

# Exhibit 20

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF NORTH CAROLINA  
SOUTHERN DIVISION  
No. 7:23-CV-00897

IN RE:

CAMP LEJEUNE WATER LITIGATION

This Document Relates to:

ALL CASES

VOLUME II

VIDEO-RECORDED EXPERT DEPOSITION OF  
REMY J.-C. HENNET, PhD

Wednesday, June 4, 2025

9:19 AM Eastern Time

Reported by: Denise Dobner Vickery, CRR, RMR  
Job No. MDLG7371943

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Wednesday, June 4, 2025  
9:19 AM Eastern Time

Video-Recorded Expert Deposition of  
REMY J.-C. HENNET, PhD, Volume II, held at the  
offices of:

MOTLEY RICE LLC  
401 9th Street NW  
Suite 1001  
Washington, DC 20004

Pursuant to notice, before Denise  
Dobner Vickery, Certified Realtime Reporter,  
Registered Merit Reporter, and Notary Public in  
and for the District of Columbia.

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P R O C E E D I N G S

- - -

THE VIDEOGRAPHER: We are now  
on the record.

My name is Deshawn White. I'm  
a videographer for Golkow, a Veritext  
division. Today's date is June 4, 2025  
and the time is 9:19 AM.

This video is being held at  
401 9th Street, Northwest, Washington, DC  
in the matter of Camp Lejeune Water  
Litigation versus United States of  
America for the United States District  
Court for the Eastern District of -- is  
it North Carolina?

MS. BAUGHMAN: Yes.

THE VIDEOGRAPHER: Thank you.

The deponent is Remy  
Jean-Claude Hennet.

The court reporter is Denise  
Vickery.

Will counsel please identify  
themselves, followed by the court  
reporter administering the oath.

1 MS. BAUGHMAN: Laura Baughman  
2 for the plaintiffs.

3 MS. O'LEARY: Allison O'Leary  
4 for the Department of Justice.

5 MS. HORAN: Alanna Horan here  
6 on behalf of the United States.

7 - - -

8 REMY J.-C. HENNET, PhD  
9 recalled for examination, and, after having been  
10 duly sworn, was examined and testified further as  
11 follows:

12 - - -

13 FURTHER EXAMINATION

14 - - -

15 BY MS. BAUGHMAN:

16 Q. Can you please state your name for  
17 the record?

18 A. My name is Remy Jean-Claude Hennet.

19 Q. Dr. Hennet, my name is Laura  
20 Baughman. I'm an attorney, and I represent the  
21 plaintiffs in the Camp Lejeune litigation.

22 You understand that?

23 A. Yes, I do.

24 Q. Okay. And you understand that

1     you're here today testifying under oath just as if  
2     you're in court in front of the judges?

3             A.         Yes, I do.

4             Q.         Okay. If you don't understand any  
5     question I ask you, will you please let me know?

6             A.         I will.

7             Q.         Otherwise, if you answer a question,  
8     I'm going to assume that you understood it.

9                         Is that fair?

10            A.         I suppose, yes.

11            Q.         Okay. Is there any reason you  
12     cannot testify truthfully here today? Like are  
13     you on any medications or having any -- any health  
14     or other issues?

15            A.         No.

16            Q.         Okay. Great.

17                         I want to start with your history in  
18     working on Camp Lejeune-related matters.

19                         So is it correct that you first  
20     started working on anything related to Camp  
21     Lejeune in 2005?

22            A.         Approximately, yes.

23                                 MS. BAUGHMAN: Okay. And just  
24     for context, I'm going to mark an e-mail

1           that was sent to us by one of the  
2           attorneys at the Department of Justice.  
3           I just have a quick question about that.  
4           Okay?

5                               (Document marked for  
6           identification as Exhibit 30.)

7   BY MS. BAUGHMAN:

8           Q.           So this is an e-mail from Joshua  
9           Carpentito -- I may -- Carpenito, I guess, from  
10          May 1, 2025 sent to me and other counsel  
11          representing the plaintiffs, and he indicated  
12          that:

13                       "The United States has confirmed  
14          through internal documentation that Dr. Remy  
15          Hennet was retained by the Department of Justice  
16          as of February 25, 2005 in Gros -- that's  
17          G-r-o-s -- versus United States" and it goes on  
18          from there, and that was "an action under the  
19          Federal Tort Claims Act claiming personal injury  
20          as a result of exposure to contaminated water at  
21          Camp Lejeune."

22                       MS. O'LEARY:   And I'm sorry to  
23          interrupt.   What is the exhibit number  
24          for this?   It might be marked on there,

1 but I didn't hear it.

2 MS. BAUGHMAN: It's Exhibit  
3 30.

4 MS. O'LEARY: 30. Thank you.

5 MS. BAUGHMAN: Okay.

6 BY MS. BAUGHMAN:

7 Q. So, Dr. Hennet, does that -- is that  
8 correct? Is that consistent with your  
9 recollection that you were retained on  
10 February 25, 2005 in the Gros case?

11 MS. O'LEARY: Object to  
12 foundation.

13 THE WITNESS: I don't recall  
14 the details of it, but I was retained by  
15 the DOJ in 2005. That's what I recall.

16 BY MS. BAUGHMAN:

17 Q. To work on personal injury -- a  
18 personal injury case related to Camp Lejeune?

19 A. Yes. I was retained as -- as an  
20 expert --

21 Q. Yes.

22 A. -- as to basically do some work on  
23 the contamination in the water supply.

24 Q. Okay. Do you know how many



1 different litigation cases you've been retained on  
2 by the Department of Justice related to Camp  
3 Lejeune?

4 A. Yes, there were more than one, but I  
5 don't know exactly.

6 Q. Okay. Other -- before we started  
7 the deposition, I handed you a copy of the  
8 deposition that was taken of you on March 20, 2005  
9 (sic) in the Camp Lejeune Water Litigation, the  
10 same litigation we're here today for.

11 You understand that?

12 A. I do.

13 Q. Okay. Other than the March 20, 2005  
14 (sic) deposition, have you ever testified under  
15 oath regarding Camp Lejeune before?

16 MS. O'LEARY: Object to  
17 foundation.

18 THE WITNESS: I do not  
19 recall. I would have to look at my CV  
20 for that because all the cases that were  
21 either deposition or trial testimony are  
22 listed in my CV. All of them in my -- in  
23 my full CV.

24 BY MS. BAUGHMAN:

1 Q. Not in the CV that was produced here  
2 today; correct?

3 A. I don't know.

4 MS. BAUGHMAN: Well, let's  
5 look at that then.

6 I'm marking as Exhibit 31 your  
7 December 9, 2004 report that you produced  
8 in this case.

9 (Document marked for  
10 identification as Exhibit 31.)

11 BY MS. BAUGHMAN:

12 Q. And there is an exhibit to your  
13 report that has your CV, and take a look at that  
14 and let me know if you've ever testified before  
15 regarding Camp Lejeune other than on March 20,  
16 2025.

17 A. I have to find it in this document.

18 Q. Yeah.

19 A. (Reviews document.)

20 Q. It's Attachment A. There you go.

21 A. I just found it. Okay.

22 Q. So fifth page of the Attachment A  
23 provides deposition experience, but it's only 2020  
24 to present, and my question is not limited to

1     that.

2                   I'm asking: Have you ever testified  
3     regarding Camp Lejeune?

4           A.       Again, you know, my full CV, I  
5     guess, is accessible on the webpage of my company,  
6     and here for this report I was -- I was asked or  
7     directed to basically provide information as far  
8     as my testimonies were concerned for the last four  
9     or five years. That's what I -- that's what I  
10    recall.

11          Q.       Okay. So based on your memory,  
12    you're saying you don't know whether you've ever  
13    testified under oath before March 20, 2025  
14    regarding Camp Lejeune; is that correct? You  
15    don't remember?

16          A.       Well, I know I did some reports. I  
17    did some declarations and I, you know, it has been  
18    20 years span that we are talking about. And my  
19    memory, I do not have an answer for you that will  
20    be detailed, no.

21          Q.       But if I go online on your company's  
22    website, that lists -- that provides the full list  
23    of your prior testimony and that will give me the  
24    answer.

1 Is that what you're saying?

2 A. That's what I am saying.

3 Q. Okay. Thank you.

4 Has all of your work related to Camp  
5 Lejeune been on behalf of the Department of  
6 Justice?

7 A. Yes.

8 Q. And has all of your work related to  
9 Camp Lejeune been related to litigation matters?

10 A. I believe so, but I am -- it could  
11 have been that I may have been asked to do some  
12 consulting at some point. I -- but, by and large,  
13 it was always related to some type of litigation.

14 Q. Wait. Who asked you to do  
15 non-litigation consulting related to Camp Lejeune?

16 MS. O'LEARY: Object to  
17 foundation.

18 THE WITNESS: I don't know if  
19 I ever did that and I don't know. I  
20 wouldn't know who ask me to do anything  
21 like this. But we're talking about 20  
22 years and, you know, I am a consultant.  
23 So sometimes I am asked questions about  
24 being retained as an expert.

1 BY MS. BAUGHMAN:

2 Q. Okay. As your -- based on your best  
3 recollection today, can you identify any  
4 non-litigation work you've ever done related to  
5 Camp Lejeune?

6 A. Right here I cannot identify any --

7 Q. Okay.

8 A. -- at this today.

9 MS. BAUGHMAN: I'm going to  
10 hand you what I've marked as Exhibit 32  
11 to your deposition.

12 (Document marked for  
13 identification as Exhibit 32.)

14 BY MS. BAUGHMAN:

15 Q. Here you go.

16 A. Thank you.

17 Q. And Exhibit 32 is Bates-stamped  
18 CLJA\_UST02-0000522322 through 323. It's an e-mail  
19 chain.

20 I'm going to direct your attention  
21 to the e-mail in the first page at the bottom half  
22 of the page from you to Adam Bain, subject  
23 "Building 902."

24 Do you see that?

1           A.           Yes, I do.

2           Q.           Okay. And this e-mail you're  
3 writing to Mr. Bain and you're recommending -- you  
4 see in that second paragraph -- "that 4 boreholes  
5 be constructed to establish the groundwater flow  
6 direction in the area of building 902."

7                       Do you see that?

8                       MS. O'LEARY: Object to form  
9 and foundation.

10                      THE WITNESS: I see that.

11 BY MS. BAUGHMAN:

12           Q.           Okay. And in the fourth paragraph  
13 of that e-mail you say:

14                       "In the new borings, groundwater  
15 samples should be collected at the water table and  
16 deeper at 20-foot depth increments and analyzed  
17 for TCE and PCE."

