

IN THE DISTRICT COURT
128TH JUDICIAL DISTRICT
ORANGE COUNTY, TEXAS

ANN STUBBS, Individually and as
Representative of the Estate of
BEN L. STUBBS, Deceased

Plaintiff;

Cause No. A-030272CC

vs.

RADIATOR SPECIALTY COMPANY, et. al.,

Defendants

HERBERT W. WILKINSON and
PEGGY S. HERBERT,

Plaintiffs,

vs.

RADIATOR SPECIALTY COMPANY, et. al.,

Defendants.

Friday, May 12, 2006

Baltimore, Maryland

Deposition of:

Mr. John Spencer

called as a witness by Plaintiffs, at Baltimore,
Maryland, before Texas S. Eckstone, Registered Merit
Reporter/Notary Public and Tigran Soghomoryan,
Videographer, in and or the State of Virginia, when
were present on behalf of the respective parties:

1
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1 VIDEOGRAPHER: This is a video
2 deposition of John Spencer, taken by counsel for
3 plaintiff in the matter of Ann Stubbs versus Radiator
4 Specialty Company et. al., and Everett W. Wilkinson
5 and Peggy S. Herbert versus Radiator Specialty
6 Company, et. al., in the District Court of Orange
7 County, Texas, 128 Judicial District. Case number
8 8-030272CC, held in the Marriott BWI International
9 Airport. Address is 1743 West Nursery Road,
10 Baltimore, Maryland, zip is 21240, on May 12th, 2006.

11 The time on the screen is 10:16:45. My
12 name is Tigran Soghomoryan, and I'm legal video
13 specialist.

14 The court reporter is Tex Eckstone.

15 We are employed by Henjum Goucher.

16 Counsel will now introduce themselves
17 and the party they represent, after which court
18 reporter will administer the oath to the witness.

19 MS. CLANCY: Denyse Clancy,
20 counsel for plaintiff.

21 MR. DILLARD: Steve Dillard,
22 counsel for defendants.

23 MR. BUTHOD: Tynan Buthod, counsel
24 for certain defendants I guess.

25 MR. MAHER: Jim Maher, counsel for

1 Union Carbide Corporation.

2 MR. AUBRY: Tom Aubrey for
3 Radiator Specialty Company.

4 MS. CLANCY: Can you hear me
5 okay? Go off the record for one second.

6 (WHEREUPON, A DISCUSSION WAS HELD OFF THE
7 RECORD.)

8 Thereupon,

9 JOHN SPENCER
10 called as a witness herein, having been first duly
11 sworn by the Notary Public, was examined and testified
12 as follows:

13 E X A M I N A T I O N

14 BY MS. CLANCY:

15 Q. Mr. Spencer, my name is Denyse Clancy,
16 and I'm attorney for plaintiff in this case. Good
17 morning.

18 A. Good morning.

19 (DOCUMENT MARKED PLAINTIFF, SPENCER
20 DEPOSITION, EXH. NO. 1, FOR IDENTIFICATION.)

21 BY MS. CLANCY:

22 Q. Have you -- I'm going to enter as
23 Plaintiff's Deposition Exhibit Number 1 on the
24 deposition notice for this case. Have you seen this
25 notice before?

1 A. Yes.

2 Q. When did you see it?

3 A. This amended notice, one or two days
4 ago.

5 Q. Did you see a notice prior to this?

6 A. Yes.

7 Q. When did you see that?

8 A. I don't know for certain. Maybe a week
9 or more ago.

10 Q. Did you read the materials -- the
11 request for materials that are attached to the
12 deposition notice as a subpoena duces tecum?

13 A. Yes.

14 Q. Did you bring materials responsive to
15 this subpoena duces tecum with you to the deposition
16 today?

17 A. Yes.

18 Q. Are there any materials that you did not
19 bring that would be responsive to the subpoena duces
20 tecum?

21 A. Not that I'm aware of.

22 Q. Where are those materials?

23 A. To my left.

24 Q. Can we get them out?

25 A. They are out.

1 Q. Okay. Can we put them on the table?

2 A. Not without blocking my view. There are
3 three boxes of material.

4 Q. Oh, okay. I'm sorry. Well, why don't
5 we start by opening the first box?

6 A. It's open.

7 Q. All right. Can you tell me what is in
8 the first box?

9 A. There are summary notes that I have that
10 I pulled together for this case.

11 Q. Can we pull those out, please?

12 MR. BUTHOD: Denyse, while we're
13 doing that, can we make the same stipulation that if
14 one of us has an objection, it is good is for all?

15 MS. CLANCY: Yes.

16 MR. BUTHOD: And the court
17 reporter need not worry about who actually makes the
18 objection if you have trouble identifying us. That
19 may facilitate things a little bit.

20 THE WITNESS: Do you want me to
21 list everything else that is in the box?

22 BY MS. CLANCY:

23 Q. Let's start with this. This is your --
24 what you just pulled out are your notes on the case,
25 is that what you said?

1 A. Correct.

2 Q. Are there any reports that you've done?

3 A. No.

4 Q. Why don't you describe for me -- the
5 notes seem to be in different folders. So why don't
6 you describe for me what each folder is?

7 A. First are deposition summaries. The
8 second part is the literature.

9 Q. And this is the Redweld that you're
10 holding right now?

11 A. Yes.

12 Q. So I'm going to mark -- let's see here,
13 I will mark deposition summaries as Plaintiff's
14 Exhibit 1.

15 No, can I stamp this and mark it and
16 attach it, or do you want me to put --

17 A. As long as I get a copy of it back,
18 that's fine. Whatever you would like to do.

19 Q. All right. I just didn't know if you
20 minded if I marked it.

21 A. Not at all.

22 Q. So this will be Exhibit 2 to your
23 deposition, which is the deposition summaries that you
24 had prepared; is that correct?

25 A. Yes.

1 Q. And the summaries of the depositions
2 that you've read with respect to these cases; is that
3 right?

4 A. Correct.

5 (DOCUMENT MARKED PLAINTIFF, SPENCER
6 DEPOSITION, EXH. NO. 2, FOR IDENTIFICATION.)
7 BY MS. CLANCY:

8 Q. Also in the first Redweld was
9 literature; is that right?

10 A. Correct.

11 Q. And is this literature that you've
12 reviewed specifically for purposes of providing an
13 opinion in this case?

14 A. Correct.

15 Q. And you've relied on this literature to
16 provide your opinion in this case?

17 A. Yes.

18 Q. I'm going to mark the second folder,
19 which the Redweld states as "literature" on the top as
20 Deposition Exhibit Number 3.

21 A. Great.

22 (DOCUMENT MARKED PLAINTIFF, SPENCER
23 DEPOSITION, EXH. NO. 3, FOR IDENTIFICATION.)
24 BY MS. CLANCY:

25 Q. Okay. What's in the next folder?

1 A. I have my CV and invoices that were
2 produced for work done on this case or cases.

3 MS. CLANCY: I'll mark the CV as
4 Deposition Exhibit Number 4, and your invoices I will
5 mark as Deposition Exhibit Number 5.

6 (DOCUMENT MARKED PLAINTIFF, SPENCER
7 DEPOSITION, EXH. NOS. 4 and 5, FOR IDENTIFICATION.)
8 BY MS. CLANCY:

9 Q. What is the next folder you brought?

10 A. This contains correspondence, a summary
11 of the inventory, that is all the materials I have
12 received, pulled together in this case. Again, some
13 summaries I produced with regards to the plaintiff's
14 activities and so forth, materials from various
15 sources.

16 And additional summary materials that I
17 pulled from all the documents that I had reviewed in
18 this case, with the exception of one piece of paper in
19 here that actually are my summary notes from when I
20 did a site visit at the Union Carbide facility in
21 January of this year.

22 Q. Okay. Thank you.

23 MS. CLANCY: I'm going to mark
24 correspondence then as Deposition Exhibit Number 6.

25 (DOCUMENT MARKED PLAINTIFF, SPENCER

1 DEPOSITION, EXH. NO. 6, FOR IDENTIFICATION.

2 BY MS. CLANCY:

3 Q. Inventory -- I'm sorry, I'm going to
4 mark inventory as Deposition Exhibit Number 7. And
5 for clarification for the record, could you explain
6 again for the record what the inventory folder is?

7 A. The documents that I have received in
8 these cases.

9 (DOCUMENT MARKED PLAINTIFF, SPENCER
10 DEPOSITION, EXH. NO. 7, FOR IDENTIFICATION.)

11 BY MS. CLANCY:

12 Q. Exhibit Number 8 I will mark, it's
13 labeled on your folder, "work product, plaintiff's
14 summaries." And could you tell me again what Exhibit
15 8 is?

16 A. It's a summary from testimony in this
17 case regarding Mr. Wilkinson and Mr. Stubbs.

18 (DOCUMENT MARKED PLAINTIFF, SPENCER
19 DEPOSITION, EXH. NO. 8, FOR IDENTIFICATION.)

20 BY MS. CLANCY:

21 Q. And it's a summary of whose testimony?

22 A. Co-workers, the plaintiffs themselves --
23 not Mr. Stubbs, but a co-worker and his wife.

24 Q. I'll mark that as Deposition Exhibit
25 Number 8. The next folder is labeled Shell. I'll

1 mark that as Deposition Exhibit 9. Could you describe
2 what is in folder Shell?

3 A. This is a summary of various documents
4 produced by Shell describing their programs, policies
5 and procedures within the relevant time period.

6 Q. Their programs, policies and procedures
7 for what?

8 A. Well, dealing with benzene related
9 products, dealing with shutdowns, turn arounds and
10 related to contractor activities within their
11 facility.

12 (DOCUMENT MARKED PLAINTIFF, SPENCER
13 DEPOSITION, EXH. NO. 9, FOR IDENTIFICATION.)
14 BY MS. CLANCY:

15 Q. The next one I'm going to label
16 Deposition Exhibit Number 9 -- I mean Number 10. It
17 says it is labeled "Exxon." Can you tell me what this
18 is?

19 A. The same as the Shell document except
20 Exxon.

21 (DOCUMENT MARKED PLAINTIFF, SPENCER
22 DEPOSITION, EXH. NO. 10, FOR IDENTIFICATION.)
23 BY MS. CLANCY:

24 Q. So therefore, it's Exxon policies and
25 procedures with respect to what?

1 A. The same as I described for Shell.

2 Q. But I don't want to put words in your
3 mouth. Exxon policies and procedures with respect to?

4 A. Benzene, Benzene related issues,
5 shutdowns, turn arounds and contractor policies and
6 procedures.

7 Q. And these are provided to you by Exxon?

8 A. Yes.

9 (DOCUMENT MARKED PLAINTIFF, SPENCER
10 DEPOSITION, EXH. NO. 11, FOR IDENTIFICATION.)
11 BY MS. CLANCY:

12 Q. And the last one I have marked as Union
13 Carbide is Deposition Exhibit Number 11.

14 A. Yes, it is a summary. One is a summary
15 of industrial hygiene air monitoring data from Union
16 Carbide facility. And second is our notes that I had
17 taken during a 25, January 2006, site visit.

18 Q. Okay, what else is in box Number 1?

19 A. The next file is the deposition earnings
20 records and affidavit of Mr. Wilkinson.

21 Q. Okay.

22 I'm going to hold off on marking this as
23 an exhibit for now, and look at it during a break to
24 see if it needs to be marked.

25 A. Okay.

1 Q. Did you take notes or otherwise flag any
2 of the areas on these papers provided in this folder?

3 A. I took notes, but they're not in that
4 folder. They're in these materials that you've
5 already been through.

6 Q. So you didn't take notes on the
7 depositions?

8 A. Correct.

9 Q. What else is in box Number 1?

10 A. Next is a deposition of Mr. Wilkinson
11 taken in 2003.

12 Q. And this is a deposition of
13 Mr. Wilkinson taken in the Nash case?

14 A. That's correct.

15 Q. Okay. I'm going to further hold this
16 back for a little bit and look at it during the break
17 to see if we need to enter it as an exhibit.

18 A. Very good.

19 Q. What is the next thing in box Number 1?

20 A. It is Mr. Petty's report on
21 Mr. Wilkinson.

22 Q. Okay. What is next in your box Number
23 1?

24 A. This is Mr. Petty's report on
25 Mr. Stubbs.

1 Q. Okay. And what's next?

2 A. This is the Shell documents, policies,
3 procedures, and their air monitoring data. And the
4 Shell estimate of historic Benzene exposures at
5 petroleum refineries.

6 Q. So are these the Shell materials that
7 you summarized as in Deposition Exhibit Number 9?

8 A. Correct.

9 Q. I'm going to hold this back for a minute
10 and see about entering it as an exhibit. Okay.

11 A. These are the Union Carbide documents,
12 programs, policies and procedures and their air
13 monitoring data.

14 Q. And similar, these are materials that
15 have been summarized by you in Deposition Exhibit
16 Number 11?

17 A. The data is, yes.

18 Q. And the policies and procedures are not?

19 A. Correct.

20 Q. Is there some reason why you didn't
21 summarize the policies and procedures?

22 A. Yes.

23 Q. What is that?

24 A. Ran out of time.

25 Q. When did you get the policies and

1 procedures?

2 A. I've had them for some time, but I was
3 just working down the list. And I reviewed the
4 documents; I just didn't summarize them.

5 Q. Okay. What's next in your box?

6 A. That's it for the first box.

7 Q. Okay. Could you hand me -- if the first
8 box is empty, you can hand it to me. I'm going to
9 put -- for organization sake, I'll put these folders
10 back in there.

11 What is in the second box?

12 Okay. The second box is comprised of Exxon
13 facility documents, which are summarized on the piece
14 of paper you just handed me?

15 A. Correct.

16 Q. So I will mark that summary as
17 Deposition Exhibit Number 12.

18 (DOCUMENT MARKED PLAINTIFF, SPENCER
19 DEPOSITION, EXH. NO. 12, FOR IDENTIFICATION.)
20 BY MS. CLANCY:

21 Q. And is this a summary of all the
22 materials provided to you by Exxon in this case?

23 A. No. Here is the second sheet of the
24 next box.

25 Q. Is that the third box?

1 A. Yes.

2 Q. Okay. Are the two sheets you handed me
3 a summary of all the materials provided to you by
4 Exxon in this case?

5 A. Yes.

6 Q. Okay. I'm going to staple them together
7 then, and mark them as Deposition Exhibit 12. The
8 boxes 2 and 3 that you brought with you today are
9 Exxon facility documents summarized, and on -- the
10 contents of which are summarized on Deposition Exhibit
11 12; is that right?

12 A. Correct:

13 Q. Did you bring any other documents
14 pursuant to the subpoena duces tecum served on you?

15 A. No.

16 Q. When were you first contacted about this
17 case?

18 A. I do not recall specifically. The first
19 correspondence I have starts from February of this
20 year, so I was contacted sometime prior to that.

21 Q. Who first contacted you?

22 A. I believe it was Fulbright & Jaworski.

23 Q. And who from Fulbright & Jaworski?

24 A. Mr. Dillard.

25 Q. And what did he say to you?

1 A. I don't remember the specifics of what
2 he said to me, but generally I'm asked to review a
3 case and review the facts in the matter.

4 Q. And what did he ask you to provide your
5 opinion on?

6 A. The exposure to plaintiffs',
7 Mr. Wilkinson and Mr. Stubbs, to review the programs
8 and procedures that were in place at the Shell
9 facility. And to comment on any plaintiff, in
10 particular industrial hygiene expert plaintiff
11 opinions.

12 Q. What programs and procedures in place at
13 Shell facility did he ask you to review?

14 A. Well, it wasn't any particular
15 programs. Certainly it was those that generally are
16 listed in the documents that we've been through, and
17 that deal with the issue of -- that are relevant to
18 Benzene exposures.

19 Q. Are you going to be testifying with
20 respect to the adequacy of Shell's industrial hygiene
21 program?

22 A. Not their overall program. I haven't
23 reviewed -- that's a very -- that's a larger, much
24 broader program. I certainly would anticipate
25 testifying to the effect of the policies and

1 procedures they had in place as it relates to managing
2 exposures to contractors.

3 Q. Well, let me clarify the question.

4 As to Shell, are you going to testify as
5 to the adequacy or the standard of care used by the
6 industrial hygiene program at Shell DuPont?

7 A. Again, not broadly as defining the
8 industrial hygiene program. But as it relates to
9 contract workers who are involved in situations where
10 there is potential for Benzene exposure, yes.

11 Q. So you're going to testify about the
12 Shell industrial hygiene program as it relates
13 specifically to contractors?

14 A. Yes.

15 Q. Okay.

16 A. And their activities which would
17 potentially involve them in Benzene streams at that
18 facilities.

19 Q. Whose activities?

20 A. The contractors' activities.

21 Q. Oh, the contractor's activities?

22 A. Right.

23 Q. Okay.

24 So what have you -- are you going to
25 testify with respect to the industrial hygiene program

1 at Brown and Root?

2 A. No.

3 Q. Are you going to testify to the
4 industrial hygiene program of Mundy?

5 A. No.

6 Q. Are you going to testify to the
7 knowledge of Brown and Root as to the hazards of
8 Benzene?

9 A. I'm not going to testify to -- not
10 specifically, but certainly it was my understanding
11 that Brown and Root would have had knowledge of
12 Benzene and Benzene streams within a refinery.

13 Q. Well, are you going to testify or
14 provide an expert opinion as to Brown and Root's
15 historical knowledge as to the hazards of Benzene?

16 A. No.

17 Q. Are you going to give an expert opinion
18 as to Brown an Root's knowledge of the safety
19 practices to be implemented with respect to Benzene?

20 A. At this point in time, no, I cannot
21 testify to their specifics as regards to their
22 historical knowledge or historical practices.

23 Q. Well, and I'm asking you specifically
24 during the time period 1970s to 1980s, are you going
25 to testify as to Brown and Root's practices with --

1 safety practices with respect to the hazards of
2 Benzene?

3 A. No, not their specific practices, no.

4 Q. Are you going to testify with respect to
5 Mundy's specific safety practices as to the hazards of
6 Benzene in the 1970s and 1980s?

7 A. No, I would not as to any of the
8 contractors. The closest I would get is to generally
9 talk about a contractor such as Mundy or a contractor
10 such as Brown and Root and their responsibility in
11 that time frame as an employer to manage the health
12 and safety of their employees, such as Mr. Wilkinson
13 and Mr. Stubbs.

14 Q. So you're providing expert opinion on
15 the responsibility of an employer to provide safety
16 for its employees?

17 A. Correct.

18 Q. In a legal sense and under the law in
19 Texas?

20 A. I don't know what that means, but
21 certainly as an industrial hygienist, and my
22 experience and training as an industrial hygienist, I
23 would be providing that testimony.

24 Q. And yet you don't know as you sit here
25 today what Mundy or what Brown and Root did with

1 respect to providing health and safety for their
2 employees?

3 MR. DILLARD: Object to form.

4 THE WITNESS: I have some general
5 understanding, but I do not have the specific
6 documents to support all their activities. That's not
7 what I've been asked to do. But I do understand and
8 am aware of what the responsibilities and the roles of
9 an employer are under these types of circumstances.

10 BY MS. CLANCY:

11 Q. So you understand generally what their
12 responsibilities would be as an employer, but you have
13 not been asked to review specifically what Brown and
14 Root or Mundy did vis-a-vis their employees; correct?

15 A. Correct.

16 Q. And you're not providing about what they
17 did specifically; correct?

18 A. Correct.

19 Q. I've got a long list of -- I've got a
20 list of contractors. Does that apply to the entire
21 list of contractors that -- for whom Stubbs and
22 Wilkinson worked in this case?

23 A. I'm not certain of the entire list, but
24 I am not speaking about any contractors other than
25 what I've --

1 Q. I was just trying to cut corners.

2 A. Other than what I've already described
3 generally, I would speak to an employer's
4 responsibility and a contractor's as an employer, and
5 their responsibilities in these type of workplaces.

6 Q. But no contractor specifically are you
7 talking about that, but for Mundy, Brown and Root,
8 Diamond, J.E. Merrit, are you providing an expert
9 opinion as to their historical knowledge as to the
10 hazards of Benzene; correct?

11 A. That's correct.

12 Q. Okay.

13 So far what I've got that you were asked
14 by Mr. Dillard to analyze plaintiff Wilkinson and
15 Stubb's exposure to Benzene; is that correct?

16 A. Yes.

17 Q. And were you asked to calculate any sort
18 of dose that they may have received or any inhalation
19 exposure analysis?

20 A. Well, I was asked to look at that to
21 determine whether I could do that, yes.

22 Q. And what did you determine?

23 A. Well, in terms of calculating dose, it
24 just wasn't possible to do so.

25 Q. And did you make any calculations as to

1 their part per million year exposure?

2 A. Well, no. That would be dose. But due
3 to the lack of any specificity as to where they
4 worked, what process streams they were particularly
5 involved with, the frequency and duration of those
6 activities, it was impossible to be able to assess the
7 exposure to the extent one could calculate a specific
8 dose for Mr. Wilkinson or Mr. Stubbs.

9 Q. Did you make any calculations whatsoever
10 with respect to any Benzene exposure that Mr. Stubbs
11 or Mr. Wilkinson might have had?

12 A. Again, not specifically to those
13 individuals. I did look at the industrial hygiene
14 data from each of the facilities, that is Shell, Exxon
15 and Union Carbide.

16 And correlated that data with time
17 frames and specific trades. And made assumptions
18 based on the testimony that had been provided in this
19 case that the plaintiffs worked in the capacity of
20 these trades. And looked at the data overall, and did
21 an overall assessment of what someone doing that
22 activity in a Benzene stream would be exposed to.

23 It's not Mr. Wilkinson and Mr. Stubbs'
24 exposure, but it's just generally what an individual
25 in the trades or the activities that were described in

1 their testimony would have been exposed to as a result
2 of that trade or activity.

3 Q. Okay. So did you write that down
4 anywhere?

5 A. Well, I wrote down the data and
6 summarized the data in looking at those specific
7 trades, and it's included in these summaries in here.

8 Q. All right. Could you pull that folder
9 out for me so I could see what you're saying?

10 A. Here is an example of the Union Carbide
11 data. Pipefitter, boilermaker, maintenance
12 activities. This is from the data from 1978 through
13 1985, so relevant trades within the relevant time
14 frame. And then summarized the data based on a number
15 of samples as presented here.

16 Q. Okay. So can I see that?

17 A. Oh, sure. It's all yours.

18 Q. Thank you. So let me make sure I
19 understand that.

20 First of all, this does -- and let me
21 clarify this for the record, what exhibit was this
22 taken out of?

23 A. 11.

24 Q. Okay. Folder Number 11.

25 With respect to this sheet, it says "job

1 classifications by UCC codes." What are UCC codes?

2 A. That was the designation used by Union
3 Carbide in their industrial hygiene program to
4 designate various trades within their chemical plant.

5 Q. Okay.

6 Just for comparison purposes, did you do
7 a similar job classification analysis for Shell and
8 Exxon?

9 A. They're similar but a little different,
10 because the data was arranged differently. But I do
11 have summarized data for Shell.

12 For Exxon, I simply went through their
13 data set and looked at the data. And I found it to be
14 consistent with the other data that I had reviewed in
15 greater detail.

16 Q. Can I see the Shell data summary?

17 A. Here is a summary presented here of the
18 Shell data.

19 Q. The Shell data you pulled from folder
20 number what?

21 A. 8.

22 Q. Okay.

23 Well, let me start with the Union
24 Carbide data sheet, and ask you some questions.

25 So I don't want to misstate what you

1 said earlier. What you did for this it appears is
2 took different trades at Union Carbide, and then
3 assigned them representative values; is that correct?

4 A. No.

5 Q. Okay. Tell me what you did.

6 A. There's a larger database of thousands
7 of samples from Union Carbide. I went through and
8 extracted those data points from that larger database
9 that were representative of the trades that had been
10 testified to by the plaintiffs in this case.

11 Q. Okay.

12 And then, you took the data from those
13 trades, which are pipefitter, boilermaker and
14 maintenance; is that correct?

15 A. Yes.

16 Q. And then you summarized those trades?

17 A. Correct. And then we extracted the data
18 from the overall data set.

19 Q. And is that -- so can you call these
20 similar exposure groups then?

21 A. Well, no, I would not call those similar
22 exposure groups. I think what this does is we have
23 lumped various maintenance people, boilermakers and
24 pipefitters into one group. So we've created a larger
25 set. The similar exposure groups would be within that

1 data set.

2 So in essence what I've done is over
3 stated what likely exposure would be. These are
4 people who were working at a variety of different
5 activities, different tasks, all related to some
6 Benzene stream. But they're different, so I can't say
7 that they're all within the same exposure group.

8 Q. Okay. Because, for example, the
9 maintenance might be doing different tasks and
10 maintenance? Is that what you mean?

11 A. Sure.

12 Q. So that's somewhat similar to similar
13 exposure groups?

14 A. They may be working on a different unit.

15 Q. Okay. And so, what you did is you took
16 folks in maintenance -- for purposes of driving your
17 maintenance number which -- at Union Carbide, which
18 says a range of 1.21 part per million to .0001 part
19 per million; is that correct?

20 A. Yes.

21 Q. You took maintenance workers who had
22 performed jobs across the facility at Union Carbide
23 but may have been different units, may have been
24 different times, but all of them were in areas where
25 there were Benzene containing streams; is that

1 correct?

2 A. Yes.

3 Q. And you put the data point from those
4 workers together, and came up with down here at the
5 mean range from 1.21 to .0001 per million; is that
6 right?

7 A. That's correct, that's the range.

8 Q. And then similarly for pipefitters at
9 Union Carbide, what you did is you took pipefitters
10 who had done different tasks, a different unit,
11 various different units at Union Carbide and
12 consolidated them together, with the common factor
13 being that they had worked around Benzene containing
14 streams. And then derived for them a mean exposure
15 range of 1.23 to less than .01 per parts per million;
16 is that correct?

17 A. Yes.

18 Q. Which of these workers on the table
19 taken from Union Carbide data are contract workers?

20 A. Well, I don't know that any of them are
21 contract workers. However, this data would be
22 representative of exposure for facility personnel who
23 would have higher levels of exposure than the contract
24 workers.

25 Q. Well, how do you know that?

1 A. Based on the activities that are being
2 conducted, and in the time frame and the sequence in
3 which they're being conducted.

4 These are people who are doing work with
5 active streams containing Benzene, versus a stream or
6 piece of equipment that has been cleared as part of a
7 shut down or a turn around where the contractor would
8 come and get involved.

9 So in that capacity, the contractor
10 would come in. Well, the contractor was actually
11 coming in and doing maintenance work. And in that
12 scenario, their results would be represented by the
13 data that is presented here.

14 Q. But you just said earlier that you don't
15 know whether any of this data is contractor data;
16 correct?

17 A. Sure. It's on employees doing the same
18 task that if a contractor was coming in and doing work
19 as part of routine maintenance in the facility, then
20 this data would be representative of their activities
21 and their exposures.

22 Q. Okay. So this is routine maintenance --
23 these tasks represented by Union Carbide data are
24 routine maintenance performed by Union Carbide
25 employees; is that right?

1 MR. MAHER: Object to form.

2 THE WITNESS: They are.

3 BY MS. CLANCY:

4 Q. Routine maintenance tasks?

5 A. Well, there are other activities
6 probably that are non-routine as well. You have to go
7 through and look at each individual data point. We
8 looked at everything that was going on in the
9 facility.

10 Q. Well, you said earlier that these are
11 routine maintenance tasks performed by Union Carbide
12 employees to the extent that, maintenance workers came
13 in and did those some or similar routine tasks they
14 were just like maintenance workers; is that correct?

