reports, edit reports on these PCB studies?

MR. CARNEY: Your Honor, may we approach the Bench?

(A discussion was had at the Bench.)

(The last question was read back by the reporter.)

THE COURT: The question is (inaudible). Can you answer the question?

A. I'm still not sure I understand the question.

BY MR. KOTOSKE:

Q. All right. Let's approach it a different way. Did you see the draft reports before they were (inaudible)?

A. Yes, I did.

Q. And you also saw the final report?

A. Yes, I did.

Q. Were there changes between the draft and the final report?

A. There were things in the final report that weren't there the last time I saw the rough drafts.

Q. Okay. Do you know who made those changes?

MR. CARNEY: Talking about personal knowledge--yes, he saw it?

THE COURT: If somebody saw. That's right.

A. I didn't actually see anyone.

Q. Change the reports? Now, who had--who was running the study? That is to say, who was the top dog? Was it Paul Wright?

A. Paul Wright was the section head of toxicology over the department, and at that time reports were going to him before they went to the typing pool to be typed and then on to upper management for approval.

Q. He was the last one to have the reports? Is that how it worked out there?

A. Yes.

Q. And he--well, you didn't see him actually making the changes; you weren't in the room (inaudible) what was going on with the changes of the drafts after it left

Paul Wright's hands in the final form; is that true?

A. There were changes in the report from the rough draft to the final form.

Q. After Paul Wright went back to Monsanto to work after his stay at IBT, did he still return to IBT?

A. Yes, he did.

Q. What was the purpose, if you know from your knowledge, why he came back to IBT as a Monsanto employee?

A. He was head of toxicology for Monsanto and he came back to supervise the studies that were ongoing at IBT for the Monsanto Company.

Q. During that period of time, did Paul Wright make changes in the reports?

MR. CARNEY: Let me object, Your Honor, unless we're talking about PCB reports.

THE COURT: Yeah, let's stick with PCB reports, please. You may answer the question based on that. Again, personal knowledge.

A. I saw memos from Paul Wright requesting--or letters--

MR. CARNEY: Objection, Your Honor. I think that would be--

THE COURT: I'll sustain.

MR. KOTOSKE: He saw the memos, Judge.

THE COURT: Well, do we have the memos? He can

refer to memos as long as we have them.

MR. KOTOSKE: We don't have 'em.

BY MR. KOTOSKE:

Q. Did you actually see the memoranda?

A. Yes.

Q. Did you physically hold it?

A. Yes.

Q. Although you can't remember verbatim what the mem--can you remember verbatim what those memos said?

A. There was a--

MR. CARNEY: Let me object as to what it said. He can answer the question as to whether he remembers verbatim. Otherwise--

THE COURT: Let's (inaudible).

(A discussion was had at the Bench.)

THE COURT: I will sustain the objection to referencing--any references to the memoranda. You may proceed. Please proceed.

BY MR. KOTOSKE:

Q. I want you to turn to the signature page on the report for 1254, and that's--appears on page 341. Now, the foundational question is, did you ever sign off on the report of 1254--for PCB 1254?

A. Yes, I did.

Q. Is that your signature?

A. No, it's not.

Q. Who forged your signature?

A. I do not know.

Q. Were you asked at the time that you were out there (inaudible) these PCB studies, were you asked from time to time by Paul Wright to sign reports and data sheets that you refused to sign?

MR. CARNEY: Is this regarding PCB?

THE COURT: PCBs.

MR. KOTOSKE: That's what we're talking about.

MR. CARNEY: Okay.

Q. You may answer, sir.

A. No, I didn't.

Q. Did you have occasion to see that your name was falsified on certain data concerning these PCB reports while you were out there?

A. Could you repeat that, please?

Q. A report is supported by raw data and bench books, is it not?

A. Yes.

Q. Did they keep bench books and raw data sheets as the studies was in progress out at IBT, or was that unusual?

A. We kept mostly loose leaf paper for the data.

Q. You didn't have formal raw data, bench books

for your work?

A. There were some available. We rarely used them.

Q. Did Paul--was Paul Wright aware of that?

MR. CARNEY: Objection.

THE COURT: Sustained as to form.

Q. Did you talk about that problem with Paul Wright?

A. No.

Q. There came a time in 1976 prior to your departure where you wrote--you personally wrote a long memorandum to the company complaining of the deficiencies in their animal testing, did you not?

A. Yes, I did.

Q. And that memorandum included the deficiencies--

MR. CARNEY: Your Honor, I'm gonna object to the question unless we have the memo here so I can look at it and cross-examine the witness.

MR. KOTOSKE: This is expert. He doesn't have the memorandum. We don't have the memorandum. The only people that we know that have the memorandum is IBT.

MR. CARNEY: Certainly Monsanto doesn't have the memo.

MR. KOTOSKE: We don't know.

MR. CARNEY: Well, you've asked for it. We searched our files. We don't have it.

THE COURT: Well, I'll tell you, I'm gonna overrule the objection. (Inaudible) his words. You can certainly cross-examine based on what he testifies to.

BY MR. KOTOSKE:

Q. That was in 1976. Is that about a ten-page memorandum?

A. Yes.

Q. It was handwritten?

A. That's correct.

Q. Who was the director?

A. Dr. Calandra.

Q. Calandra?

A. Yes.

Q. And in that memorandum you detailed the deficiencies in that laboratory with respect to the animal toxicity studies, did you not?

A. Yes.

Q. And not only you signed the memorandum, but other employees at IBT signed the memorandum?

A. That is correct.

Q. How many others?

A. Two.

Q. And the three of you together complained in

great detail about how sloppy the work was out there, did you not?

A. Yes.

Q. About the falsity of the reports that were being prepared; is that true?

A. Yes, but I think we were a little more delicate in phrasing it. There was not data to support the information that was reported. We didn't specifically say that reports were falsified.