18                       Do you say that? You see that?

19           A.           I see that.

20           Q.           And then in the next paragraph you  
21 say:

22                       "Soil samples should be collected in  
23 one borehole at depths of about 20, 40, and 80  
24 feet and analyzed for their fraction organic

1 carbon."

2 You see that?

3 A. I see that.

4 MS. O'LEARY: Object to  
5 foundation.

6 BY MS. BAUGHMAN:

7 Q. Okay. Why were you making these  
8 recommendations regarding boreholes, groundwater  
9 samples, and soil samples in September of 2006?

10 A. Well, I -- my recollection is at the  
11 time I was trying to understand where the  
12 contamination was coming from to some water supply  
13 ways that were contaminated. That's -- that's a  
14 reason why I was doing this. That was part of the  
15 first phase of things that I did after having been  
16 retained by the DOJ.

17 Q. So this -- so this was -- the  
18 request for the drilling of the boreholes and the  
19 groundwater samples and the soil samples was done  
20 in connection with litigation that the DOJ hired  
21 you to work on; is that correct?

22 A. Well, my recollection is, is that I  
23 was just trying to understand the sources.

24 Q. For what purpose?

1           A.           For the purpose of why was it  
2           contamination in the water supply.

3           Q.           But why?

4           A.           In certain -- in certain specific  
5           wells, and if I recall for this, that was I think  
6           the wells were 60 -- 600 series of wells that are  
7           along there.

8           Q.           In the Hadnot Point area?

9           A.           In the Hadnot Point area.

10          Q.           Okay. But I guess you were hired to  
11          do this work by someone; right? I mean, you  
12          weren't doing it for your own edification?

13          A.           I think that was part of what I was  
14          hired for in -- in -- for the Camp Lejeune issue.  
15          I think at the beginning, there was some unknown  
16          as far as certain wells had contamination, and in  
17          order to understand that, I wanted to understand  
18          where it come from.

19          Q.           So --

20          A.           Where it came from. Sorry.

21          Q.           Right.

22                        So you're e-mailing Mr. Bain.

23                        You're clearly doing this work for  
24          the Department of Justice; correct?



1 A. Yeah, yeah, yeah. Yes.

2 Q. Okay. For the litigation?

3 A. That's my understanding, yeah.

4 Q. Well, for example, did you do any  
5 work to help remediate the Camp Lejeune site?

6 A. No, I did not do remediation work.

7 Q. Okay.

8 A. But the information that I  
9 recommended be acquired, I suppose, was relevant  
10 to what I did, but it might have been relevant to  
11 what other people did who might have been  
12 basically involved in the remediation work.

13 Q. But that wasn't your purpose in  
14 doing this?

15 A. No.

16 MS. BAUGHMAN: Okay. So I'm  
17 handing you what's marked as Exhibit 33  
18 to your deposition.

19 (Document marked for  
20 identification as Exhibit 33.)

21 BY MS. BAUGHMAN:

22 Q. And Exhibit 33 is Bates-stamped  
23 CLJA\_UST02-0000523534, and this is just a  
24 one-paragraph e-mail from Scott Williams to Robert

1 Lowder on June 8, 2007, and it says "Bob" -- this  
2 is from Scott.

3 "Bob, I just spoke with Remy Hennet.  
4 He formed me that he has the data he needs."

5 And if you go down toward the bottom  
6 of the e-mail, the second to last line it says:

7 "As far as Remy is concerned it is  
8 the CERCLA teams call. He has what he needs."

9 Do you know what -- what you needed  
10 at that time? Do you remember this?

11 A. Vaguely, but if I recollect what I  
12 needed was understanding the direction of  
13 groundwater flow around well 600 series, and --  
14 and I also wanted to have basically measurements  
15 of the fraction organic carbon in the groundwater  
16 environment. And that's what I recall that's what  
17 I needed.

18 Q. Okay. Do you remember, did you ever  
19 request any other testing be done at Camp Lejeune  
20 other than the e-mails I've just shown you?

21 A. No. The exception would be recently  
22 I had -- before my expert report, I had asked via  
23 counsel for the -- the water treatment personnel  
24 to measure something in there related to a

1 spiractor --

2 Q. Okay.

3 A. -- effluent pipe.

4 Q. Yes. We're definitely going to talk  
5 about that.

6 So other than the requests that are  
7 documented in Exhibits 32 and 33 that we just  
8 talked about and your request for a measurement of  
9 the spiractor pipe at the water treatment plant,  
10 have you ever requested any other testing be done  
11 at Camp Lejeune?

12 A. I don't recollect any.

13 Q. Okay. So in your last deposition,  
14 you testified that you had been to Camp Lejeune  
15 three times.

16 Is that consistent -- no, that's not  
17 right.

18 Three times in this case; is that  
19 correct?

20 A. That's what I recall, yes.

21 Q. Okay. Do you know how many other  
22 times you've been to Camp Lejeune other than for  
23 the purpose of this case?

24 A. I do not recall exactly, but there

1 were instances where I went to do site visit at  
2 Camp Lejeune, yes, and probably early on as that's  
3 what I recall.

4 Q. Okay. Each time you went, that  
5 would have been for purposes of litigation matters  
6 for the DOJ; right?

7 A. Yes.

8 MS. BAUGHMAN: Okay. Okay.  
9 I'm handing you what we've marked as  
10 Exhibit 34 to your deposition.

11 (Document marked for  
12 identification as Exhibit 34.)

13 MS. BAUGHMAN: And this is the  
14 Supplemental and Corrected Reliance List  
15 that was provided to us by DOJ in  
16 February of 2025.

17 Let me also -- I already --  
18 what's the exhibit number for the report?  
19 Can you remind me? Is that 30?

20 THE WITNESS: For the report?  
21 Excuse me.

22 MS. O'LEARY: 31.

23 THE WITNESS: 31, right.

24 MS. BAUGHMAN: Thank you.

1 BY MS. BAUGHMAN:

2 Q. All right. Does the Supplemental  
3 and Corrected Reliance List list all of the  
4 documents that you reviewed and you're relying on  
5 for your opinions in this case?

6 A. Well, I have access to the full set  
7 of documents via, you know, a portal, I guess, but  
8 those are the ones that, I suppose.

9 Q. Okay. What do you mean by the full  
10 set of documents in the portal? What are you  
11 referring to there?

12 A. Well, I am referring to, I guess,  
13 those -- those documents which the ones cited in  
14 my report, and I had access to the -- to all the  
15 documents and that's what I recall. Specific  
16 documents, I don't by memory remember exactly what  
17 those documents would have been without seeing  
18 them, you know.

19 Q. All right. So you understand that  
20 the federal rules require you to provide a list  
21 with your report of the documents that you've  
22 reviewed and that you're relying on for your  
23 opinions in this case, and counsel has provided us  
24 with this Supplemental and Corrected Reliance

1 List.

2 And I'm trying to figure out if  
3 there are any other documents that you plan to  
4 rely upon for your opinions in this case that are  
5 not listed on Exhibit 34.

6 Are you aware of any?

7 A. I am not aware of any that would be  
8 specific to -- to Camp Lejeune. You know, I have  
9 books that I use, and if a question comes, I may  
10 just, you know, that's basically based on all my  
11 knowledge, experience, education.

12 Q. Okay. As you sit here today, can  
13 you identify any document, book, anything that you  
14 are relying on for your opinions in this case --

15 A. No.

16 Q. -- that's not listed in Exhibit 34?

17 A. Not to my knowledge.

18 Q. Okay. So you've provided two errata  
19 sheets, like corrections, to your report as part  
20 of this litigation. Most of it was like  
21 corrections to citations to documents.

22 Other than what was contained on  
23 those errata sheets, have you identified any other  
24 changes that you wish to make to your expert

1 report, Exhibit 31?

2 A. No, I have not. It may be some  
3 spelling mistakes or "I" for "they," you know,  
4 because of my French accent sometimes when I say  
5 "they."

6 Q. Okay. Let's talk about substantive,  
7 substantive changes, not -- not grammatical or  
8 spelling issues.

9 Can you identify any substantive  
10 change that you would like to make to your report,  
11 Exhibit 31?

12 A. I have no substantive changes to be  
13 made.

14 Q. Okay.

15 A. With the exception of, you can have  
16 some confusion between an "I" and a "they" as far  
17 as the meaning of the sentence. Right?

18 Q. Okay. I want to go back to ask you  
19 a few questions about your CV.

20 So that again Exhibit --

21 A. 31.

22 Q. -- 31 is your report and your CV is  
23 attached as Attachment A.

24 And, actually, I was going to ask

1 you if exhibit -- the CV that's attached as  
2 Attachment A to your report is a true and correct  
3 copy of your current CV, but it's not; right?

4 Your current CV is actually what's  
5 on your website; is that fair?

6 A. Well, this is with the last four  
7 years of testimony or trial appearances; whereas,  
8 my CVs that you can find on our website may have  
9 something, everything I ever done as a  
10 professional for deposition or trial appearances  
11 and, you know, it doesn't stop at 2020 in that  
12 case.

13 Q. Okay. With the exception of the  
14 list of your prior testimony, is this the CV  
15 attached as Attachment A to your report a true and  
16 correct copy of your current CV?

17 A. I believe so.

18 Q. Okay. On the first page in the  
19 first paragraph at the top, there is a sentence  
20 that says:

21 "Dr. Hennet is often retained as an  
22 expert witness for litigation in providing  
23 services to industry, law firms, and the U.S.  
24 Department of Justice."



1 Do you see that?

2 A. I do.

3 Q. Okay. And that's true; right?

4 A. That is true.

5 Q. Can you tell me, like, over the past  
6 year, let's say, what percentage of time you  
7 worked on litigation matters as opposed to other  
8 work?

9 A. Well, roughly, over the past year  
10 especially I have done more litigation-related  
11 work than I did over my career. Right?

12 Q. Okay. So I'm going to break it down  
13 in different time frames. I'll first just ask for  
14 the last year and then we'll go backwards. Okay?

15 So over the last year, can you  
16 estimate is your work 50 percent litigation or --  
17 or more or less? What can you tell me?

18 A. Well, 50 percent is a good guess.

19 Q. Okay.

20 A. Right.

21 Q. And then let's say last five years.

22 Over the last five years, what  
23 percentage of your time would be litigation  
24 related?

1           A.           It would be a little bit less than  
2           presently.

3           Q.           So maybe 40 percent? 30 percent?

4           A.           That's a good guess as well.

5           Q.           Okay. Have you ever been retained  
6           by a plaintiff or a group of plaintiffs who were  
7           injured or claimed they had been injured from  
8           exposure to toxic substances to be an expert in  
9           that kind of a case?