15 MR. MAHER: Object to form.

16 THE WITNESS: If I said routine,
17 then I shouldn't have. I don't know that every one of
18 these is routine. There are other numbers in here
19 reflective of non-routine tasks as well. It's the
20 universe of data, so --

21 BY MS. CLANCY:

22 Q. Do you have that data that you derived
23 that from? I think you have it in that box Number 1.

24 A. Yes, this is the Union Carbide data
25 here.

1 Q. Thank you. So first of all, you did not
2 compare any of this employee data to any actual
3 contractor data taken at Union Carbide; correct?

4 A. I'm not sure. Compare it with what?

5 Q. Well, did you have any actual contractor
6 monitoring data at Union Carbide?

7 A. From that data set, no. Again, I didn't
8 have specific contract monitoring data. If a
9 contractor was doing one of these tasks, they would be
10 represented by this same data set.

11 Q. Well, I guess my question was simpler
12 than that. This data set represents employees data
13 exposure, correct, exposure in parts per million?
14 Well, let me back up and make it clear.

15 This exhibit, the Union Carbide exhibit
16 is data derived from Benzene monitoring of Union
17 Carbide's employees; correct?

18 A. Yes. Doing tasks within the Union
19 Carbide facility that -- it could be a Union Carbide
20 facility or it could be the same task that a contract
21 contractor would be doing.

22 Q. And my question --

23 MS. CLANCY: Object to the
24 non-responsive portion of that, so I guess everything
25 after "yes."

1 BY MS. CLANCY:

2 Q. My question is then did you have any
3 actual monitoring of contractors at Union Carbide for
4 Benzene exposure?

5 A. Again, I don't know if any of that was
6 specifically for contractors at Union Carbide.

7 Q. Well, as you sit here today, you're not
8 aware of any contractor data, actual contractor data
9 for Benzene monitoring --

10 MR. MAHER: Object to form.

11 BY MS. CLANCY:

12 Q. -- at Union Carbide, correct?

13 A. Well, your statement is correct from the
14 standpoint that I don't have it on a specific
15 contractor. But what I have said, and I'm sorry, but
16 I'll say it again, is it is my view that this data is
17 representative of a contractor doing the same type of
18 work that a Union Carbide employee would have been
19 doing.

20 So that data is representative of a
21 contractor's work, but it is not on a specific
22 contractor that I am aware of.

23 Q. Okay. You're just making the assumption
24 that the contractor is doing same or similar tasks as
25 Union Carbide employees would have same or similar

1 exposure; correct?

2 MR. MAHER: Object to form.

3 THE WITNESS: I don't know that
4 you call it an assumption. It's based on experience.
5 It's based knowledge of the tasks and activities. And
6 I'm not sure why a contractor would do it differently
7 than pulling a blind or disconnecting a pump, why they
8 would do that differently than a Union Carbide
9 employee.

10 BY MS. CLANCY:

11 Q. Okay. So what your testimony is that
12 once you have the basic task, that you can assign
13 values to folks who didn't even perform that task, as
14 long as you have an understanding of what the task
15 entails?

16 MR. MAHER: Object to form.

17 THE WITNESS: Sure. Sure. One of
18 the -- in industrial hygiene, one of the principles is
19 a task-based analysis. You don't have to assess every
20 person every day under every specific scenario. There
21 are various processes that you go through, and one is
22 a task-based analysis.

23 BY MS. CLANCY:

24 Q. And so to understand that, because I'm
25 not an industrial hygienist, to understand that then,

1 a task-based analysis is you can compile values using
2 other folks' experience in that task, and then apply
3 those to anticipate or predict historically what
4 another person may have experienced in same or similar
5 tasks; is that right?

6 A. Good, sure.

7 Q. Correct?

8 A. Yes.

9 Q. And that is a standard and accepted
10 method of analysis in industrial hygienist; correct?

11 A. Oh, absolutely.

12 Q. Let's put this back in the Union Carbide
13 folder which is --

14 MR. MAHER: 11.

15 THE WITNESS: 11, which is right
16 here.

17 BY MS. CLANCY:

18 Q. Thank you. Let me look at this. Well,
19 I think it might be easier if you explain to me then
20 how you derived the Shell data, which is marked
21 "summary table, Shell-Wilkinson."

22 A. The Shell data is based on data
23 collected from 1979 and 1988. Of that data set, there
24 were 809 personal samples that were collected. And by
25 far and away the majority of them, nearly 99 percent,

1 were less than one part per million for workers at the
2 Shell facility.

3 Q. Could you give me those years again
4 please?

5 A. 1979 to 1988.

6 Q. Okay. And it says here 1979, 1984, '85
7 and '88. So did you review just four years in that
8 period?

9 A. Reviewed the -- the data was, came from
10 those years.

11 Q. So from the years 1979, 1984, 1985 and
12 1988; correct?

13 A. Correct.

14 Q. Okay. Are you looking for the data?

15 A. Yes. Is that what you want me to look
16 for?

17 Q. Yes.

18 A. I kind of anticipated that.
19 We're getting things disorganized here.
20 Could we put this back in that folder?

21 Q. I'm sorry. I knew I was -- that's my
22 fault.

23 A. Because you may ask me about it again,
24 and I'll have to spend a lot of time looking for it.
25 This is a summary of the Shell data.

1 And -- well, you can take a look at this and ask me
2 questions.

3 Q. Well, first of all, is this data of
4 Shell employees?

5 A. It's Shell employees and Brown and Root
6 contractors, employees.

7 Q. Where are the Brown and Root
8 contractors?

9 A. They're interspersed in here. Here is a
10 Brown and Root contract employee in the loop plant
11 where Mr. Wilkinson worked in 1988.

12 Q. Okay, so is this the air sampling
13 collected on Brown and Root employees in March, June
14 and September '88 in the loop plant referenced here on
15 your summary table?

16 A. Yes.

17 Q. Okay.

18 A. I believe they were all non-detectable,
19 or less than 0.1 parts per million.

20 MS. CLANCY: I'm going to object
21 as non-responsive portion, because there wasn't a
22 question pending. So thank you.

23 THE WITNESS: Okay.

24 BY MS. CLANCY:

25 Q. Can I see that?

1 A. Yeah.

2 Q. Okay. And the Brown -- the typical OSHA
3 measurement for -- well, what's passing OSHA
4 regulations are two different types of time-weighted
5 averages. One is over a 15-minute period, and one is
6 over an eight-hour period, correct, for Benzene?

7 A. First one you said is what?

8 Q. A 15-minute period, the short-term
9 exposure on there?

10 A. Well, there are two standards.

11 Q. Okay.

12 A. Or permissible exposure limits. Yes, 15
13 and eight hour. You don't have to monitor both.
14 That's an activity based determination as to which one
15 you do.

16 Q. And what does that mean?

17 A. If it's a short term task, you compare
18 it to the S.T.E.L. If it's a long term activity, you
19 compare it to the eight-hour TWA.

20 Q. Would non-routine tasks be an example of
21 short term tasks?

22 A. Depends on the activity, the length of
23 the activity.

24 Q. Well, for example, if you just came in
25 to insert a blind, takes 30 minutes, would that be

1 considered a short term task?

2 A. You know, that's a call that has to be
3 made in the field. I mean, it's a 30-minute sample,
4 so it's longer than 15 minutes. So you may average
5 that over an eight-hour day.

6 Q. Could you give me an example of a short
7 term task that you would, as an industrial hygienist
8 would make the call of that?

9 A. Sure. You may be disconnecting a line.
10 You may be inserting a blind.

11 Q. What else?

12 A. You may be cleaning a part that takes
13 minutes.

14 Q. Okay. How about changing a filter?
15 Could that be considered as this task, short term
16 task?

17 A. What type of filter, what size, etc.,
18 and how do you access the filter?

19 Q. Well, tell me if there's an instance
20 where changing a filter could be considered a short
21 term task?

22 A. Sure, if it's some small filter and it's
23 readily, easily accessible, and sure, that could be
24 less than -- there are many scenarios that, you know,
25 I just can't presume them all.

1 Q. But there are many scenarios where
2 possibly changing a filter could be considered a task
3 where short term exposure monitoring was appropriate?

4 A. Oh, no. What I'm saying is that may be
5 true, there may be short term activities in that kind
6 of -- in changing out a filter. I can't think of a
7 specific piece of equipment in a refinery or chemical
8 plant where that's necessarily the case.

9 Q. So the other time period that OSHA
10 prescribes is an eight-hour time-weighted average;
11 correct?

12 A. Yes.

13 Q. And what you do is you take -- is that
14 you take the exposure during a certain time period in
15 that day. And if you are going to calculate an eight-
16 hour time-weighted average, that you spread that
17 exposure over the eight-hour time-weighted period. So
18 you calculate your total eight-hour time-weighted
19 average parts per million exposure?

20 A. Well, I don't know if that's exactly the
21 right term to use. You would, again, look at the
22 length of the activity that would be likely to produce
23 an exposure to Benzene.

24 And, first, you try to sample for the
25 entire length of that time. If you cannot do that, if

1 you cannot sample the entire time, then you may sample
2 for a portion of that time, and then presume that the
3 rest of it is the same. And then that's factored into
4 your eight-hour time-weighted average.

5 Or if the task only lasts a half a day
6 and the rest of the day is no exposure to asbestos,
7 then you would time weight that, your results over
8 that eight-hour period. Oh, sorry, Benzene, yes.

9 Q. Benzene, yes.

10 A. The same is true for asbestos.

11 Q. So there are two different ways, then
12 you're testifying at calculating the eight-hour time-
13 weighted average for purposes of providing data as
14 required by the OSHA regs?

15 A. Yes.

16 Q. And the first of which is that you take
17 a representative exposure sample at one point during
18 the day, and then just presume that the rest of the
19 eight hours are the same at that exposure point?

20 A. Or you could sample the entire day, 480
21 minutes.

22 Q. All right. And at that point, you could
23 say, here is what the average would be experienced
24 over the eight-hour time period?

25 A. Correct.

1 Q. The second way of doing it is to take a
2 sample, and then to spread that out over the eight-
3 hour period by means of averaging the -- capturing of
4 time over the eight-hour time period; is that right?

5 A. Yes.

6 Q. And it follows, then that like, for
7 example, if you have a 15 minute -- if you monitor me
8 for 15 minutes of exposure to Benzene, and then I say,
9 well, I really want to know what that is over an
10 eight-hour period. The 15 minute sample is going to
11 be a far greater parts per million exposure than it
12 would be if you spread it over the eight-hour time
13 period; right?

14 MR. BUTHOD: Form.

15 THE WITNESS: Unless both of them
16 are zero.

17 BY MS. CLANCY:

18 Q. Well, let's start with --

19 A. Then they'd be the same.

20 Q. Yes. But in general, if it's not --
21 well, specifically if it's not zero, if there is an
22 actual number, like a hundred parts per million
23 assigned to the 15-minute time period, when you spread
24 that out over eight hours, that's going to be a much
25 smaller number; correct?

1 MR. MAHER: Object to form.

2 THE WITNESS: Sure if the rest of
3 your day is no exposure to Benzene, that is true.
4 That's how the OSHA determines the eight-hour time-
5 weighted average for comparison with the health
6 standards.

7 You have to normalize the data in order
8 to compare it with the occupational health standards.
9 So what you stated is correct.

10 BY MS. CLANCY:

11 Q. And part of everybody using the eight-
12 hour time-weighted average is a process of normalizing
13 the data?

14 A. Correct.

15 Q. So that people compare apples to apples?

16 A. Correct.

17 Q. And the longer -- if you use longer time
18 periods, like nine hours or ten hours, that's even
19 going to make the numbers look -- the numbers will be
20 smaller; right?

21 MR. BUTHOD: Form.

22 THE WITNESS: There is a different
23 technique for if you have longer than eight-hour
24 shifts. Then there is a mathematical technique for
25 adjusting the permissible exposure limit so that

1 you're recognizing that longer exposure period.

2 BY MS. CLANCY:

3 Q. And what is that mathematical technique?

4 A. Well, you take a fraction of whatever --
5 the extended period of time is nine hours. Ten hours
6 you take that fraction and effectively decrease the
7 permissible exposure limit, and then compare your
8 results against that.

9 Q. Well, let's say -- I'm kind of
10 confused. If you have -- why would you decrease the
11 exposure if you're trying to back it back into an
12 eight-hour time-weighted average?

13 A. Because you've exposed the individuals
14 for a longer period of time. There is more exposure.

15 Q. You're assuming that you're doing the
16 type of measurement that is an exposure for ten hours
17 as opposed to the type of measurement that is where
18 you capture the individuals for a certain period of
19 time, and then you divide that out over the whole day.

20 A. Sure. I'm sorry. As I understand your
21 hypothetical, you're presuming that someone is exposed
22 more than eight hours.

23 Q. No. I was just saying if you're using
24 ten hours as -- let's just say you want to do a
25 ten-hour time-weighted average.

1 A. Yes.

2 Q. As opposed to eight-hour time-weighted
3 average.

4 A. Right.

5 Q. Is that an accepted practice to do a
6 ten-hour time-weighted average?

7 A. Yes. But again, you adjust the health
8 standard. You lower the health standard.

9 Q. Well, but I'm talking about an instance
10 where you're not measuring all day. You're measuring
11 -- let's say the example you provided earlier, we were
12 measuring for half a day. And then you say, okay,
13 well, I want to do it on a ten-hour time-weighted
14 average. Is that an accepted practice?

15 A. If your belief is the exposure continued
16 for the rest of that day and for an entire ten-hour
17 day, you could do that. But then you have to
18 mathematically change the permissible exposure limit
19 for comparison purposes.

20 Q. Okay.

21 And did you mathematically change the
22 Brown and Root in quotes for the eight-hour time-
23 weighted average for comparison exposure purposes?

24 A. No. I mean, I believe a majority or all
25 of them were non-detectable. There was no need to do

1 that.

2 MS. CLANCY: Object as
3 non-responsive.

4 BY MS. CLANCY:

5 Q. You recognize that the Brown and Root
6 exposures reported by Shell were a ten-hour time-
7 weighted average; correct?

8 A. Well, I looked at the times, yes. But I
9 also looked at the results of the data.

10 Q. Right. Well, my question is simple.
11 You estimate that they were reported, many of them on
12 a ten-hour time-weighted average; right?

13 A. Okay.

14 Q. Correct?

15 A. I'd have to go back and look at them. I
16 didn't make note of if all of them or most of them
17 were reported an a ten-hour time-weighted average.
18 Again it doesn't matter, because most of them were a
19 non-detect.

20 MS. CLANCY: Object to the
21 unresponsive portion of that.

22 BY MS. CLANCY:

23 Q. Okay.

24 For example, on the data you just handed
25 me, Brown and Root loop plant, ten-hour time-weighted

1 average, Brown and Root loop plant, ten-hour time-
2 weighted average, Brown and Root loop plant, ten-hour
3 time-weighted average, Brown and Root loop plant, ten-
4 hour time-weighted average. Do you see where it says
5 that?

6 A. Sure.

7 Q. And so you didn't -- my question is very
8 simple; very specific. You did not do a conversion of
9 that Brown and Root data back to an eight-hour time-
10 weighted average; correct?

11 A. I did not because there was no need to.
12 Because the data was less than, was non-detect, so
13 there was no need to do that.

14 Q. Well, you didn't make a comparison of
15 apples to apples. You did not make a -- convert the
16 ten-hour time-weighted average to eight-hour time-
17 weighted average; correct?

18 A. Oh, sure I did. That's what I'm
19 saying. But you wouldn't need to do that. That would
20 be a silly step to take, because the results are
21 non-detect. I don't understand why one would do that.

22 Q. Well, because you testified earlier that
23 if you have a ten-hour time-weighted average -- strike
24 that.

25 At any rate, your use of the Brown and

1 Root data uses a ten-hour time-weighted average;
2 correct?

3 A. My -- that data is -- some of it is a
4 ten-hour -- they recognize longer tasks and
5 activities. But they reported no detectable levels of
6 Benzene, and they had a detection limit of .1 parts
7 per million. The standard is one.

8 So at ten hours, you're looking at an
9 extra what, 20 percent time. So it would be 20
10 percent of -- that would be .8, so it's still well
11 below that extrapolated permissible exposure limit.

12 Q. But you didn't make that conversion for
13 purposes of your calculations here today; correct?

14 A. I didn't need to; it was already done.

15 Q. But you did not do it for -- you did not
16 do that calculation for purposes of your summary data
17 sheet that we see here today; correct?

18 A. I'm sorry, I'm not following your
19 question. I'm not sure why I would do something that
20 didn't need to be done.

21 Q. My question is not why. My question is
22 did you?

23 A. Sure. I made that assessment mentally
24 when I looked at the data just as I did sitting here
25 explaining it to you.

1 Q. Your calculation -- you testified
2 earlier that you weren't even sure if they used
3 ten-hour time-weighted average. So --

4 MR. MAHER: Object to form.

5 THE WITNESS: No. I think you
6 misstated what I said. What I said was I didn't look
7 that closely at it. I looked at it and I knew there
8 were ten-hour samples in there, but I didn't need to
9 do any calculation as you put it, because the results
10 were non-detect.

11 Q. So my question is then, you did not do
12 calculations to convert the Brown and Root ten-hour
13 time-weighted average to an eight-hour time-weighted
14 average; correct?

15 A. Yes, I did. I did it in my head just as
16 I did here with you this morning.

17 Q. You're not changing your testimony to
18 say that you did it in your head?

19 MR. BUTHOD: Object to the form of
20 the question.

21 THE WITNESS: Sure, I didn't write
22 anything down. I didn't need to.

23 BY MS. CLANCY:

24 Q. Because the summary -- well, your
25 summary sheet, your summary data sheet includes -- for

1 air monitoring collected by Shell by Brown and Root
2 employees includes data that includes ten-hour time-
3 weighted average and eight-hour time-weighted average;
4 correct?

5 A. Yes.

6 Q. Who else contacted you about providing
7 an opinion in this case?

8 A. Exxon Mobile. And I was also contacted
9 by attorneys from Arco. They were representing Arco,
10 Lyondell, and I believe BP AMOCO.

11 Q. And is that it?

12 A. Yes.

13 Q. So the attorneys that contacted you were
14 from Shell, Exxon and BP AMOCO?

15 MR. MAHER: Object to form.

16 THE WITNESS: And Union Carbide.

17 BY MS. CLANCY:

18 Q. And whom did you speak to -- who else
19 did you speak to from Shell -- what other Shell
20 attorneys did you speak to besides Mr. Dillard?

21 A. I believe that's it.

22 Q. And did you meet with Mr. Dillard in
23 person prior to your testimony here today with respect
24 to these cases?

25 A. I may have met with Mr. Dillard on

1 another occasion in Houston where he mentioned this
2 case, but I don't recall that we talked in any detail
3 about this case in person.

4 Q. Did you do a site visit of Shell Deer
5 Park in preparation for this case?

6 A. Not for this case. I've been there
7 before, but not for this case.

8 Q. And did you do a site visit of Exxon
9 Baytown for purposes of this case?

10 A. Same answer.

11 Q. So the answer is no?

12 A. Not for this chase.

13 Q. And it's my understanding that you did
14 do a site visit at Union Carbide?

15 A. But not for this case.

16 Q. Not for this case either?

17 A. Correct.

18 Q. So when you were at Exxon Baytown, Shell
19 Deer Park and Union Carbide in a prior time period,
20 you weren't there for the purposes of analyzing --
21 well, obviously for analyzing what your opinions would
22 be or analyzing facts for purposes of providing
23 opinions in this case?

24 MR. MAHER: Object to form.

25 THE WITNESS: Well, no, I think in

1 fact, the purpose of my site visit was to understand
2 the layout of the facility, the magnitude of the
3 facility, the workplace conditions, the types of units
4 and so forth that existed at these facilities.

5 Q. When was your site visit at Shell Deer
6 Park?

7 A. I believe it was sometime in, and I'm
8 not positive, 2004, 2005.

9 Q. Was it for purposes of litigation?

10 A. It was involving a litigation case in --
11 I don't recall the name of the specific case I was
12 there for.

13 Q. But you went to visit Shell Deer Park in
14 your capacity as serving as an expert in a legal case;
15 correct?

16 A. Sure. If I'm going to discuss
17 operations at a facility, certainly it is of benefit
18 to see those operations and understand the environment
19 in the context of the work activities. And so that's
20 why I went there originally.

21 Q. Okay. And when did you do a site visit
22 at Exxon Baytown?

23 A. Again, I can't give you a specific
24 time. It was in the last several years.

25 Q. Was that for purposes of providing your

1 opinion in a legal case?

2 A. It was, yes.

3 Q. And were you providing your opinion on
4 behalf of Exxon? You were hired by Exxon?

5 A. As best as I can recall, yes.

6 Q. Well, have you ever been hired by a
7 plaintiff's attorney in a Benzene case?

8 A. Yes. There was a Benzene component to
9 an issue. It was multiple solvents that individuals
10 were exposed to, and I represented a group of
11 plaintiffs in that case.

12 Q. And who were the plaintiffs -- I mean
13 who was the plaintiff's attorney?

14 A. Frank Duff.

15 Q. And when was that?

16 A. The best I can tell you, the late '90s.

17 Q. But Benzene was not an issue in that
18 case; correct?

19 A. Well, my recollection is there was a
20 variety of solvents, including Xylene. And as a part
21 of that, Benzene was considered a constituent. It was
22 not the primary focus of the case. There were several
23 different solvents or components to these paint
24 products that were at issue.

25 Q. But you testified previously under oath

1 that Benzene was not an issue in the paint case;
2 correct?

3 A. Yeah. I did not consider it an issue,
4 that's right. When I looked at the data, I was asked
5 to comment on that by the plaintiff's attorney, but I
6 did not feel the trace levels of the Benzene in the
7 product were not of any consequence in terms of
8 exposure.

9 Q. What was your opinion for the
10 plaintiff's attorney in the paint solvent exposure
11 case?

12 A. That their employer, the contractor, had
13 put them in harm's way by having them paint on an
14 operational boiler in a confined area without the
15 benefit of respiratory protective equipment.

16 Q. Okay. And what did you testify that
17 they were exposed to?

18 A. There were a variety of solvents.
19 Xylene, MEK, isosinates. Those are the ones that I
20 recall.

21 Q. So the substances at issue in the one
22 time you testified for a plaintiff's attorney in a
23 solvent's case were Xylene, MEK and isosinate;
24 correct?

25 A. As I saw it and agreed to testify to,

1 that's correct. I was asked about Benzene, but again
2 did not feel that there was an exposure of any
3 significance.

4 Q. Well, what you said actually was Benzene
5 was not an issue?

6 A. It wasn't in the case after -- since I
7 wouldn't testify to it.

8 Q. And any other times that you have
9 testified on behalf of a plaintiff in a Benzene case?

10 A. I cannot think of one in a Benzene
11 case.

12 Q. But you have testified on behalf before
13 then -- well, in addition to today, you offered
14 previous testimony for Exxon in a Benzene case;
15 correct?

16 A. I have, yes.

17 Q. Okay. How many times have you testified
18 on behalf of Exxon?

19 A. I'm not really certain. Two or three
20 times. I am not real certain. It hasn't been a lot.

21 Q. And you've offered prior testimony in a
22 Benzene case on behalf of Shell, correct, in addition
23 to this?

24 A. Yes.

25 Q. How many times?

1 A. Perhaps a couple of times.

2 Q. And you've offered prior testimony in
3 addition to today on behalf of Union Carbide in a
4 Benzene case; right?

5 A. I don't know that I've ever provided
6 testimony for Union Carbide in a Benzene case.

7 Q. Well, you've been hired by Union Carbide
8 in another Benzene case prior to this case; correct?

9 A. Yes, that is true.

10 Q. About how many?

11 A. I'm sorry?

12 Q. How many?

13 A. I can think of one.

14 Q. And you've also testified for Dow in
15 Benzene cases; correct?

16 A. I can't recall having testified for
17 Dow. I may have, but I just don't recall testifying
18 for them.

19 Q. Well, you're not saying today that you
20 haven't testified for Dow in a Benzene case?

21 A. Yes. I'd have to look further into that
22 to see if I could determine whether I have actually
23 testified for them.

24 Q. How about for Marathon?

25 A. I've been hired by Marathon. Again, I'm

1 not certain. It was one case in particular where they
2 settled out, I can't remember, right before or right
3 after I testified in a deposition.

4 Q. But you were hired by Marathon to
5 provide expert opinions in a Benzene case; correct?

6 A. Sure.

7 Q. And you with hired by Dow to provide
8 expert opinions in a Benzene case?

9 A. I have been, yes. All low dose cases,
10 yes.

11 Q. What does that mean, all low dose cases?

12 A. Well, they were activities -- there were
13 operations that presented, in my views and in my
14 practice, either no or low level of exposure to
15 Benzene.

16 Q. Okay. Have you ever offered an opinion
17 testifying in a Benzene case that the exposures
18 suffered were higher than no low or no level of
19 exposure?

20 A. I don't that I've said that certain
21 activities -- certainly I'm aware of certain
22 activities that can lead to high levels of exposure.
23 I don't know that I've been asked to testify to that
24 before though.

25 Q. Well, have you ever, you know, provided

1 a deposition or sat in front of a jury and testified
2 under oath that the activities or operations presented
3 the worker at issue with higher than low or no level
4 of exposure?

5 A. Yeah. That's what -- I can't recall
6 whether I have ever provided that specific testimony.
7 Say, a particular task would present a high level of
8 exposure. I may have presented that before, I just
9 don't recall a specific instance.

10 I certainly know that those
11 opportunities exist for high levels of exposure. I
12 monitored workers in my course of working for the
13 Coast Guard that had high levels of exposure on
14 occasion to Benzene.

15 Q. Well, I'm just asking as you sit here
16 today if you can recall any instance where you've
17 testified that a worker experienced high levels of
18 exposure to Benzene?

19 A. I cannot give you a specific instance
20 where I've done that. I can't tell you one way or the
21 other whether I have.

22 Q. So you can't recall as you sit here
23 today?

24 A. Correct.

25 MS. CLANCY: Okay. Let's change

1 the tape.

2 MR. DILLARD: Let's take a
3 restroom break too, if you don't mind.

4 VIDEOGRAPHER: This is the end of
5 tape number 1, the video deposition of John Spencer.
6 The time on the screen is 11:31:21. We're going on
7 break now.

8 MR. AUBREY: This is Tom Aubrey
9 representing Radiator Specialty, and we've got some
10 depositions lined up for next week for Pyatt and
11 Paustenbach, and I'd like your permission to attend
12 those by telephone.

13 MS. CLANCY: Can we talk about it
14 later? I just don't feel it's appropriate for
15 Mr. Spencer's deposition.

16 MR. AUBREY: Okay.

17 VIDEOGRAPHER: This marks the
18 beginning for tape number 2 in video deposition of
19 John Spencer. The time on the screen is 11:47:59.
20 We're back on the record.

21 BY MS. CLANCY:

22 Q. Mr. Spencer, earlier we had marked your
23 most recent curriculum vitae as an exhibit. Could you
24 pull that out, please?

25 Deposition Exhibit 4.

1 First of all, have you ever received a
2 non cert?

3 A. I have not.

4 Q. Have you ever written an article or book
5 outside of the context of litigation on the topic of
6 Benzene exposure?

7 A. Yes.

8 Q. What?

9 A. It was an article just recently
10 published on -- we were validating a model based on
11 some air sampling that was done with solvents
12 containing low levels of Benzene.

13 Q. But my question was, have you done an
14 analysis that occurred outside the context of
15 litigation? Because that paper was written in the
16 context of two legal cases; correct?