Q. You just indicated that there was no data to support the conclusion?

A. That's right.

Q. And you went on to discuss in this memorandum that you wrote the general conditions at IBT and the deficiencies in the condition in which the test animals were kept, did you not?

A. Yes.

Q. What else did you detail in that memorandum?

A. We made suggestions on how to improve the studies and the operation of the department, and it turned out to be very similar to a rough outline of what the GLP regulations are.

Q. How long after you wrote that memorandum were you asked to resign?

A. Approximately a year.

MR. KOTOSKE: May I have a minute, Your Honor?

THE COURT: Yes.

Q. These Arochlor studies that we have in evidence here, did Paul Wright ask you to sign all three of them?

A. Yes, he did.

Q. You refused to sign the one on 1254, did you not?

A. No, I didn't.

Q. Why did you sign the ones where you know your signature appears--that is the 1260 and the 1242? Why did you sign that if you knew they contained false data?

A. I was new in the--in the toxicology field, and the--the general atmosphere of the company from--from Dr. Wright was that this was perfectly okay for these kinds of studies. And I, at that particular time, I didn't have the knowledge that I do now that the false data was wrong. These guys had doctorate degrees, and it was, well, it's okay.

MR. KOTOSKE: If I could just have a minute, Your Honor, I might be done with direct examination. Counsel's witness.

THE COURT: Cross examination, Mr. Carney?

MR. CARNEY: Could we approach the Bench, Your Honor?

THE COURT: All right.

(A discussion was had at the Bench.)

CROSS EXAMINATION

QUESTIONS BY MR. CARNEY:

Q. Mr. Smith, my name is Tom Carney and I represent Monsanto in this case. You've never met me?

A. No, I haven't.

Q. My office is here in St. Louis. You've never met anybody in my office to your knowledge?

A. Name your law firm.

Q. Husch and Eppenberger.

A. Not that I know of.

Q. And we haven't taken your deposition for this case, correct?

A. Correct.

Q. Did you meet with Mr. Kotoske in connection with your testimony?

A. Yes, I did.

Q. When did you meet with him?

A. Last night.

Q. Okay. Approximately how long was your meeting?

A. An hour, maybe an hour and fifteen minutes.

Q. Now, you did have your deposition taken, though, in a case down in--that was taken up in the Chicago

area, wasn't it?

A. Yes, it was.

Q. That was in connection with a case down in Texas?

A. That's correct.

Q. And you actually testified in that case in Texas?

A. Yes, I did.

Q. And your deposition was taken at 3405 Algoton (sp.) Road in Rolling Meadows, Illinois?

A. I believe that's correct. It was the Holiday Inn in Rolling Meadows. I don't know what the exact address is.

Q. Okay. And if the transcript shows it was on July 9th, 1987, at 10 o'clock it started, is that about right?

A. July 9 what?

Q. 1987.

A. I would think it would be in that area, yes. It was in the summer of '87.

Q. And you understood that your testimony was under oath at the time of the deposition?

A. Yes.

Q. Same oath that you gave here--

A. Yes.

Q. --before your testimony? Let me just go back a little bit about your background, because that wasn't covered very well. Your goal in life when you were going to school was to be a veterinarian?

A. That's correct.

Q. You applied to various veterinarian schools?

A. Yes, I did.

Q. Over a three-year period?

A. Yes, I did.

Q. You were not accepted at any of them?

A. No, I was not.

Q. You're not a member of any professional organization, are you?

A. No, I'm not.

Q. You're not a certified toxicologist?

A. No, I'm not.

Q. You got your job training in toxicology at IBT on the job?

A. That is correct.

Q. And you're not an expert pathologist either?

A. No, I'm not.

Q. And just to briefly cover some of your employment, if I can cover your employment, you were a-- before joining IBT, you were a tree trimmer for about 2-1/2 years?

A. No.
Q. You weren't a tree trimmer?
A. Yes, I was, but not for 2-1/2 years.
Q. Was it over the period between--well, how long was it (inaudible)?
A. Three or four months at that particular time.
Q. Over the course of time, have you been a tree trimmer for about 2-1/2 years?
A. Yes. I worked as a tree trimmer during summer breaks and semesters off of college to earn money for college.
Q. And then you also worked as a landscaper for four or five months in 1969?
A. That's correct.
Q. And then in January of 1971, you started at IBT?
A. That's correct.
Q. And you worked up until June of 1977?
A. Yes.
Q. Just to briefly cover some of the other jobs, after you left IBT, you went to work for International Research and Development Corporation?
A. Yes, I did.
Q. And you lasted there for about eleven or twelve weeks?

A. That's correct.
Q. You were terminated?
A. Yes, I was.
Q. Your supervisor said you were sleeping on the job?
A. When I was terminated, my supervisor told me that I was--his supervisor told me that I was being fired for open disagreement with my immediate supervisor.
Q. And the disagreement was he said you were sleeping on the job and you disagreed?
A. That's right.
Q. The next job you had was about 2-1/2 years after that, and you were--worked for your stepfather as a laborer?
A. It was about three and a half or four years after that.
Q. Okay. And you worked as a laborer for your stepfather?
A. When I started I was a laborer, yes.
Q. And then you worked there for a couple years?
A. Yes, until he retired and closed the business down.
Q. Okay. And then you've done carpenter work ever since?
A. That's correct.

Q. Now, as of the time of your deposition here in 1987, you were married?

A. Yes.

Q. You had been separated, though, for 13 years?

A. Yes.

Q. Are you still separated?

A. Yes, I am.

Q. You hadn't spoken to your wife since 1980 at the time of the deposition; is that true?

MR. KOTOSKE: Your Honor, I--I don't like to object, but what does the man's marital condition have to do with this?

THE COURT: Sustained.

MR. KOTOSKE: I find that totally--

THE COURT: You made your objection. I sustained it. Let's move on.

Q. Your duties when you started at IBT in January of 1971 were making sure that the animals in the studies were fed and had water, correct?