10          A.           That could have been. You know, I  
11          have done work for all kind of -- all kind of  
12          parties, if you wish, that included, you know,  
13          Sierra Club. For example, I have worked for the  
14          Sierra Club. River Keepers I guess I did some  
15          work for this type of group. I have done industry  
16          work.

17                       And as far as having a role as an  
18          expert within potential on the plaintiff side, I  
19          think there was some. One case come up to mind  
20          for me is St. Croix in the U.S. Virgin Islands. I  
21          did some work there for evaluating contamination  
22          at the refinery, former refinery.

23          Q.           So I read something about that.

24                       In that case, you were hired by the

1 government, right, of St. Croix?

2 A. A law firm and I think the law firm  
3 was actually representing the government of  
4 St. Croix.

5 Q. Right.

6 A. That's -- that's what I recall.

7 Q. So -- so can you recall ever working  
8 on a case where you were retained by lawyers who  
9 were representing people who claimed they had been  
10 injured because they were exposed to contaminants  
11 in the environment?

12 A. Yeah, I understand your question and  
13 I, you know, I have been retained maybe in several  
14 dozen cases that and probably -- and the cases I'm  
15 talking about went to either deposition or trial  
16 appearances. But there are also many other cases  
17 where I was retained that never went to deposition  
18 or, you know, they settled, those things, like  
19 those things.

20 And my goal of this, specifically  
21 right now, I cannot give you one specifically  
22 right now, but I believe there might have been  
23 some.

24 Q. But you can't identify -- just let

1 me finish the question.

2 As you sit here today, you can't  
3 identify a case where a lawyer representing  
4 someone injured from exposure to a toxic substance  
5 hired you as an expert; is that fair?

6 A. Right now I cannot --

7 Q. Okay.

8 A. -- give you a case.

9 Q. Okay. Would it also be fair to say  
10 that the majority of your litigation work has been  
11 either on behalf of industry or the government?

12 A. Well, as far as a number of cases  
13 are concerned, I have worked for plaintiffs and  
14 defendants. I have worked for the government, but  
15 I have also worked for utilities. I have, you  
16 know, and I have worked for organizations, as I  
17 mentioned before.

18 And if you -- if you were to count  
19 the number of cases for plaintiffs, number of  
20 cases for non-plaintiffs, I mean, maybe a third  
21 for plaintiffs and the rest for non-plaintiffs.

22 Q. Right.

23 A. But some -- some of the plaintiffs  
24 work may be a bit shorter sometimes.

1           Q.           But some of the plaintiffs you  
2           worked for were industry; right? Sometimes it's  
3           one company suing another company?

4           A.           No, no, no. You have some of that,  
5           but you have some which are basically  
6           associations, for example, having issues with  
7           sewer systems or -- or, you know, I did work for  
8           the Hudson River organization. So you have some  
9           of those and those are -- I would put them in the  
10          bucket of plaintiffs.

11          Q.           Okay. But the majority of your work  
12          has been on behalf of industry or the government  
13          that's litigation related; right? More than half?

14          A.           If you -- if you sum government plus  
15          industry, it may be little bit more than half.

16          Q.           Okay. I'm going to ask you about  
17          your areas of expertise.

18                       On your CV on the right-hand side  
19          like the blue portion, it gives example areas of  
20          expertise.

21                       Do you see that?

22          A.           Example? Yes, I see that.

23          Q.           Okay. And in addition, like in that  
24          first paragraph, you wrote:

1                   "His areas of expertise include" and  
2     it says "the analysis of geochemical fingerprints  
3     for organic and inorganic compounds including  
4     radionuclides and stable isotopes, the evaluation  
5     of the timing of chemical releases, the allocation  
6     of responsibilities for cost allocation, and  
7     geochemical modeling."

8                   Do you see that?

9           A.       You're talking about the first  
10   paragraph of the CV?

11          Q.       Yes.

12          A.       Yeah. Well, it sounds right.

13          Q.       Okay. Do you consider yourself to  
14   be an expert in groundwater modeling?

15          A.       Well, I am educated in groundwater  
16   modeling. I'm -- I have a university degree and I  
17   hold geologies that included that, but my company  
18   is really a leader in that and we have people in  
19   the company that are, you know, that I rely upon  
20   for -- for modeling specifically.

21          Q.       Sure. I understand that. So I'm  
22   not questioning anything about your company or  
23   anyone else. I'm just talking about you.

24                   Do you -- do you yourself to be an

1 expert in groundwater modeling?

2 A. I am educated in groundwater  
3 modeling and you have to define what an expert is.

4 Q. Okay. So your education in  
5 groundwater modeling was from your diploma from  
6 Switzerland; is that right?

7 A. That's correct.

8 Q. In 1980?

9 A. That's correct.

10 Q. Okay. Have you --

11 A. I would add, plus the exposures that  
12 I have had through the years being working in a  
13 firm that does a lot of groundwater modeling.

14 Q. Okay. Have you published any  
15 articles in the peer-reviewed literature regarding  
16 groundwater modeling, either flow or fate and  
17 transport or any other kind of groundwater  
18 modeling?

19 MS. O'LEARY: Object to form.

20 THE WITNESS: Combined with  
21 geochemical modeling, I have actually,  
22 you know, done some movement of certain  
23 contaminant in the subsurface.

24 You need both. You need what

1 makes it move is actually the groundwater  
2 movement, and the geochemical aspect of  
3 it is -- is -- was part of that.

4 And I believe -- I believe I  
5 have -- I co-authored a paper on  
6 some -- on one case, maybe four. That  
7 was arsenic, as I recall.

8 BY MS. BAUGHMAN:

9 Q. Okay. So you've got your CV in  
10 front of you --

11 A. Yes.

12 Q. -- which has a publication list.

13 Can you identify which peer-reviewed  
14 publications you have that you're an author of  
15 that are concerned with groundwater modeling?

16 A. Yes, that is. By that you mean that  
17 is an aspect of groundwater modeling included in  
18 it and -- and that's important.

19 I -- the papers that I published  
20 were the second one on the list, Bessinger and  
21 Hennet 2019. So that's the one I was that came to  
22 mind when you asked me that question. And in that  
23 one, you had movement of arsenic and its reaction,  
24 its fate and transport, when water recharges to an



1     aquifer and so that's -- that one combined some  
2     groundwater flow.

3             Q.           Any others? I just need the list  
4     for now. Any others?

5             A.           Yeah.

6                         MS. O'LEARY: Object to form.

7                         THE WITNESS: Be patient.

8             It's a long list. So.

9                         (Reviews document.)

10                        I believe the 2007 paper with  
11             Soderberg in it. Soderberg is  
12             S-o-d-e-r-b-e-r-g. Also involved some  
13             combination of geochemistry and  
14             groundwater movement.

15     BY MS. BAUGHMAN:

16             Q.           Okay. You know what? Let's -- let  
17     me withdraw that question and I'm going ask you a  
18     different question.

19                         Let me ask you this.

20                         Have you yourself ever -- ever  
21     developed a groundwater flow model?

22             A.           Yes, I have, as part of my  
23     education.

24             Q.           Okay. When you were in school?

1 A. When I was at the university, yes.

2 Q. Okay.

3 A. That was part of what we will do.

4 Q. Okay. After you graduated in 1980  
5 from -- with that diploma from Switzerland, have  
6 you developed a groundwater model since then?

7 MS. O'LEARY: Object to form.

8 THE WITNESS: Simple, simple  
9 model, if you want to call it a model,  
10 calculations of groundwater movement and  
11 so on. I have done that.

12 BY MS. BAUGHMAN:

13 Q. Okay. I'm not talking about  
14 calculations. I'm talking about an actual model.

15 MS. O'LEARY: Object to form.

16 THE WITNESS: Well, define a  
17 model. A model is a set of calculations.

18 BY MS. BAUGHMAN:

19 Q. Okay. You're familiar with the type  
20 of model that we're talking about here in this  
21 case that the ATSDR developed; correct?

22 MS. O'LEARY: Object to form.

23 THE WITNESS: Yes, I have -- I  
24 have looked at it, yes.

1 BY MS. BAUGHMAN:

2 Q. Okay. Have you ever run that model?

3 A. Personally I have not. That was  
4 done by my colleague.

5 Q. Okay. Have you ever -- so the ATSDR  
6 developed multiple groundwater models that are at  
7 issue in this litigation; fair? It's more than  
8 one; right?

9 A. It's two.

10 Q. Okay. Have you developed a  
11 different groundwater model related to Camp  
12 Lejeune?

13 MS. O'LEARY: Object to form.

14 THE WITNESS: Again, it's  
15 definition of a model. If a model is a  
16 calculation, I have done calculation.

17 BY MS. BAUGHMAN:

18 Q. Okay. And those are the  
19 calculations discussed in your report?

20 A. Yes.

21 Q. Okay. Did you assess the model bias  
22 for your groundwater flow model that you've done  
23 for Camp Lejeune?

24 A. Can you explain what you mean by

1 "bias"?

2 Q. Well, let me ask you this.

3 What sensitivity or uncertainty  
4 analysis did you do for your groundwater model for  
5 Camp Lejeune?

6 A. I --

7 MS. O'LEARY: Object to form.

8 BY MS. BAUGHMAN:

9 Q. If any.

10 A. What I -- what I did did not require  
11 that because it is included in -- in it because --  
12 because of the lack of data and so on and, you  
13 know.

14 Q. Okay. So did you do a sensitivity  
15 analysis for what you're calling your model for  
16 Camp Lejeune?

17 MS. O'LEARY: Object to form.

18 THE WITNESS: I didn't do a  
19 sensitivity analysis.

20 BY MS. BAUGHMAN:

21 Q. Okay. Did you do an uncertainty  
22 analysis for what you're calling your model for  
23 Camp Lejeune?

24 MS. O'LEARY: Object to form.

1 THE WITNESS: I didn't do  
2 specifically an uncertainty analysis.

3 I am just aware that you have  
4 a very large amount of uncertainty for  
5 whoever makes calculations when you have  
6 no data.

7 BY MS. BAUGHMAN:

8 Q. Your -- your testimony is there's no  
9 data, literally none, zero data related to Camp  
10 Lejeune.

11 Is that what you're saying?

12 A. Well, you have very limited data as  
13 far as -- as contamination is concerned and then  
14 you have site-specific data and you have  
15 basically, you know, hydrological framework that  
16 is simplified, and all of that has a lot amount of  
17 uncertainty.

18 Q. Have you ever made a presentation at  
19 a conference regarding groundwater flow or fate  
20 and transport modeling?

21 MS. O'LEARY: Object to form.

22 THE WITNESS: I believe so.

23 BY MS. BAUGHMAN:

24 Q. Okay. Have you ever received an

1 honor or award from your work on groundwater  
2 modeling?