17 A. No, that paper was not. I did not do it
18 in the context of any legal case.

19 Q. What the paper says that has your name
20 on it is "The data are sparse because the simulations
21 were not conducted as part of well funded research
22 studies, but in the context of two legal cases to
23 provide a general sense of exposure intensity given
24 specific Benzene levels in the solvent." Do you
25 disagree with that statement?

1 MR. BUTHOD: Do you want to show
2 the witness what you're reading?

3 THE WITNESS: I doubt if -- what
4 you need to understand is the data was produced as a
5 result of that, but not our data, not our study. I
6 didn't do the study as part of any litigation case.
7 The data that we were utilizing had been produced by
8 someone else in a litigation case. But this paper was
9 not written in the context of litigation.

10 BY MS. CLANCY:

11 Q. Okay. So this says that the simulations
12 were conducted in the context of two legal cases;
13 correct?

14 A. Done by other people, not me. We just
15 used that data and looked at the results of the data,
16 and then ran computer models to determine whether
17 there was a correlation between the model and the data
18 done by -- collected by others.

19 Q. So the data that you were deriving your
20 analysis from for purposes of this May 2006 paper was
21 data that was a simulation done in the context of two
22 legal cases; correct?

23 A. Well, part of the data was. Our data
24 was not. Where we ran the computer simulation, that
25 was not. That was something we did on our own.

1 Q. Right. That's what I'm saying is that
2 your computer simulation used as a comparison point,
3 the data derived from simulations conducted in the
4 context of two legal cases; correct?

5 A. Yes. That's where the actual air
6 monitoring data came from.

7 Q. Is there any other book or article that
8 you have written outside of the context of litigation
9 with respect to Benzene and Benzene exposure?

10 A. Yes. I wrote a health and safety audit
11 manual that includes methods for auditing the Benzene
12 regulations and how to properly meet those regulations
13 within your operation.

14 Q. Well, this isn't the -- here is a health
15 and safety audit by John Spencer, but that's not the
16 one you're referring to; correct?

17 A. Yes, it is.

18 Q. Oh, this is the one you're referring to?

19 A. Yes.

20 Q. Can you tell me where in this it refers
21 to the Benzene regulation?

22 A. Sure. It should be 1910 through 28.

23 Gosh, I haven't looked at this in a long
24 time. Page 211.

25 Q. This appears to be a checklist to be

1 followed in order to have compliance with the OSHA
2 regulations with respect to Benzene; is that correct?

3 A. It's part of an auditing protocol.

4 Q. And the auditing protocol to be used as
5 a checklist to help determine compliance with the
6 relevant OSHA Benzene regulation 29 CFR 1910-1028;
7 correct?

8 A. I don't like the word "checklist" but it
9 certainly can be described as that, yes.

10 Q. Well, protocol then, is that better?

11 A. Yes.

12 Q. Protocol.

13 A. It makes me feel better.

14 Q. Okay. It's a protocol to be followed
15 with compliance with the Benzene regulation, 29 CFR
16 1910-1028; correct?

17 A. Yes.

18 Q. What else have you written that has been
19 published outside of litigation on the issue of
20 Benzene and Benzene exposure?

21 A. I can't think of anything else that's
22 been published in that sense. I think that's it.

23 Q. Have you ever taught classes on the
24 issue of exposure estimation?

25 A. Well, I've given presentations at

1 technical conferences on doing retrospective
2 assessments. Another one on how to select appropriate
3 data sets presented at the national conference of the
4 American industrial hygiene association and the ACGIH.

5 Q. When did you present that?

6 A. It's in my CV I think. The dates are a
7 couple of years ago.

8 Q. Is this "Estimating Past Exposures-The
9 Scientific Basis for Reconstructing Asbestos Dose for
10 Groups and Individuals"?

11 A. Yes.

12 Q. How about with respect to -- let me back
13 up.

14 Do you have a copy of that paper still?

15 A. Well, I probably have a copy of the
16 abstract. I'd have to look for that.

17 Q. And what do you mean by the abstract?

18 A. Well, that's what they requested for
19 review was basically an abstract of the paper. And
20 they presented an abstract in the proceedings from the
21 meeting. I'd have to look and see what I have.

22 Q. And that was specifically with respect
23 to historical assessment for purposes of analyzing
24 asbestos exposure?

25 A. Well, asbestos was used as an example,

1 but it really applied to any type of chemical
2 exposure.

3 Q. Did you specifically mention Benzene and
4 calculation of Benzene in your speech?

5 A. I'm not sure that I did or not.

6 Q. Where else? Is there any other instance
7 where you have given a -- taught a class at an
8 educational institution on -- well, that was -- let me
9 back up. That was with respect to a technical
10 conference for the ACGIH, the topic of which was
11 "historical exposure assessment with respect
12 asbestos;" correct?

13 A. Yes.

14 Q. Have you ever taught a class in an
15 educational institution with respect to analyzing
16 exposure assessments or preparing exposure
17 assessments?

18 A. On exposure assessments, I don't know if
19 it's called that. I taught a course using this manual
20 at Johns Hopkins University, part of the NIOSH
21 educational resource center.

22 Q. And you're talking the health and safety
23 auditing?

24 A. Right, which included the component of
25 Benzene and the requirements for exposure assessment.

1 I'm not sure if that answers your question or not.

2 Q. Well, the audit book doesn't deal with
3 issues of exposure assessment; correct?

4 A. Not specifically, you're right. In
5 terms of specifically exposure assessment techniques,
6 that's correct.

7 Q. In fact, it doesn't specifically deal
8 with -- I don't see anywhere in the book it even
9 handles the issue of exposure assessment, historical
10 exposure assessment?

11 A. Not historical. It talks about the
12 practices for an employer to monitor employees'
13 exposure to Benzene.

14 Q. Right. But it doesn't attempt to teach
15 how to calculate a cumulative dose or cumulative
16 exposure assessment; correct?

17 A. Oh, correct.

18 Q. Is that it?

19 A. Yes.

20 I gave another presentation, and I don't
21 even know that it's listed here. Again, at the AIHA
22 ACGIH conference on, I guess Benzene as an example
23 where we evaluated exposures through measurements.
24 And then first, we modeled the data to predict
25 exposures, and then we took actual measurements to

1 evaluate those exposures.

2 Q. But that's not listed on your CV?

3 A. Here. It's listed under professional
4 conference and poster sessions. That was in 2004.
5 And then there were two presentations that were done
6 in 2004 on that issue.

7 Q. May I see the original copy of your CV?
8 And do you still have the paper that you prepared for
9 purposes of exposure assessment and evaluation of
10 Benzene from the application and use of spike
11 penetrating solvents?

12 A. Yes, I should still have that.

13 Q. And this paper was -- or this
14 presentation was with respect to making calculations
15 based on the use of solvent?

16 A. Well, that particular one had to do with
17 actual air monitoring based on the use of that
18 solvent, where it had varying levels of Benzene in it.

19 Q. And what solvent was it?

20 A. It was a mineral spirits based solvent.

21 Q. Who was it made by?

22 A. Liquid Wrench.

23 Q. Did you use any of the knowledge or
24 techniques that you talked about in that assessment
25 for purposes of preparing your opinion today?

1 A. No.

2 Q. Are you testifying today with respect to
3 plaintiff's exposure to Liquid Wrench?

4 A. Well, not directly. I don't mean to be
5 evasive, but I guess indirectly part of what I was
6 asked to do is take a look at the plaintiff's expert's
7 assessment for his estimates of exposure.

8 And so I certainly have opinions and
9 would comment on the industrial hygiene expert as
10 representing the plaintiffs in this case, and his
11 assessment of exposure to Liquid Wrench.

12 Q. But have you made your own calculations
13 with regard to any exposure that any plaintiff had
14 with Liquid Wrench?

15 A. I have not made any calculations, no.

16 Q. And just to make the record clear, the
17 only calculations that I've seen that you've made with
18 respect to any representative exposure with respect to
19 plaintiffs would be the Shell data, Shell calculations
20 that we looked at earlier the Union Carbide
21 calculations; is that right?

22 A. Well, I would not call them calculations
23 that were made specific to the plaintiffs. There are
24 data points that if, in fact, the plaintiffs worked in
25 jobs and had activities that involved them in Benzene

1 containing streams, then that data would be
2 representative of their exposure.

3 Q. And those are the only two calculations
4 you made with respect to data representative of
5 plaintiff's exposure based on the assumptions that you
6 just set forth; is that correct?

7 A. Well, yes, but I guess to be more
8 specific, I wouldn't call them calculations. It was
9 an analysis of existing data. Something that
10 virtually most any industrial hygienist could have
11 gone through and analyzed and pulled that data out.
12 So it wasn't a calculation per se.

13 Q. It was an analysis -- the only analysis
14 of existing data that you did and then summarized was
15 with respect to the Shell data and the Union Carbide
16 data that you just set forth?

17 A. And I reviewed the Exxon data as well.

18 Q. But you didn't produce any for this
19 calculated summary of that; correct?

20 A. I didn't produce a summary of it; that
21 is correct.

22 Q. You just looked at the data; is that
23 right?

24 A. Correct.

25 Q. Do you plan to do a summary of the Exxon

1 data?

2 A. That's possible. I mean, I'd like to do
3 something similar to what I did with the Shell data.
4 I just read through it. I just didn't have time to
5 count and summarize all that.

6 Q. Are you planning to come to trial in
7 this case?

8 A. Yes.

9 Q. Who did you speak to on behalf of Exxon
10 with respect to your opinions that you provided in
11 this case?

12 A. Mr. Buthod.

13 Q. So you were hired by Exxon as well?

14 A. Yes.

15 Q. What was your understanding of what
16 Exxon wanted you to provide an opinion about?

17 A. Well, the same issues that I previously
18 described. When I gave that description before, it
19 really applied to all the individuals that had asked
20 me to evaluate this case.

21 Q. And that is what? What did Exxon
22 specifically ask you to do?

23 A. To evaluate the exposures to the
24 plaintiffs in the case. To evaluate programs,
25 policies, procedures. And to, excuse me, comment on

1 the plaintiff's industrial hygiene expert's process
2 for determining plaintiff's exposure.

3 Q. And so the three categories that I have
4 that you were asked to testify about with respect to
5 these cases are, one, the -- your analysis of the
6 exposures that may have arisen or did not arise to the
7 plaintiffs in this case, whichever way you came out on
8 that; correct?

9 A. Correct.

10 Q. And that was specifically with respect
11 to Benzene?

12 A. Yes.

13 Q. Did you do any analysis with respect to
14 any type of organic solvent other than Benzene or
15 Benzene -- let me retract that. That was very
16 confusing.

17 MR. BUTHOD: Objection. Form.

18 MS. CLANCY: Well, just retract
19 that.

20 BY MS. CLANCY:

21 Q. The second area that you were asked to
22 testify about was with respect to policies and
23 procedures. And I'd like to ask you again, what
24 policies and procedures specifically have you been
25 asked to testify about?

1 A. The ones that were identified -- there
2 weren't specific policies and procedures. In general,
3 I think as I explained before, it had to do with the
4 procedures and the policies that dealt with how
5 Benzene exposures were managed within the facility as
6 it relates to contract personnel.

7 There was one other area I left out, I
8 think I had mentioned before, and that was the issue
9 of employer responsibility.

10 Q. And you meant employer responsibility in
11 general; correct?

12 A. Yes.

13 Q. So you will be -- are you commenting
14 therefore on the standard of care and the adequacy of
15 policies implemented by the Exxon safety department,
16 health department, and industrial hygiene department
17 as to managing contractors as it relates to Benzene?

18 MR. BUTHOD: Form.

19 THE WITNESS: Not necessarily
20 managing contractors, but what their practices were
21 that had the downstream effect of managing or limiting
22 or eliminating exposure to certain contract
23 employees. Not necessarily the plaintiffs in this
24 case because there is not a clear data on that or
25 information on that, but contractors in general.

1 BY MS. CLANCY:

2 Q. So they're Exxon and Shell and Union
3 Carbide, is that right, all three of them?

4 A. Yes.

5 Q. You've been asked to talk about how in
6 general their -- what their practices were as they
7 related to contract personnel and Benzene; is that
8 correct?

9 A. How their programs, policies, procedures
10 ultimately effected what the exposures would be
11 downstream to contractors generally.

12 Q. And yet you've analyzed no contractor
13 data with respect to Union Carbide; correct?

14 MR. MAHER: Object to form.

15 THE WITNESS: Other than what we
16 have already discussed, which again, it's my belief
17 that that data would be on a task based level, would
18 be representative of contractors doing those types of
19 pipefitter, boilermaker and maintenance workers
20 activities.

21 BY MS. CLANCY:

22 Q. Right. You're saying that the employee
23 data that you reviewed for Union Carbide, you're
24 saying is representative of the contractor data that
25 you did not review for Union Carbide; correct?

1 A. Correct.

2 Q. And for Shell, you analyzed three -- oh,
3 I've done it. Where is our Shell summary sheet? I
4 thought it would be in Shell.

5 A. Are these what you're looking for?

6 Q. Yes, thank you.

7 And for Shell with respect to contractor
8 data, you analyzed data over the period of September
9 10th, 1988, to September 19th, 1988, is that correct,
10 at the lube unit?

11 A. Yes. Well, I'd have to look at that to
12 be sure. I do recall it was all contained within the
13 1988 period.

14 Q. I'm looking at this one that says
15 September 10th, 1988, to September 19th, 1988;
16 correct?

17 A. Well, there is other Brown and Root data
18 from June of 1988. So there is more data than just
19 the September data.

20 Q. Okay. I just want to know which Brown
21 and Root data you're looking at.

22 A. Also March of 1988.

23 I believe that's all there was.

24 Q. Okay. So the Shell contractor data that
25 you analyzed was the data from two days in March of

1 1988, which is March 28 and 29 of 1988?

2 MR. DILLARD: If that's the end of
3 the question I would object to the form of it.

4 BY MS. CLANCY:

5 Q. Is that correct? And that was the first
6 contractor data you analyzed for Shell?

7 A. Yes.

8 Q. And then you also analyzed Shell
9 contractor data from June 5th through June 8th of
10 1988; correct?

11 A. Yes.

12 Q. And finally the last piece of contractor
13 data that you analyzed for Shell was September 12th
14 through September 19th of 1988; correct?

15 A. Actually, it's September 10th.

16 Q. All right. Thank you. September 10th
17 through September 19th, 1988; is that right?

18 A. September 19th?

19 Q. Yes.

20 A. Okay.

21 Q. Is that correct?

22 A. Yes.

23 Q. Any other contractor data that you
24 analyzed for Shell?

25 A. What do you have in your hands there,

1 what pages? You mixed these up.

2 Correct.

3 Q. And so you did not analyzed any
4 contractor data for Shell at the Dubbs 9 Unit;
5 correct?

6 A. That's correct.

7 Q. What contractor data did you analyze for
8 Exxon?

9 A. Where is the Exxon data?
10 Embedded in here is a variety of
11 contractor data.

12 Q. Okay.

13 A. In particular, there is two data points
14 on Mr. Stubbs.

15 Q. Can I clarify the record and say this is
16 -- what we're looking is Exxon Bates labeled number
17 16499 to 16842. I'm sorry to interrupt you. Go
18 ahead.

19 A. No, I think I was done.

20 Q. Well, you were telling me that the
21 contractor data that you analyzed in this exhibit
22 Exxon 16499 to 16842.

23 A. Okay.

24 Q. Go ahead. Could you explain the
25 contractor data that you analyzed in there?

1 MR. DILLARD: Form.

2 THE WITNESS: There is a summary
3 of much of the contractor data divided in an Exxon
4 letter, and it covers the period 1989 -- I'm sorry.
5 Yes. 1989. And there is data specifically in April
6 3rd and April 5th, 1989, that includes data
7 representing where Mr. Stubbs was monitored.

8 BY MS. CLANCY:

9 Q. Okay. May I see?

10 A. I think that was while he worked for JE
11 Merrit.

12 Q. So the contractor data you've looked at
13 for Exxon is the May 1989 results of monitoring at JE
14 Merrit workers during NRU Column 7 turnaround?

15 MR. BUTHOD: Form.

16 BY MS. CLANCY:

17 Q. Is that correct?

18 A. Yes.

19 Q. That's some of the contractor data you
20 looked at. I'm going to enter that as Exhibit 13.

21 (DOCUMENT MARKED PLAINTIFF, SPENCER
22 DEPOSITION, EXH. NO. 13, FOR IDENTIFICATION.)

23 BY MS. CLANCY:

24 Q. Okay. What other data did you analyze
25 for Exxon Baytown?

1 A. Well, there is other data that I believe
2 is in addition to that. There is contractor data from
3 other periods of time in here.

4 You have to look through. Here is
5 contractor data for Mundy. That's a function, you
6 have to flip through all these pages and find that
7 data.

8 Q. So the contractor data that's comprised
9 in Bates labeled Exxon 16499 through 16842, that would
10 be the remaining contractor data that you looked at
11 with respect to Exxon; correct?

12 A. It is incorporated with other Exxon data
13 in there, yes.

14 Q. To the extent there is contractor data
15 in Exxon 16499 through 16842, that would be the Exxon
16 contractor data that you reviewed?

17 A. Correct.

18 Q. Okay. Anything else?

19 A. That's it.

20 Q. You can put that back, please.

21 When you were working at NIOSH from 1980
22 to '81, what region were you responsible for?

23 A. I think I was there '80 to '82 or three.

24 Q. And what region were you responsible
25 for?

1 A. Well, I was all over the country. There
2 wasn't a particular region.

3 Q. Okay. You were all over the United
4 States?

5 A. Yes.

6 Q. As part of their survey?

7 A. Well, I missed Hawaii.

8 Q. That's unfortunate.

9 A. I know.

10 Q. What, if any, petroleum refineries and
11 petrochemical facilities did you audit at that point?

12 A. One in particular was AMOCO Wood River
13 facility in Illinois.

14 I went to other refineries, and I've
15 been trying to actually think about the names of
16 those, and I don't recall other refineries. I went to
17 other smaller refineries as part of my NIOSH work,
18 maybe two others.

19 Q. But you don't recall what they were?

20 A. I know one was in California and -- I
21 was just all over the country in a two and a half year
22 period.

23 Q. What other industries were you looking
24 at?

25 A. Name something. I went to it all. I

1 went to any type of manufacturing or virtually any
2 type of business.

3 Q. How many types of businesses would you
4 say you visited in that two-year period?

5 A. How many types?

6 Q. I mean how many different? I mean, how
7 many -- what was the total number of businesses that
8 you --

9 A. That I personally went to?

10 Q. Yes.

11 A. About 250.

12 Q. And what would you do at the sites once
13 you were there?

14 A. We basically did an audit of the
15 facility. We inventoried essentially what
16 occupational groups were present, what their exposures
17 were.

18 I reviewed industrial hygiene and other
19 safety related data, injury illness logs, material
20 safety data sheets, product labels and warnings.
21 Interviewed employees, management and discussed their
22 health and safety program.

23 Q. Were you reviewing industrial hygiene
24 data with respect to Benzene at AMOCO Wood River in
25 1980 to '82?

1 A. Oh, I'm sure. And there were many other
2 things as well, but, yes, Benzene would have been a
3 constituent.

4 Q. About how long would you spend at each
5 facility when you went to audit it?

6 A. It would depend on the size and the
7 complexity, from hours to a week at a time. So it
8 varied.

9 Q. Would you ever spend longer than a week
10 at a facility?

11 A. I don't recall ever having done that,
12 no.

13 Q. When you were working for the Coast
14 Guard in 1982 to 1987 as a director of industrial
15 hygiene and occupational health programs, your
16 responsibility was not to supervise industrial hygiene
17 and occupational health programs at petroleum
18 refineries and petrochemical facilities; correct?

19 A. No, I didn't direct the programs at
20 refineries, that's correct. I did work at those
21 various chemical plants, steel mills, areas where
22 Benzene containing cargos would be loaded or
23 unloaded. And as part of the marine inspector's
24 process, I was evaluating exposures.

25 Q. Well, you were working at the loading

1 and unloading zones then, of petroleum refineries?

2 A. Generally, yes.

3 Q. And petrochemical facilities?

4 A. Yes.

5 Q. So you weren't doing like an internal
6 plant assessment of any of their industrial hygiene
7 programs; correct?

8 A. Yes, that's correct.

9 Q. You testified previously that 90 percent
10 of your time was spent in litigation and 10 percent
11 outside. Is that still the case today?

12 A. Sure that was me? I don't know that
13 I've ever testified to that. That's not the case.

14 Q. What is the case today?

15 A. I mean, it varies, and I think that's
16 what I've said before, because it's always been true.
17 Depending on the week or the month, I mean, it might
18 be five percent, it might be 40 percent of my time is
19 litigation related. But it varies.

20 Q. What do you do outside of litigation?

21 A. Industrial hygiene work. We do health
22 hazard assessments of the air monitoring, write
23 product warnings and labels, doing training of other
24 -- we do train the trainer programs for health and
25 safety on related issues.

1 We have various government projects
2 we're involved in. Help sink ships to make artificial
3 reefs. I mean, it's quite diverse.

4 Q. What percentage of your time personally
5 is spent, not your company time, but your personal
6 time is spent on litigation versus non-litigation
7 activities?

8 A. Well, those figures I gave you was for
9 me.

10 Q. On a yearly basis?

11 A. Yes, it is. And it varies. I couldn't
12 tell you -- I couldn't begin to tell you on a yearly
13 basis. I just don't maintain any sort of analysis of
14 my time in that fashion. I do the same work
15 regardless of whether it's litigation or
16 non-litigation.

17 Q. Do you keep track of what bills, what
18 invoices you submit in the context of litigation and
19 what money you receive in that context?

20 A. Oh, no.

21 Q. You don't keep track of it?

22 A. No, it's not -- that is just not
23 important to me. No.

24 Q. So how does your accounting system work
25 when you submit an invoice?

1 A. It's based on a project. We assign a
2 project and it's not determined whether it's a
3 litigation project or a non-litigation project.

4 Q. What field work do you do now outside of
5 litigation?

6 A. All the things I described.

7 Q. Where do you do health hazards
8 assessments outside of litigation?

9 A. Gosh. I mean, it could be anywhere. I
10 mean, plants around the country. You mean like
11 geographically?

12 Q. Well, when was the last time you did a
13 health hazard assessment outside of litigation?

14 A. I'm trying to think of the last
15 industrial hygiene sampling. I mean, in some context
16 I do it every day. I get calls from people looking
17 for advice and getting information. And that's what I
18 do.

19 The last I did was probably a sampling
20 for -- we do a lot of environmental and
21 microbiological sampling, and it was for a facility up
22 north of Baltimore here.

23 Q. When was that?

24 A. A month ago.

25 Q. And did you personally go?

1 A. Yes.

2 Q. I'm looking for your folder that we
3 labeled "invoices," if you see.

4 A. I think it was separate from a folder.

5 Q. Oh, there it is. The invoices shown
6 here only show invoices to Fulbright and Jaworski. So
7 have you submitted no invoices to Baker Botts or King
8 & Spalding today?

9 MR. DILLARD: If we haven't, we're
10 going to fix that.

11 THE WITNESS: Sorry. That would
12 be true. This is all that we have today that I've
13 submitted.

14 BY MS. CLANCY:

15 Q. So you've only billed Fulbright &
16 Jaworski, who represents Shell on behalf of this case
17 today; correct?

18 A. Yes.

19 Q. Does that include all of the time that
20 you've spent on the case to date, the invoices that
21 you brought today?

22 A. Well, no. I mean, it doesn't represent
23 the time that I've spent this week preparing for this
24 deposition.

25 Q. Okay. So other than the time that you

1 spent this week, those invoices reflect the time to
2 date that you've spent on the case?

3 A. I believe that to be true.

4 Q. Can I see that back?

5 A. That's not marked paid, is it?

6 MR. DILLARD: She has got another
7 stamp for that.

8 BY MS. CLANCY:

9 Q. One of this things on your invoice says,
10 "presentation of materials," which was from the March
11 31st, 2006 invoice. What are presentation of
12 materials? You billed Fulbright and Jaworski \$175.00
13 for that.

14 A. I'd have to go back and look and see
15 what I've done -- what that was. I don't know
16 offhand. I don't recall.

17 Q. What presentation have you worked on
18 with respect to this case?

19 A. I don't know if it was actually a
20 presentation material. It may have been something
21 that's in the file here and someone -- it just got
22 coded that way. It may not be correct. Doesn't sound
23 like it's even correct.

24 Q. It says "preparation of summary
25 materials," which you brought today; correct?

1 A. Yes.

2 Q. But I don't see any presentation
3 materials here.

4 A. Yeah, me neither. So that's why I'm
5 thinking that it was probably someone miscued.

6 Q. Have you helped, as you say, somebody in
7 preparing presentation materials in this case?

8 A. I have not.

9 MR. DILLARD: We don't have any
10 either, I'll tell you that.

11 THE WITNESS: No.

12 MR. DILLARD: Should save them
13 more money off the bills.

14 THE WITNESS: I know. It's
15 causing me trouble now.

16 MR. DILLARD: Pesky bills.

17 BY MS. CLANCY:

18 Q. Part of your bill is for researching
19 scientific literature. What scientific literature did
20 you research?

21 A. Well, a lot of literature. Looking
22 particularly at one of the things we look for is data
23 on -- that would be representative of what
24 Mr. Wilkinson, what Mr. Stubbs claimed to have been
25 doing, and the types of environments.

1 So we looked for that limited data. But
2 most of the literature that we would have found and
3 found applicable is in this folder marked
4 "literature."

5 Q. And you brought that with you today?

6 A. Yes.

7 Q. When you rely on literature or text for
8 the purposes of providing an opinion in a case, is the
9 literature that you're relying on -- do you rely on
10 generally accepted literature in the scientific
11 community?

12 MR. BUTHOD: Form.

13 THE WITNESS: Well, sure, I think
14 broadly. Although on some occasions there is data or
15 there are studies that is not disbursed within the
16 industrial hygiene community. But I'll certainly
17 consider that literature, and base my opinion on what
18 I believe are the merits of that work.

19 BY MS. CLANCY:

20 Q. Well, would you -- if you rely on a text
21 or a book in those contexts that you're providing your
22 opinion in a case, would you rely on authoritative
23 text in that field of industrial hygiene or one that
24 discredited?

25 A. I'm not aware of one that discredited.

1 And I don't know what you mean by "authoritative."
2 There is information in books that, again, you have to
3 make professional judgments. It's not always
4 absolutely correct.

5 Papers are not always absolutely
6 correct. I've found errors in papers. There's errors
7 in books that I've found. So you have to make some
8 assessment of that information.

9 Q. You served as the past president of, a
10 section at least of the AIHA; correct?

11 A. Yes.

12 Q. And is that a reputable organization in
13 the scientific community?

14 A. Well, it's a part of an association.
15 And to answer your question, I think generally, yes,
16 it would be considered that.

17 Q. And generally, are the publications that
18 come out of the AIHA peer reviewed and consistent with
19 the basic accepted principles of industrial hygiene?

20 A. They're not all peer reviewed. They
21 come out in the journal. There is some literature
22 that comes out that is not peer reviewed. And like
23 any journal, there can be -- there is good literature,
24 and there's literature that slipped by.

25 Q. Well, what about textbook publications

1 from AIHA?

2 A. I provide the same comment.

3 Q. That some of them may not be up to the
4 scientific standard that you would accept and some
5 might be?

6 A. Yes, I can't think of any book or any
7 field that there are such an absolute that everything
8 is absolutely correct, nor is it absolutely wrong.