A. No.

Q. Was that part of your duties?

A. Yes.

Q. Okay. And you were assigned to what was called the rat department?

A. Yes, I was.

Q. IBT did tests--testing--animal testing on lots of different animals, didn't they?

A. Yes, they did.

Q. Beagle dogs?

A. Yes.

Q. Rabbits?

A. Yes.

Q. Chickens?

A. Yes.

Q. Fish?

A. Yes.

Q. And lots of other things?

A. Probably no more than ten other species.

Q. And then in September of 1971 I--I think I'm gonna use the board, too, just to try to get these dates straight in everybody's mind. January--January, 1971, was when you started?

A. Yes.

Q. Okay. And then in September--I think it's September 1; is that right? September 1, 1971, you were advanced to a report writer; is that correct--in terms of duties?

A. It would have been late August or early September.

Q. Okay. Can I use September 1?

A. If you'd like. It was a holiday.
Q. Would it have been Labor Day?
A. Yes.
Q. Oh, then it would have been September--early September?
A. Yeah.
Q. Okay. Now, the animal studies that we're talking about in this case, and that's the PCB--they were called Aroclor studies there. Aroclors were PCBs, right?
A. Yes.
Q. Those studies had started about a year and a half before you started, correct?
A. That's correct.
Q. So that would be, let's see, January of '70--be like summer of '69?
A. Somewhere in there.
Q. Okay. I'm gonna put June, July, 1969. And the dosing of those animals in these studies went on for a year, and they would have stopped in the, I think you said, early summer of 1971, correct?
A. No, I didn't say early summer. I said summer.
Q. Is that true? Early summer?
A. It went on for two years and then ended in the summer of '71. July--anywhere from June to August.
Q. Okay. Summer, 1971. Feeding animals. Okay.

So what we have here is you were involved in those studies for the final--about six months of the study, correct--these PCB studies--in terms of actually being there and being involved in the study?

A. I was involved with the animal portion of the study--

Q. Yes.

A. --on occasionally feeding them, doing mortality checks, et cetera, while the study was running, and then I was involved with assisting in preparing the report which--

Q. We'll get to the report in a bit. And the reports were written and their involvement would have been November, 1971, correct? That's the date of the final report?

A. November 12th.

Q. November 12th. Okay. Now, your involvement in the period from January to the summer of '71, you were not a report writer at that time, were you?

A. No, I wasn't.

Q. So your involvement would be to assist in the feeding, the watering, removing dead rats--things like that in the study?

A. The only time that we fed and watered the rats was when the animal caretakers that were hired--employed to

do that--did not show up or weren't around, and then we would have to see that the animals had--had food or water.

Q. Okay.

A. And other--

Q. So you got involved in that work when the caretakers didn't show up for work?

A. That's right.

Q. Okay.

A. And then it was the person in charge of the (inaudible) responsibilities to see that the parameters in the study protocol were followed, which included mortality checks and collecting body weights, food consumption data, et cetera.

Q. And during this period of six months, in addition to making sure the rats were fed and watered, they had to be weighed periodically?

A. They were supposed to be, yes.

Q. And during that six months when you were involved in the study, did you make sure that they were weighed in accordance with the protocol--the rats that were part of the PCB study?

A. For the last two months of the study, yes.

Q. Okay.

A. I tried to see that they were weighed accordingly.

Q. Okay. And so during the last two months of the study, you know those body weights were correct because you did it yourself?

A. That's correct.

Q. Okay. And when you were doing it, you followed the protocol to the letter?

A. No.

Q. You did not?

A. No.

Q. Okay. So sometimes you knew that you were supposed to weigh an animal or a rat on a certain day and you just didn't do it?

A. We didn't do it because there was so much work. There wasn't enough hours in the day to get all the work done.

Q. So when you got there, you realized that there weren't enough hours in the day to do everything that you were supposed to do in the protocol; isn't that correct? Is that what you're saying?

A. Essentially.

Q. Okay.

A. We knew there wasn't enough time.

Q. To do all of the things that--you had to do a lot of things and there were thousands of studies going on, right?

A. Hundreds.

Q. Hundreds. Not just these three; these weren't the only studies that were going on?

A. No, they weren't.

Q. And you were involved in other studies as well as this one, weren't you?

A. That's correct.

Q. And, in fact, when you described these problems of missing data, it wasn't just the Monsanto PCB studies; that was true of a lot of studies, wasn't it--for other customers?

MR. KOTOSKE: Your Honor, the door is now open and I intend to pursue that.

THE COURT: Well--

MR. KOTOSKE: We better go to side bar because--

THE COURT: Let's go (inaudible).

(A discussion was had at the Bench.)

THE COURT: You want to restate the question?

MR. CARNEY: Yes. Let me restate (inaudible).

BY MR. CARNEY:

Q. Let me go back just a minute and talk about--in January of 1971, IBT's clients included many of the best-known companies in America?

MR. KOTOSKE: Well, objection. I--you know, (inaudible). Let me object as to foundation.

THE COURT: Let me just sustain as to form.

Q. They included large companies other than Monsanto--IBT's clients?

A. They included other companies besides Monsanto, yes.

Q. Chevron was a client--a customer of IBT at that time?

A. I don't know. They may have been. (Pause.) Yes, they were.

Q. Okay. Shell Oil?

A. I believe so, yes.

Q. Abbott Laboratories?

A. Yes.

Q. Gillette Razor?

A. I don't know about Gillette Razor, but the Gillette Company.

Q. Okay. Gillette Company? Proctor and Gamble?

A. Yes.

Q. Exxon?

A. Yes.

Q. DuPont?

A. Yes.

Q. And, finally, I won't go through--there are lots of other companies?

A. There were a number of other companies, yes.

Q. Ciba-Geigy Corporation was one?
A. Yes.
Q. And there were--there were some Japanese companies as well?
A. In 1971, no.
Q. And Monsanto retained IBT to conduct these studies--strike that. In 1971--in January of 1971, the United States Government was also a client of IBT's?
A. Some agencies of the Government, yes.
Q. The Atomic Energy Commission was one of the Government clients of IBT?
A. Yes.
MR. KOTOSKE: I guess at this point--excuse me, Counsel. Common courtesy. I guess at this point the objection is relevance. What in the world do we care who else was a client? Monsanto is on trial.
THE COURT: Overruled, as long as you make it brief.
MR. CARNEY: It goes to their reputation.
THE COURT: I understand. Proceed.
BY MR. CARNEY:
Q. The National Institute of Drug Abuse was a client of IBT in 1971?
A. No. I don't believe so.
Q. Do you recall this question and this answer on