3 MS. O'LEARY: Object to form.

4 THE WITNESS: Not on  
5 groundwater modeling, no.

6 BY MS. BAUGHMAN:

7 Q. Have you ever published anything  
8 related to Camp Lejeune?

9 A. No.

10 Q. Have you ever made a presentation, a  
11 public presentation at a conference, for example,  
12 related to Camp Lejeune?

13 A. No.

14 Q. Okay. Are you an epidemiologist?

15 A. I am not an epidemiologist.

16 Q. Are you a toxicologist?

17 A. I am not a toxicologist.

18 Q. Have you reviewed any of the  
19 epidemiology studies published by the ATSDR  
20 regarding Camp Lejeune?

21 A. I recall having seen some of that.

22 Q. So I reviewed your Exhibit 34, your  
23 Supplemental and Corrected Reliance List, and I  
24 did not see any of the published peer-reviewed

1 epidemiology studies that Dr. Bove and others have  
2 published regarding Camp Lejeune listed on your  
3 reliance list.

4 Did you review those epidemiology  
5 studies as part of your work on this case?

6 MS. O'LEARY: Object to  
7 foundation and form.

8 THE WITNESS: Not on this  
9 case. I am not relying on that on this  
10 case.

11 BY MS. BAUGHMAN:

12 Q. Okay. Have you yourself ever  
13 conducted an exposure assessment for an individual  
14 person, in other words, to determine how much of a  
15 chemical the person was exposed to by inhalation,  
16 ingestion, and/or dermal contact?

17 A. No. I have -- I have worked on  
18 issues that relate to geochemistry and  
19 hydrogeology that deal with concentrations and --  
20 but I don't go to the exposure. I don't go to the  
21 inhalation. I don't go to those kinds of things.

22 Q. Okay. Is that because calculating  
23 the exposure for individual person is not part of  
24 the -- your expertise?

1 MS. O'LEARY: Object to form.

2 THE WITNESS: It's not what I  
3 do.

4 BY MS. BAUGHMAN:

5 Q. Okay. What about -- I think I know  
6 the answer.

7 But for this case, the Camp Lejeune  
8 litigation, have you calculated the exposure of  
9 any individual person to the contaminants at Camp  
10 Lejeune?

11 A. I have not done such calculations  
12 that will be specific like that.

13 Q. So can you identify, as you sit here  
14 today, any individuals or any group of individuals  
15 that you would say were substantially exposed to  
16 contaminated water at Camp Lejeune?

17 MS. O'LEARY: Object to form.

18 THE WITNESS: What I have  
19 done is, I have reviewed the information  
20 and the data, and I have made my  
21 conclusions that are in my report for  
22 this case.

23 And, you know, there is  
24 another case I worked on which is



1 different from this one where I looked at  
2 concentration potential in the water  
3 supply, in the waters that was basically  
4 supplied to the person for small period  
5 of time. That's the Washington case if I  
6 recall.

7 BY MS. BAUGHMAN:

8 Q. The Baby Washington case; right?

9 A. Yeah, so I have done that, but for  
10 this case for this report, I have not done. I  
11 have just looked at the geochemistry and the  
12 hydrogeology and the geology.

13 Q. Okay. So you're not going to offer  
14 an opinion to any of the judges in this case about  
15 any individual person or any group of people as to  
16 whether they were or were not substantially  
17 exposed to contaminated water at Camp Lejeune; is  
18 that fair?

19 MS. O'LEARY: Object to form  
20 and foundation.

21 THE WITNESS: Yeah, I am not  
22 providing opinions that are not in my  
23 report.

24 BY MS. BAUGHMAN:

1           Q.           Okay. And that's not in your  
2 report, is it?

3           A.           It is -- it is not in my.

4           Q.           Okay.

5           A.           Because the opinions in my report  
6 speak for themselves.

7           Q.           Okay. And you have not offered an  
8 opinion in your report about whether any  
9 individual person or any group of people was  
10 substantially exposed to contaminants at Camp  
11 Lejeune; fair?

12                       MS. O'LEARY: Object to form.

13                       THE WITNESS: I have not done  
14 that for people, no.

15 BY MS. BAUGHMAN:

16           Q.           Okay. Have you ever developed or  
17 used a water model to determine contaminant  
18 concentrations that would be used for an  
19 individual exposure determination?

20                       MS. O'LEARY: Object to  
21 foundation.

22                       THE WITNESS: Not that I can  
23 recall here.

24 BY MS. BAUGHMAN:

1 Q. Okay.

2 A. With the exception of -- well, there  
3 is no exception.

4 Q. Okay.

5 A. I cannot recall.

6 Q. I'm going to ask you a few questions  
7 about the experts for the plaintiffs in this case.  
8 Okay? I'll -- I'll ask one by one.

9 Let me ask you about Dr. Leonard  
10 Konikow or Lenny Konikow.

11 Do you know him?

12 A. I know him socially.

13 Q. Okay. Have you ever worked with  
14 Dr. Konikow?

15 A. No.

16 Q. Okay. Are you aware of his  
17 reputation in the hydrogeology or groundwater  
18 field?

19 A. Yes. He's a reputable  
20 hydrogeologist that worked for the USGS.

21 Q. Reputable; is that what you said?

22 A. Yeah.

23 Q. Okay. What about Morris Maslia? Do  
24 you know him personally?

1 A. I do not.

2 Q. Okay. You've never worked with  
3 Morris then, I assume?

4 A. With who?

5 Q. Mr. Maslia?

6 A. No, I have not.

7 Q. Okay. Norm Jones and Jeff Davis,  
8 the two individuals who did the post-audit.

9 Do you know them?

10 A. I do not.

11 Q. Are you aware of their reputation in  
12 the hydrogeology or groundwater modeling  
13 community?

14 A. I do not.

15 Q. Okay. Dr. David Sabatini. Do you  
16 know him?

17 A. Except for this case, I have never  
18 met him or I don't know him.

19 Q. Okay. And are you aware of his  
20 professional reputation?

21 A. No.

22 Q. Okay. Have you ever communicated  
23 with Dr. Clement regarding Camp Lejeune?

24 A. Dr. What?

1 Q. Clement. The individual who wrote  
2 part of the NRC report and published an article.  
3 He's discussed, I believe, in your report.

4 A. No.

5 Q. He's certainly discussed in  
6 Dr. Spiliotopoulos's report.

7 A. Yeah, I --

8 MS. O'LEARY: Object to form.

9 THE WITNESS: I do not know  
10 him.

11 BY MS. BAUGHMAN:

12 Q. You don't know Dr. Clement?

13 A. I don't.

14 Q. Okay. So, obviously, you have not  
15 communicated with him about Camp Lejeune then?

16 A. I don't believe so.

17 MS. BAUGHMAN: Okay. Let me  
18 see here.

19 (Document marked for  
20 identification as Exhibit 35.)

21 (Document marked for  
22 identification as Exhibit 36.)

23 (Document marked for  
24 identification as Exhibit 37.)

1 BY MS. BAUGHMAN:

2 Q. Okay. I am going to hand you in a  
3 moment. I need to read this out first.

4 I'm going to hand you what I've  
5 marked as Exhibits 35, 36, and 37 to your CV, and  
6 those are a series of documents with the first  
7 part of the Bates stamp series saying  
8 CLJA\_SSPA\_INVOICES, and then there are numbers.  
9 35 goes 1 through 41, 36 goes 43 through 287, and  
10 then 37 goes 288 through 407. Okay?

11 And I believe these are all of the  
12 invoices that have been produced to us regarding  
13 SSPA's -- that's S.S. Papadopoulos & Associates --  
14 work related to Camp Lejeune?

15 A. Thank you.

16 Q. And can you confirm that for me?

17 A. What is your question?

18 Q. Okay. Are Exhibits 35, 36, and 37  
19 SSPA's invoices regarding work related to Camp  
20 Lejeune?

21 MS. O'LEARY: Object to  
22 foundation.

23 THE WITNESS:

24 (Reviews document.)

1 MS. O'LEARY: Also object to  
2 form.

3 THE WITNESS:  
4 (Reviews document.)

5 MS. O'LEARY: Dr. Hennet, are  
6 you waiting for a question or?

7 MS. BAUGHMAN: I asked you a  
8 question.

9 Could you repeat it, please?  
10 (The reporter read the record  
11 on page 343 lines 18-20.)

12 THE WITNESS: They appear to  
13 be. I am not the one who make this kind  
14 of invoices. I am not making invoices.  
15 I am not doing the administrative work at  
16 SSPA.

17 BY MS. BAUGHMAN:

18 Q. Okay. But you've just spent a few  
19 minutes flipping through Exhibits 35, 36, and 37,  
20 and those appear to be invoices from your company,  
21 SSPA; correct?

22 A. It appears to be.

23 Q. And they are related to Camp  
24 Lejeune; correct?

1 A. Well, I believe so.

2 Q. Okay. And they document work from  
3 2005 all the way until February of 2025 related to  
4 Camp Lejeune; correct?

5 MS. O'LEARY: Object to  
6 foundation.

7 THE WITNESS: 2005?

8 BY MS. BAUGHMAN:

9 Q. Yes.

10 A. I -- I'm sorry. I didn't spot any  
11 2005 invoices.

12 Q. Let's see. Let's look.  
13 If you look at Exhibit 36.

14 A. Yes.

15 Q. Hold on a minute.

16 No, I'm sorry, Exhibit 37. And turn  
17 to the one that's stamped page 340.

18 A. Yeah.

19 Q. So at page 340, let me ask you about  
20 this.

21 This is a page -- from 340 until 345  
22 is a timesheet backup report for billing to the  
23 DOJ of SSPA from January 23, 2005 until  
24 October 27, 2007.



1 Do you see that?

2 A. I see that.

3 Q. Okay. And then if you turn to page  
4 346, that invoice is for professional services  
5 rendered for the period January 23, 2005 until  
6 March 19, 2005.

7 Do you see that?

8 A. I see that.

9 Q. And based on the testimony you've  
10 given today and in the prior deposition, you  
11 didn't work on Camp Lejeune-related matters for  
12 the DOJ before January 23, 2005; right?

13 MS. O'LEARY: Object to  
14 foundation.

15 THE WITNESS: That's my  
16 understanding.

17 BY MS. BAUGHMAN:

18 Q. Okay. So and then -- and then in  
19 terms of the range of what we've got here, if you  
20 go to Exhibit 35 and you go to the end of that,  
21 page 42.

22 A. Wait. Hold on. Page?

23 Q. 41 actually.

24 A. Yes.

1           Q.           So that invoice is for services  
2           rendered through January 31, 2025.

3                       Do you see that?

4           A.           Yes.

5           Q.           Okay. I'm guessing you don't know  
6           the answer.

7                       I've just established we have a  
8           range of invoices that start in January of 2005  
9           and end in January 2025.