9 So you've got to make -- read
10 information, analyze that information, and make some
11 informed decisions about how you're going to process
12 that material.

13 Q. When did -- you testified previously
14 that prior to the mid 1970s, that no one was aware of
15 the cancer effects of Benzene. Do you still hold that
16 opinion today?

17 A. That no one was aware?

18 Q. The companies weren't generally aware of
19 the hazards of cancer causing effects?

20 A. I don't know exactly what I said. But
21 it is my understanding that NIOSH in 1974 in it's
22 Benzene criteria document did not list Benzene as a
23 carcinogen, and did not revise that document until
24 1976, when they believed was definitive information
25 became available.

1 So I can't say that no one under no
2 circumstances. But generally accepted within the
3 scientific community, it wasn't until the mid 1970s
4 that information became available.

5 Q. Are you aware if Exxon was aware prior
6 to the mid 1970s that Benzene could cause leukemia?

7 A. I'm not aware of their specific
8 knowledge in that area. Nor am I aware as to what
9 dose they believed caused leukemia. Nor am I aware of
10 what type of leukemia was associated with it.

11 Q. And how about Shell? Are you aware if
12 they knew prior to mid 1970s that Benzene could cause
13 leukemia?

14 A. Same answer.

15 Q. And Union Carbide?

16 A. Same answer.

17 Q. Once -- a premises owner needs to keep
18 -- should warn folks of workers on its premises as to
19 the hazards that exist on the premises, do you agree
20 with that?

21 MR. DILLARD: Object to form.

22 MR. BUTHOD: Form.

23 THE WITNESS: Only to the extent
24 that it's a hazard that the individual, a contractor
25 coming on that premise are not aware of the hazards.

1 BY MS. CLANCY:

2 Q. And they have an obligation to properly
3 label the hazard, do they not?

4 MR. BUTHOD: Form.

5 THE WITNESS: Well, I'm not sure
6 what you mean by "label." Do you have a specific
7 example?

8 BY MS. CLANCY:

9 Q. Well, one has to comply with the hazmat
10 regs; do you not?

11 A. Well, hazmat regs are different. That
12 deals with DOT and transportation of hazardous
13 materials.

14 Q. Okay. And are you --

15 A. I'm sorry, so are we talking about that
16 or within the workplace?

17 Q. Are you stating that the hazmat regs do
18 not apply to the sentence in this case?

19 A. Well, I only know that it's at issue
20 here. You're using a term that is very specific to my
21 industry. So hazmat deals with department of
22 transportation placarding, and the regulatory process
23 that deals with transportation of materials.

24 Q. So is it your testimony today that the
25 hazardous materials regulations then only apply to the

1 issues of transporting hazardous materials?

2 A. Yes, and that's under 49 CFR.

3 Q. What about 29 CFR 1200?

4 A. That's hazard communication standard.

5 Q. Okay.

6 A. Which went into effect in 1986. I'm
7 sorry, what's the question?

8 Q. The question is -- well, prior to 1986,
9 is it your opinion that places such as Exxon and Shell
10 should have told workers coming on their premises and
11 identify to them where hazardous substances are?

12 MR. DILLARD: Objection.

13 THE WITNESS: Sure, I would agree
14 that a premise owner should tell or make aware if the
15 contract employee is unfamiliar with a process, or
16 unfamiliar with a particular contaminant or chemical,
17 and make them aware of it, that it does exist.

18 BY MS. CLANCY:

19 Q. And they should make them aware of the
20 hazards of that chemical?

21 MR. BUTHOD: Form.

22 THE WITNESS: If it's something
23 that is unknown to the people coming onto that site,
24 then, yes.

25 BY MS. CLANCY:

1 Q. So for example --

2 A. But to the point that there is accepted
3 knowledge of the potential hazards for that product.

4 Q. Well, let's say with Benzene, that Shell
5 and Exxon and Union Carbide, should they have told
6 folks coming -- workers coming on their premises as to
7 potential hazards that might arise with contact of
8 Benzene on their premises?

9 MR. DILLARD: Objection.

10 MR. BUTLER: Objection.

11 THE WITNESS: Well, I mean,
12 depending -- if it is a contractor that is experienced
13 and has done work in refineries and chemical plants,
14 they would know the potential health hazards that are
15 there.

16 Not only health hazards, but safety
17 hazards in working with those materials. And would be
18 aware of the occupational health standards and
19 guidelines that were in place for not only the premise
20 owner, but for a contractor employer to ensure that
21 the employees were not exposed to above those levels.
22 BY MS. CLANCY:

23 Q. But you have no specific knowledge as to
24 any specific contractor's knowledge of the hazards of
25 Benzene or the applicable guidelines that apply to

1 that in this case; correct?

2 A. Correct. I'm not addressing that
3 specifically. It's my understanding that Brown and
4 Root and others will come and present that
5 information.

6 Q. What is your understanding -- how is
7 your understanding based on that? I mean, what do you
8 base that understanding on?

9 A. I've been told by the attorneys in this
10 case that Brown and Root would make a presentation.

11 Q. What presentation did they tell you that
12 they would make?

13 A. That they had knowledge of potential
14 hazards of Benzene. And they had and accepted the
15 responsibility as an employer to manage their
16 employees' exposures.

17 Q. What else did they say about that?

18 A. I think that about covers it.

19 Q. Which attorney told you that?

20 A. Mr. Dillard.

21 Q. Anybody else?

22 A. There may have been one of the other
23 attorneys here, but I don't --

24 Q. And who did they --

25 A. I didn't make note of who told me that.

1 Q. And who did they say from Brown and Root
2 would come and testify to that?

3 A. I did not get that information.

4 Q. Did they say other contractors would
5 come and testify?

6 A. I do not recall that. They may have. I
7 do not specifically recall.

8 Q. Why is it important to do -- well, let
9 me back up.

10 You admit that Benzene is a carcinogen?
11 You're aware of that; correct?

12 A. Sure, in sufficient dose, yes.

13 Q. Why is it important to do short term
14 exposure level monitoring?

15 A. Well, you do the short term monitoring
16 to capture short term tasks.

17 Q. And why is it important to capture short
18 term tasks?

19 A. Well, because you're looking to evaluate
20 their exposure, and that's the extent of the task.

21 Q. Why do you need to do short term
22 monitoring in addition to eight-hour time-weighted
23 average monitoring?

24 A. You don't have to. You may not have to
25 do it in addition to. If it's a short term task only,

1 you're just looking at short term activities and
2 comparing that to the S.T.E.L.

3 Q. Why does OSHA recommend that -- or why
4 does OSHA require that you do not only an eight-hour
5 time-weighted average, but in addition to that short
6 term exposure limit monitoring?

7 MR. BUTHOD: Form.

8 THE WITNESS: I don't know that
9 they do require that. You only do it if it's a short
10 term activity. They do not require short term
11 sampling unless there is an activity that would be
12 captured within that 15-minute period.

13 BY MS. CLANCY:

14 Q. And is that because then therefore, the
15 short time exposure monitoring is more representative
16 of the actual exposure occurred than in short term
17 activities and spreading that over an eight-hour time-
18 weighted average basis?

19 A. I wouldn't say it's more
20 representative. It tells you what the level within
21 that short term period. But you're not doing a series
22 of short term samples throughout the course of an
23 eight-hour day. It is designed to evaluate short term
24 tasks.

25 Q. Because if you -- it follows then if you

1 don't take short term exposure level monitoring for
2 short term tasks, then you won't know the intensity of
3 the exposure possibilities that occurred during that
4 short term time period; correct?

5 A. Well, actually, you could determine that
6 even taking an eight-hour sample. You could look at
7 the total amount of Benzene, and instead of dividing
8 it by the volume of air samples over an eight-hour
9 period, you could divide it by the volume of air
10 sampled over a 15-minute period. You could do the
11 same thing.

12 But again, the short term sample for
13 S.T.E.L. was designed to be able to evaluate short
14 term tasks.

15 Q. And the purpose of that is then to
16 analyze what potential exposure you had while
17 performing short term tasks; correct?

18 A. Yes.

19 Q. So to get the most accurate data point
20 then for short term tasks, you'd either have to do the
21 15-minute exposure S.T.E.L. monitoring, or as you just
22 explained, take the eight-hour time-weighted average
23 and then back into the 15-minute task; is that
24 correct?

25 A. Yes.

1 Q. Why is it important to do monitoring in
2 general for Benzene?

3 A. Well, if you're in a situation where you
4 believe that there is a potential for over exposure to
5 Benzene, you want to be able to document that so you
6 can take measures to ultimately eliminate or prevent
7 exposures from exceeding occupational health
8 standards.

9 And if necessary, based on frequency of
10 that exposure for Benzene in particular, put someone
11 in a medical monitoring program.

12 Q. So let me back up. You say that in
13 there if there's a situation -- it's important to
14 monitor for Benzene exposure because if there is a
15 situation where there is a potential for exposure, you
16 want to take measures --

17 A. Over exposure.

18 Q. For over exposure to Benzene, you want
19 to take measures to -- well, first of all, I would
20 assume you want to understand the extent of the
21 exposure; correct?

22 A. Yes.

23 Q. And then once you understand it --
24 monitoring allows you to then understand the extent of
25 the exposure, and then allows you to proactively

1 present future exposures; correct?

2 A. Yes. Or to insure that the actions that
3 you've taken are, in fact, effective at managing that
4 exposure.

5 Q. I see. So in a situation where you're
6 aware that there may be the potential for over
7 exposure, doing monitoring allows you to A, see if
8 you've corrected the potential for over exposure?

9 A. Right.

10 Q. Or B, take measures that allows you to
11 evaluate measures that you might need to prevent
12 future exposures; correct?

13 A. Correct.

14 Q. Would it also allow you to analyze what
15 personal protective equipment might be necessary in
16 that area?

17 A. Yes.

18 Q. Would monitoring also enable you to know
19 what type of engineering controls need to be put in
20 place?

21 A. Well, it allows one to determine what
22 level and what type of protective measures should be
23 instituted.

24 Q. And the protective measures include, as
25 an industrial hygienist, the protective measures that

1 you would include after analyzing your monitoring data
2 would be engineering controls; correct?

3 A. One looks at those, yes. Again, given
4 the circumstances, given the location, given the
5 environment, you look for feasible realistic types of
6 controls.

7 Q. Okay. Such as? One might be
8 engineering controls?

9 A. That is possible, yes.

10 Q. One might be personal protective
11 equipment?

12 A. Correct.

13 Q. One might be warnings?

14 A. No.

15 Q. Well, I thought -- and correct me if I'm
16 wrong. But I thought one of the basic units of
17 industrial hygiene is that if you can't eliminate the
18 hazard, you then control for the hazard. If you can't
19 control, then you warn. Is that wrong?

20 A. Well, no.

21 Q. Then tell me how --

22 A. That not a tenet of industrial hygiene.
23 Warnings are, for the most part, they're not useful in
24 controlling exposures because of the behavior of
25 individuals. You control exposures by, as you've

1 described, substitution through engineering controls
2 or personal protective equipment.

3 Q. But you feel like warnings alone are not
4 enough to control for the hazard?

5 A. That does not control for the hazard.

6 Q. So what you should be doing to control
7 for the hazard is instead of merely just warning, you
8 should also either eliminate the hazard or provide
9 personal protective equipment; is that correct?

10 A. Or engineering controls.

11 Q. Is that right?

12 A. Yes.

13 Q. Okay. Have you analyzed any of the work
14 permits of Shell or Exxon issued to contractors?

15 A. The specific work permits?

16 Q. Yes.

17 A. I'd have to look to see whether they're
18 included in any of these documents. Let me first go
19 through a summary. (WITNESS EXAMINING DOCUMENT.)

20 MR. BUTHOD: I might be able to
21 facilitate this at least from Exxon. I don't believe
22 that material contained any specific work permits. I
23 mean, if you look at all of the summaries, I don't
24 think you'll find anything in there.

25 THE WITNESS: I'm looking for the

1 specific work permits, and I just don't remember
2 whether I've seen them in this case or not. So I have
3 to go through all this to determine whether if I
4 actually have seen them in the materials.

5 BY MS. CLANCY:

6 Q. Are you going to be providing an opinion
7 with respect to the deficiency of the work permits and
8 any safety information provided by work permits by
9 means of work permits from Exxon or Shell or Union
10 Carbide for its contractors?

11 A. I don't know that it specifically goes
12 down to that level in the work permits. It's more of
13 the other documents that I've already pointed to that
14 I reviewed, and are in the boxes and I have
15 summarized.

16 Q. So then it's the documents that you've
17 reviewed and summarized, and only those documents that
18 you're doing to be providing an opinion on with
19 respect to their -- these defendants' interaction with
20 contractors?

21 A. I hesitate to say it's just these
22 documents. I understand there are still a lot of
23 depositions going on and even discovery. So there may
24 be things that are uncovered or rise to the surface,
25 which, you know, become important. But I don't know

1 of anything else as I sit here today.

2 Q. Well, as you sit here today, can you
3 site for me any work permit given to any contractor
4 that you have looked at from defendant Shell, Exxon or
5 Union Carbide?

6 A. (WITNESS EXAMINING DOCUMENT.) I'm
7 looking in one other spot.

8 I do not have an actual work permit as
9 you've described it.

10 Q. Okay. So you have no opinions today
11 with respect to the adequacy of the permitting process
12 or the deficiency of any warnings provided to
13 contractors by means of work permits; correct?

14 MR. MAHER: Object to form.

15 THE WITNESS: Well, I haven't in
16 this case seen the word "permits." So I cannot
17 comment on them if I have not seen them at this point.
18 BY MS. CLANCY:

19 Q. Do you plan to offer an opinion on the
20 sufficiency of the warnings provided specifically to
21 contractors by any means of the permit in process?

22 MR. MAHER: Object to form.

23 THE WITNESS: Well, since I have
24 not seen them at this point, no. I would comment,
25 however, that there are documents such as the Union

1 Carbide document, which is contractor work in Benzene
2 areas.

3 BY MS. CLANCY:

4 Q. Can I see that?

5 A. Sure.

6 Q. Does this document say something about
7 work permits? In legal Scott, 3598.

8 A. I didn't see anything offhand that talks
9 about the work permits. It talks about the process.

10 Q. It talks about Union Carbide's process?

11 A. This talks about the -- yes, their
12 process of hiring contractors and conveying
13 information to those contractors as necessary.

14 Q. Okay.

15 MS. CLANCY: We'll mark that as
16 Exhibit Number 14 for this deposition.

17 THE WITNESS: I'll take that out
18 of here.

19 (DOCUMENT MARKED PLAINTIFF, SPENCER
20 DEPOSITION, EXH. NO. 14, FOR IDENTIFICATION.)

21 BY MS. CLANCY:

22 Q. Is that it?

23 A. Yes.

24 Q. So you were not able to identify any
25 permits that you've reviewed specifically in this

1 case; correct?

2 A. That's correct. I do not have those
3 permits at this point in time.

4 Q. What are your opinions with respect to
5 Shell's policies and procedures as it relates to its
6 contract personnel and Benzene?

7 MR. DILLARD: Object to form.

8 THE WITNESS: Based on the
9 policies and procedures that I have reviewed that they
10 adequately provided a program that would have
11 protected -- in conjunction with the contractor's
12 employer protected their health and safety.

13 BY MS. CLANCY:

14 Q. And what do you derive your opinion on
15 for that?

16 A. Based on my review of the policies and
17 procedures that I've brought with me today, and based
18 on the results of the air monitoring data.

19 Q. And which policies and procedures
20 specifically are you referring to?

21 A. Well, they're listed here in Exhibit
22 Number 9.

23 Q. Okay. May I see that? Thank you.

24 Okay. Based on your review of the
25 training manual memorandum and data set forth in

1 Exhibit 9, that is what you based your opinion on that
2 Shell adequately provided a program adequate for its
3 contractors at the Shell Deer Park facility?

4 MR. DILLARD: Form.

5 THE WITNESS: Yes.

6 BY MS. CLANCY:

7 Q. Did you talk to any co-workers of
8 Mr. Stubbs or Mr. Wilkinson in forming your opinion in
9 this case?

10 A. No. I reviewed their testimony.

11 Q. Did you speak to them personally?

12 A. I did not.

13 Q. Is there a reason why you did not speak
14 to them personally?

15 A. I suspect there is. I don't know what
16 it is.

17 Q. Well, would you have liked to have
18 spoken to them personally to formulate your opinion?

19 A. I've asked many times in the past to
20 speak with plaintiffs, and have never been allowed to
21 do so.

22 Q. I'm not talking about the plaintiffs.
23 I'm talking about their co-workers.

24 A. Well, same answer. I have asked to talk
25 with them in the past. I did not do that in this

1 case. But in other cases I've been involved in, I've
2 asked to do that, and have been prevented by
3 plaintiff's attorneys from doing so.

4 Q. Well, have you ever asked to speak --
5 object as non-responsive.

6 Have you ever asked to speak with any of
7 the co-workers in this case?

8 A. Not in this case.

9 Q. Is it your understanding that the
10 co-workers are somehow under plaintiff's control?

11 A. In this case?

12 MR. DILLARD: Some of them are
13 your clients.

14 THE WITNESS: In this case?

15 BY MS. CLANCY:

16 Q. Yeah, not the plaintiffs.

17 A. Yeah, I'm sorry, in this case?

18 Q. Yes.

19 A. I don't know if they are or not. I
20 suspect there are some who are not under their
21 control.

22 Q. Is that something that you would like to
23 do, is speak to the co-workers to better formulate
24 your opinion in this case, or do you feel the
25 sufficiency -- the data that you've reviewed to date

1 is sufficient for your opinions?

2 A. I do believe the data and the procedures
3 speak for themselves. But if given the opportunity to
4 speak with a co-worker, I certainly would do that.

5 Q. And to date, you have not spoken to
6 anyone from Brown and Root or Mundy with respect their
7 experience as to Shell's procedures?

8 A. Correct.

9 Q. Or any contractor who worked at Shell,
10 you have not spoken to them; correct?

11 A. That's correct.

12 MS. CLANCY: Let's change the
13 tape.

14 VIDEOGRAPHER: End of tape number
15 2 in the video deposition of John Spencer. The time
16 is 13:04:06.

17 (WHEREUPON A RECESS WAS TAKEN.)

18 VIDEOGRAPHER: This marks the
19 beginning of tape Number 3 in the deposition of John
20 Spencer. The time on the screen is 13:29:22. We're
21 back on the record.

22 BY MS. CLANCY:

23 Q. What is your opinion, sir, with respect
24 to Exxon's policies and procedures as to its
25 contractors on its premises at Exxon based on --

1 concerning Benzene?

2 A. That their policies and procedures in
3 tandem with their data represent that exposures were
4 well managed for tractors.

5 Q. And what do you mean "well managed"?

6 A. Meaning that based on the data I
7 reviewed that it is -- one would anticipate levels of
8 exposure to be well below the occupational health
9 standards. Or in circumstances where there may have
10 been exceedances of the health standards, that the
11 individuals would have been fitted in appropriate
12 protective devices to eliminate or reduce exposures.

13 Q. So if your testimony is that I guess
14 it's two part. One -- well, let me ask you this:
15 What was the internal Exxon standard for purposes of
16 Benzene levels at its Baytown's facility?

17 A. At what point in time?

18 Q. Prior to 1998.

19 A. I'd have to look that up to tell you the
20 specific number prior to '88.

21 Q. You're not aware as you sit here today
22 what internal levels, if any, of exposure that Exxon
23 attempted to enforce at its Exxon Baytown premises
24 prior to 1988?

25 A. No. I've looked at it. I've just

1 looked at so many materials I just don't have
2 everything committed to memory, including Exxon's
3 internal guidelines prior to 1988.

4 Q. Okay. Have you -- and are the Exxon's
5 internal guidelines prior to 1988 in the materials
6 that you reviewed for today?

7 A. I believe so. I have seen that number,
8 so I anticipate that they're in there in some form.

9 Q. Do you know what Exxon -- if Exxon had
10 an internal level for short term exposure limits?

11 A. I recall that they -- yes, they did.

12 Q. What was that?

13 A. They had a one minute -- and I'm not
14 sure how they really applied it. It wasn't clear to
15 me how they applied it, but they had a one minute
16 number of 250 PPM per minute.

17 Q. Okay. And that is above what is the
18 current OSHA STL limit; correct?

19 A. No, it is not.

20 Q. It's not? Okay.

21 A. I'm sorry. Above the current?

22 Q. Yes.

23 A. You mean today?

24 Q. Uh-huh

25 A. It wasn't above the one they were -- at

1 the time they were using it.

2 Q. It wasn't above -- prior to 1988, my
3 question is the STL of 250 parts per million per
4 minute that Exxon had in place prior to 1988 is above
5 the current --

6 A. Yes, I think when you calculate it out,
7 it comes to 6.6 parts per million. So it's slightly
8 above today's standard, 2006. It wasn't above the
9 number that they used at the S.T.E.L. when it was --
10 they were using it when it was in effect as I
11 understood it.

12 Q. Could you show me how you do the
13 calculations that you got it would 6 for 15 minutes?

14 A. Take -- pull out your calculator.

15 Q. I'll have to do it by --

16 A. You take 250 and divide it by 15.

17 Q. Well, let's see, it's 250 for a
18 one-minute period; right?

19 A. Correct.

20 Q. And so what would it be for two minutes?

21 A. There is no such thing. There is no
22 standard or anything like that. You could divide it
23 by two if you want for two minutes.

24 Q. I mean, does it break down by --

25 A. It would be 125.

1 Q. Okay. So it doesn't -- in normal
2 industrial -- I'm asking this for my own education
3 really -- in -- scratch that.

4 What was Shell's internal limit prior to
5 1988 with respect to Benzene?

6 A. Again, I do not specifically recall if
7 it was any different from the OSHA standard at the
8 time. I'd have to look. I just don't have it
9 committed to memory.

10 Q. And are you talking about the ten part
11 per million over an eight-hour time-weighted average
12 standard?

13 A. Correct.

14 Q. So you don't recall that Shell's was any
15 different than that prior to 1988?

16 A. I just don't specifically recall whether
17 it was or not. I'd have to look it up to tell you if
18 they were any lower.

19 Q. How about Union Carbide?

20 A. Same answer.

21 Q. You don't know as you sit here today
22 what their internal exposure limit was?

23 A. Again, it's not something I committed to
24 memory. I'd have to go back through the documents and
25 try to find that.

1 Q. Do you have that in documents to that
2 today, for example, the Shell exposure limit, internal
3 exposure limits?

4 A. I do not recall specifically seeing it.
5 But again, it doesn't mean it's not in there. I would
6 guess that it is somewhere in one of those documents,
7 one of their -- in some part of their documents. But
8 I just didn't specifically look for that.

9 Q. So in other words, you're able to
10 provide your testimony today as with respect to the
11 adequacy of their procedures as to safety in
12 contractors without knowing what their internal
13 exposure limits were for Benzene; correct?

14 A. Well, I'm applying it to today's
15 standards, not to 1988. So if they were protective
16 based on today's standards, then certainly they're
17 going to have been protective of the standards in 1988
18 and prior.

19 Q. So your opinion is that they were Exxon
20 -- you think Exxon was protective of its contract
21 workers according to the standards of OSHA as
22 promulgated today, with respect to Benzene; is that
23 correct?

24 A. Sure, that was the data that we looked
25 at earlier today.

1 Q. And that being the one part per million
2 over an eight-hour time-weighted average?

3 A. Correct.

4 Q. Would be what -- the exposure level
5 should not exceed one part per million over an eight-
6 hour time-weighted average; is that correct?

7 A. That is correct.

8 Q. Because that is -- and your opinion
9 therefore, is based on your belief that Exxon did not
10 exceed for its contractors one PPM per an eight-hour
11 time-weighted average prior to 1988; is that correct?

12 A. Well, no. I would not state it that
13 way. I think what I said before was that in general,
14 the data represents that the exposures were well
15 managed even below today's occupational health
16 standards.

17 However, I do recognize that there were
18 excursions above that on some occasions. However, one
19 of two things happened at that point. It was
20 identified and measures were put into place to
21 eliminate that in the future. Or there were already
22 preventative measures, respiratory protection
23 generally, or procedures clearing lines that were
24 designed to further eliminate harmful exposures.

25 Q. Okay. So I'm talking about the period

1 1970 to 1980 for Exxon, okay, at its premises at Exxon
2 Baytown.

3 A. Correct.

4 Q. So your opinion is that, first, that the
5 procedures with respect to contractors in terms of
6 insuring that the contractor's levels of exposure to
7 Benzene were safe. First of all, your opinion is that
8 Exxon had those procedures well managed even by
9 today's occupational exposure standards; is that
10 correct?

11 A. In general that is true, yes.

12 Q. Would you say on average that is true?

13 A. Based on the data I reviewed, yes.

14 Q. So you didn't review any data showing
15 the average contractor exposure at Exxon Baytown in,
16 for example, 1987?

17 A. No, I think the data we looked at was
18 from 1988. I suspect there is other data that you
19 will see from Brown and Root for that time period
20 where they were monitoring their people.

21 Q. Do you have that data?

22 A. I do not.

23 Q. Were you proved that data?

24 A. No, that's what I'm saying. I don't
25 have it, as I said before, but I think that's what the

1 Brown and Root people will be bringing to the table.

2 Q. Why do you think that?

3 A. Based on discussions I had with the
4 attorneys.

5 Q. Have you talked to anybody from Brown
6 and Root about that data?

7 A. No.

8 Q. Have you talked to any experts in this
9 case, who are testifying in this case?

10 A. Yes.

11 Q. Whom have you spoken to?

12 A. Carolyn Phillips.

13 Q. And she is an expert testifying in this
14 case?

15 A. As I understand it, that's the case.

16 Q. And who is Carolyn Phillips?

17 A. She is an industrial hygienist who was a
18 long time Shell professional.

19 Q. And what did you talk about with Carolyn
20 Phillips?

21 A. The Shell historical estimate that she
22 was a part of.

23 Q. And what did she say to you about that?

24 MR. DILLARD: Object to the form.

25 THE WITNESS: She indicated that

1 based on her knowledge as being one of the authors and
2 intimately involved in that study that it was misused,
3 misapplied by the plaintiff's industrial hygiene
4 expert. That he did not understand the purpose of
5 that study and the limitations in the use of the
6 information that was in that estimate.

7 BY MS. CLANCY:

8 Q. I'm going to put a big circle around
9 that and come back to it in a minute. I just want to
10 put a bow on this one -- the first topic we were
11 talking about, the Exxon and the contractors.

12 A. Okay.

13 Q. Okay? So the data that you reviewed
14 with respect to Exxon and its contractors was 1988;
15 correct?

16 MR. BUTHOD: Form.

17 THE WITNESS: Yes. Specifically
18 what we determined to be contractors Brown and Root
19 was from 1988.

20 BY MS. CLANCY:

21 Q. And you did not review any data from
22 Exxon with respect to its contractors or part per
23 million exposure of its contractors prior to -- from
24 1987 or prior?

25 A. I did not see that data.

1 Q. That was not provided to you by Exxon;
2 is that right?

3 A. That's correct.

4 Q. So you're basing -- when you say you're
5 basing your opinion that even by today's standard the
6 occupational exposures to Exxon contractors were well
7 within today's limit, you're basing that opinion on
8 employee exposure data?

9 A. Well, certainly I've included that.
10 Yes, employee exposure data.

11 Q. Because my time period I'm asking you
12 about is -- I want to ask you about 1970 to 1987 now
13 at Exxon Baytown?

14 MR. BUTHOD: Form.

15 THE WITNESS: Okay.

16 BY MS. CLANCY:

17 Q. Are you of the opinion that during that
18 time period, that the exposure to contractors was well
19 managed even by today's occupational exposures?