page 86 of your deposition in July of 1987: "Question--Do you remember some of the agencies that may have submitted studies for IBT to do? Answer--The Atomic Energy Commission, the National Institute of Drug Abuse, the Food and Drug Administration, the United States Army, the Department of Health, Education and Welfare." Do you recall that answer?

A. Yes, I do. And your question was in 1971 was the National Institute on Drug Abuse a client.

Q. When were they a client?

A. '72, '73.

Q. Okay. Fair enough.

Q. When you went to work for IBT in January of 1971, the company had an excellent reputation, true?

A. In January of '71 I have no idea what their reputation was. Some of the clients that I met referred to it as a good laboratory.

Q. Okay. In fact, they referred to it as a Cadillac of the animal-testing industry, didn't they?

A. Some of them did, yes.

Q. And back in 1971, at least, Cadillac was considered one of the top-of-the-line cars, wasn't it?

A. For some people, yes.

Q. What did you understand that to mean when they said Cadillac of the industry? Did that mean one of the best in the industry?

A. One of the best or better.

Q. Okay. So if a company like Monsanto wanted a valid test on PCB fluids in 1969, it would be natural to retain the Cadillac of the industry to do the tests, wouldn't it?

MR. KOTOSKE: Objection. Foundation.

THE COURT: I'm gonna overrule (inaudible).

A. There were other laboratories that I'm sure were available. I don't know what went into Monsanto's choice of Industrial Bio-Test.

Q. If you wanted to find out the truth about a chemical, you would hire one of the best, wouldn't you?

MR. KOTOSKE: Objection. Lack of foundation. You know, he--this man worked there. He saw what went on.

THE COURT: I'll sustain as to the form, Mr. Carney. You may rephrase.

Q. At any rate, in 1971 when you joined the company, IBT was known as the Cadillac of the testing industry, correct?

MR. KOTOSKE: Objection. Foundation. He can tell what happened there.

THE COURT: He's already answered it. I'll sustain. Proceed.

Q. You don't have any firsthand knowledge about the testing that went on of the animals in the first year and

a half of the PCB studies from '69 in the summer until January of '71, true?

A. The firsthand knowledge that I have is based on study records that were in existence.

Q. Now, when you signed these reports--these PCB reports--you knew about these problems with the lack of data, didn't you?

A. Yes, I did.

Q. But you signed the reports and I believe just so--you've got it right there. Why don't you take a look at 1261. I think they're all the same in terms of what was said, but next to where is your signature it says, report prepared by, and then says Phil S. Smith, correct?

A. That's correct.

MR. KOTOSKE: What the document actually says is several people signed it.

MR. CARNEY: Well, I'm getting to that, Mr. Kotoske.

THE COURT: Let's proceed. Overruled. Mr. Carney proceed.

BY MR. CARNEY:

Q. And then underneath that it says, report approved by, and it has James B. Plank, Senior Group Leader?

A. Yes, sir.

Q. And underneath that, it has Paul L. Wright,

Section Head?

A. Yes, sir.

Q. And underneath that, it has Mr. Keplinger, Manager, Toxicology?

A. Yes, sir.

Q. So all four signatures appear on that PCB study at page 264, Plaintiff's Exhibit 12?

A. Yes.

Q. And it's dated November 12, 1971?

A. Yes.

Q. And you knew at the time that this report shows that it was prepared by you it was gonna go to Monsanto?

A. Yes.

Q. And you knew about the problems at the time you signed as preparer, but you signed anyway?

A. I signed anyway because the feeling that was given me by Dr. Wright was it was standard operating procedure with these studies and that there was nothing wrong with it. They had a beginning point and an end point and that it didn't make any difference that stuff in the middle was missing and made up.

Q. And what you're talking about Wright saying there is here you had a beginning point--let's talk about Bio-Test. You had the weight of a rat here at the beginning

point?

A. Yes.

Q. And then, let's say, you had the weight of the rat after two years of eating PCBs--

A. Yes.

Q. --right here, and you might have had some other pinpoints, right?

A. Yes.

Q. Like here and here and here (indicating). But you didn't have all of the points; is that what you're saying?

A. That's correct. And they made--the points that were in existence may not have been so evenly spaced from beginning to end.

Q. Okay. And when you said in your direct testimony what happened was you would connect up these dots and then you would try to fill in the blanks based on what the weight was in the last weight you knew of and the weight afterwards, right?

A. What I said was that Dr. Wright asked me to fill in the graphs with the existing body weights and give them to him, and he gave them back to me with body weights written in. There were some places where there were more than two months or three months missing.

Q. Out of two years, there were some places where

there were two or three months missing?

A. No, I said there were places where there were more than two or three months.

Q. Okay.

A. And I would guess probably half of the data--of the body weight data was missing.

Q. And how often were you to weigh the animals--the rats?

A. The animals were to be weighed once a week for the first thirteen weeks of the study, which would be approximately three months.

Q. Okay. Once a week. That would be--they were supposed to be weighed twelve times or thirteen times?

A. Correct.

Q. And they were only weighed about half of that time; is that what you said?

A. No, I think the first thirteen weeks they were weighed pretty often.

Q. Pretty often. And then how often were they to be weighed?

A. From month 4 to 24, they were supposed to be weighed once a month.

Q. And that's where there was missing data because you didn't have the monthly weights every month; is that true?

A. That's correct.

Q. Okay. And in those cases you would--the intent was to extrapolate from the month you had before and the month after or the two or three months after and try to fill in that body weight; is that what happened?