10                      To the best of your knowledge, have  
11           all of the invoices for SSPA's work related to  
12           Camp Lejeune been produced to the plaintiffs in  
13           this case?

14                      MS. O'LEARY: Object to form  
15           and foundation.

16           BY MS. BAUGHMAN:

17           Q.           In that time frame.

18                      MS. O'LEARY: Same objections.

19                      THE WITNESS: I am not the  
20           one who produce those. So I don't know.

21           BY MS. BAUGHMAN:

22           Q.           Okay.

23           A.           But I suppose they're all there.

24           Q.           I mean, you haven't purposefully

1 told anyone to not produce any of them, have you?

2 A. I have not. I have nothing to do  
3 with this.

4 Q. Okay. You're aware that there were  
5 motions filed and, as a result of that, that the  
6 DOJ attempted to produce all of the invoices, that  
7 SSPA had to go and look for these.

8 Are you aware of that?

9 MS. O'LEARY: Object to  
10 foundation.

11 THE WITNESS: Vaguely, yes.  
12 I was out of the country for, you know,  
13 two and a half weeks. I just came back  
14 this weekend, and I think that all  
15 happened during that period of time.

16 BY MS. BAUGHMAN:

17 Q. Okay.

18 A. And I, you know, so if -- if you  
19 requested all the invoices from my -- from my  
20 shop, from SSPA, I suppose that I will have done  
21 the best I could to provide that.

22 Q. And you certainly wouldn't have  
23 withhold them?

24 A. Pardon?

1 Q. You would not have withheld them?

2 MS. O'LEARY: Object to form.

3 THE WITNESS: No, I --

4 BY MS. BAUGHMAN:

5 Q. And, obviously, you flipped through  
6 these documents.

7 SSPA has a logo; right?

8 A. SSPA has a logo, yes.

9 Q. And so on page -- on Exhibit 35 at  
10 the top of the page, that's SSPA's logo; right?

11 A. Yes, it is.

12 Q. And it appears, at least we can tell  
13 on the first page of each Exhibit 35, 36, and 37,  
14 it's all the same logo; right?

15 A. Yeah, except that it's in color --

16 Q. Right.

17 A. -- on the first one and not in the  
18 other one.

19 Q. Got it.

20 So let me ask you something.

21 If you look at Exhibit 35 and you go  
22 to the last page, which is page 42.

23 A. Yes.

24 Q. Okay. The billed to date on that

1 invoice, which is invoice 27722, is 2 million  
2 400 -- I'm sorry -- \$2,004,131.67.

3 Do you see that?

4 A. I see 2 million 216.

5 Q. That's the budget.

6 A. Oh, that's the budget. Okay.

7 Q. If you go down to billed to date?

8 A. Okay. I'm sorry. I see that.

9 Q. Okay. So billed to date as of  
10 January 31, 2025 was just over \$2 million; right?

11 A. That's what it appears to be.

12 Q. Okay. But that's just for -- that's  
13 just for the litigation that we're here for today.

14 That doesn't include the prior  
15 litigation matters; correct?

16 MS. O'LEARY: Object to form  
17 and foundation.

18 THE WITNESS: That's my  
19 understanding.

20 BY MS. BAUGHMAN:

21 Q. Okay. Do you know what the total  
22 amount of money is that SSPA has billed DOJ for  
23 all of your Camp Lejeune-related work 2005 to  
24 present?

1           A.           I do not know.

2           Q.           Okay. But we could add up all of  
3 these invoices and come up with a number and that  
4 would be the number as far as you know; correct?

5                       MS. O'LEARY: Object to  
6 foundation.

7                       THE WITNESS: Specifically I  
8 do not know. I suppose.

9 BY MS. BAUGHMAN:

10          Q.           Okay.

11          A.           If you -- if you add those numbers,  
12 maybe you -- you get a number somehow.

13          Q.           Is there any reason that you're  
14 aware of that if we added up all of the invoices  
15 from Exhibits 35, 36, and 37 and came up with a  
16 number, is there any reason you're aware that that  
17 would not be the correct number for the amount of  
18 money that SSPA has billed DOJ for Camp  
19 Lejeune-related work?

20                       MS. O'LEARY: Object to  
21 foundation.

22                       THE WITNESS: I suppose this  
23 speaks for itself. I have nothing to do  
24 with this -- this piece of work.

1 BY MS. BAUGHMAN:

2 Q. Can you identify any reason that  
3 that wouldn't work out as the appropriate  
4 methodology, can you?

5 MS. O'LEARY: Object to form.

6 THE WITNESS: I cannot see  
7 any why reason it couldn't be.

8 MS. BAUGHMAN: Okay.

9 MS. O'LEARY: And would now be  
10 a good time for a short bio break?

11 MS. BAUGHMAN: Yes.

12 THE WITNESS: Yeah. That's  
13 right. I was going to ask for that as  
14 well.

15 THE VIDEOGRAPHER: The time is  
16 10:18. We are going off the record.

17 (A recess was taken.)

18 THE VIDEOGRAPHER: The time is  
19 10:28 AM. We are now on the record.

20 BY MS. BAUGHMAN:

21 Q. Okay. All right. Dr. Hennet, I'm  
22 going to ask -- I want to ask you some questions  
23 about -- we're going to talk about the spiractor  
24 fall height issue, but let me give you some

1 exhibits so that we have some things to talk  
2 about.

3 I'm going to hand you first what  
4 I've marked as Exhibit 38 to your deposition.

5 (Document marked for  
6 identification as Exhibit 38.)

7 BY MS. BAUGHMAN:

8 Q. And it is the AH Environmental  
9 report from December 2004 CLJA water modeling  
10 01-000071446 through 71512. There you go.

11 A. Thank you.

12 Q. I'm also going to hand you this one  
13 was marked at your deposition in March as Exhibit  
14 11. So I'm not going to re-mark it. I'll just  
15 refer to that as Exhibit 11 but give you a copy.  
16 And those are your notes that you took from your  
17 February 2025 Camp Lejeune site visit; correct?

18 A. Yes.

19 Q. Okay. Now I'm going to hand you  
20 what I've marked as Exhibit 39 to your deposition.

21 (Document marked for  
22 identification as Exhibit 39.)

23 BY MS. BAUGHMAN:

24 Q. And these are HENNET\_USA\_ a whole



1 bunch of 0s and it's 1 through 96.

2 And can you tell me. Are those the  
3 photographs that were taken at your February 2025  
4 site visit?

5 MS. O'LEARY: Object to  
6 foundation.

7 THE WITNESS:  
8 (Reviews document.)

9 It look like -- it looks like  
10 it.

11 BY MS. BAUGHMAN:

12 Q. Okay. And now I'm going to hand you  
13 what I've marked as Exhibit 40 to your deposition.

14 (Document marked for  
15 identification as Exhibit 40.)

16 BY MS. BAUGHMAN:

17 Q. And this is CLJA PHOTOS SSPA 1  
18 through 45.

19 And my question for you is: Is  
20 Exhibit 40 photographs that were taken of your  
21 visit in May 2024 to Camp Lejeune for this  
22 litigation?

23 MS. O'LEARY: Object to  
24 foundation.

1 MS. BAUGHMAN: Foundation  
2 meaning he doesn't know if these are  
3 photos? Is that what you're saying?

4 MS. O'LEARY: Yeah, I don't  
5 know that. I mean, this is the produced  
6 versions. I don't know what he's seen.  
7 I believe he testified that he wasn't the  
8 one who took photographs.

9 MS. BAUGHMAN: Okay. Well,  
10 let's -- let's do this. For Exhibit 40  
11 if you turn to --

12 So I guess to establish a  
13 foundation for this, your -- your  
14 position is that we have to call the  
15 attorneys for DOJ who took the photos?

16 MS. O'LEARY: I think you  
17 might need to ask him more specific  
18 questions about what he saw.

19 THE WITNESS:

20 (Reviews document.)

21 BY MS. BAUGHMAN:

22 Q. Okay. Turn to page 17 of Exhibit  
23 40.

24 Who's that a picture of?

1           A.           I'll get there.

2                       I am there.

3                       It's a picture of myself and of  
4 Dr. Alexander Spiliotopoulos.

5           Q.           Okay. And where are you?

6           A.           I am -- on the picture, I am on the  
7 right.

8           Q.           No.

9                       Where are you in the photo?

10          A.           Oh.

11          Q.           Where are you standing?

12                       MS. O'LEARY: Objection.

13                       Form.

14          BY MS. BAUGHMAN:

15          Q.           Where was the photo taken at?

16          A.           Right. That's near building 670  
17 at -- at Camp Lejeune.

18          Q.           Okay. And what's building 670? Do  
19 you remember?

20          A.           Yeah. It's one of the water  
21 treatment plant.

22          Q.           Which one?

23          A.           I think it's -- it is the Holcomb  
24 Boulevard Water Treatment Plant.

1 Q. All right. And where were you? Do  
2 you remember when this photo was taken?

3 A. Exactly not, but I'm sure it's in  
4 the record somewhere.

5 Q. Okay. Is it one of the times that  
6 you visited Camp Lejeune as part of this case?

7 A. Yes.

8 Q. Okay. And then if you turn to page  
9 45, the last page of Exhibit 40, is that also a  
10 picture of you and Dr. Spiliotopoulos?

11 A. Yes.

12 Q. At Camp Lejeune?

13 A. Yes.

14 Q. Okay. So is Exhibit 40 pictures of  
15 your visit -- one of your visits prior to 2025 at  
16 Camp Lejeune?

17 A. I believe so.

18 Q. Okay. So if we look at your report,  
19 Exhibit 31. Your calculations -- let's see.  
20 Let's look at page 5-6 of your report.

21 Are you at page 5-6?

22 A. Yes, I am.

23 Q. Okay. And that is Exhibit 2-4. "COC  
24 Volatilization Losses at Hadnot Point Water

1 Treatment Plant"; correct?

2 A. Yes.

3 Q. So this documents how you made your  
4 calculations regarding volatilization losses for  
5 Hadnot Point; correct?

6 MS. O'LEARY: Object to  
7 foundation.

8 THE WITNESS: Yes, that is  
9 information that support that. Yes.

10 BY MS. BAUGHMAN:

11 Q. Right. From your report?

12 A. That's in my report.

13 Q. Okay. So if you look at the fall  
14 height in the middle of Exhibit 2-4, the fall  
15 height is listed as 0.675 meters; right?