20 MR. BUTHOD: Form.

21 THE WITNESS: Well, I can't say
22 from the 1970 let's say '75 period. If I look at the
23 procedures and the policies -- let me look at
24 something first. And we're talking about Exxon;
25 correct?

1 BY MS. CLANCY:

2 Q. Yes.

3 A. Actually, some of these practices at
4 Baytown go back to 1971. So I believe to answer your
5 question, I can't speak specifically about the data.
6 But again, the practices, policies and procedures that
7 were in place in my view were designed and implemented
8 to effectively manage exposures, at least to below the
9 contemporary health standards.

10 Q. And contemporary health standards is one
11 part per million?

12 MR. BUTHOD: Form.

13 THE WITNESS: Well, no. I mean,
14 for the time. The period in 19 -- you started 1970,
15 so it's 25 parts per million.

16 BY MS. CLANCY:

17 Q. How about let's say 1980? Was there a
18 time when your opinion is that it changed at Exxon?
19 Is there a difference between Exxon 1972 and Exxon
20 1980?

21 A. I can't say. I don't have empirical
22 data to say that there was any change at all. It may
23 have always been real well as it was in the '80s.

24 Q. Okay. Was it --

25 A. But --

1 Q. Go ahead. I didn't mean to interrupt.

2 A. Again, the practices, procedures and the
3 programs would indicate that Exxon was managing those
4 exposures to control them to below the occupational
5 health standards at the time.

6 Q. And here is my question. You're saying
7 that the practices and procedures and programs would
8 indicate that Exxon was managing its exposures to keep
9 it below exposure levels at the time. So are you
10 saying to keep it below ten parts per million?

11 A. Yes.

12 Q. But you're not saying that Exxon kept
13 its exposures in the '70s and '80s below ten parts per
14 million; are you?

15 A. I can't say. That could have been the
16 case. I just can't say.

17 Q. Would you say then --

18 A. And it's also a function of what unit
19 someone was working in, what the product was and the
20 Benzene content of that product. That's all the
21 information that you need to understand what the
22 exposure could have been or would have been at that
23 time.

24 Q. Well, do you need that information then
25 to say whether or not Exxon was behaving or handling

1 appropriately its relations with its contractors?

2 MR. BUTHOD: Form.

3 THE WITNESS: No, that's different
4 from specifically understanding specific exposures.
5 That is a different item.

6 BY MS. CLANCY:

7 Q. Let me back up. Maybe I don't
8 understand your opinion.

9 I thought part of having a program that
10 adequately makes a safe place for contractors is also
11 insuring that the contractors are not over exposed to
12 Benzene; correct?

13 A. I think that that responsibility is on
14 the contractors to insure that their employees are not
15 over exposed. That is their responsibility.

16 Q. Okay. So you're saying that Exxon had
17 no responsibility to make sure its contractors were
18 not over exposed?

19 A. No, that's not what I'm saying.

20 Q. What are you saying then?

21 MR. BUTHOD: Form.

22 THE WITNESS: I'm saying the
23 ultimate responsibility lies with the employer, in
24 this case a contractor. Exxon would have had a
25 responsibility to convey information if that

1 contractor had no knowledge of a potential hazard in a
2 particular work area.

3 BY MS. CLANCY:

4 Q. Okay. What about --

5 A. But their role was to convey that
6 information. And that's still the way it works today.
7 And then it's the employer, the contractor had the
8 responsibility ultimately to protect its employees.

9 Q. Did Exxon had have a responsibility to
10 monitor its contractors to insure that there were no
11 over exposures to Benzene?

12 A. No, it does not. And, in fact, in many
13 situations they're not allowed to do that sort of
14 thing. Another employer such as a contractor in some
15 situations won't allow it.

16 Q. Okay. So what was then, your opinion
17 with respect to -- you said Exxon did not have a
18 responsibility to monitor any of the contractors.
19 What is your opinion as to Exxon's responsibility
20 toward the contractors?

21 A. To convey the information if that
22 information is not known or is not available to that
23 contractor, that employer.

24 Q. And by what means should Exxon convey
25 the information with respect to the hazards of

1 Benzene?

2 A. It could be meetings. It could be by
3 contract. I mean, there's many ways to handle that.

4 Q. Well, what ways did you find that Exxon
5 behaved that made it sufficient?

6 A. Well, they had -- Exxon had safety
7 procedures. I have here a note in 1971 discussing
8 breaking any lines, and there's a possibility of
9 product being present. And there's got to be safety
10 equipment and personally supervise the work. The
11 contractor must comply with safety plant protection
12 regulations. That also included Benzene.

13 There were -- there was an Exxon -- this
14 came later in the 1990s. There were documents that
15 laid out the plant contractors' responsibilities. I
16 guess the earliest version that I have is 1978. Those
17 are some of the documents.

18 Q. So your opinion is that once Exxon
19 informed its contractors about, whether by means of a
20 meeting or by a safety manual that there were Benzene
21 hazards on its premises, that that was the extent of
22 Exxon's duty with respect to warning its contractors
23 or otherwise protecting them against the hazards of
24 Benzene?

25 A. Well, you're applying a very large brush

1 to everything going on in a very large refinery and
2 chemical plant. There may be very specialized
3 activities that more went on, and we'd have to talk
4 about those specialized activities. So I can't answer
5 that question universally.

6 But if you're talking about a contractor
7 such as the magnitude of Brown and Root who builds
8 refineries, who completely turns refineries around and
9 has for many years, certainly they were astute in
10 Benzene related issues and aware of those issues. Or
11 certainly should have been aware.

12 Q. So it's your opinion then that it's
13 Brown and Root who should have been aware of the
14 hazards of Benzene to its workers at Exxon Baytown
15 premises; is that right?

16 A. Sure. Not only should have been aware,
17 but they had the experience and knowledge base, and
18 the resources to properly understand what the
19 potential hazards were of many things in a refinery,
20 including Benzene, and how to address those problems.

21 Q. And you knew that because of what the
22 attorneys told you in this case?

23 A. No, if you go to Brown and Root's web
24 site, and read about their history and their
25 experience in building refineries, I think that will

1 create a clear picture for you.

2 Q. So you're basing your knowledge on what
3 the attorneys told you and Brown and Root's web site;
4 is that correct?

5 MR. DILLARD: Object to form.

6 MR. BUTHOD: Form.

7 THE WITNESS: Well, I'm basing it
8 on my own experience and being in several different
9 refineries, and talking about people who work in
10 refineries and the extent of what Brown and Root
11 knows.

12 I'm basing it on what Brown and Root has
13 said in their own -- if you go to their own website.
14 I hate to refer to Internet sites, but they have a
15 pretty good history there that describes their
16 experience in building and constructing and renovating
17 chemical plants and refineries.

18 So to think that they would go in, and
19 they have no knowledge of potential hazards, health
20 hazards and safety hazards in a refinery is wrong.

21 BY MS. CLANCY:

22 Q. The second thing that you testified with
23 respect to Exxon is you said that -- first, you
24 testified that Exxon's procedures with respect to
25 making -- its procedures with respect to its

1 contractors as to Benzene were, quote, well managed
2 even by today's occupational exposure standards;
3 correct? That's one thing you said?

4 MR. BUTHOD: Form.

5 THE WITNESS: Depending on the
6 time frame and the application, yes. And then, I also
7 said that they managed those exposures to contemporary
8 health standards.

9 BY MS. CLANCY:

10 Q. All right. Well, how about during the
11 1980s, 1980 to 1987, does that time frame fit your
12 statement that Exxon's procedures with respect to
13 managing its contractors were well managed even by
14 today's occupational exposure standards?

15 A. Well, the data that I looked at for
16 Exxon covered the period 1984 through 1990. So I can
17 say through that period of time. That's the data,
18 specific data that I looked at.

19 Q. And according to the data that you
20 looked at, '84 to '90 that Exxon -- you're saying from
21 the period '84 to '90 that Exxon's procedures were
22 well managed -- with respect to its contractors and
23 Benzene were well managed even by today's occupational
24 exposure standards; is that right?

25 A. Based on my review of the data, yes.

1 Q. How about the period of '84 -- prior to
2 1984 at Exxon Baytown?

3 A. Again, I don't have data on that, but if
4 you look at the programs, policies and procedures,
5 they were doing -- they had put into place the actions
6 necessary to properly manage Benzene exposures for
7 their employees.

8 Q. So for the period prior to '84, because
9 you don't have data on that, you're just assuming that
10 the data would be indicative of occupational exposures
11 that are within safe level?

12 A. I don't have -- I am -- "assuming" is
13 not the right word. I'm using certainly professional
14 judgment. I understand in some of the changes that
15 have occurred over time in chemical plants and
16 refineries, and the periods of time and things that
17 have caused there to be a significant change in
18 exposures because of change in health standards
19 because of change in environmental regulations, these
20 things effect the overall exposures that people have.

21 And in the '80s and based on the
22 documents that were available to me from Exxon, they
23 were doing the right things to manage those
24 exposures. I don't have data to show me exactly what
25 they were, but they were doing the right things to

1 manage those exposures.

2 Q. Okay. Would the data change your
3 opinion one way or the other?

4 MR. BUTHOD: Form.

5 BY MS. CLANCY:

6 Q. If you were to have the data prior to
7 1984?

8 A. Would it change my opinion? I don't
9 know until I see that data.

10 Q. Well, let's say that the data prior to
11 '84 exceeded safe levels of exposure, either the ten
12 parts per million or the one part per million time-
13 weighted average. Would that change your opinion as
14 to whether or not Exxon was implementing -- well
15 managing its program with respect to Benzene?

16 MR. BUTHOD: Form.

17 THE WITNESS: Well, I'd have to
18 understand. When you say they were over exposed, were
19 they being protected by respiratory protective
20 equipment or some other means? While the numbers may
21 have exceeded the occupational health standards, they
22 took protective measures.

23 And that's what I see in these programs,
24 policies and procedures. If that were the case, those
25 were the measures they took.

1 BY MS. CLANCY:

2 Q. All right. So even if the data shows
3 there were exceedances of say, occupational levels
4 preventing -- if Exxon took proper protective measures
5 such as insuring that respiratory protection was worn
6 was or putting in the proper engineering controls,
7 then they would be well managing the processes to
8 Benzene; is that correct?

9 A. That is part of the process, managing
10 exposures. As an industrial hygienist, I have to
11 consider that certainly there are exposures that
12 exceed health standards. But an effective program
13 means they're also taking measures to control or
14 manage those exposures, and respiratory protective
15 equipment is one of those.

16 Q. So in a situation where exposures are
17 over and above the safe levels of occupational
18 exposure to Benzene, Exxon should at that point
19 provide respiratory protection or insure respiratory
20 protection is being worn or that proper engineering
21 controls are put in place?

22 MR. BUTHOD: Object to the form.

23 THE WITNESS: Sure. That's part
24 of the process. And I also want to add if there is a
25 one time occurrence where you measure some exceedance

1 of the health standards, that doesn't mean you make
2 changes to the process or institute controls. There
3 may be some unique situation that caused there to be
4 an over exposure. You try to keep that situation from
5 occurring again.

6 BY MS. CLANCY:

7 Q. And that's why it's important to do
8 monitoring is so that you don't have to -- you're not
9 just taking data from one data point. You're able to
10 analyze the full spectrum of it what exposure might be
11 by putting in a comprehensive monitoring program;
12 correct?

13 A. Well, I mean, there's different ways,
14 including statistically to monitor data and such that
15 when you get to a point where you're satisfied the
16 data you have is representative, or in some situations
17 may not need any monitoring data. You know that if
18 there is a spill of pure Benzene, that you need to
19 take protective measures. And there is not
20 necessarily a need to monitor that activity.

21 Q. Well, but in situations where you might
22 know that exposures are a problem, then that would be
23 a situation where you should monitor that activity to
24 follow up and confirm the problem is either fixed or
25 managed going forward?

1 A. Well, if you know there is a problem,
2 yes, you don't need to monitor. You take measures to
3 fix it. And then you might monitor at the end of that
4 what you think the fix is to demonstrate that your
5 measures were, in fact, effective.

6 Q. And the documents that you've reviewed
7 today to opine that Exxon procedures with respect to
8 its contractors and Benzene were well managed are set
9 forth in Deposition Exhibit Number 10; is that
10 correct?

11 A. Well, there are those, and there's also
12 two boxes of materials here. And I don't know what
13 happened. There was the two pages that you took that
14 listed all the documents that were in here.

15 Q. Oh, I see. Did we make those an
16 exhibit?

17 A. I'm not sure what happened to them. I
18 haven't seen them lately. I don't see them in this
19 stack.

20 Q. I'll take one minute and put this in
21 order.

22 Is that the Exxon facility document?

23 A. I'm sorry. Did you staple these
24 together?

25 Q. Yes.

1 A. Okay.

2 Q. So that they wouldn't get lost. I can
3 mark them as a separate exhibit.

4 A. I'll have to look and see which one goes
5 in which box. That's fine. This is it. I thought
6 there were two pages, which there are.

7 Q. So it's documents that you have used to
8 opine that Exxon provided well managed procedures with
9 respect to its contractors in Benzene are Exhibit
10 Number 12, and the documents summarizing Exhibit
11 Number 12, and Exhibit Number 10; is that correct?

12 MR. BUTHOD: Form.

13 THE WITNESS: Yes.

14 BY MS. CLANCY:

15 Q. I want to go back to your conversation
16 with Carolyn Phillips. What you said originally, and
17 correct me if I'm wrong, that she told you that the
18 Shell historical exposure assessment was misused and
19 misapplied by plaintiff's industrial hygiene expert.
20 That he did not understand the purposes of the study
21 and the limitations and use of the information in that
22 estimate. I want to ask you a couple of questions
23 about that.

24 What did she say were the purposes of
25 this study?

1 A. It was an attempt to define -- to
2 determine whether they could define various trades or
3 activities that had higher levels of exposure than
4 other trades or activities for purposes of determining
5 whether or not there were Benzene related diseases
6 associated with kind of the hierarchal exposures.

7 Q. And what else did she say?

8 A. We talked about many things.

9 Q. Okay.

10 That the use of the specific exposure
11 levels by Mr. Petty and his analysis of Mr. Wilkinson
12 and Mr. Stubbs' total dose was wrong. It was
13 inaccurate.

14 Q. Okay.

15 A. It was, you know, he went pretty far
16 afield in his approach and methodology, particularly
17 using that data, using that information.

18 Q. Okay. How did she say that he went
19 wrong and went far afield?

20 A. Because the data was not -- that data
21 was representative, I mean, there are many things. I
22 don't know that I can describe them all sitting here
23 off the top of my head.

24 But, that data in large part was derived
25 not only from odor issues, but from individual

1 recollection from decades ago. They interviewed
2 people who worked at Shell facilities, refineries from
3 the 1940s, 1950s and 1960s, a very different time.
4 And in her view, a very different set of circumstances
5 that lead ultimately to exposures and perception of
6 those exposures.

7 It was also, the study focused on
8 people, I'm not saying study, but their estimates,
9 their attempted estimates focused on trades or
10 activities where there were known Benzene streams.
11 Generally five percent or greater, unless it was an
12 open type of activity. Then it was one percent was
13 their cut off. We don't even know if Mr. Wilkinson or
14 Mr. Petty worked around any Benzene containing
15 streams.

16 Q. Petty? Mr. Stubbs.

17 A. I'm sorry. We don't know whether
18 Mr. Stubbs -- Mr. Petty. My point was that Mr. Petty
19 applied this data to Mr. Stubbs and Mr. Wilkinson, and
20 we don't know that they were around any Benzene
21 containing streams.

22 Q. Okay. What else?

23 MR. DILLARD: Object to form.
24 What else? What's the question?

25 MR. BUTHOD: Yeah, what's the

1 question?

2 MS. CLANCY: The question pending
3 was what did Carolyn Phillips say to him.

4 THE WITNESS: I'm trying to think
5 if there were any other highlights. I mean, there
6 were so many things that were, you know, at issue.

7 Again, I think the strength of her point
8 was that the numbers that are presented in the Shell
9 estimate of historical exposures are not accurate,
10 and --

11 BY MS. CLANCY:

12 Q. I'm sorry, the numbers presented in the
13 Shell historical exposure assessment are not accurate?

14 A. That's correct.

15 Q. Okay.

16 A. They do not accurately represent what an
17 individual would have been exposed to. They were used
18 -- those numbers were used as a means to categorize
19 individuals in a hierarchal structure from highest to
20 lowest, or lowest to highest exposures.

21 Q. Those were the highlights. What else
22 did she -- you said those were the highlights, but
23 what else did you consider are many things?

24 A. And I'm sure I'm not going to recall
25 things sitting here. In particular, there is on a

1 table in there, and I believe Mr. Petty used it. It
2 may be Attachment 5. And he used data on PPM days
3 that dealt with pipefitters in which he fabricated
4 very high numbers in terms of per million exposures.

5 And failed to recognize that there was
6 pipefitter data on the very next page that was
7 specifically related not only to the type of activity
8 that the plaintiffs claimed to have been engaged in,
9 but at the same area of the plaintiffs where they
10 claimed to have been on some occasion. But it was
11 much lower data or much lower exposure values.

12 Q. When you say "the very next page," you
13 mean the very next page of the historical exposure
14 assessment data?

15 A. Correct.

16 Q. What else did Carolyn Phillips say?

17 A. Those are the points I can think of
18 right now.

19 Q. Did you take notes from her call?

20 A. I did not.

21 Q. You just listened?

22 A. Yes.

23 Q. What was Carolyn Phillips' role in the
24 historical exposure assessment?

25 A. She was involved in interviewing

1 personnel. She had hands-on experience working in the
2 refinery and applying her own professional judgment to
3 the information that was put into the report.

4 Q. Do you know what her role is in terms
5 of, you know, heading up the study or working on the
6 study, or anything like that?

7 A. I don't specifically.

8 Q. Are you relying on Carolyn Phillips'
9 opinions with respect to the study in terms of
10 offering your opinions today?

11 A. I am not from that standpoint. I think
12 she corroborated, my understanding and my reading of
13 that document produced by Shell. And that's why I
14 didn't take notes, because everything that she had
15 indicated to me was exactly what I had thought in
16 reading the document.

17 Q. Tell me what you thought in reading --
18 well, because one of your opinions today is the
19 methodology used in the Wood River study; is that
20 correct? That Mr. Spencer may also testify about the
21 methodology used in the Wood River study.

22 A. Well, if we're talking about the
23 historical exposure estimates --

24 Q. First of all, do you recognize that both
25 Deer Park data and Wood River data were included in

1 the historical exposure assessment?

2 A. Well, you use the word "data" loosely.
3 There was very little data that was actually in that
4 study. They had a table where they tried to validate
5 some data. But it was very limited in terms of
6 numbers, and the specific trades that were included in
7 that validation data.

8 Q. Let me ask you this then. You recognize
9 though that there were workers from Shell Deer Park
10 and Wood River who were studied in the Shell
11 historical exposure assessment data. Meaning that
12 it's not just the Shell Wood River analysis; correct?

13 MR. DILLARD: Object to form.

14 THE WITNESS: Yes. When you say
15 they were, I'm not sure of the words you just used.
16 But they were interviewed, and these were retirees who
17 went back decades and were asked to recollect certain
18 aspects of their jobs.

19 BY MS. CLANCY:

20 Q. My question is much simpler than what
21 you've been thinking.

22 A. Okay.

23 Q. I'm just asking, what you testified
24 about is, Mr. Spencer may also testify about what the
25 methodology used in the Wood River studies. Let me

1 show you that.

2 A. Yes.

3 Q. And I'm just saying this also included
4 information -- this isn't just Wood River, correct? I
5 mean, there was also information with respect to
6 workers, be they are retired or not from Shell Deer
7 Park?

8 A. Correct. This is my understanding, yes.

9 Q. Well, have you seen the data or is there
10 any information or summaries of exposures on Shell
11 Deer Park people in the historical exposure assessment
12 data?

13 MR. DILLARD: Object to form.

14 THE WITNESS: Yes.

15 BY MS. CLANCY:

16 Q. Excuse me, the historical data
17 assessment study?

18 A. Yes.

19 Q. So you were saying that your first
20 criticism of it was that very little data included in
21 the study in terms of numbers and trades?

22 MR. DILLARD: Objection.

23 MR. BUTHOD: Criticism of what?

24 THE WITNESS: No. That was just
25 one of many items that makes it difficult. It's

1 impossible to use the study for the purposes as done
2 by the plaintiff's industrial hygiene expert. That
3 was just a table in there. They were trying to
4 validate some of their findings, or some of their
5 guesstimates I should say.

6 BY MS. CLANCY:

7 Q. So you called the Shell historical
8 exposure assessment a guesstimate?

9 A. Well, it's not -- I think you've
10 misquoted the title. It says "estimate" in the
11 title.

12 Q. Make sure I get it right.

13 A. "Estimate of Historic Benzene Exposure
14 at Two Petroleum Refineries."

15 Q. That doesn't say guesstimate; it says
16 estimate.

17 A. No, I said I think they used the word
18 "estimate."

19 Q. As I just said, you were designated to
20 testify about the methodology used in the Wood River
21 study, which we now know is the Wood River and Deer
22 Park studies. What is your opinion about the
23 methodology used in the studies?

24 A. Well, again, I wouldn't call it a
25 study. They were trying to estimate exposure for

1 another study they were attempting to do.

2 The overall issue with this, and to
3 answer your question, is that this is not a developed,
4 sanctioned or widely used or known method by
5 industrial hygienists for evaluating exposures.

6 There is a standardized exposure
7 assessment process that is in the book that you
8 brought with you, and that Mr. Petty refers to in his
9 report, but then totally ignores the process that's in
10 the book.

11 Q. First, what is the process in the book
12 that you...

13 A. There's a chapter on exposure
14 assessment. And in that chapter it defines the
15 criteria for properly evaluating an occupational
16 exposure, whether real time or retrospectively.

17 MR. BUTHOD: Could you identify
18 the book by name that you're talking about?

19 MS. CLANCY: Absolutely.

20 MR. BUTHOD: Thank you.

21 MS. CLANCY: Sure.

22 BY MS. CLANCY:

23 Q. The book that you're referring to is A
24 Strategy for Assessing and Managing Occupational
25 Exposures, second edition published by the AIHA Press,

1 authors John Mulhausen and Joseph Damiano; is that
2 correct?

3 A. Yes.

4 Q. So the chapter that you're referring to,
5 could you point that to me?

6 A. Chapter 3.

7 Q. So what is your point with respect to
8 this chapter?

9 A. Well, this study does not follow that
10 process. Mr. Petty did not follow the process that is
11 described in the standard industrial hygiene text.
12 Instead he did something that was -- he basically
13 developed on his own.

14 And this process is what we use again,
15 in real time or in doing retrospective assessments.
16 And there's information that's necessary in order to
17 properly evaluate an exposure to an individual or a
18 population.

19 Q. So let me make sure I'm understanding.
20 You're saying that the methodology espoused by Chapter
21 3 of A Strategy for Assessing and Managing
22 Occupational Exposures is the methodology that you say
23 should have been followed in performing a historical
24 exposure assessment; is that correct?

25 A. That gives you a broad -- an outline.

1 And then the following chapters, I think 4 and 5 get
2 to even more detail of how exposure assessments are
3 conducted.

4 Q. And it follows then that you would say
5 this book, A Strategy for Assessing and Managing
6 Occupational Exposures, you consider this book
7 authoritative in the field of industrial hygiene?

8 A. I don't like to use that word. Because
9 I can't say that every word and every sentence in
10 there is absolute. But generally, the process that is
11 defined in there for doing exposure assessment is
12 something that I agree with, and as far as I know most
13 other industrial hygienists agree with.

14 Q. So the processes as set forth in A
15 Strategy for Assessing and Managing Occupational
16 Exposures by AIHA Press, those processes are processes
17 that you and other industrial hygienists agree are
18 those that should be applied in performing an exposure
19 assessment analysis; is that correct?

20 MR. DILLARD: Asked and answered.

21 THE WITNESS: Yes.

22 BY MS. CLANCY:

23 Q. Okay. What other comments do you have
24 on the methodology used? I'm just reading from your
25 designation called the study.

1 MR. BUTLER: Objection.

2 THE WITNESS: I'm sorry. On the
3 Shell estimate?

4 BY MS. CLANCY:

5 Q. The Shell historical --

6 A. Estimate of historic Benzene exposures?

7 Q. Yes.

8 A. And you mean relative to how it was used
9 by the plaintiff's industrial hygiene expert to assess
10 Mr. Wilkinson's and Mr. Stubbs' exposures?

11 Q. Well, as I understand it, you have two
12 opinions, right? One is with respect to the study
13 itself and how it was done; is that right?

14 MR. DILLARD: Object to form.

15 MR. BUTHOD: Object to form.

16 THE WITNESS: I wouldn't say that
17 so much. I'm not criticizing the study in terms of
18 how it was done. My issue is with how it was utilized
19 by the plaintiff's industrial hygienist to quantify
20 the dose to Benzene for Mr. Wilkinson and Mr. Stubbs.

21 BY MS. CLANCY:

22 Q. So when it says here -- let me show it
23 to you. When it says here, "Mr. Spencer may also
24 testify about the methodology used in the Wood River
25 study."

1 A. As it relates to how -- its use by the
2 plaintiff's industrial hygiene expert. That should
3 have been inserted in there.

4 MS. CLANCY: Okay. All right. So
5 let me mark this. It's defendant Exxon Mobil
6 Corporation and American Chemistry Council's First
7 Amended Rule 194.2(d) through (f) disclosures. And
8 I'll mark is as Exhibit 15.

9 (DOCUMENT MARKED PLAINTIFF, SPENCER
10 DEPOSITION, EXH. NO. 15, FOR IDENTIFICATION.)
11 BY MS. CLANCY:

12 Q. So what other -- now if we insert what
13 you also testified about the methodology used in the
14 Wood River and Deer Park studies with respect to its
15 use by plaintiff's experts, what other comments do you
16 have?

17 MR. DILLARD: Object to the form.

18 THE WITNESS: I believe I've
19 covered them broadly. I mean, there are other -- I'm
20 sure there's other details that I have not brought
21 forth, but I'm trying to think of those. And I've
22 covered what I can recall at the time. There's a lot.
23 BY MS. CLANCY:

24 Q. Well, I have three -- maybe what you
25 were saying then -- were you saying that -- because

1 you talked about everything Carolyn Phillips told you
2 and you said that that corroborated your opinion.

3 A. Right.

4 Q. So when you listed -- because you listed
5 a lot when you talked about your discussion with her.
6 So that is therefore also encompassing your opinion?

7 A. Yes. That also relates -- and again, it
8 relates to how it was used by the plaintiff's
9 industrial hygiene expert to evaluate the dose or the
10 exposures of Mr. Wilkinson and Mr. Stubbs.

11 Q. Do you have any criticisms of the Shell
12 historical exposure assessment other than it was being
13 used by plaintiff's attorney to estimate exposure for
14 Mr. Wilkinson and Mr. Stubbs?

15 A. I guess, if you're asking me if I have
16 criticism of the study itself.

17 Q. Yes.

18 A. I think they did not adequately validate
19 objective data with their estimates properly or
20 completely. I believe that was a limitation.

21 Q. Are there any other limitations that you
22 have as an industrial hygienist expert would find with
23 the Shell historical exposure assessment?

24 A. Well, I guess generally -- it's just not
25 a method that I've ever seen used anywhere else, at

1 any other time. So it was an interesting attempt for
2 its time, but I have never seen it used before or
3 since.