A. I don't know what Dr. Wright did. I gave him the graphs and I did not stay in his office. And he gave them back to me with weights written in for the missing body weights.

Q. Okay. So he--he supplied the missing weights?

A. That is correct.

Q. Okay. But he said it's okay, Phil Smith. That's okay because we know what it was at the beginning of the study; we know what it was at various points during the study and, most importantly, we know what it was at the end of the two-year study; isn't that what he told you?

A. No, he just said it was okay because we had a starting and an ending point.

Q. Okay. You start there and you end there (indicating)?

A. Yes.

Q. You knew the weights when the study was started and you knew the weight when it was ended?

A. Yes.

Q. Now, these other customers that I went

through--some of those other customers--their studies were falsified in the same way as Monsanto's, correct?

A. Some were, yes.

Q. In fact, it was, I think you said in your direct testimony, standard operating procedure at IBT in 1971 to substitute false data or missing data when the data wasn't available; isn't that what you said?

A. Something to that effect, yes.

Q. That was true, wasn't it?

A. On the body weight stuff when there was body weight data missing, yes. It was falsified in the report.

Q. And the Government reports?

A. Yes.

Q. In some of 'em?

A. Yes.

Q. And in some of these other companies' reports?

A. Yes.

Q. You also signed the report on 1242. It appears page 435 of Exhibit 12. You signed that on page 3 as well?

A. Yes, I did.

Q. And in addition to your signing it as the preparer of the report, it was approved by the same three people--Plank, Wright and Keplinger--correct?

A. Yes. However, in both cases, Dr. Wright

assisted in preparing the report.

Q. But at least on the report, it says prepared by Phil Smith and approved by Wright, Plank and Keplinger, correct?

A. That's correct.

Q. You were prepared to sign all of the Arochlor reports--all of the PCB reports that IBT did; isn't that correct--back in 1971 in November?

A. To my knowledge, I signed all three of 'em.

Q. You signed all three of 'em. No forgeries on those reports, were there?

A. Pardon?

Q. There were no forgeries of your signature on any of those reports, were there?

A. Which reports are we talking about?

Q. I'm talking about the Aroclor PCB reports that are in Plaintiff's Exhibit 12.

A. Yes, the 1254 report is a forged signature on it.

Q. Whose signature is forged?

A. Mine.

Q. Your signature wasn't forged on the 1260 PCB report, was it?

A. No, it wasn't.

Q. You freely signed it?

A. That's correct.

Q. And you freely signed the 1242 PCB report, correct--

A. That's correct.

Q. --on November 12th? But the third report--the 1254 report--is not your signature?

A. No, it's not.

Q. But you--

A. But, to my knowledge, I signed that report.

Q. You signed it, but that signature that appears on this copy is not yours; is that what you're saying?

A. That's what I'm saying.

Q. But there was a report for another company--Sintex (sp.)--that you would not sign on November of 1971; isn't that correct?

A. That is correct.

Q. And it was because there was missing data and you would not sign that report. You told Paul Wright that, didn't you?

A. I would not--I told Paul Wright I wouldn't sign it because there was missing data from the end of the report. It--it had been my understanding that if you had the beginning and the end, they didn't care about the middle. But in this particular one, I refused to sign the final data for a number of things was missing. And that's why I refused

to sign that report.

Q. But you didn't refuse to sign any of the PCB reports?

A. Other than the Sintex report, I never refused to sign a report while I was there.

Q. Okay. Even though you knew that there was missing data--and that was standard operating procedure at IBT--the only report you refused to sign was one for another company called Sintex, and that was back in November of 1971?

A. Yes. And that, as I explained, was because it was missing the end point data and they had explained to me that if they had the start and the finish, that there was no problem with filling in the blanks in the middle and falsifying data. And the Sintex one I refused to sign was missing the end point data.

Q. Now, you didn't tell any of IBT's clients that there were missing data or falsified data on the reports, did you?

MR. KOTOSKE: Objection. Irrelevant. The question should be, did he tell Monsanto. That's who is on trial.

MR. CARNEY: Well, we'll get to that in a minute. What I'm asking about now--

THE COURT: I'm gonna overrule the objection. Let's not spend a lot of time on it. (Inaudible).

Q. Is that correct? You didn't tell any of IBT's

clients back in the early 1970s when these practices were going on that their studies were falsified?

A. No, I didn't.

Q. And you didn't tell Monsanto, either, back in the early 1970s? You didn't tell someone at Monsanto that; isn't that true?

A. I--Paul Wright--I told Paul Wright.

Q. Well, Paul Wright was--he was involved in this falsification, wasn't he?

A. Yes.

(Ms. Pape was replaced by Ms. Carter.)

Q. Did you tell anybody -- (inaudible) know went to Monsanto. You didn't tell anybody at Monsanto, did you, excluding Paul Wright for a minute who was in on the deal, you didn't tell anybody at Monsanto, did you?

A. I didn't tell anybody besides Paul Wright, and there was no deal between Paul Wright and myself.

Q. In fact, the only people you told about this falsification and about the conditions in the IBT facility were people inside IBT during the 1970's; isn't that correct?

A. No.

Q. Let's take the period 1971 to 1976. Did you tell anyone outside of IBT about these problems with the conditions of the facility and the falsification of data?

A. No.

Q. Now, back in the -- Well, strike that. Well, back in the '70s, in the early to mid-1970's while you were at IBT it was not the policy of IBT to give its customers the raw backup data on reports, correct?

A. Define raw data. Do you mean individual data or the actual raw data collected?

Q. I'm talking about using it the same way it's used in your deposition. Let me read this question and see if this refreshes your recollection. "Question: What about in the 1971 time frame? Answer: Nobody received

their raw data then. Occasionally clients would receive kitchen samples to run their own tests on and generate their own data as far as (inaudible) systems, but, otherwise, clients were not routinely sent raw raw data. That was part of the IBT's" and then you say that changed in the late 1970's; is that correct?