16 A. Yes.

17 Q. Okay. And 0.675 meters is 24  
18 inches; is that right?

19 A. About two feet, yeah.

20 Q. Two feet is 24 inches?

21 A. (Nods head).

22 Q. Yes?

23 A. Yes.

24 Q. Okay. And then -- so it's

1 clear -- it's true that when you -- for your  
2 calculations of volatilization at the spiractor at  
3 Hadnot Point, you assumed a fall height of 2 feet;  
4 correct?

5 A. That's what -- that's what I recall  
6 with, yes.

7 Q. Okay. And that's what's documented  
8 in your report?

9 A. Yes.

10 Q. Okay. And then if you turn to page  
11 5-9 of your report, that's Exhibit 2-5. "COC  
12 Volatilization Losses at Tarawa Terrace Water  
13 Treatment Plant"; correct?

14 A. Yes.

15 Q. Okay. And you have a fall height  
16 and it's also listed as 0.675; correct?

17 A. Yes.

18 Q. So for your calculations of the fall  
19 height at Tarawa Terrace, you also assumed 2 feet  
20 or 22 inches is the fall height; correct?

21 A. Yes.

22 Q. Okay. So let's look at Exhibit 38,  
23 the AH Environmental report. And if you could  
24 turn to page -- it's 3-10 in the report. The

1 Bates stamp numbers last three digits or last five  
2 digits are 71475.

3 You see that?

4 A. Not yet.

5 Yes.

6 Q. Okay. So this is a diagram prepared  
7 by AH Environmental regarding the fall height of  
8 the spiractor; correct?

9 A. Yes.

10 Q. And you're aware that AH  
11 Environmental made calculations regarding  
12 volatilization loss at the spiractor; correct?

13 A. Yes.

14 Q. Using the same formula as you, but  
15 they used 1 foot or 12 inches for the fall height  
16 instead of 2 feet; correct?

17 MS. O'LEARY: Object to  
18 foundation.

19 THE WITNESS: It's kind of  
20 reverse. I used the same formula as  
21 they.

22 BY MS. BAUGHMAN:

23 Q. You used the same formula as AH?

24 A. Yes.

1           Q.           But you used 2 feet and they used 1;  
2           right?

3           A.           Yes.

4           Q.           All right. Let me ask you.  
5                        Have you -- have you spoken to  
6           anyone from AH Environmental regarding the report,  
7           Exhibit 38, their December 2004 report?

8           A.           I have not.

9           Q.           Okay. And just more broadly, have  
10          you spoken to anyone from AH Environmental  
11          regarding the spiractors and the fall height  
12          issue?

13          A.           No, I have not.

14          Q.           Okay. Do you know Dr. Peter  
15          Pommerenk?

16          A.           I do not know him.

17          Q.           Have you ever spoken to  
18          Dr. Pommerenk about anything related to Camp  
19          Lejeune?

20          A.           I don't believe so.

21          Q.           Okay. What about anyone who worked  
22          for SSPA? To your knowledge, has anyone reached  
23          out to Dr. Pommerenk or AH regarding any of the  
24          subject matter in Exhibit 38, the AH Environmental



1 2004 report?

2 A. Not to my knowledge.

3 Q. Okay. I want to ask you.

4 The first page of Exhibit 38 says  
5 that this report was prepared for the  
6 Environmental Management Division at Camp Lejeune.

7 Do you see that?

8 A. I see that.

9 Q. And on page 1 of the report, which  
10 is at 1-1 I think is what they refer to it as, at  
11 the bottom of the page under Purpose, the last  
12 full paragraph it says "AH Environmental  
13 consultants was retained by MCB"; right?

14 Which is MCB Camp Lejeune under  
15 contract number and then there's a number;  
16 correct?

17 A. Correct.

18 MS. O'LEARY: Object to form.

19 BY MS. BAUGHMAN:

20 Q. So I just wonder.

21 In your report, you -- you refer  
22 multiple times to the AH report as something that  
23 was commissioned by ATSDR.

24 Were you aware that AH was actually

1 retained by Marine Corps Base Camp Lejeune to do  
2 this work?

3 A. I know that by memory that somewhere  
4 they say that they were -- on the first page, it's  
5 written "ATSDR Support - Estimation of VOC  
6 Removal."

7 Q. I'm sorry. Which page are you  
8 referring to? Page 1-1?

9 A. No. I'm on the first, the cover  
10 page of Exhibit 38.

11 Q. Okay. It says "ATSDR Support," but  
12 who paid for the study?

13 A. Oh, I don't know.

14 Q. Who hired AH Environmental to do the  
15 study?

16 A. I don't know.

17 Q. Doesn't it say in the report that  
18 they were hired by Marine Corps Base Camp Lejeune?

19 MS. O'LEARY: Object to form  
20 and foundation.

21 The next part of the sentence  
22 you read said it was to assist ATSDR in  
23 obtaining information.

24 MS. BAUGHMAN: I'm going to

1 object. That is a speaking objection.  
2 That is a violation of the local rules  
3 and the federal rules. I ask that you  
4 not do it again.

5 MS. O'LEARY: I ask you not to  
6 misrepresent -- misrepresent the record.

7 MS. BAUGHMAN: I am not  
8 misrepresenting anything.

9 BY MS. BAUGHMAN:

10 Q. Dr. Hennet, who paid AH  
11 Environmental to do this report?

12 A. I do not who paid them.

13 Q. Okay. Who hired AH Environmental?

14 A. I do not know who exactly hired  
15 them.

16 Q. Okay. Do you know whether AH  
17 Environmental, in fact, was a consultant of the  
18 Navy and the Marine Corps related to Camp  
19 Lejeune-related matters?

20 A. Could be.

21 Q. You don't know either way?

22 A. I don't know either way.

23 Q. Okay. So turn please to page 4-2 of  
24 the AH report. There is a sentence in the middle

1 of page 4-2 that says:

2 "Because of the downstream  
3 recarbonation basin at that plant" -- and let's  
4 back up for a second.

5 There's a recarbonation basin at the  
6 Hadnot Point Water Treatment Plant; correct?

7 A. Can you repeat because I was  
8 reading. Sorry.

9 Q. Okay. There is a recarbonation  
10 basin at the Hadnot Point Water Treatment Plant;  
11 correct?

12 A. That's correct.

13 Q. Is there a recarbonation basin at  
14 Tarawa Terrace, or was there one?

15 A. I don't believe so.

16 Q. Okay. Was there a recarbonation  
17 basin or is there one at Holcomb Boulevard Water  
18 Treatment Plant?

19 A. I have to refresh my memory on this  
20 one. I don't believe so.

21 Q. Okay. So -- so you see the sentence  
22 right above it says:

23 "This variability is illustrated in  
24 pictures taken at the Hadnot Point Water Treatment

1 Plant."

2 Okay. And then they're talking  
3 about a vortex that formed, and then the next  
4 sentence says:

5 "Because of the downstream  
6 recarbonation basin at that plant" -- referring to  
7 Hadnot Point -- "the available head does not  
8 appear to allow a fall height of greater than  
9 approximately one foot and the effluent pipe is  
10 likely to be flowing full."

11 Do you see that?

12 A. I see that.

13 Q. Okay. Were you able to observe at  
14 any time that you were at the Hadnot Point Water  
15 Treatment Plant the available head given the  
16 presence of the recarbonation basin?

17 A. No, but I measured it. I measured  
18 the pipe.

19 Q. I'm not talking about the pipe.  
20 Head refers to the -- the elevation  
21 of the water, does it not?

22 A. Well, head refers to a difference of  
23 elevation.

24 Q. Okay. Of the water; right?

1 A. Yes.

2 Q. Okay.

3 A. For water, yes.

4 Q. Okay. When you made your  
5 measurement at Hadnot Point of the spiractor,  
6 there was no water in the spiractor at the time;  
7 correct?

8 A. For the February 11 measurements,  
9 yes.

10 Q. Okay.

11 A. Not in the one I measured, yes.

12 Q. Okay. Let's back up.  
13 Let's just talk about February 11,  
14 2025.

15 When you made your measurements on  
16 that date, the spiractor did not have water in it;  
17 correct?

18 A. That specific spiractor. You have  
19 five of them.

20 Q. Okay. Did you make a measurement at  
21 a spiractor that did have water in it on  
22 February 11, 2025?

23 A. Couldn't be done, no.

24 Q. Okay. So did you at any point in

1 time make a measurement in a spiractor at any  
2 water treatment plant at Camp Lejeune that had  
3 water in it?

4 A. I did not do measurements when the  
5 spiractor was flowing water.

6 Q. Okay.

7 A. I couldn't.

8 Q. So I want to focus on Hadnot Point  
9 and the effect of the recarbonation basin on the  
10 water level in the spiractor.

11 Do you agree with AH that the  
12 head -- the available head does not appear to  
13 allow a fall height of greater than approximately  
14 one foot at the spiractor at Hadnot Point?

15 A. I do not agree with that, and I  
16 would go back to Figure 3-4 of the AEH report,  
17 which is on page 3-10 that you just referred to  
18 before. And there you can see where they put --  
19 where they put the 12 inches, which is I think is  
20 what it is. It appears to be. I didn't measure  
21 it.

22 And then you can see there that the  
23 fall height is 12 inches. The pipe is not flowing  
24 full as claimed. And -- and I made some estimates

1 of for the flow you have through that pipe and the  
2 dimension of 12-inch for the pipe, the 6-inch that  
3 they have at the bottom would be -- would be  
4 basically the -- where the water level would be in  
5 the pipe when it normally flows.

6 Q. Well, what's in the diagram on  
7 Figure 3-4 is not consistent with the text on page  
8 4-2; correct? Because 4-2 says "the effluent pipe  
9 is likely to be flowing full."

10 A. Right. That's inconsistent.

11 Q. Right.

12 A. And -- and I would -- I would refer  
13 to -- to the diagram because for the diagram for  
14 the estimate of the 6-inch, I made a calculation  
15 for the flow and the size of the pipe that  
16 basically the water level would be approximately 6  
17 inches in it. That's what I recall.

18 Q. Okay. You're saying that AH  
19 Environmental did that, correct, not you?

20 A. AH Environmental did that and  
21 on -- on the statement in the -- in the text, it's  
22 -- it's a speculative statement because it says  
23 "it appears to be" and that's based on visual  
24 interpretation, which -- which are subjective in



1       that sense.

2               Q.           So in your opinion --

3               A.           So that --

4               Q.           In your opinion, what effect did the  
5       downstream recarbonation basin have on the  
6       available head in the spiractors at the Hadnot  
7       Point Water Treatment Plant?