4 Q. And what about the method do you find
5 unique for, I guess --

6 A. The entire process. In interviewing
7 people whose experiences were decades in the past and
8 asking them to recall specific daily routines and
9 daily incidences and daily odors, and to tease out
10 Benzene exposure from mixed hydrocarbon in a
11 refinery.

12 I mean, I think they took on an enormous
13 challenge. But because of the technical limitations,
14 it's not reliable from the standpoint in numbers that
15 are presented. Perhaps in the hierarchy of exposures
16 and what occupations, we're likely to see higher
17 levels of exposure. But not in the numbers
18 themselves.

19 Q. You left me on the last point. What did
20 you mean by that?

21 A. That the intent of the study, and I
22 think where it perhaps worked, was to look at
23 particular occupations that likely had the more
24 consistent elevated types of Benzene exposure. So it
25 created a hierarchy.

1 But in terms of the actual numbers as
2 true objective data, that's where it falls down.

3 Q. Do you disagree with their use of odor
4 as one of the means of measuring the exposure
5 assessment?

6 MR. MAHER: Object to form.

7 THE WITNESS: Well, obviously it
8 didn't work very well. Yes, I do agree there are
9 enormous problems with the use of odor as a means of
10 estimating exposure.

11 BY MS. CLANCY:

12 Q. Okay. And how about Shell's use of
13 sensory perception as a means of estimating exposure?

14 A. I think the severe problems were, and I
15 think Shell recognized it, is that in most situations
16 you're talking about a mixed hydrocarbon environment.
17 And many of these hydrocarbons have the same sort of
18 sensory impacts, eye irritation, upper respiratory
19 tract irritation. So to attribute that to Benzene I
20 think fundamentally flawed what they were doing.

21 Q. Do you have an opinion that one cannot
22 identify Benzene by its smell?

23 A. I'm sorry, do I agree?

24 Q. Is that your opinion that one cannot
25 identify Benzene by its smell?

1 A. No, that's not my opinion.

2 Q. Is it your opinion that one can identify
3 Benzene by its smell?

4 A. Under very specific circumstances, and
5 someone who is trained to do so, yes, I believe that's
6 the case.

7 Q. Do you believe someone can identify
8 Benzene from a smell as distinguished from, for
9 example, Toluene or Xylene?

10 A. Unless they're specifically trained to
11 do so, no, I do not.

12 Q. But if trained to do so, you believe an
13 individual can distinguish as between the smells of
14 Xylene, Toluene and Benzene?

15 A. It is possible, and I'll leave it at
16 that.

17 Q. In your opinion do Toluene, Xylene and
18 Benzene have different smells?

19 A. Smell is in the nose of the beholder.
20 So there are subjective descriptions of the odors of
21 these products. And in some places you can find that
22 they're similar, and in some places you find they're
23 different.

24 Q. So given that you just said in some
25 places you find Toluene and Xylene and Benzene smell

1 sometimes the same, and sometimes they smell
2 different, it's it your opinion then that you really
3 can't distinguish as between them based on odor?

4 A. I'm sorry. Again, unless you're
5 specifically trained, I do not believe, in my
6 experience and from what I've seen and read, you
7 cannot do it. It's not reliable.

8 Q. It's not reliable?

9 A. Correct.

10 Q. What would you say is the safe level of
11 exposure in a parts per million year basis to Benzene
12 without respiratory protection in the 1980s, what
13 should have been the safe level of exposure?

14 MR. BUTHOD: Object.

15 THE WITNESS: Well, I'm not the
16 medical expert. But as an industrial hygienist, I
17 rely on occupational health standards. So you look in
18 the 1980s, probably '87?

19 BY MS. CLANCY:

20 Q. Uh-huh.

21 A. In ten parts per million, 45 years,
22 that's 450 parts per million years.

23 Q. So in the 1980s, as long as the
24 companies were keeping their exposures under 450 parts
25 per million years in aggregate and that would have

1 been providing safe levels of exposure; is that
2 correct?

3 A. That was the basis for the health
4 standard at the time.

5 Q. And now obviously it has changed?

6 A. It's 45 now.

7 Q. 45 parts per million years?

8 A. Correct.

9 Q. So you're opinion is that as long as the
10 company is adhering to the current regulatory health
11 standards -- Federal regulatory health standards at
12 the time that they're acting in a safe manner with
13 respect to Benzene?

14 MR. BUTHOD: Form.

15 THE WITNESS: Yes. They were
16 acting on the best information they had available at
17 the time. It was a consensus of information. And
18 simply because they were using or that there was a
19 health standard at the time of ten parts per million
20 doesn't mean that they were wed to that or using only
21 that number.

22 That there were, in fact, controls
23 instituted to manage ten parts per million may have
24 been effective in reducing the levels down below to
25 one part per million. So you need to look at that on

1 a case-by-case basis.

2 BY MS. CLANCY:

3 Q. Well, do you think they should have had
4 effected controls to reduce exposures below ten parts
5 per million prior to 1987?

6 A. There was research and debate going on
7 at that time. OSHA didn't change it at that time. I
8 can't -- I'm not in a position to second guess
9 everything that was going on in that period of time.

10 In hindsight, should they have done so?
11 Perhaps. I think a lot of companies -- in 1977, when
12 the emergency temporary standard came out, we're
13 already managing down to below one because of the
14 information that came out. And they thought the
15 regulation was just going to go there anyway, and they
16 thought it was the right thing to do.

17 Q. And did you agree with companies who --
18 did you think that -- I mean, looking back, do you
19 actually agree with what they did in 1977 lowering it
20 to one part per million, those companies that did?

21 A. Sure. With that hindsight, sure.

22 Q. It was the right thing to do make the
23 environment safer for workers; correct?

24 MR. MAHER: Form

25 MR. BUTHOD: Form.

1 THE WITNESS: I guess, you know, I
2 can't say whether it actually made it safer. Again,
3 I'm not the medical person, but I certainly don't
4 disagree that they were doing something positive in
5 meeting a lower occupational exposure limit.

6 BY MS. CLANCY:

7 Q. What other criticisms do you have of
8 Mr. Petty's historical -- use of the Shell historical
9 exposure assessment?

10 MR. DILLARD: Form.

11 THE WITNESS: Again, I believe
12 I've covered most of the main points to the best I can
13 recall right now. I mean, starting out so broadly to
14 use this attempt that is so unique and so different --
15 not just that it's different, but it's never been
16 done. And the data he's using so unreliable.

17 And on top of it all, when you look at
18 Mr. Petty's knowledge of Mr. Wilkinson's and
19 Mr. Stubbs' workplace environment, their workplace
20 tasks and activities, the frequency and duration of
21 those activities, whether or not they were exposed to
22 a Benzene containing product, he doesn't know any of
23 those things. And yet, arbitrarily assigns data from
24 a study -- I shouldn't say data, but estimates from an
25 analysis that was never designed to be used in that

1 fashion.

2 BY MS. CLANCY:

3 Q. Is there anything else?

4 MR. DILLARD: Form.

5 MR. BUTHOD: Form.

6 THE WITNESS: I am certain there
7 is, I just can't think of any specifics to give you
8 right now.

9 BY MS. CLANCY:

10 Q. Was it your understanding that Carolyn
11 Phillips was going to appear at trial to testify?

12 A. Yes.

13 Q. Okay. The four things that you told me
14 that you were going to provide opinions about today
15 are, one, the exposures, the analysis that you derived
16 from the Exxon data; correct?

17 A. Correct.

18 Q. Two, we've talked -- one thing we've
19 covered extensively, policies and procedures the
20 defendants had vis-a-vis their contractors and Benzene
21 safety; correct?

22 A. Yes.

23 Q. Three, the plaintiff's expert process in
24 deriving his exposure assessment; correct?

25 A. Yes.

1 Q. And four, the duty of an employer to
2 provide a safe work environment for employees
3 vis-a-vis Benzene; is that correct?

4 A. Yes.

5 Q. Are those the four areas of your opinion
6 in this case?

7 A. To the best of my knowledge, yes.

8 Q. What do you consider yourself an expert
9 in?

10 A. Industrial hygiene.

11 Q. You're not an epidemiologist?

12 A. Correct.

13 Q. You're not a toxicologist?

14 A. Correct. Those are areas that are part
15 of my training and background, but I don't consider
16 myself an expert in those areas. They're part of what
17 I do.

18 Q. But you're not providing expert opinion
19 in this case as a toxicologist or as an
20 epidemiologist; correct?

21 A. Correct.

22 Q. And you're not going to provide
23 causation opinion, meaning --

24 A. I'm sorry, correct.

25 Q. -- any causation with respect to the

1 diseases at issue in this case, and what would be
2 sufficient exposure levels to cause the diseases at
3 issue in this case; is that correct?

4 MR. BUTHOD: Form.

5 THE WITNESS: That is correct. I
6 mean as an industrial hygienist, I typically make
7 myself aware of what the potential adverse health
8 effects are from a particular contaminant. I'm not
9 aware that Benzene causes the diseases that are at
10 issue here, but I am not an expert in causation.

11 BY MS. CLANCY:

12 Q. So you're not testifying as an expert in
13 causation in this case; correct?

14 A. Correct.

15 Q. What are you -- I know we've talked
16 about your conversation with Carolyn Phillips, and
17 your own opinions with respect to the use of the Shell
18 historical exposure study to derive exposure
19 assessment numbers for Mr. Stubbs and Mr. Wilkinson.
20 In category three of your opinions, what other
21 criticisms do you have of Mr. Petty's processes?

22 MR. MAHER: Object to form.

23 MR. DILLARD: Form.

24 BY MS. CLANCY:

25 Q. Number three being plaintiff's expert

1 processes.

2 A. Well, I think we've covered that to the
3 best of my ability at this point. I know there are
4 other things, but factually, I've given you what I can
5 draw upon right now.

6 Q. Is there any document that would help
7 you refresh your memory and see what other opinions
8 you would have --

9 A. No.

10 Q. -- as to or criticisms of Mr. Petty's
11 processes?

12 A. No, I have not created any specific
13 document.

14 Q. What other experts did you talk to in
15 this case besides Carolyn Phillips?

16 MR. DILLARD: Object to form.

17 THE WITNESS: None.

18 BY MS. CLANCY

19 Q. Did you talk to Mr. Paustenbach?

20 A. I did not.

21 Q. Did you analyze any of Mr. Wilkinson's
22 or Mr. Stubbs' exposures to anything other than
23 Benzene?

24 A. I mean, no, I couldn't really do any
25 analysis of their specific exposure to Benzene. There

1 just was not sufficient information, testimony. There
2 is no testimony at all from Mr. Stubbs as to what he
3 did. And Mr. Wilkinson's testimony and co-worker
4 testimony just were so unclear, I couldn't derive
5 anything from it.

6 Q. And thank you for clarifying that. My
7 question was something else, but you reminded me of
8 something I didn't clarify. So you did no estimate of
9 specifically Mr. Wilkinson's or Mr. Stubbs' exposure
10 to Benzene; correct?

11 MR. MAHER: Object to form.

12 THE WITNESS: That's right. I
13 think that's what we talked about at the very
14 beginning of the depo. I did not. The data that I
15 looked at looked at those activities and trades that
16 they have some indication through testimony that they
17 were involved in or conducting.

18 BY MS. CLANCY

19 Q. Did you do any classification or
20 analysis of any pesticide exposure?

21 A. No.

22 Q. Did you do any quantification or
23 analysis of any other toxic substance to which
24 Mr. Wilkinson or Mr. Stubbs may have been exposed?

25 A. You mean like drugs or...

1 Q. Well, did you do any analysis of those?

2 A. No, I did not do any other analysis or
3 assessment for any other constituent.

4 Q. Do you plan to offer any opinion with
5 respect to any other constituent to which -- any other
6 toxic constituent that Mr. Wilkinson or Mr. Stubbs may
7 have been exposed to?

8 MR. BUTHOD: Form.

9 THE WITNESS: No, I did not do any
10 other assessment of any other chemical agent.

11 BY MS. CLANCY:

12 Q. This book that you --

13 A. It's under here.

14 Q. Thank you. One of the things that you
15 list in your book are most cited safety and health
16 regulations in the year 1988.

17 A. And I'll bet has comments at the top.

18 Q. Hosting of OSHA poster is at the top.
19 But written has some program is Number 2.

20 A. Okay.

21 Q. Can you tell me what this is, in this
22 book you wrote, "the most often violated OSHA
23 standard"?

24 A. I believe this is derived generally
25 every year from like Bureau of Labor Statistics post.

1 It looks at all of OSHA's violations by a standard
2 number. It simply tallies them up and puts them in
3 order of the most first and the least last.

4 Q. So then if we go from most first to
5 least last, the second most violated issue with
6 respect to OSHA regulations is having a written
7 program hazcom program; is that correct?

8 A. Yes.

9 Q. And then the fourth most violated as of
10 1988 is having hazcom training program; is that
11 correct?

12 A. Correct.

13 Q. So then the hazcom labeled identity
14 would be all the way down at 14, Number 14 on the list
15 of most violated; is that correct? Is that right?

16 A. I didn't count them. I'll trust your
17 counting technique.

18 Q. Okay, trust me on this.

19 Is this a nation -- what is this a
20 survey of? I mean, every company that reports to
21 OSHA?

22 A. Well, any company in the United States
23 that falls under OSHA jurisdiction.

24 Q. And it was the auditing that was being
25 done at that time to ascertain compliance with OSHA,

1 that's how this list was compiled?

2 A. Yes.

3 Q. And who did the auditing?

4 A. Well, this is from OSHA. It's just you
5 go to a database and it has all their violations in
6 there, and they just tally them up.

7 Q. So it's when OSHA inspectors go out,
8 reported and then tallied on their database; is that
9 right?

10 A. Yes.

11 Q. How many times has a court determined
12 that either some or part of your opinion you would not
13 be able to offer at trial?

14 A. One time, and that was part of my
15 opinion.

16 Q. And which case was that?

17 A. Lavender versus Miles.

18 Q. Is there any other incident where a
19 court has said that some or part of your opinion you
20 would not be able to offer at trial?

21 A. No.

22 Q. Is there any other incident where for
23 whatever reason the court has -- let me back up.

24 At the appellate level after you've
25 already testified at trial, is there any court that

1 has ever said that your testimony was not relevant or
2 reliable or meeting --

3 A. There was a judge in Louisiana who was
4 investigated right after that trial, and left the
5 bench, that used the plaintiff's document as his own
6 findings.

7 So I don't know who really -- whether it
8 was the judge or the plaintiff's attorney at the time
9 that wrote that. I don't know the outcome of that.
10 He was being investigated following that trial.

11 Q. I'm sorry. So what happened?

12 A. There was a case, Maritime case where
13 actually the judge left the courtroom during my direct
14 testimony, and did not hear me testify on some data.
15 And then following the trial said my data -- that my
16 -- what I produced or what I said wasn't relevant or
17 reliable. Of course, he wasn't there to hear it.

18 Q. So what is the name of that case?

19 MR. BUTHOD: Responsiveness.

20 THE WITNESS: I believe it was
21 Warren.

22 BY MS. CLANCY:

23 Q. So after the trial the judge, struck
24 your opinion from the...

25 A. No, it was never struck. He just said

1 that he didn't like it. Of course, he wasn't there to
2 hear it.

3 Q. What was the legal import of that?

4 A. He said I didn't do anything to -- I
5 can't remember the exact words, to refute or rebut the
6 testimony of the plaintiff's industrial hygiene
7 expert. That's when he left the courtroom.

8 It was a bench trial. There was no
9 jury. And he -- it was the oddest thing I've ever
10 seen. He got up and left the courtroom during my
11 direct testimony.

12 Q. At the end of the trial, did he issue a
13 written opinion?

14 A. Yes, as I understand it, it was the
15 opinion written by the plaintiff's attorney. In fact,
16 it had the same misspellings in the document as when
17 the plaintiff's attorneys had produced it as when the
18 judge produced it at the end of the trial. So I don't
19 know how reliable those comments are.

20 Q. But the judge did issue a written
21 opinion with respect to your testimony not being
22 sufficient in that case?

23 MR. BUTHOD: Object to the form.

24 THE WITNESS: No. It was written
25 opinion about the whole case. He just said he didn't

1 like my testimony. But again, he wasn't there for
2 it. It was really very odd.

3 MS. CLANCY: Object to
4 non-responsive question.

5 BY MS. CLANCY:

6 Q. Is it your opinion that you always need
7 monitoring data in order to provide an accurate
8 historical exposure assessment?

9 A. No.

10 Q. How should it be done without monitoring
11 data?

12 A. Well, there is generally a hierarchal
13 approach to doing that. One, monitoring data is
14 best. Two, surrogate data, whether it's from other
15 activities with a similar or same product, or a
16 similar product where you can draw some associations.

17 If you don't have either of those, the
18 next is you may go to a modeling of data. There are
19 acceptable models used in industrial hygiene to
20 evaluate individual exposures and exposures to
21 bystanders.

22 Q. So the hierarchy of performing an
23 historical exposure assessment is in your opinion
24 first you use actual monitoring data that was
25 performed on the individual; is that right?

1 A. Yes.

2 Q. The second step is if you don't have
3 that actual monitoring data, then you look at
4 surrogate data from other workers similarly situated?

5 A. Correct.

6 Q. And then if you don't have surrogate
7 data from other workers similarly situated, then you
8 use modeling data; is that right?

9 A. Yes. Now, there was a step in between
10 where you may use data from -- industrial hygiene data
11 from say, if you're looking at Benzene, you may use
12 data on total hydrocarbon exposure. And look at the
13 percent of Benzene in that total hydrocarbon, and make
14 some associations from that.

15 MS. CLANCY: We have to change
16 tapes, so I'm going to follow up on that question as
17 soon as we get back.

18 VIDEOGRAPHER: This marks the end
19 of tape Number 3 off in the video deposition of John
20 Spencer. The time on the screen is 14:56:34. We're
21 going off the record.

22 (WHEREUPON A RECESS WAS TAKEN.)

23 VIDEOGRAPHER: This marks the
24 beginning of tape Number 4 in the video deposition of
25 John Spencer. The time on the screen is 15:09:11.

1 We're back on the record.

2 BY MS. CLANCY:

3 Q. Mr. Spencer, we're back from break, and
4 I saw that you took out Mr. Petty's opinion -- outline
5 of opinions on Mr. Wilkinson. Did you intend to offer
6 further opinions about that?

7 A. Well, yes. I mean, I had pulled this
8 out and just looking at it trying to refresh myself
9 with other issues you had asked me about before that I
10 had with Mr. Petty's work. And I mean, there are
11 other issues.

12 I think one of the more significant ones
13 that I probably forgot about earlier was his misuse of
14 contributory dermal dose. He, I think, misunderstood
15 some literature, in particular some work done by Allen
16 Susten on dermal absorption of Benzene. And he has
17 severely misapplied it to the plaintiffs in this case
18 as a contributing factor to their exposure.

19 He also -- the other issue that I
20 thought was of significance was that he took data from
21 a refinery -- well, okay, using the estimate of
22 historical Benzene exposure from two Shell refineries,
23 and applied it to these men working at chemical plants
24 as well, and chemical plants from companies different
25 than that of Shell. I thought that was rather

1 significant.

2 He also had -- there is one other thing
3 since you asked that I thought was significant, in the
4 use of Liquid Wrench. And had, I believe, was
5 Mr. Wilkinson covered, at least 27 percent of his body
6 covered in a solvent day in and day out.

7 And this particular product is something
8 that is used to loosen bolts, and is applied to a very
9 specific area. But somehow he had it on his face and
10 his arms, and his legs and his torso such that his
11 clothing was soaked in this stuff daily.

12 And I think the other -- and this may be
13 -- points keep popping into my head, but the other one
14 is the use of -- Mr. Petty, when he did these
15 assessments, failed to consider respiratory
16 protection. Just, I believe even in his testimony
17 indicated he just ignored it.

18 And he ignored the data, the air
19 monitoring data that was available from these
20 facilities, because he believed it was too low.

21 I mean, we have testimony from
22 Mr. Wilkinson who says that he used air supplied
23 respirators at both the Exxon and the Shell facility.
24 Yet, Mr. Petty would not consider that testimony and
25 that information from the plaintiff himself.

1 Q. What else?

2 MR. DILLARD: Object to the form.

3 THE WITNESS: I think he also in
4 my view, Mr. Petty misleads one, or attempts to
5 mislead one in his report with some testimony from
6 various workers, saying that they were discouraged
7 from voicing concerns to the defendant companies.

8 If you read the testimony, what they're
9 being told is by their employer the contractor, J.E.
10 Merrit or Brown and Root, if there is a problem, if
11 there is a spill, there is release, you come to us.
12 We are responsible for managing that. Mr. Petty, I
13 think, misleads as if that is some sort of motivation
14 to quiet them, you know, in the event that there is
15 some issue.

16 But what it is, it's a presentation of
17 recognition by their employer by the contractor that
18 they are responsible for managing their employees'
19 health and safety.

20 And if there were warnings, placards,
21 signs that were present in those work areas, that
22 those workers were to adhere to those warnings, and
23 recognize those as Benzene regulated areas. And not
24 go in there unless they were authorized to do so, and
25 utilizing appropriate protective equipment if it were

1 necessary.

2 BY MS. CLANCY:

3 Q. I'm sorry. You lost me. I was with you
4 till the very last point. How was that a criticism of
5 Mr. Petty's opinion?

6 A. Well, just, I got onto the issues of
7 controls again, going from respirators when you and I
8 were talking about controls. And I wanted to make
9 sure I was clear on that, that I do not view warnings
10 as a means of controlling -- directly controlling
11 exposure.

12 But it's part of a program that I think
13 was recognized in some of this testimony that again,
14 that Mr. Petty was misleading with. You know, there
15 were signs up for Benzene. There were warnings in
16 some areas. Or they didn't see a sign, there wasn't a
17 sign for Benzene. That doesn't mean there was a
18 Benzene exposure and they weren't doing what they were
19 supposed to. It means that there was likely not a
20 Benzene hazard in that particular area in which they
21 were working.

22 Q. So the lack of signs you take as not an
23 indication that either Exxon or Shell or Union Carbide
24 were failing to warn, but more you're interpreting
25 that as there was no Benzene in that area; is that

1 correct?

2 A. Correct. It wasn't a Benzene regulated
3 area. And that Shell and Exxon, again, I don't
4 believe that warnings were used as a means of
5 controlling exposure. It does provide information to
6 someone that they may need to take other measures to
7 control that exposure.

8 There's another -- I'm jumping around
9 here, but every time I look at this report I see
10 something else. The Benzene -- exposure is a function
11 of the amount of Benzene that's present in a product,
12 and then how much of that product gets into the air,
13 and how long and how frequently one is exposed.

14 Mr. Petty has a table here of various
15 units and the volume percentage of Benzene in those
16 processed streams, yet he was unable to associate
17 Mr. Wilkinson or Mr. Stubbs' activities within these
18 areas.

19 For example, at Union Carbide he makes a
20 mistake. He indicates that Mr. Wilkinson was next to
21 a coker unit, and that coker unit would have presented
22 him with a source of Benzene exposure.

23 Well, number one, he doesn't know how --
24 what the Benzene product was that would have come from
25 that coker unit. But two, and most importantly, there

1 was no coker unit at the Union Carbide facility.

2 Q. And how do you know that?

3 A. When I did my tour of the facility, and
4 then further discussions with Mr. Marr about that,
5 because I was a little perplexed when I saw that
6 testimony.

7 Q. And you did your tour of the facility in
8 the year 2006, January of 2006?

9 A. Yes.

10 Q. And so my question is, do you know when
11 Mr. Wilkinson was at the Union Carbide facility?

12 A. Let me see. I think I can tell you. I
13 mean, if it's accurately known at all, I think there
14 was -- let me look.

15 Yes, okay. That's why I wanted to look
16 at this. There is actually some confusion here as to
17 whether he was there at all. One, because he defines
18 the coker unit. And two, because of the employer that
19 he says he was working with. That is Brazos or
20 Mundy.

21 The records that I looked at I believe
22 was Mundy's records for Mr. Wilkinson. And Mundy was
23 not doing work at Union Carbide in the time frame that
24 he claimed to have been there.

25 Q. Is it your understanding that it was

1 early 1980?

2 A. The mid 1980s, according to Mr. Petty,
3 and then Mr. Wilkinson's testimony.

4 Q. What historical documents or whom did
5 you speak to know historically that there never was a
6 coker unit at the Union Carbide facility? And I
7 recognize that you didn't see one in January of 2006.
8 So what documents did you look at to know that it
9 wasn't there in the 1980s?

10 MR. MAHER: Object to form.

11 THE WITNESS: Well, the coker unit
12 is associated with crude. There was no crude in that
13 facility in the types of products that plant was
14 making or did make. So it wouldn't make sense that
15 there would be one there.

16 BY MS. CLANCY:

17 Q. How did you learn that historically
18 there was never a coker unit at that facility?

19 A. I was looking for -- on the day I did
20 the site visit -- well, no. In fact, again, when I
21 looked that up, I talked to Mr. Marr about that.

22 Q. So the attorney for Union Carbide told
23 you that there was never a coker unit at that Union
24 Carbide facility. Is that how you learned that?

25 MR. MAHER: Object to form.

1 THE WITNESS: That's part of the
2 answer, but the real part of the answer is their
3 feedstock is ethane and propane, not crude.

4 BY MS. CLANCY:

5 Q. Their feedstock right now?

6 MR. MAHER: Object to form.

7 THE WITNESS: And to my knowledge
8 and my understanding when I was at the facility,
9 that's what they made in particular in that time
10 frame.

11 BY MS. CLANCY:

12 Q. In particular in that time frame in the
13 1980s they made that?

14 A. Correct.

15 Q. And you learned about the fact that they
16 made that in the 1980s from Mr. Marr; is that right?

17 MR. MAHER: Object to form.

18 THE WITNESS: No.

19 BY MS. CLANCY:

20 Q. Who told you that?

21 A. That was Dave Hake.

22 Q. How do you spell his last name?

23 A. H-a-k-e.

24 Q. And what did Mr. Hake tell you?

25 A. That ethane and propane were the

1 feedstock.

2 Q. What else did you talk about with
3 Mr. Hake?

4 A. We talked about the products that they
5 made there. I mean, that was the primary thing. We
6 talked about other parts of the process.

7 Q. Is that note from your conversation with
8 Mr. Hake?

9 A. It includes -- yes, and during the site
10 visit.

11 Q. May I see that?

12 A. Sure.

13 Q. Did Mr. Hake say there was an Olefin
14 unit at the Union Carbide facility?

15 MR. MAHER: Object to form.

16 THE WITNESS: That there had been
17 one. I believe he gave me some dates when the Olefin
18 units -- Olefins 2 had shut down, yes, and when
19 Olefins 3 started up.

20 BY MS. CLANCY:

21 Q. Did he tell you when Olefin 2 started
22 up?

23 MR. MAHER: Object to form.

24 THE WITNESS: Is it on there?

25 Going back and forth. I don't know if he told me when

1 it started up. I don't recall that in particular.

2 BY MS. CLANCY:

3 Q. Did he ever tell you if the Olefin unit
4 was present at the Union Carbide facility in the
5 1980s?

6 A. Well, the Olefin 3 started up in 1969.

7 Q. And was Olefin 3 still there when you
8 went for your site visit in March of 2006?

9 A. Well, Olefin 3 had shut down.

10 Q. When was that?

11 A. I believe in 2003. I believe that's the
12 right date.

13 Q. May I look at that?

14 A. Uh-huh.

15 Q. The feedstock for -- right here you
16 write the words Dripline Pyrolysis, 50 percent
17 Benzene?

18 A. Yes.

19 Q. Can you tell me what that means in that
20 context?

21 A. As part of the production of ethylene
22 and propylene, there are byproducts. And one of
23 those -- two of those byproducts were Dripline A and
24 Dripline C. And each of them at one point contained
25 some percentage of Benzene.