A. That's essentially correct. The raw data would be the information generated during the course of the study.

Q. Like the (inaudible)?

A. That information was available, but they wouldn't give out the sheets that it was collected on in the early '70s time frame.

Q. You recalled only one time when a Monsanto employee visited IBT, correct? I'm sorry. I didn't hear the answer.

A. No, I didn't. I wasn't sure you were finished with your question.

Q. Yes.

A. There were several times Monsanto employees visited IBT.

Q. Let me read this question, page 109, see if this refreshes your recollection of what you said back in 1987 -- Well, strike that. Did any of these Monsanto employees that you say visited the plant ever go back into

the labs where the animals were kept?

A. As far as the rat studies go, not to my knowledge.

Q. Okay. Now, these other clients of IBT, they visited the offices back in 1971, true?

A. A few did.

Q. Ciba-Geigy personnel visited IBT offices in that time frame?

A. Yes.

Q. Some of them from Gillette visited the IBT offices in that time frame?

A. Yes.

Q. Several Japanese clients had personnel that visited IBT offices at that time?

A. As far as the Japanese clients, I don't think we started getting in any Japanese clients till '72 or '73.

Q. And they visited the IBT facility?

A. Yes.

Q. The U.S. Army also visited IBT offices about every three months in the 1971-1972 time frame?

A. I don't believe it was every three months in the 1971 time frame. It may have started in like late '71 into '72.

Q. But then they visited every three months

sometime in late '71 or '72?

A. From at least '72 on through '75, '76.

Q. And at least on one occasion the U.S. Army sent someone into the animal rooms in 1972, correct?

A. Yes.

Q. And the animals in the aroclor studies, PCBs weren't treated any differently than the animals in these other clients' studies, correct?

A. That's not true.

Q. Well, let me try to refresh your recollection of your testimony in the Texas case down in Beaumont, Texas. Let me ask you this. Were the rodents, the rats and mice, were those animals treated any differently for these other clients as they were for Monsanto?

A. As the time progressed in the time frame you were discussing with the U.S. Army and Monsanto and Ciba-Geigy, the company had more personnel, and the study protocols were followed closer.

Q. As time progressed into the mid-'70s?

A. Yes, sir.

Q. But back in 1971 when these -- in fact, 1969 through '71 when these PCB studies were done for Monsanto, Monsanto's rats weren't treated better than any other clients' rats of IBT, correct?

A. The animals themselves were treated the same

in all the studies.

THE COURT: Why don't we (inaudible) take a break?

MR. CARNEY: This is as good as any.

THE COURT: Take a (inaudible) break. Step down. Ladies and gentlemen of the jury, we'll take a ten-minute break. Do not discuss the case among yourselves or with others.

(A recess was taken.)

THE COURT: Proceed, Mr. Carney.

Q. (By Mr. Carney) Let me just quickly run off some customers by IBT where studies were falsified, the the data was falsified like the (inaudible) study. The Ciba-Geigy was improperly done; is that correct?

A. Which study?

Q. Well, there was a Ciba-Geigy study during this time that was improperly done?

A. Yes.

Q. A Chevron study improperly done?

MR. KOTOSKE: We went through this, Judge, just a few minutes ago.

MR. CARNEY: I didn't. I asked him about the visits.

THE COURT: No. I think we did, Mr. Carney. I think it was more of a general question, specifically

you did (inaudible). I don't know if you went through them name by name.

MR. CARNEY: I just have about four or so that I'd like to cover so the jury understands that there were other studies.

THE COURT: I understand what you're trying to do. As long as you can -- I'll let you go through two or three of them as long as they weren't referred to earlier. You referred to some earlier.

MR. CARNEY: Okay. I won't.

Q. (By Mr. Carney) The Atomic Energy Commission studies were improperly done?

A. Yes.

Q. Procter & Gamble studies improperly done?

A. Yes.

Q. And others?

A. Yes.

Q. I won't go through the rest. Now, when the Army visited -- or the government agencies that IBT were doing tests for visited IBT, were they impromptu or scheduled visits -- Were they scheduled visits or were they impromptu where you didn't know they were coming?

A. Nobody in (inaudible) visited without scheduling a visit to my knowledge.

Q. Was there any kind of a procedure at IBT that

you'd spruce up the labs or spruce up or do anything when you had a visitor like somebody from the Army coming in?

A. A lot of the visitors never would go back to the animal rooms. So there would be no special sprucing up of facilities. If they had a visitor that wanted to see the animal rooms, they would spruce it up.

Q. Now, back in the 1971, '72, '73 time period, these other customers of IBT, they weren't told that their studies were improperly done, were they?

A. Not to my knowledge.

Q. They weren't told the data was falsified in their studies, were they?

A. No, not to my knowledge.

Q. Did anyone from these other companies in this time period in the early '70s complain to you that their tests weren't being properly done?

A. No.

Q. And to the best of your knowledge none of these other companies that we mentioned where the studies were improperly done and data was falsified, none of them knew back in the early 1970's that the tests were improperly done?

A. I don't know whether they knew or not.

Q. You don't know that they did, do you? I'll withdraw that. Now, you mentioned on direct testimony --

Well, let me ask you this first. You testified that falsification of these PCB studies and also the other clients' studies of IBT where there was missing data and missing data was inserted when there was no actual data, correct?

MR. KOTOSKE: I think his testimony is false data was (inaudible)

THE COURT: Do you want to change?

Q. (By Mr. Carney) Well, was there ever a situation at IBT where there was data that was collected and lost?

A. If it's lost, there's no way to tell it was ever collected.

Q. So you don't know which?

A. With regard to body weight data. With regard to blood and urinalysis data, the animal department used to regularly lose copies of that data, but there were copies available in the clinical pathology department that conducted the specific blood and urine studies.