8                           MS. O'LEARY:   Object to form.

9                           THE WITNESS:   Well, it  
10           controls the head, but -- but, you know,  
11           I measured the pipe and you have 2 feet  
12           from the rim of the pipe to the top of  
13           the pipe, and that's what I did on  
14           February 11 and that's what I done the  
15           previous visit on the pipe that was on  
16           the truck.   So I did measure those.   I  
17           did not do a visual evaluation.

18       BY MS. BAUGHMAN:

19               Q.           You did not do a visual evaluation  
20       of the head in the spiractor of Hadnot Point when  
21       it was running at any time; right?

22               A.           I did not do measurements when the  
23       spiractor was running.

24               Q.           Okay.   Or -- and you didn't make a

1 visual -- have you -- have you actually seen the  
2 head, the height of the water in the effluent pipe  
3 or in the spiractor when it was running at any of  
4 the treatment plants?

5 MS. O'LEARY: Object to form.

6 THE WITNESS: No, you cannot  
7 see that because it is actually below  
8 what you can see.

9 BY MS. BAUGHMAN:

10 Q. Okay. If you look at your -- what  
11 we marked as Exhibit 11 to your prior deposition,  
12 your notes, you just mentioned something that you  
13 measured 2 feet.

14 A. Yeah. Well, I measured 18 inches  
15 and then -- and then I relied on the AHE diagram,  
16 and I agree with a pipe of this kind flowing would  
17 have about 6 inches at the bottom and that's 18  
18 plus 6 brings you to 24 for a head.

19 Q. Okay. Is the effect of the --  
20 there's no recarbonation basin at Tarawa Terrace;  
21 right? We already talked about that.

22 MS. O'LEARY: Object to form.

23 THE WITNESS: Yeah. Yes.

24 BY MS. BAUGHMAN:

1           Q.           Okay. But you assumed the  
2 same -- the same fall height at Tarawa Terrace and  
3 at Hadnot Point; right?

4           A.           I don't recall what I did for Tarawa  
5 Terrace.

6           Q.           Well, we just talked about it. I  
7 mean, we can turn to your report. It's page 5-9.

8           A.           (Reviews document.)

9           Q.           Of Exhibit 31.

10                       And you've assumed for Tarawa  
11 Terrace the exact same fall height as you assumed  
12 for Hadnot Point; right?

13           A.           Yes, and I believe that's a  
14 reasonable assumption because the type of  
15 spiractors were the same.

16           Q.           Right.

17                       But there's no recarbonation basin  
18 in Tarawa Terrace. There never was.

19           A.           There is no -- there is no  
20 recarbonation -- if I remember correctly, there is  
21 no recarbonation at Tarawa Terrace.

22           Q.           Right.

23                       So you haven't made any accounting  
24 for the fact there was a recarbonation basin at

1 Hadnot Point and not at Tarawa Terrace in your  
2 calculation? You've assumed it's the same for  
3 both?

4 A. As far as the fall height to the --  
5 to the effluent pipe, yes.

6 Q. Okay. So the Hadnot Point spiractor  
7 is under normal circumstances covered; right? All  
8 of them. They have covers on them?

9 A. They have covers on them. I mean,  
10 partially opened covers and that has not always  
11 been the case since the start of the plant.  
12 That's my understanding.

13 Q. Okay. So is it your testimony that  
14 it's not possible to measure the fall height at  
15 the Hadnot Point Water Treatment Plant while the  
16 spiractor is operating?

17 A. Not under the conditions that I was  
18 there.

19 Q. Okay.

20 A. You would -- you would need a major  
21 project to do that.

22 Q. So you haven't done that?

23 A. I have not done that.

24 Q. Okay. If you look at AH

1 Environmental Figure 3-10, which, by the way, that  
2 figure is also in your report; right? You  
3 reproduced that AH figure in your report, didn't  
4 you?

5 A. Yes.

6 Q. That in your report it's on page 5-4  
7 of Exhibit 31. It's the exact same diagram;  
8 right?

9 A. I believe so, yes.

10 Q. Okay. And I'll let you get there.  
11 Okay.

12 So one thing I want to ask you is:  
13 That diagram, it's Exhibit 2-2 in your report and  
14 3-4 in the AH report, it seems to show like a 90  
15 degree angle. It's showing like it goes down and  
16 then it goes to the right, doesn't it?

17 The diagram appears to show the  
18 spiractor has a 90 degree angle.

19 Would you agree?

20 MS. O'LEARY: Object to  
21 foundation.

22 THE WITNESS: Yes, and that  
23 was the basis of the AEH calculations --

24 BY MS. BAUGHMAN:

1 Q. Right.

2 A. -- to the schematic for that.

3 Q. But it's not the spiractor pipe.

4 You've observed it. You've taken pictures.

5 The spiractor pipe is not a 90  
6 degree angle, is it?

7 MS. O'LEARY: Object to form.

8 THE WITNESS: No, it is more  
9 like a J-shaped pipe.

10 BY MS. BAUGHMAN:

11 Q. Right.

12 And when we talk about fall height,  
13 does that mean like -- that means the vertical  
14 distance.

15 It's not -- it's not a diagonal  
16 distance for the fall, right, for a weir?

17 MS. O'LEARY: Object to form.

18 THE WITNESS: Well, it is a  
19 vertical distance on a weir, yes.

20 BY MS. BAUGHMAN:

21 Q. Right.

22 When we refer to fall height, we're  
23 talking about the vertical fall, correct, top to  
24 bottom?

1           A.           Yes, that's -- that would be a fall  
2 height for a weir, yes.

3           Q.           Okay. And the calculation that both  
4 you and AH used for the spiractor volatilization  
5 is a calculation regarding a weir; right? It's  
6 assuming that this acts as a weir?

7           A.           Yes, that's what AEH did and I just  
8 use the same approach.

9           Q.           Okay. Can you turn to Exhibit 39  
10 and just to be -- let's just establish first.

11                       Exhibit 39. These are the photos  
12 taken -- well, they're all marked February 11,  
13 2025?

14                       Do you see that? They all have that  
15 marking on them with the date?

16           A.           I see that.

17           Q.           Okay. So these are from your visit  
18 to the Camp Lejeune site on February 11, 2025.

19                       That's what Exhibit 39 is; right?

20                       MS. O'LEARY: Object to  
21 foundation.

22                       THE WITNESS: Not all  
23 pictures have dates on it, but I think  
24 you're correct. This is what I recall.

1 BY MS. BAUGHMAN:

2 Q. Okay. And if you could turn to page  
3 28 of Exhibit 39.

4 What are we looking at there?

5 A. Hold on. Hold on.

6 Okay.

7 Q. What is -- what is this a picture of  
8 HENNET\_USA 28 in Exhibit 39?

9 A. This is a photograph taken from the  
10 opening from the covers that is on top of the  
11 spiractors that was not in use, that means it had  
12 no water in it, and that is you have the spiractor  
13 pipe as you can see the G -- the J-shaped pipe.  
14 It's kind of laying down.

15 And then you have -- you have a  
16 scale that was just basically put against the pipe  
17 the best we could, and a picture was taken of  
18 that.

19 Q. Okay. So Exhibit -- I'm sorry.

20 Page 28 of Exhibit 39, this is a  
21 spiractor -- a pipe in the spiractor at Hadnot  
22 Point Water Treatment Plant; right?

23 A. That's the pipe where I conducted  
24 measurements, yes.



1 Q. Right.

2 Hadnot Point Water Treatment Plant;  
3 right?

4 A. At Hadnot Point Water Treatment  
5 Plant.

6 Q. Okay. On February 11, 2025; right?

7 A. Correct.

8 Q. Okay. And that what we see there,  
9 that is a measuring tape trying to measure the --  
10 the fall height; right?

11 A. No. The measuring tape is there to  
12 kind of give the best you can a reliable scale  
13 against the pipe.

14 Q. Okay. And from page 28 of Exhibit  
15 39 we can see that this is the J-shape, as you  
16 call it, pipe.

17 It is not a 90 degree angle;  
18 correct?

19 A. It is a J-shaped pipe. Correct.

20 Q. Okay. And if we were talking about  
21 what is the fall height, it would be from the top  
22 of the rim of that pipe going straight down;  
23 right? That's the fall height?

24 A. That would be the fall height for

1 the calculations or the fall height for the weir,  
2 yes.

3 Q. Okay. And if you look at your  
4 measuring tape, doesn't it look like the fall  
5 height there is about 13 or 14 inches?

6 MS. O'LEARY: Object to form  
7 and foundation.

8 THE WITNESS: No, that's a  
9 visual effect because -- that's the best  
10 we could do, but that's a visual effect  
11 because you don't go -- the picture is  
12 not -- provides a visual effect because  
13 you don't have the tape all against the  
14 pipe, and it is distorted. So.

15 BY MS. BAUGHMAN:

16 Q. How is it distorted?

17 A. The visual effect is distorted and,  
18 you know, we measured that differently. You don't  
19 only have -- this is only one picture that was  
20 taken of that attempt there.

21 Q. Well, it looks like -- based on this  
22 picture, it looks like that vertical distance is  
23 13 inches, doesn't it?

24 MS. O'LEARY: Object to form

1 and foundation.

2 THE WITNESS: No. Whatever  
3 you want the picture to say it looks  
4 like, you have to understand that  
5 it's -- it is basically distorted  
6 photograph. It's not good enough for  
7 measurement, and we did all the  
8 measurements to kind of get at that.

9 BY MS. BAUGHMAN:

10 Q. Which picture in Exhibit 39  
11 demonstrates the fall height that you measured?

12 MS. O'LEARY: Object to  
13 foundation.

14 THE WITNESS: Well, I do  
15 not -- I cannot answer that, but it seems  
16 that you may not have all the pictures  
17 that I took here. I don't know. I don't  
18 know. I cannot verify that. It seems  
19 that you cherry-picked one.

20 BY MS. BAUGHMAN:

21 Q. Dr. Hennet, I did not cherry-pick  
22 anything. I have provided you with every -- a  
23 picture of every photograph that was provided to  
24 us from February 11, 2025. Okay? So don't accuse

1 me of that. Okay? This is everything that the  
2 DOJ produced.

3 So can you show me which photograph  
4 in Exhibit 20 -- 39 demonstrates, in your opinion,  
5 the fall height?

6 MS. O'LEARY: Object to form  
7 and foundation.

8 THE WITNESS: Yes, yes, and  
9 give me a minute. Okay.

10 (Reviews document.)

11 Okay. I would go to a series  
12 of pictures for this, and let's say you  
13 have a Bates number that ends with 008.