1 Q. Okay. And here it says approximately 50
2 percent Benzene?

3 A. That was in the Pyrolysis product. The
4 Dripline itself, I don't remember the exact
5 percentages. One had a higher percentage than the
6 other. Dripline A higher --

7 Q. This appears to say five percent
8 Benzene. Is that --

9 A. Well, it was less than five percent for
10 the Dripline A. I think it was the Dripline C that
11 had the higher Benzene content.

12 Q. Just to put this in context for me and
13 for the jury, you write down here feedstock and then a
14 number of bullet points.

15 A. Right.

16 Q. Could you explain what this means?

17 A. What the feedstock was and what the
18 products were?

19 Q. Well, what units the feedstock went into
20 and the products?

21 A. I can't explain this. Look, I started
22 all this by telling you there was no coker unit there.

23 Q. Okay.

24 A. I didn't do -- so there were parts of
25 that testimony that was never considered by

1 Mr. Petty. He never did that evaluation. They don't
2 have crude oil in the facility, so you don't have a
3 coker unit. He just failed to consider that.

4 I didn't do an analysis beyond the fact
5 that they -- what the feedstock was and what the
6 product and the byproducts were coming from that
7 facility. So I can't lay out the operation for you.

8 Q. So the analysis that you did do is the
9 feedstock were -- the byproducts you're saying are the
10 Pyrolysis and the Dripline; is that right?

11 MR. MAHER: Object to form.

12 THE WITNESS: Well, Dripline is
13 that product.

14 BY MS. CLANCY:

15 Q. Is the product?

16 A. Actually it's a byproduct they sold as a
17 product.

18 Q. And Pyrolysis, is that similarly a
19 byproduct that Union Carbide sold as a product?

20 A. No, that's just a term that is a result
21 of part of the process.

22 Q. So what is the -- where you wrote 50
23 percent Benzene, is it the Dripline here that has 50
24 percent Benzene?

25 A. Yes. Approximately, yes.

1 Q. You also wrote down Ken Lyons safety
2 manual discussion going back to 1970?

3 A. Yes.

4 Q. Did you also talk to someone named Ken
5 Lyons at Union Carbide?

6 A. I can't remember if it was on that day
7 that I spoke with Ken Lyons, or if it was in a
8 deposition testimony. I think I brought with me, I
9 believe, Mr. Lyons' testimony in that regard where
10 there was a discussion of the safety manual going back
11 to the 1970s.

12 Q. And that was from another case?

13 A. Yes.

14 Q. Do you have that? Would that be in your
15 folder marked deposition?

16 A. It would be in -- no, it's in the --
17 let's see, Union Carbide file, which is here.

18 Q. So this was taken in the Scott case?

19 A. Correct.

20 Q. And your site visit was generally done
21 for purposes of the Scott case?

22 A. Correct.

23 Q. And you're relying on Mr. Lyons' opinion
24 provided in the Scott case for purposes of your
25 opinion you're providing today in this case?

1 MR. MAHER: Object to form.

2 THE WITNESS: In part, yes.

3 BY MS. CLANCY:

4 Q. What part are you relying on?

5 MR. MAHER: Object to form.

6 THE WITNESS: Well, his discussion
7 of the safety manual and how far back it went. I had
8 earlier or later versions of the manual, and I was
9 curious as to how far back it went. And that's what
10 his testimony represents.

11 MS. CLANCY: May I see that
12 folder? So this is the Union Carbide document. I'm
13 going to mark this folder then and put the deposition
14 back in it, as Exhibit 16. Thank you.

15 (DOCUMENT MARKED PLAINTIFF, SPENCER
16 DEPOSITION, EXH. NO. 16, FOR IDENTIFICATION.)

17 BY MS. CLANCY:

18 Q. Are there any other depositions from
19 outside of this case that you have brought with you
20 today?

21 MR. MAHER: Form.

22 MR. BUTHOD: You mean other than
23 what he's already identified for you?

24 MS. CLANCY: Ken Lyons, other than
25 Ken Lyons.

1 MR. BUTHOD: Form.

2 THE WITNESS: Well, the only other
3 deposition, I may have said this before, was that of
4 Mr. Wilkinson in the case in 2003.

5 BY MS. CLANCY:

6 Q. And other than those two?

7 A. I cannot think of any others.

8 Q. All right.

9 We had turned to a discussion of Union
10 Carbide while you were providing further grievances
11 from Mr. Petty's report that is now in this case. So
12 I didn't want to interrupt that. So we left off with
13 the Union Carbide coker right now.

14 MR. BUTHOD: Form.

15 THE WITNESS: I'm quite certain
16 there are other issues that are embedded in there that
17 I haven't covered, but short of going through every
18 page in his report, I can't think of anything else
19 right now. We talked about the dermal calculation
20 that he did and his misunderstanding and
21 misrepresentation of the literature for adding
22 additional exposure.

23 Basically the application of the Shell
24 exposure estimate to any facility in the world, and
25 any worker at any time without any regard to personal

1 protective devices, respirators, such as those
2 described by Mr. Wilkinson at both the Shell and the
3 Exxon facility where he claimed to have used supplied
4 air respirators.

5 I've covered as much as I can pull out
6 of my head right now.

7 BY MS. CLANCY:

8 Q. Looking at this would it help you to --

9 A. Let me -- I'll do that a little more to
10 be sure there isn't another major point I've forgotten
11 about.

12 I mean, I think that I said it earlier
13 but perhaps I should reiterate again that when I talk
14 about conducting a proper exposure assessment, you
15 have to understand the workplace, the work products,
16 the tasks and activities. Mr. Petty didn't know
17 anything about any of those issues with regards to
18 Mr. Wilkinson or Mr. Stubbs. So I don't know.

19 He would have been unable to do an
20 exposure assessment were it not for him making up this
21 method deriving information from a Shell exposure
22 estimate that was never designed to be used in that
23 application.

24 Q. And how do you know it was never
25 designed to be used in that application?

1 A. Well, read the document. Read the
2 disclaimers in the document. I spoke with Carolyn
3 Phillips, one of the people intimately involved in the
4 development of that work.

5 Q. Is that what she told you?

6 A. Oh, yes.

7 Q. She told you it was never designed to be
8 used for purposes of assessment of other exposures?

9 MR. DILLARD: Object to form.

10 THE WITNESS: Of individual's
11 exposure or certainly any individual at an entirely
12 different type of facility, or owned by an entirely
13 different organization. And that's what Mr. Petty
14 did.

15 And I think also importantly, Mr. Petty
16 simply ignored -- not ignored, he was aware of it and
17 chose not to use it, that is specific data from
18 contractors, including Mr. Stubbs. He totally
19 disregarded that information, critical information.

20 BY MS. CLANCY:

21 Q. And that's the data that you brought
22 with you today?

23 A. Yes. Again, that's all that comes to
24 mind at this point. If that isn't enough.

25 Q. If something else occurs to you over the

1 course of this deposition, please feel free to
2 interrupt me and we can go back to that topic.

3 A. Terrific.

4 Q. Because I want to make sure to the
5 extent you can recall today your criticisms of
6 Mr. Petty's opinions in this, I'd like to hear you
7 testify to them today.

8 A. Great.

9 Q. Okay? What employees have you spoken to
10 at Shell besides Ms. Phillips?

11 A. For this case?

12 Q. Uh-huh.

13 A. None.

14 Q. What employees at Exxon have you spoken
15 to for this case?

16 A. None.

17 Q. And employees for Union Carbide for this
18 case?

19 A. None.

20 Q. And since we know you're using
21 interviews with employees that you had in the Scott
22 case for purposes of your opinion in this case as to
23 Union Carbide, are there any employees that you have
24 spoken to at Exxon in other cases that you're going to
25 use those interviews for purposes of your opinions

1 today?

2 MR. MAHER: Objection. Form.

3 THE WITNESS: No.

4 BY MS. CLANCY:

5 Q. How about at Shell? Have you spoken to
6 employees at Shell in the context of other scenarios
7 that you're going to use those conversations, or that
8 learned from those conversations as a basis for your
9 opinion today?

10 A. There is no specific information that I
11 can think of at this point in time.

12 Q. You mean no specific person?

13 A. Person or information derived from that
14 individual that I would use at this time.

15 Q. So the only interview -- the only
16 interview with a Shell employee that you can recall as
17 you sit here today that you would use for purposes of
18 providing your opinion in these cases is the interview
19 you had with Carolyn Phillips; is that right?

20 A. Yes.

21 Q. And there is no -- you did not speak to
22 an Exxon employee for purposes of providing your
23 opinion in this case?

24 A. Correct.

25 Q. Is there anyone else at Union Carbide

1 that you have spoken to outside of the two individuals
2 we just discussed, which are set forth on your site
3 visit analysis?

4 A. I may have talked to others in the past,
5 but there's none specifically for this case. Nor is
6 there anything that I'm specifically relying on in
7 those discussions at this point in time.

8 Q. Did you talk to any employee of Radiator
9 Specialty or U.S. Steel for purposes of providing your
10 opinion in this case?

11 A. No.

12 Q. Do you have any further -- I believe you
13 mentioned one criticism that I can recall right now of
14 the -- Mr. Petty's Liquid Wrench analysis. Do you
15 have any other criticisms of that? By that I mean the
16 report he did on Mr. Wilkinson's Liquid Wrench
17 analysis.

18 A. I mean, again, I cannot think of
19 something specific other than the times, the length of
20 time that he attributes to the use of Liquid Wrench by
21 the plaintiff, the amount of skin contact.

22 His misunderstanding of the literature
23 with regards to the dermal contribution of total dose
24 to the individual with skin contact, he's completely
25 misinterpreted, misunderstands that data. I just

1 don't think -- he's not aware of it, I guess. But
2 he's misinterpreted it severely.

3 Q. Are you talking about the data in the
4 dermal number -- the supplemental dermal number he put
5 in the original report, or are you talking about his
6 dermal analysis in the Liquid Wrench report?

7 A. It's both. I mean, he uses that same
8 assessment that 20 to 30 percent increase of whatever
9 the airborne exposure was as an additional
10 contributing factor, and doesn't realizes that 20 to
11 40 percent is 20 to 40 percent of the exposure from
12 one part per million.

13 And it is not related to any increase in
14 the exposure. That was just something the authors had
15 recognized at one part per million that a particular
16 solvent contributed 20 to 40 percent of one part per
17 million. And he misunderstood. That's what I'm
18 guessing. He simply misunderstood that research.

19 Q. Okay. Any other criticisms of the
20 Liquid Wrench analysis?

21 A. No. But if I come across something
22 else, I will bring it up.

23 Q. Is it important to flush out equipment
24 prior to opening something that has Benzene in it?

25 A. Yes.

1 Q. Why is that?

2 A. Two reasons. One is fire and explosion,
3 and two is toxicity.

4 Q. And that's if there are -- if when you
5 break open the equipment and the equipment hasn't been
6 flushed out, you have the potential for being exposed
7 to toxic substances?

8 MR. BUTHOD: Form.

9 THE WITNESS: You have the
10 potential of being blown up.

11 BY MS. CLANCY:

12 Q. And you also have potential for exposure
13 to toxic substances; is that correct?

14 A. Yes. I think that would come second to
15 concern for being blown up or engulfed in fire.

16 Q. So it's your opinion then if, like for
17 example, prior to a turn around or prior to opening of
18 equipment if a system isn't fully purged and flushed
19 of any Benzene containing product, that presents a
20 dangerous situation for the workers working around
21 that equipment; is that correct?

22 MR. BUTHOD: Object to the form of
23 the question.

24 THE WITNESS: A potentially
25 dangerous situation. Now, you also have to look at

1 what sort of personal protective equipment they were
2 wearing, or what other measures were in place to
3 eliminate or reduce their exposure.

4 BY MS. CLANCY:

5 Q. So you're saying it is a potentially
6 dangerous situation, one. And two, that you have to
7 then correct that danger by either wearing personal
8 protective equipment or taking other measures to
9 prevent exposure; is that correct?

10 MR. MAHER: Objection. Form.

11 MR. BUTHOD: Form.

12 THE WITNESS: Yes. A good
13 example, if you read Mr. Wilkinson's deposition, he
14 indicates at Exxon and Shell he used supplied air
15 respirators, fresh air when he was loosening lines, I
16 think he said.

17 BY MS. CLANCY:

18 Q. Okay.

19 A. So even if there were some residual
20 material in there, he was properly protected to
21 prevent inhalation of some harmful level of exposure.

22 Q. So to the extent the equipment is opened
23 up and there is potential for residual material in the
24 equipment, then respirators should be worn or other
25 protective measures should be taken to prevent

1 non-exposure to that residual material; is that
2 correct?

3 MR. BUTHOD: Form.

4 THE WITNESS: Again, that's
5 correct. If it has not been properly done, there are
6 measures that these individuals in the field know. If
7 they loosen a bolt and material still is draining out
8 or spraying out, because maybe a line or main under
9 pressure immediately bolted back again and reflushed
10 the lines again because something happened and it
11 wasn't done completely.

12 So there are other measures besides just
13 wearing a respirator that's recognizing when there is
14 a potential issue, and then correcting that issue.

15 BY MS. CLANCY:

16 Q. So when a equipment has remnants in it
17 or has not been fully flushed out of Benzene
18 containing equipment, then upon opening there are
19 other measures that need to be taken, such as a
20 respiratory protection or closing the equipment back
21 up to protect workers' safety; is that correct?

22 MR. BUTHOD: Form.

23 MR. MAHER: Objection.

24 THE WITNESS: It may or may not
25 be. You have to understand, and that's why -- again,

1 this is one of the flaws of Mr. Petty. He had no idea
2 whether the line was flushed, whether the line
3 contained a Benzene containing product. If it did
4 contain a Benzene containing product what percentage?

5 So a lot of the lines, you wouldn't --
6 once the contractor got in there during a turn around
7 or a shut down, there was no need for respiratory
8 protection. Because the lines had been cleaned. They
9 had been tested and there was no requirement for
10 respiratory protection.

11 But in order to do that, you have to
12 understand what process you're involved in and what
13 products that are in those lines or that equipment.

14 BY MS. CLANCY:

15 Q. Okay. So it is your opinion that a line
16 can be fully flushed and cleaned such that there is no
17 need for respiratory protection?

18 A. Oh, sure.

19 MR. MAHER: Objection. Form.

20 BY MS. CLANCY:

21 Q. And obviously my prior question was
22 referring to Benzene containing materials. I was
23 talking about fully flushing and cleaning with respect
24 to Benzene containing materials; did you understand
25 that?

1 MR. BUTHOD: Form.

2 THE WITNESS: Sure. And again, my
3 point is in going back to what Mr. Petty did, is he
4 had no knowledge of what Benzene containing products,
5 if any, that Mr. Stubbs or Mr. Wilkinson were working
6 around. Or whether there was any measurable Benzene
7 in there at the time that they were working,
8 conducting their work on a piece of equipment or a
9 line.

10 BY MS. CLANCY:

11 Q. Okay.

12 So I'm trying to differentiate. That
13 was your criticism of Mr. Petty. I'm just asking you
14 generally with respect to a line that has Benzene
15 containing products in it, it's your opinion that a
16 line like that can be flushed and thus broken open
17 safely without the need for use of respiratory
18 equipment when working around that line; is that
19 correct?

20 A. Yes, that's the design of the process.

21 Q. And that's your opinion?

22 A. Correct.

23 Q. Is it your opinion that the Shell
24 historic exposure assessment study -- is it your
25 opinion that the Shell historic exposure assessment

1 study did not use any actual data in coming to its
2 conclusion?

3 MR. DILLARD: Object to the form.

4 THE WITNESS: No.

5 BY MS. CLANCY:

6 Q. Did you think that they did actually
7 consider actual data in deriving to their conclusion?

8 A. They had a table in there where they
9 were -- here it is, where they were attempting to
10 validate some of the numbers they were coming up
11 with. It was a very limited, and I think I touched on
12 this before, it was a very limited number of samples.

13 And was also a very limited number of
14 trades that they actually had some historical data
15 on. So they attempted to do that.

16 But in my view, the data was
17 insufficient to draw the conclusions that their data
18 -- in particular their data at the higher levels was
19 actually close to being accurate.

20 Q. So even if they used actual data, you're
21 saying the actual data that they used was
22 insufficient?

23 A. Correct. Because it was only a few
24 samples, and it was of operators primarily. There was
25 some other data, but there were very few samples that

1 they used for that validation part of the study. That
2 was clearly a weak part of their assessment.

3 Q. To use a only few samples in order to
4 gather their assessment weakened the assessment; is
5 that correct?

6 A. Correct. I mean, the numbers weren't
7 even so important to them. It was the hierarchy of
8 exposures, which ones were likely the highest and
9 which ones were likely the lowest. The numbers
10 themselves weren't as important to them.

11 Q. Is that what you learned from speaking
12 with Carolyn Phillips?

13 A. Yes.

14 Q. And why did she say that the numbers and
15 not the hierarchy were important?

16 A. It's reversed.

17 Q. I'm sorry. I mean, excuse me, that the
18 hierarchy and not the numbers were important?

19 A. Again, this was part of a larger study
20 where there were -- an epidemiological type study
21 where they were trying to determine whether or not
22 disease from Benzene exposure was associated -- could
23 be associated causally with -- on a dose dependent
24 basis.

25 Q. Is that it?

1 A. Yes.

2 Q. I want to go back to something that we
3 covered and then we took a break, and I forgot to go
4 back.

5 You were saying that in the absence of
6 -- you were saying -- we were walking through the
7 tenet what you as an industrial hygienist would
8 recommend to properly conduct a historic exposure
9 assessment.

10 And the three things that you had said
11 were -- first use actual monitoring data. If you
12 don't have actual monitoring data, you use surrogate
13 data from similarly situated workers; is that
14 correct?

15 A. Yes.

16 Q. And then if you can't use surrogate data
17 from similarly situated workers, then you use modeling
18 data; is that correct?

19 A. Again, there was one more.

20 Q. Right. Then you said that inserting in
21 that, you needed to consider data on total hydrocarbon
22 exposure. And I wanted to ask you how that fit that
23 in.

24 A. Well, I used that as an example. That
25 was just an example.

1 Q. Okay.

2 A. You can use other types of exposures
3 under some circumstances to relate to a different
4 constituent. And I used that type of hydrocarbon in
5 Benzene as an example.

6 Q. So when you were deriving your
7 methodology for doing a historical exposure
8 assessment, you were basing it on what would do to do
9 a total hydrocarbon exposure; is that correct? Did I
10 get that right, is that what you were...

11 A. No. Again, I was just using that as an
12 example. There are other examples. You might use
13 xylene to evaluate toluene exposure. I'm saying --
14 I'm using -- I gave you the example of using total
15 hydrocarbons as an example to evaluate Benzene
16 exposure.

17 Q. I'm sorry, but I do not understand what
18 you mean, how that fits in with what you're saying.

19 A. Let me give you an example.

20 MR. MAHER: Objection form.

21 THE WITNESS: You go to a
22 facility, they work with a gasoline product. And they
23 have lots of total hydrocarbon data. And as part of
24 that total hydrocarbon, Benzene is a one percent or
25 two percent component.

1 They didn't measure for Benzene though.
2 If you want to get an understanding of what the
3 Benzene exposures were, but you only have results in
4 total hydrocarbons.

5 There is literature, several studies
6 that relate the ratio of total hydrocarbons to
7 Benzene. That's generally a ratio of about 100 to 300
8 to one.

9 So you can take the total hydrocarbon
10 numbers and divide by 100 or 300, and that will give
11 you a good estimate of what the Benzene concentration
12 would have been.

13 BY MS. CLANCY:

14 Q. So would that fall into this step 3, the
15 modeling data?

16 A. No, the one before that.

17 Q. It would fall into the surrogate data?
18 Oh, okay. You could use surrogate -- I finally
19 understand. You could use surrogate data of total
20 hydrocarbon exposure to other's experience to then
21 derive Benzene exposure as to the subject at issue?

22 A. Correct.

23 Q. With respect to Union Carbide, what are
24 your opinions based on the -- let me just pull your
25 designations by Union Carbide for a second.

1 I'll mark as Deposition Exhibit Number
2 17 the designation -- your designation by Union
3 Carbide in this case.

4 (DOCUMENT MARKED PLAINTIFF, SPENCER
5 DEPOSITION, EXH. NO. 17, FOR IDENTIFICATION.)
6 BY MS. CLANCY:

7 Q. I'll hand this to you, and ask you if
8 this is what you've been hired by Union Carbide to
9 testify to about?

10 A. (WITNESS EXAMINING DOCUMENT.)

11 I think it's broader than, you know,
12 what we've been talking about today and what I was
13 prepared to testify for or about.

14 Q. Do you want to just tell me how you
15 would change it?

16 A. Well, "state of the art knowledge at
17 relevant points in time concerning Benzene and other
18 chemicals," I'm not sure what's meant by "other
19 chemicals". I was focused on Benzene as an issue at
20 that facility.

21 I guess in a sense I have talked about
22 other chemicals when I talked about what the feedstock
23 was, and what the byproducts were in the products at
24 that facility, and why some of the testimony is just
25 not relevant. So maybe that is true.

1 Q. Well, may I see that for a second so I
2 could look at the sentence that you're referring to?
3 Thank you.

4 Will you be discussing on the state of
5 the art knowledge with respect to Benzene historically
6 as opposed to what was known in the '30s, '40s, '50s
7 about the hazards of Benzene?

8 MR. MAHER: Object to form.

9 THE WITNESS: I think you had
10 asked me some questions about that today.

11 BY MS. CLANCY:

12 Q. And you said no.

13 A. Well, no. I said that I'm aware of the
14 NIOSH criteria document up to 1974, which did not list
15 Benzene as a carcinogen. And that was an extensive
16 review in 1974. And they did not change that until
17 1976.

18 So I think from that standpoint, we have
19 talked about that, and I guess that fits, you know,
20 the state of the art knowledge discussion.

21 Q. So the extent of your state of the art
22 opinion would be with respect to starting with the
23 NIOSH criteria document issued in 1974?

24 MR. MAHER: Object to form.

25 THE WITNESS: Not necessarily. I

1 guess the function of the question that are asked.
2 You just happened to asked me a question that related
3 to that particular issue.

4 I am certainly prepared to talk about
5 the fact that Benzene was considered a poison for many
6 years. It was considered to be a poison in what we
7 would consider today very high doses, hundreds and
8 hundreds of parts per million. And certainly that
9 knowledge and the standards changed over time as more
10 information became available.

11 BY MS. CLANCY:

12 Q. When did Union Carbide first become
13 aware that Benzene was a carcinogen?

14 MR. MAHER: Object to form.

15 THE WITNESS: I think you had
16 asked me that before, and I do not know the answer to
17 that.

18 BY MS. CLANCY:

19 Q. What personal protective equipment did
20 Union Carbide provide to contract workers?

21 MR. MAHER: Object to form.

22 THE WITNESS: I don't know that
23 they would have provided any equipment. The employers
24 should have provided that equipment.

25 BY MS. CLANCY:

1 Q. It just says "and personal protective
2 equipment," so your opinion with respect to personal
3 protective equipment is that the employer should have
4 provided that?

5 MR. MAHER: Object to form.

6 THE WITNESS: That their employer
7 should have provided that, yes if it was necessary.
8 Again, a lot of the environments, a lot of the
9 situations under which these contractors were working
10 did not require personal protective equipment. In
11 fact, I would say most did not.

12 BY MS. CLANCY:

13 Q. With respect to Union Carbide, what is
14 your opinion with respect to the management of their
15 policies and procedures vis-a-vis contractors?

16 MR. MAHER: Object to form.

17 THE WITNESS: Again, I think that
18 was something we touched on earlier today.

19 BY MS. CLANCY:

20 Q. Actually, I only talked about Exxon and
21 Shell so far.

22 A. Oh, we did?

23 Q. Yeah.

24 MR. BUTHOD: I beg to differ, but
25 go ahead and finish your answer.

1 THE WITNESS: Similarly, I have
2 documents. Did you mark that file? The safety plans,
3 the testimony of Ken Lyons. There was testimony, you
4 know, and it was probably you had asked me earlier
5 whether there is anybody else, and there is testimony
6 of Richard LaCor.

7 BY MS. CLANCY:

8 Q. What case was that in?

9 A. Ringstaff.

10 Q. So you will be relying in part on the
11 testimony of Richard LaCor in Ringstaff for purposes
12 of providing your opinions with respect to Union
13 Carbide in this case?

14 MR. MAHER: Object to form.

15 THE WITNESS: Correct. With
16 regard specifically to their health and safety
17 programs and procedures and policies, and so forth.

18 BY MS. CLANCY:

19 Q. And this, I think, is your copy of the
20 estimate of historic Benzene exposures for Shell. So
21 I'm going to put that back here.

22 The depositions, earnings, and Wilkinson
23 affidavit, which are the depositions you reviewed in
24 this case, the earnings and statements you reviewed in
25 this case and the affidavit of Mr. Wilkinson you

1 reviewed in this case; is that correct?

2 A. Yes.

3 MS. CLANCY: I'm going to mark
4 this as Exhibit 18.

5 (DOCUMENT MARKED PLAINTIFF, SPENCER
6 DEPOSITION, EXHIBIT NO. 18, FOR IDENTIFICATION.)

7 MR. BUTHOD: Denyse, why do you
8 want another set of all that?

9 THE WITNESS: Because I want it.

10 MR. BUTHOD: I'm not saying you
11 don't have a right to, I just don't want to have to
12 pay for that when I buy my copy of the exhibit.

13 MS. CLANCY: Then don't buy
14 Exhibit Number 18.

15 MR. MAHER: Can I ask you a quick
16 question?

17 MS. CLANCY: Want to go off the
18 record for a minute?

19 MR. MAHER: It's not going to be
20 that big of a deal. I was just wondering whether or
21 not you're almost done.

22 MS. CLANCY: I don't know.

23 BY MS. CLANCY:

24 Q. This here is the Petty report I believe
25 for Stubbs. I'm going to put that back in here.

1 A. Okay.

2 Q. And this is Wilkinson's deposition from
3 the asbestos case Nash. So I'm not going to mark
4 that.

5 A. Yes, two of them.

6 Q. And what I'm trying to understand is the
7 two boxes over there, the remaining two boxes, those
8 are Exxon documents, which you have summarized;
9 right? I mean in terms of the content of them?

10 A. Yes.

11 Q. So may I see the summary again? You can
12 put that back. I'm not going to mark that. This
13 should be the extent of the exhibits.

14 What are you charging for your testimony
15 today?

16 A. 245 per hour.

17 Q. What do you charge if you come to trial
18 on a case?

19 A. 245 per hour.

20 Q. And what do you charge if you are not
21 giving deposition testimony or at trial? Is it the
22 same rate?

23 A. Oh, yes.

24 Q. It's always 245 per hour?

25 A. No matter what I do.

1 Q. No matter what you do, okay.

2 What are your earnings on a yearly
3 basis. Let's say, for last year in terms of
4 litigation?

5 A. I have no idea.

6 Q. What were your gross earnings last year?

7 MR. DILLARD: No, unrelated to
8 litigation.

9 MR. BUTHOD: You don't have to
10 answer that.

11 THE WITNESS: I'm sorry, for
12 litigation?

13 BY MS. CLANCY:

14 Q. Yes.

15 A. I have no idea. I don't keep any
16 records in that fashion.

17 Q. How many cases are you working on right
18 now?

19 A. I do not know the answer to that.

20 Q. Is it more than ten?

21 MR. BUTHOD: Now, Denyse, the line
22 you always draw before with your witnesses is how many
23 cases have you actually been disclosed or presented as
24 a witness in or at trial. I think that's a fair
25 enough line that we're going to draw with these

1 witnesses.