Q. Let's talk about the missing body weight data. Are you aware of the situation where the data was actually recorded that on this date the rat weighed X ounces, but it was lost?

A. I'm not sure I followed your question.

Q. Well, when you got ready to write the PCB

studies, you noticed there was body weight data missing for various times when there was supposed to be body weight data available, correct?

A. That's correct.

Q. And do you know whether that data was recorded and lost or was it just never recorded at all?

A. Specifically at the time I don't know whether it was recorded or not. The consensus from the people that were running the studies before I got there were that if there was no data, it was never collected. My experience from when I started working there was if there was no body weight data, it was not collected.

Q. And what was done on these PCB studies with regard to body weight when you had body weight on this date and body weight on this date? Would you extrapolate what you thought the body weight would be on the dates it should have been collected; is that correct?

MR. KOTOSKE: Objection. Asked and answered. We went all through this just a few minutes ago.

THE COURT: Overruled. Mr. Carney (inaudible). Make it brief.

A. I didn't extrapolate it. I gave the graphs to Dr. Wright, and he returned them to me. I did not observe his procedure for how he arrived at the figures. He returned the graphs to me with weights written in on

the graph for the various intervals that the data was missing.

Q. And did you look at those weights that were inserted that had been missing?

A. Yes. He instructed me to put those in the appropriate spot in the final report.

Q. And you did that?

A. Yes, I did.

Q. And did you -- I take it did you look and compare the missing weight with the two weights that were the closest in time?

A. Well, sometimes there were a number of missing weights between the two closest weights in time.

Q. Let's take an instance where you have the weight in April of 1970 and a weight in June of 1970. You're supposed to do it monthly. You didn't have May. Did you look at the weight in between that you didn't have and see what was filled in there?

A. Well, I looked at the weights when I transferred them to the summary table for the reports.

Q. And what was that weight in between? Was it similar to the weights here or was it a higher or lower or was there any rhyme or reason to it to your knowledge?

A. They generally were in some sort of an extrapolation pattern, but at that point in time I just

transferred the weights to the summary tables for the report.

Q. Now, I've covered with you the body weight -- the fact that there was missing body weight data that was supposed to be done monthly, at least after the first 13 weeks, and it wasn't always done. Some missing weights were included for those missing months. Let me talk about were there any other improprieties in these PCB studies -- Well, strike that. I believe you've testified there were other improprieties, and that was mortality -- the mortality information. Was that falsified in the report? I'm not sure you said that, but I want to make sure the jury understands. Was the information on the mortality included in the reports?

A. There is mortality and frequency distribution (inaudible) in the report.

Q. And it shows there in the various groups how many rats survived at the end of the test?

A. Yes.

Q. And is that information accurate or fraudulent?

A. The information on the number of animals surviving at the end of the study is reasonably accurate.

Q. Okay. So nobody was trying to falsify the mortality of those rats at the end of the study, correct?

And you know wouldn't have signed those studies if they did?

MR. KOTOSKE: Well, there's two questions there.

THE COURT: Sustained as to form. Proceed.

Q. (By Mr. Carney) You wouldn't have signed these studies if IBT had falsified the information on how many rats survived at the end of the study?

A. I probably wouldn't.

Q. And when you signed the study in November 12, 1971, you thought that that mortality information on how many rats survived at the end of the study was accurate?

A. The number of animals that survived to the end of the study was reasonably accurate. It was the frequency distribution of the deaths during the study that is not accurate.

Q. Did you know that at the time you signed these reports?

A. I don't believe I prepared that table in the report. I may have (inaudible) some of the data for it.

Q. You weren't involved in that table?

A. As I explained before, my responsibility in these studies, they were the first long-term toxicity studies that I worked on, and my contribution in preparing the reports was to take and assemble the data available

and then give it to Dr. Wright.

Q. And wasn't part of the report to prepare the mortality table?

A. With what information was in existence.

Q. And as far as you know, at the time you signed the reports, the mortality information was accurate?

A. No, it wasn't. Once again --

Q. The end point was accurate?

A. Yes.

Q. And the beginning point was accurate?

A. Yes.

Q. How many rats started. And you knew how many rats finished the test?

A. Uh-huh.

Q. And when you said 10 percent survived, that's reported in here, isn't it?

A. Well, when I said -- My guess was approximately 10 percent survived. That should be recorded in there, yes.

Q. And is it recorded in there?

A. Huh?

Q. You just looked at the table.

A. In looking at the table, the percentages -- the percentage surviving is a little higher than my

estimate of approximately 10 percent.

Q. But at any rate, what's in there as to the rats that survived is accurate at the end of the report?

A. It should be, yes, to the best of my knowledge.

Q. And the first year and a half of the test when rats would die, you weren't there to see what happened then, were you?

A. No, I wasn't.

Q. But there were some missing data, is that what you're saying, on this?

A. There were animals that disappeared from the study with no record of them having died, no record of having the animal taken to necropsy lab for an autopsy.

Q. And that was the kind of practice that was done at IBT for other clients other than Monsanto as well, correct?

A. From my time in January of '71 till September -- or the summer of '71 when this study ended with these older studies, that was a frequent occurrence.

Q. Okay. Let me ask you if you recall these questions and these answers on page 183 of your deposition in 1987. "Could you tell me what the improprieties were? Maybe that's the best way to start. Tell me what the improprieties were in connection with these two-year oral

toxicity studies. Answer: I'm not quite sure what I -- if I understand what you mean by improprieties other than as stated before. There is falsified data that occurs in these reports. Question: That is what I (inaudible) the term. What is the falsified data? Can you show me on the report itself what is false? Answer: There's a lot of body weight data that is false. Question: C and C number would be fine. Answer: It would entail the body weight and weight gained section of the report which would include data on some or all of the pages of FCM 022491 through FCM 022494. Question: Any other false data on that report? Answer: Without going back to the actual study records, the departmenal study records, I cannot specifically give you falsified data." Do you recall those questions and answers?

A. I recall it, but I don't recall which study or report we were discussing.

MR. KOTOSKE: The record's not even clear if that's PCB studies they are discussing.

Q. (By Mr. Carney) Well, let me go back to the earlier page, starting page 181, "Mr. Smith, I want you to assume for a moment, if you would, that this is the original aroclor 1242 two-year oral toxicity study, that that's the original. Can you tell me what you believe to have been wrong with that document? Just assume that that

is the document with no revisions to it that you referred to earlier. What is wrong with that document? What is improper?" That was on the prior page. Do you recall those answers to those questions?

A. Yes. And I stand by it again. Without having the specific raw study data where I could show you specifically what I am -- There is no information for (inaudible) in the study file that there is in the final report, I can't answer specifically which finite item is falsified.

Q. Okay. You haven't studied those files since your deposition in 1987, have you?

A. Which files?

Q. I'm talking about the raw data files to do the comparison, the study files. You haven't looked at those study files since 1987 to refresh your recollection, have you?

A. I saw a portion of the necropsy logs that you're --

THE REPORTER: (Inaudible)

THE WITNESS: Necropsy, n-e-c-r-o-p-s-y.

Q. (By Mr. Carney) Did they help refresh your recollection on the specifics of what was falsified in the study?

A. Well, in looking at these necropsy logs and

going through to account for all the animals in the study, there are many animals that are missing from the necropsy log. The necropsy log is designed to chart every animal in the study. Based on the way the study's supposed to run, every animal is supposed to go through the necropsy lab when they depart the study, whether they die during the course of the study or in an interim sacrifice or the final sacrifice.

Q. Let me ask you this, can you recall --

THE COURT: Let him -- Were you done with the answer?

THE WITNESS: No.

THE COURT: Go ahead and briefly finish.

A. And there were a number of animals that didn't appear in that necropsy log, and they would be covered by the frequency distribution of deaths table in the summary report, and that purports to show where all the deaths occurred.

Q. (By Mr. Carney) During the period 1969, 1970 and 1971, at the time you signed those PCB studies there was missing data and false data in a whole number of other clients of IBT as well as Monsanto, correct?

A. There were missing data and falsified data in the reports for some other clients.

Q. Okay. Including the United States

government?

A. Agencies of the United States government.

MR. CARNEY: No further questions, Your Honor.

MR. KOTOSKE: I can finish if the jury can stand it. I'm going to make two or three points. That's all.

THE COURT: We don't need to go over (inaudible)?

MR. KOTOSKE: No. I'm just going to follow cross-examination.

THE COURT: All right.

MR. KOTOSKE: And I'm going to (inaudible).

CROSS-EXAMINATION

QUESTIONS BY MR. KOTOSKE:

Q. Mr. Carney asked you between July -- or pardon -- between 1971 and 1976 did you report to anyone what you knew about the irregularities going on at IBT.

MR. CARNEY: Your Honor.

Q. (By Mr. Kotoske) And my question is in 1977 did you report what you knew to the federal government?

MR. KOTOSKE: I'm going to object, Your Honor. May we approach the bench?

THE COURT: All right.

(A bench conference was held.)

THE COURT: Proceed.

Q. (By Mr. Kotoske) In 1977 did you report what you knew about what was going on at IBT with respect to false studies to the federal government?

A. Yes.

THE COURT: Just answer yes or no.

A. Yes.

Q. (By Mr. Kotoske) You were asked some questions about raw data. The actual raw data has not been in your possession for some years, has it?

A. No, it has not.

Q. It's been in the possession --

MR. CARNEY: I'll -- What was the last word?

MR. KOTOSKE: Raw data.

THE COURT: Do you want to hear his question?

Q. (By Mr. Kotoske) I was just -- When everybody's cooled down, I'll ask the question.

MR. CARNEY: I didn't hear the last word, but I was concerned it might (inaudible).

THE COURT: Okay. Let's listen to the question.

Q. (By Mr. Kotoske) On cross-examination -- Turning to another subject matter, on cross-examination you were asked about the raw data that underlied -- underlay these PCB studies. My questions to you are, you

don't have possession of that raw data at this time, do you?

A. No, I do not.

Q. You don't know who does, do you?

A. No, I do not.

Q. You haven't seen it since you left the company, have you?

A. Yes, I have.

Q. In the course of other litigation?

A. Yes, I have.

Q. But you don't have control of those documents?

A. No, I do not.

Q. Now, my final inquiry, one of your customers according to your cross-examination was Exxon, Chevron, the government, all the way down. I want to ask you something. With respect to any of those people, did you have a situation where those companies would take an employee on leave of absence and come and work at IBT?

MR. CARNEY: Objection, Your Honor. There is no foundation that he was on a leave of absence, absolutely none. It's not true, by the way.

THE COURT: Well, I'm going to overrule the objection. Do you want to tailor it to what you think the evidence will be?

Q. (By Mr. Kotoske) In any situation with any other client that you have knowledge of that was an IBT customer where you did rat toxicity studies or, for that matter, any toxicity study, was the situation of that particular client, whoever it was, would have one of its own employees come and work inside IBT?

MR. CARNEY: I'm going to object. There is no evidence that he was a Monsanto employee when he was at IBT. He was an IBT employee.

THE COURT: Except for that I'm going to (inaudible) overruled. He may answer.

A. It never occurred in any other case.

Q. (By Mr. Kotoske) That was the only situation with Paul Wright?

A. Yes.

MR. KOTOSKE: I have no further questions.

THE COURT: Recross, Mr. Carney?

MR. CARNEY: No questions, Your Honor.

THE COURT: Thank you. You may step down. Will he be excused? He won't be brought back live or otherwise?

MR. CARNEY: I don't plan on calling him back.

THE COURT: Let's take our lunch break at this time. We'll convene at 1:30. That's about an hour

and five minutes from now. And we'll push on. Again, do not discuss the case among yourselves or with others.

(A lunch recess was taken.)