2 If you want to discover where he's been
3 disclosed or presented for deposition or trial, feel
4 free. But I'll make the same objection that you
5 always make with your witnesses about other areas
6 where he's been retained but not disclosed.

7 MS. CLANCY: I have no problem
8 with that if you want to tell me --

9 MR. BUTHOD: Do you understand the
10 distinction I'm talking about?

11 THE WITNESS: Well, where I've
12 been disclosed?

13 MR. BUTHOD: Yeah, let's say some
14 lawyer calls you and wants to get your professional
15 advice on something, but has never made you his expert
16 witness or whatever, she doesn't get to find out about
17 that.

18 THE WITNESS: I honestly don't
19 know the answer to where I've been disclosed and where
20 I haven't. I get calls from people all the time
21 looking for information. I get calls from people
22 telling me I'm in cases that I know nothing about.

23 BY MS. CLANCY:

24 Q. How many times have you given your
25 testimony to date this year?

1 A. It would be a guess. Maybe once or
2 twice a month.

3 Q. So you've given a total of --

4 A. Good question.

5 Q. So about eight depositions to date so
6 far this year?

7 A. Perhaps. I really don't know offhand.
8 I don't think it would be a whole lot different from
9 that.

10 Q. How many times have you appeared at
11 trial to testify this year?

12 A. I think it was this year. It was early
13 in the year I believe. I'm not positive. I believe
14 twice that I can think of. No, I'm sorry, three.
15 There is a third.

16 Q. What were the three trials that you
17 testified in this year?

18 A. Two were in California. One was named
19 Horr.

20 Q. How do you spell that?

21 A. H-o-r-r. And the other one was
22 Morrison. And the last one was Ringstaff.

23 Q. Were Horr or Morrison Benzene cases?

24 A. No.

25 Q. Were they asbestos cases?

1 A. Yes.

2 Q. And what Benzene cases did you testify
3 in at trial last year?

4 A. Last year?

5 Q. Yes.

6 A. I couldn't tell you.

7 Q. How many Benzene cases have you
8 testified in at trial?

9 A. I don't believe I testified in any last
10 year. I can't recall any.

11 Q. Prior to Ringstaff, what was the last
12 Benzene case that you testified in at trial?

13 A. Maybe on one in upstate New York. I
14 don't remember the name of it. It was a couple of
15 years ago.

16 Q. Who was plaintiff's attorney?

17 A. I couldn't tell you.

18 Q. Who was the defense attorney?

19 A. Kyle Carpenter.

20 Q. And this was upstate New York?

21 A. Yes.

22 Q. What city?

23 A. Buffalo area? I'm not exactly positive.

24 Q. And that's the last Benzene case you
25 remember testifying in at trial prior to Ringstaff?

1 A. Yes. That's the last one I can recall.

2 Q. What was the outcome of the Buffalo
3 case? The one you testified for Kyle Carpenter?

4 A. A defense verdict.

5 MS. CLANCY: I'm going to take a
6 five-minute break and I may be done.

7 THE WITNESS: Great.

8 VIDEOGRAPHER: Time on the screen
9 is 16:08:16. We're going to go on break.

10 (WHEREUPON A RECESS WAS TAKEN.)

11 VIDEOGRAPHER: Time on the screen
12 is 14:21:30. We're back on the record.

13 BY MS. CLANCY:

14 Q. Mr. Spencer, you were not at Shell when
15 Shell historical exposure assessment study was done;
16 correct?

17 A. Correct.

18 Q. And you weren't part of putting together
19 the protocol for that study; correct?

20 A. Correct.

21 Q. And you weren't part of conducting that
22 study; correct? You did not conduct the Shell --

23 A. Correct.

24 Q. And you didn't play any part in
25 conducting the Shell historical exposure assessment

1 study; correct?

2 Q. And you didn't send that study to OSHA
3 or to NIOSH; correct?

4 A. That is correct.

5 Q. So in terms of why the study was done,
6 are you going to be relying -- you will be relying on
7 Shell people to tell you why -- the purpose of the
8 study; correct?

9 MR. DILLARD: Object to the form.

10 THE WITNESS: No. I will not say
11 that I'm going to rely on Shell people. As I said
12 before, I think they helped corroborate the fact that
13 that the exposure estimate only goes up to 1975, and
14 represents data only up to that point, not '76
15 forward.

16 That some of that data was from units
17 such as aromatics unit, which neither of these
18 individuals claimed to have worked around. So I don't
19 know -- I'm not necessarily relying on Shell people
20 for that study. But I think the assessment, the
21 estimate and the document speaks for itself.

22 MS. CLANCY: Object as not
23 responsive.

24 BY MS. CLANCY:

25 Q. My question was are you saying that you

1 know better than the Shell employees who designed,
2 conducted and implemented the study the purpose for
3 the study?

4 A. I'm not saying that I know better.

5 Q. Okay.

6 A. I'm saying, I can read, and I did have a
7 conversation with one of the members involved in that
8 assessment.

9 Q. Okay.

10 A. That corroborated my understanding of
11 what I read.

12 Q. All right. But for the reason why the
13 study was instituted, created and how it was
14 conducted, you would have to defer, would you not
15 ultimately, to the Shell employees who did that study;
16 correct?

17 MR. DILLARD: Objection. He's
18 already answered that. He read it.

19 THE WITNESS: No, I do not believe
20 I have to defer to that. If they tell me something
21 different, I will certainly consider that. But I have
22 not heard that in talking to one of the participants
23 in that assessment, that being Carolyn Phillips. She
24 basically corroborated what I read.

25 BY MS. CLANCY:

1 Q. Okay. If you are told something
2 different by a Shell employee who participated in and
3 conducted that study, then you would have to take that
4 into consideration in terms of formulating your
5 opinions with respect to that study; correct?

6 A. Certainly I would take into
7 consideration. It still doesn't take away from the
8 fact that there are so many issues within that
9 assessment in using it, that it's just hard for me to
10 see how it's going to change my overall opinion in the
11 use of the study as done by Mr. Petty.

12 Q. Have you read the deposition of Howard
13 Kusnetz in this case?

14 A. No.

15 Q. That was not provided to you by the
16 attorneys for Shell?

17 A. I do not believe so.

18 Q. With respect to your experience, after
19 you left NIOSH in 1982 and went to the Coast Guard --
20 actually, I can start even after that. After you left
21 the Coast Guard in 1987 and went to the corporation
22 industrial hygienist environmental coordinator at
23 United States Fidelity and Guarantee Company, is that
24 an insurance company, United States Fidelity?

25 A. Yes.

1 Q. In your time in working at United States
2 Fidelity and Guarantee Company, did you ever do
3 exposure assessments at petroleum refineries and
4 petrochemical companies for Benzene?

5 A. I know I did some work at chemical
6 companies. I cannot recall right now whether I did
7 any work at refineries. I don't believe that I did.

8 Q. And was it petrochemical companies that
9 you did work for when you were at the insurance
10 company?

11 A. I don't -- you know, I've been to so
12 many sites, I couldn't tell you specifically. I've
13 forgotten more places that I've been to than I
14 remember.

15 Q. Okay. But as you sit here today, you
16 don't recall specifically doing exposure assessments
17 for purposes of analyzing Benzene exposure at
18 petroleum refineries or petrochemical facilities while
19 working at United States Fidelity and Guarantee
20 company; is that correct?

21 A. As I sit here today. No.

22 Q. When you were working as a principal at
23 Draft-McCune-Walker in Towson, Maryland from 1988 to
24 1990, did you perform any exposure assessments for
25 Benzene at any petroleum refineries or petrochemical

1 companies?

2 A. Not at a petroleum company, no. I have
3 done work at other facilities and environmental
4 assessments for Benzene and total hydrocarbons.

5 Q. But not at a petroleum refineries or
6 petrochemical company?

7 A. Correct.

8 Q. And then when you --

9 A. Well, again, you're asking me to go back
10 and remember every place that I've been to, and I've
11 been to a number of refineries and chemical plants
12 throughout my career where I've done monitoring. And
13 I don't remember them all honestly, without going back
14 and looking. So you're asking me to go back and
15 recall ten years ago. I go to places every week. I
16 just don't remember them all.

17 Q. Okay. Well, I'm asking you specifically
18 as you sit here today, do you remember while you were
19 working as a principal at Daft-McCune and Walker doing
20 exposure assessments for Benzene at petroleum
21 refineries or petrochemical companies?

22 MR. BUTHOD: He's answered that.

23 MR. DILLARD: He just answered it.

24 THE WITNESS: And now, thinking
25 about this there was a marketing facility where I did

1 some work. It was environmental work, and we were
2 looking at contamination in a community assessment,
3 and onsite assessment for V-techs and total
4 hydrocarbons. I think that was at a -- it was a Crown
5 facility and an Exxon facility here in Maryland.

6 BY MS. CLANCY:

7 Q. And when were you doing that?

8 A. That was 19 -- the late 1980s.

9 Q. So that -- go ahead.

10 A. At eastern Baltimore.

11 Q. And you were looking at the impact
12 environmentally outside the refinery of the V-techs
13 unit on the community?

14 A. We were doing some work inside and
15 outside based on some -- there was some release, some
16 contamination issues. We were looking at that.

17 Q. And then when you were working at
18 National Advisory -- National Medical Advisory Service
19 as vice president and director of environmental
20 sciences, did that job entail you doing exposure
21 assessment for Benzene or petroleum refineries or
22 petrochemical facilities?

23 A. I cannot recall a specific incident.
24 But, again, I went to so many different places. I
25 can't give you an accurate answer without really -- I

1 just can't say right now.

2 Q. You can't say as you sit here today, you
3 cannot recall any time while you were at National
4 Medical Advisory Service that you did a historical
5 exposure assessment for Benzene at a petroleum
6 refineries or petrochemical facility?

7 A. Historical? I'm thinking more real time
8 sampling.

9 Q. Or real time?

10 A. I just can't say. It's likely that I
11 did, but I can't give you the specifics of that.

12 Q. Why do you have say it's likely that you
13 did?

14 A. Because I've just been involved in this
15 type of work and business throughout my career.

16 Q. Well, I'm asking specifically when you
17 were at the National Medical Advisory Service.

18 A. I cannot put everything, all of my
19 experiences and all the places I've been into the
20 chronological order you're looking for. So I can't
21 tell you specifically at that point in time.

22 I'd have to go back and, I don't know,
23 see if I can somehow pull all that together. You
24 know, I've been to refineries, I've been to chemical
25 plants on a number of occasions. I've done monitoring

1 for Benzene many times. But I can't tell you -- give
2 you these specific times and locations and facilities
3 throughout time.

4 Q. Well, what is National Medical Advisory
5 Service?

6 A. A consulting firm.

7 Q. And what do you consult on? What did
8 you consult on?

9 A. Health and safety and medical issues,
10 and environmental issues.

11 Q. And what area were you based in? Was it
12 primarily in the Maryland area that you did your work,
13 or was it nationwide?

14 A. No, all over the country.

15 Q. What would help draw your memory as to
16 whether or not you did actually do a Benzene exposure
17 assessment at a petroleum refineries or petrochemical
18 facility while working at National Medical Advisory
19 Service?

20 A. Good question. Going back and -- I
21 don't know if I even have any old files or talking to
22 people that I worked with over the years. That's what
23 I'd have to do to accurately answer that question.

24 Q. And as you sit here today, you don't
25 know the answer to that question; correct?

1 A. I know that I've been, like I said I've
2 monitored Benzene under a variety of conditions,
3 environmental conditions, workplace exposure,
4 conditions in chemical plants and refineries.

5 I've just been around the country, and
6 I've been into a number of places. Refineries in
7 California and Illinois and Texas, and Louisiana. I
8 suspect there's others, but I just don't recall them
9 all.

10 MS. CLANCY: Object as
11 non-responsive.

12 BY MS. CLANCY:

13 Q. My question is just specifically this:
14 Do you recall as you sit here today a specific
15 petrochemical or petroleum refinery facility as to
16 which you did a Benzene exposure assessment while you
17 were working at the National Medical Advisory Service?

18 A. I may have. I just can't tell you what
19 that is. I just don't recall the specifics of it
20 right now.

21 Q. When you were working at Equitable
22 Environmental Health in 1977 to 1980, did you do any
23 Benzene exposure assessment at petroleum refinery or
24 petrochemical facilities?

25 A. I do not recall having done that at that

1 time.

2 Q. Since you have started -- well, you have
3 your own company now; right?

4 A. Yes.

5 Q. And you started that in 1993?

6 A. Yes.

7 Q. Since you started your own company in
8 1993, how many Benzene exposure assessments have you
9 done at petroleum refineries or petrochemical
10 facilities outside of the course of litigation?

11 A. I'd just have to go back and look.
12 Perhaps half a dozen times.

13 Q. In what context or where, what
14 facilities have you done a Benzene exposure assessment
15 outside the course of litigation at a petroleum
16 refinery or petrochemical facility?

17 A. I'm happy to tell you the states. I'm
18 not going to tell you who it was for.

19 Q. Okay.

20 A. I was in Louisiana, California. I've
21 been in Texas, Pennsylvania. Those are the
22 locations. Did I say Texas?

23 Q. Yes.

24 A. I've probably been there a couple of
25 times.

1 Q. And so you would estimate that it's
2 about a half a dozen times that outside the course of
3 litigation that you've done a Benzene exposure
4 assessment at petroleum refineries or petrochemical
5 facilities since you've started your own company in
6 1993?

7 A. That I can recall, yes.

8 MS. CLANCY: I think that's all
9 the questions I have today. Thank you very much.

10 E X A M I N A T I O N

11 BY MR. DILLARD:

12 Q. Just a couple of quick questions,
13 Mr. Spencer. Do you recall some of the other, of the
14 more major mistakes that Mr. Petty made in his
15 exposure estimates in this case that you haven't
16 already told us about?

17 A. Well, there were other issues in
18 particular with Liquid Wrench, something that I did
19 not mention. It's as much an industrial hygiene or
20 toxicology issue, but that he really did not consider
21 that, in fact, toluene is in that product as well.

22 And I'm familiar with the literature
23 that describes toluene out competing the sites in the
24 human body where Benzene has metabolized to the
25 product that is considered a carcinogen.

1 I think I mentioned several others.

2 Q. How about with respect to the Shell
3 historic exposure estimate? You mentioned -- not the
4 year 1975. You're talking about the one estimate that
5 Mr. Petty selected, the '70 to '75 data?

6 MS. CLANCY: Objection. Leading.

7 THE WITNESS: Well, are we talking
8 about the aromatics hydrocarbon --

9 BY MR. DILLARD:

10 Q. Well, that would be part of it.

11 A. -- unit? And using -- well, I think I
12 mentioned before about extracting data from the 1970
13 to '75 period, when certainly within that -- following
14 that time period, there were changes made within most
15 chemical plants or refineries, due to both
16 environmental regulations, and because of growing
17 concerns for changes in the knowledge surrounding
18 Benzene.

19 MR. DILLARD: Thank you. That's
20 all I've got right now.

21 E X A M I N A T I O N

22 BY MR. MAHER:

23 Q. I have a few questions, Mr. Spencer. I
24 am -- strike that.

25 Based upon your experience in this

1 business, do you associate the existence of a coker
2 unit with a petroleum refining facility or a chemical
3 manufacturing facility?

4 A. A petroleum refinery facility where
5 there is crude oil as a feedstock.

6 Q. You have visited Union Carbide's
7 facility at Texas City?

8 A. Yes.

9 Q. You have had conversations with Dave
10 Hake, who is employed at Union Carbide's Texas City
11 facility?

12 A. I did. He took me around that day.

13 Q. And have you reviewed documents that
14 have been provided to you by Union Carbide in this
15 case and others?

16 A. Yes, I have.

17 Q. When you were out at Union Carbide in
18 January, did you see a coker unit at Union Carbide's
19 facility in Texas City?

20 A. Honestly, I was not looking for a coker
21 unit. But I would not anticipated seeing one, given
22 the types of feedstock that was at that Union Carbide
23 facility.

24 Q. Based upon your conversations with
25 Mr. Hake and your review of the documents that have

1 been provided to you by Union Carbide, have you seen
2 any indication that Union Carbide has now or ever has
3 had a coker unit or any facility for refining
4 petroleum?

5 A. I have not seen information indicating
6 that. And again, given the type of facility that
7 Union Carbide was operating, I would not anticipate
8 there would have been a Coker unit present.

9 MR. MAHER: Thank you very much.

10 Mr. AUBREY: I'll reserve my
11 questions until the time of trial.

12 MR. BUTHOD: I'll reserve my
13 questions, too.

14 E X A M I N A T I O N

15 BY MS. CLANCY:

16 Q. I have a clarification question. Tell
17 me what -- list for me every single change that
18 happened in 1975 that you were just referencing in
19 response to Mr. Dillard's questions.

20 A. Some of things that occurred would have
21 occurred during that time. And I certainly won't
22 pretend to list every one of them, but there were
23 environmental regulations which were changing, coming
24 into place for reduction of fugitive emissions.

25 There was certainly a growing awareness

1 of the, and I can't remember specifically when, the
2 occupational health standards or the TLVs at the time
3 prior to OSHA, just prior to 1970, were changing --
4 had recently changed. So companies were working to
5 further manage and reduce the levels of exposure.

6 And I think the point is that Mr. Petty
7 applied this data to throughout the rest of time.
8 From the latter part of the 1970s into the 1980s and
9 the 1990s. He even applied it to periods of time
10 following, as I understood it when the plaintiffs were
11 diagnosed with their disease.

12 So he was assigning an exposure to them,
13 and indicating this exposure contributed to a disease
14 post the time that they had been diagnosed with
15 disease.

16 So getting back to my original point was
17 that things were changing. In 1976, '77 emergency
18 temporary standard came about, and the industry was
19 making many changes. I can't detail them all for you,
20 but changes in their procedures and programs to
21 further reduce. Requiring more protective equipment
22 where they didn't require it before, because the
23 emergency temporary standard was going from ten to
24 one.

25 Q. So you're saying that there was a sea

1 change -- are you saying that there was some sort of
2 sea change that happened in 1975 that people went from
3 being not as safe to much safer after 1975?

4 A. No. I'm not saying -- you said a sea
5 change?

6 Q. Uh-huh.

7 A. I'm not sure what that means.

8 Q. Have you ever read Mid Summer Night's
9 Dream?

10 MR. BUTHOD: I'm going to miss my
11 flight.

12 THE WITNESS: No, I have not.

13 BY MS. CLANCY:

14 Q. So you're saying there was something
15 major that happened in 1975 where companies went from
16 being prior to 1975 not so safe to much safer after
17 1975?

18 A. My understanding, my discussions with
19 Ms. Phillips is they made that cut off because
20 internally they felt there were changes that had
21 occurred within the organization in recognition of
22 the -- of both environmental and health and safety
23 changes that were either had taken effect or were
24 coming into effect. So that earlier data, '70, '75 as
25 earlier estimates were, in fact, going to be higher

1 than actual data from post '75. That was what she
2 conveyed to me.

3 Q. Are you referring to the 1975 emergency
4 temporary Benzene standards?

5 A. That's one of the driving forces, yes.

6 Q. And is it your opinion that Shell
7 adopted the one part per million proposed by the
8 emergency temporary standard as an internal standard?

9 A. Yes. Again, that's a discussion we had
10 earlier, and I'd have to go back and look at the
11 documents to give you an accurate answer. In general,
12 that's my understanding, but I have to go back and
13 look at the documents to be accurate.

14 Q. So in general it's your understanding
15 that Shell -- well, from your conversations with
16 Ms. Phillips that Shell became safer after 1975
17 because it did things such as adopt an internal
18 standard like one part per million as proposed by the
19 emergency temporary regs?

20 MR. BUTHOD: Form.

21 THE WITNESS: I don't know if I'd use
22 the word "safer." I mean, they took measures to
23 further reduce exposures.

24 BY MS. CLANCY:

25 Q. Such as adopt the one part per million

1 standard propounded by the emergency temporary Benzene
2 regs; is that correct?

3 MR. BUTHOD: Form.

4 THE WITNESS: It's my
5 understanding, yes.

6 MS. CLANCY: we have to change
7 tapes.

8 VIDEOGRAPHER: This is the end of
9 tape Number 4 in the deposition of John Spencer. The
10 time on the screen is 16:44:11. We're going to go off
11 the record.

12 (WHEREUPON A RECESS WAS TAKEN.)

13 VIDEOGRAPHER: This marks the
14 beginning of tape Number 5 in the deposition of John
15 Spencer. The time on the screen is 16:43:56. We're
16 back on the record.

17 BY MS. CLANCY:

18 Q. Mr. Spencer, you've never published an
19 article in a peer review journal with respect to
20 Benzene exposure assessments; is that correct?

21 A. That's not correct.

22 Q. Other than the one that you did on the
23 May 2006 article that you published on Liquid Wrench?

24 A. Correct -- well, no, it's not Liquid
25 Wrench. There were other products, not Liquid Wrench.

1 Q. Have you ever published an article in a
2 peer review journal on Benzene exposure assessment at
3 a refinery or petrochemical facility?

4 A. No.

5 Q. Have you ever published an article in a
6 peer review journal with respect to toxicological
7 studies?

8 A. No.

9 Q. Have you ever performed toxicological
10 studies of Benzene?

11 A. No.

12 Q. Have you ever evaluated a cohort group
13 for purposes of doing an epidemiological study in
14 terms of analyzing what groups should -- what groups
15 should be in the cohort group based on their Benzene
16 exposure?

17 A. Yes.

18 Q. When was that? Based on their benzene
19 exposure.

20 A. Several years ago.

21 Q. Who did you do that for?

22 A. I'm not at liberty to say. It was an
23 individual study.

24 Q. Is it published?

25 A. No.

1 Q. So it was a study that was never
2 published in any peer review journal; is that correct?

3 A. Correct.

4 Q. Is it your opinion that contract workers
5 at refineries do not have any greater risk for over
6 exposure to Benzene than employees at refineries?

7 MR. BUTHOD: Object to form. This
8 is way beyond anybody's direct examination, Denyse.
9 You're just starting over. Steve asked a limited
10 topic. Jim asked a limited topic. This doesn't have
11 anything to do with that.

12 MS. CLANCY: This is my deposition
13 I'm allowed to ask whatever I want.

14 MR. MAHER: You took a break and
15 then said you were done, and now you're starting over
16 again.

17 BY MS. CLANCY:

18 Q. I'm keeping going. Answer the question.

19 A. I don't know -- it doesn't matter
20 whether they're contract employees or facility
21 employees. You need to look at the task and look at
22 the activity. You need to look at the environment in
23 which they're doing the work. You need to look at the
24 process stream, and the products that they're being
25 exposed to. And that is what gives you your answer.

1 Q. And at Shell in the 1970s, are you aware
2 of any situations where contractors had greater risk
3 of exposure to Benzene than employees?

4 MR. MAHER: Form.

5 THE WITNESS: You mean risk by a
6 mathematical calculation? Is that how you define
7 risk?

8 BY MS. CLANCY

9 Q. Risk by means of exposure to greater
10 parts per million of Benzene than employees.

11 A. I don't know about at Shell, because I
12 certainly didn't see it in this case with
13 Mr. Wilkinson and Mr. Stubbs. I saw that theirs would
14 have been less than generally the workers within the
15 Shell facility.

16 But I am aware that there are certain
17 activities, such as mucking tanks that previously
18 contained Benzene, that that would present a higher
19 exposure and a higher risk as a result. And
20 oftentimes contractors were assigned that task.

21 But that's not something that
22 Mr. Wilkinson or Mr. Stubbs ever identified doing.

23 Q. And at Exxon, are you aware of any
24 instances where contractors were quantified as having
25 a greater risk of exposure to Benzene than employees?

1 MR. BUTHOD: Form.

2 THE WITNESS: Which are you
3 talking about the refinery or the chemical plant?
4 BY MS. CLANCY:

5 Q. I'm talking about Exxon Baytown, the
6 refinery and the chemical plant.

7 A. Well, there is a table in Mr. Petty's
8 report, and again, I don't think he recognized the
9 difference that it was the Baytown chemical plant,
10 there's data that had showed contractors with some
11 higher exposures than some of the other groups of
12 employees.

13 But again, there is information.
14 There's not differentiation as to the activities, as
15 to the product of process, and there is no indication
16 as to whether these individuals were wearing
17 respiratory protective equipment as described by
18 Mr. Wilkinson in his own testimony.

19 Q. When you say no differentiation as to
20 activities or products of processes, are you talking
21 about the Exxon document, or are you talking about
22 Mr. Petty's report?

23 A. Both. In particular, Mr. Petty's report
24 and that particular table that I saw from his report.
25 I did not see a differentiation made in that table or

1 in his report.

2 MS. CLANCY: That's all the
3 questions I have.

4 (DOCUMENT MARKED PLAINTIFF, SPENCER
5 DEPOSITION, EXH. 19, FOR IDENTIFICATION.)

6 MR. BUTHOD: Thank you.

7 VIDEOGRAPHER: This ends the
8 deposition of John Spencer, concluded on May 12,
9 2006. The time on the screen is 16:52:05. We're
10 going off the record.

11 (WHEREUPON, SIGNATURE OF THE WITNESS NOT
12 HAVING BEEN WAIVED, THIS DEPOSITION WAS CONCLUDED.)
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CERTIFICATE OF SHORTHAND REPORTER-NOTARY PUBLIC

I, Texas S. Eckstone, Registered Merit Reporter/Notary Public, the officer before whom the foregoing deposition was taken, do hereby certify that the witness was by me duly sworn; that the testimony of said witness was taken by me stenographically and thereafter reduced to typewriting under my supervision; that said transcript is a true record of the testimony given; that I am neither counsel for, related to, nor employed by any of the parties to this case and have no interest, financial or otherwise, in its outcome.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal this 14TH day of MAY 2006.

My Commission Expires:
JULY 1, 2008

Texas S. Eckstone, RMR
Notary Public in and for
THE STATE OF MARYLAND

INSTRUCTIONS TO THE WITNESS

1
2 Read your deposition over carefully. It is
3 your right to read your deposition and make any
4 changes in form or substance. You should assign a
5 reason in the appropriate column on the errata sheet
6 for any change made. After making any change in form
7 or substance which has been noted on the following
8 errata sheet along with the reason for any change,
9 sign your name on the errata sheet and date it. Then
sign your deposition at the end of your testimony in
the space provided. You are signing it subject to the
changes you have made in the errata sheet, which will
be attached to the deposition before filing. You must
sign in the space provided. The witness need not be a
notary public. Any competent adult may witness your
signature.

10 Return the original errata sheet and
11 transcript to the deposing attorney (attorney asking
questions) promptly! Court rules require filing
within 30 days after you receive the deposition.

Thank you

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ERRATA SHEET

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DATE:

DEPONENT SIGNATURE

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3 SIGNATURE PAGE

4 OF

5 JOHN SPENCER

6 I hereby acknowledge that I have read the
7 foregoing deposition and that the same is a true
8 and correct transcription of the answers given by
9 me to the questions propounded, except for the
10 changes, if any, noted on the attached errata
11 sheet.
12

13 SIGNATURE:
14
15 _____

16 WITNESSED BY:
17
18 _____

19 DATE: _____
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