14 That one is a measurement of  
15 the -- of the diameter of the effluent  
16 pipe. That's a measurement because that  
17 one is not distorted because the tape is  
18 touching one end of the pipe and coming  
19 all the way to the -- to the other end,  
20 and I think that that was something  
21 like --

22 BY MS. BAUGHMAN:

23 Q. Okay. But 008 does not give us --

24 A. Okay.

1           Q.           -- a measurement of the fall height,  
2       does it?

3                       MS. O'LEARY:   Object to form.

4                       THE WITNESS:    I am going  
5       there.

6       BY MS. BAUGHMAN:

7           Q.           I am just asking you that question.

8           A.           It doesn't.   It doesn't.

9           Q.           It does not?

10          A.           No.

11          Q.           Okay.

12          A.           Okay.   Now you have 009.   Here you  
13       have a distance that is measured from a bar, a  
14       horizontal metal bar, using the rope to basically  
15       get the distance from the top of the pipe to the  
16       bar.   So that's a distance that is relevant for  
17       getting the fall height.

18          Q.           Okay.   So when we look at page -- at  
19       page 9, how can we tell what that measurement is  
20       from the picture?

21          A.           Well, you have several steps in.  
22       That -- that measurement with the rope is actually  
23       taken with a tape outside of the -- of the opening  
24       of the spiractor because you could not do it right

1       there.

2               Q.           Okay.   So there's no way by looking  
3       at picture 9 on Exhibit 39 we could make that  
4       measurement; correct?   Not by looking at the  
5       photo?

6               A.           Hold on.   Hold on.

7               Q.           Just answer that question.

8                           MS. O'LEARY:   No.   Object to  
9       form.

10      BY MS. BAUGHMAN:

11              Q.           No.   I'm asking, Dr. Hennet, you  
12      just brought up page 9.

13                      Is there a way with the photo on  
14      page 9 to make a measurement?

15                      MS. O'LEARY:   Object to form  
16      and foundation.

17                      THE WITNESS:   The measurement  
18      is done and illustrated in -- in  
19      additional photographs where the lengths  
20      of the rope is being measured with a  
21      tape.

22      BY MS. BAUGHMAN:

23              Q.           Okay.   Show me where that is.

24              A.           I am looking for it.

1 (Reviews document.)

2 Okay. That will be photograph 003.

3 Q. Okay. It's a measurement of a rope,  
4 but we don't know, we can't tell from the  
5 measurement where the rope was; right?

6 A. Well, I am telling you where the  
7 rope was by showing you 009. That basically is  
8 the way we had to do it.

9 Q. Okay. So you're saying that -- that  
10 from that what we're seeing there is from that  
11 pipe on 9 all the way to where? To what part of  
12 the bottom of the spiractor?

13 A. Not to the --

14 Q. To --

15 A. It is to the top of the pipe of the  
16 spiractor, just after it stops turning is a J.

17 MS. BAUGHMAN: "Just after it  
18 stops turning is a J." So it's -- I tell  
19 you what we'll do.

20 I'm going to mark as  
21 Exhibit 41 a copy just of page 9.

22 (Document marked for  
23 identification as Exhibit 41.)

24 BY MS. BAUGHMAN:

1           Q.           And I'm going to give you a pen, and  
2 I want you to show me from right on Exhibit 9  
3 where the rope was that you measured. Just draw  
4 the rope.

5           A.           The rope is here. (Marks document).

6           Q.           Okay. Can I see that, please?

7           A.           (Hands document).

8           Q.           So if you look at Exhibit 11.

9           A.           Exhibit 11.

10          Q.           In your diagram there, you're  
11 showing 18 inches from where to where?

12                       Don't write on this yet, on  
13 Exhibit 41, but show me where that 18 inches would  
14 be.

15          A.           Well, it would be from the rim  
16 elevation down. That would be this portion.  
17 Because then we measure this distance on another  
18 photographs, but we measured that distance from  
19 there to the rim. And then you just subtract that  
20 from the length of the rope, and then you have the  
21 distance from the rim to the top of the pipe, and  
22 that's 18 inches about. And I made a note that it  
23 was difficult to measure. So it's --

24          Q.           Okay.



1 A. It is an estimate --

2 Q. So.

3 A. -- plus or minus an inch or so.

4 Q. Okay. So use the pen here and go  
5 ahead and, like, mark where the 18 inches is.  
6 Write 18 inches so we can see what you're talking  
7 about.

8 MS. O'LEARY: Object to form.

9 BY MS. BAUGHMAN:

10 Q. Go ahead. Go ahead.

11 A. Yeah. Again, you are just asking me  
12 to do something. Just the accuracy of it you can  
13 always talk about. But you have to -- you have  
14 to go and -- it's -- we measured this distance  
15 here. (Marks document).

16 Q. What -- but I'm looking at your --  
17 your diagram --

18 A. And then --

19 Q. -- on Exhibit 11 and you're saying  
20 18 inches based on this work. So I'm trying to  
21 understand where that 18 inches is.

22 A. And I'm trying to explain that to  
23 you.

24 Q. Okay. Can you show us?

1 A. Well, I can show you.

2 This is one measurement. Right?

3 Q. Okay. But you have to say --

4 A. That's the length of the rope.

5 Q. -- what "this" is. What --

6 A. That's -- that's what we --

7 Q. For the record, when you say "this

8 is one measurement," what are you referring to?

9 What's the number of that photo?

10 A. This is -- sorry, yes. It is 003.

11 Okay?

12 Q. Okay. All right.

13 A. This is one measurement that's total

14 length of that hole that you have here --

15 Q. Okay.

16 A. -- vertically.

17 Q. So that the line that you've drawn

18 on what we've marked as Exhibit 41 is the

19 measurement on page -- on the photo number 3;

20 right?

21 A. Yes.

22 Q. Okay. Now, where's the 18 inches

23 that you're -- you're indicating on Exhibit 11

24 exists? What -- what is that?

1           A.           The next step is this one. It's  
2   Exhibit 012.

3           Q.           Okay. And that's showing 11 inches?

4           A.           From the top of the bar, which is  
5   always on top, to the rim.

6           Q.           Right.

7           A.           Right? So that would be this here.

8           Q.           Right.

9           A.           Right? And then on 003, you can see  
10   that to the top of the bar, it's about 28 inches.  
11   The lengths of the rope. Right?

12          Q.           Right.

13          A.           Then here you have this 11. Right?

14          Q.           Right.

15          A.           And -- and you have basically 28  
16   minus 11, that's 17 but, you know, that  
17   it's -- it's approximate. So this is -- this is  
18   where the 18 comes from.

19                       That this -- this is 012 that give  
20   you the 11, 11 inches from the top of the bar to  
21   the rim. Right?

22          Q.           Uh-huh.

23          A.           And then you have this that gives  
24   you the entirety of the -- from the top of the bar

1 to basically the top of the pipe.

2 Q. Right.

3 A. And that's about 28 inches.

4 Q. Uh-huh.

5 A. So you subtract 11 from the 28  
6 inches and that -- that gives you -- it will be  
7 17, but I --

8 Q. Okay. Can you show me? Go ahead  
9 and mark it on the diagram there, the 18 or 17  
10 inches. Show us where that is.

11 MS. O'LEARY: Object to form.

12 THE WITNESS: It's difficult  
13 on that.

14 You have the 11 here and you  
15 have the 28 there.

16 BY MS. BAUGHMAN:

17 Q. Right.

18 But first on Exhibit 41, where is  
19 the 18 inches?

20 A. Exhibit 41.

21 MS. O'LEARY: Objection.

22 BY MS. BAUGHMAN:

23 Q. This one.

24 A. On this photograph on 009?

1 Q. Right.

2 A. Well, it's going to be somewhere.  
3 You have to subtract.

4 Q. Right.

5 Just mark it so that -- so that --  
6 so that the court will understand what you're  
7 saying.

8 MS. O'LEARY: Object to form.

9 He's just said it's hard to  
10 see on that photo.

11 BY MS. BAUGHMAN:

12 Q. That's the photo you showed me that  
13 was the best illustration of your measurements;  
14 right?

15 MS. O'LEARY: Object to  
16 foundation.

17 THE WITNESS: It's a  
18 step-wise approach. You need more than  
19 one thing to illustrate the -- the  
20 measurements that I took.

21 You have this one which gives  
22 you 28 inches. Right? This is this.

23 BY MS. BAUGHMAN:

24 Q. I understand.

1           A.           You have this one. By "this one" I  
2 meant 003.

3                       And then you have 012 that give you  
4 11 inches.

5                       And then you have this one that  
6 shows you that these lengths minus -- the lengths  
7 that is on 003 minus the lengths that is on 012 --

8           Q.           Okay.

9           A.           -- gives you basically the distance  
10 between the rim and the top of the pipe.

11          Q.           Okay. So just -- so draw --

12          A.           The top of the pipe.

13          Q.           Mark the distance from the rim to  
14 the top of the pipe on there.

15                       MS. O'LEARY: Object to form.

16                       THE WITNESS: I don't know  
17 how to do that.

18                       MS. BAUGHMAN: Are you  
19 instructing him not to do it?

20                       MS. O'LEARY: No. I'm  
21 objecting to the form. He doesn't have  
22 to do it, but I'm not instructing him not  
23 to.

24 BY MS. BAUGHMAN:

1 Q. Okay. Go ahead.

2 A. Right. It is difficult to do here  
3 because if I do something on this, you are going  
4 to make something of it that I didn't mean it to  
5 be and that's --

6 Q. Do this for me.

7 Where is the fall? If you were  
8 measuring the fall height, if you could measure  
9 the fall height; right?

10 A. Okay.

11 Q. Without this experiment. What is  
12 the fall height?

13 A. Yeah, yeah.

14 Q. From where to where on that  
15 document?

16 A. Not at the fall height yet. We are  
17 at the distance between the rim and the top of the  
18 pipe.

19 Q. Okay. I'm asking you a different  
20 question now.

21 Where is the fall height?

22 A. The fall height would be to where  
23 the level would be in this 12-inch pipe or in this  
24 pipe as estimated by AHE -- AEH, and that's about

1 6 inches of here. So that would be something  
2 from -- again, on this photograph, it's difficult  
3 to do because you have a -- you have a visual  
4 this.

5 Q. Let me ask you.

6 Wouldn't the fall height -- and I  
7 understand people can't see what I'm doing. I'm  
8 just.

9 Wouldn't the fall height be from  
10 this rim to where the water level is? Isn't that  
11 the fall height, or not?

12 MS. O'LEARY: Object to form.

13 THE WITNESS: That would be  
14 from -- from this -- this rim to  
15 basically, yeah, something like this.

16 BY MS. BAUGHMAN:

17 Q. Okay. So can you draw for me if you  
18 are able to, whether you measured it or not, what  
19 the fall height is so we understand what that is?

20 MS. O'LEARY: Object to form.

21 THE WITNESS: I gave you that  
22 on my notes, and I'm telling you that the  
23 basis for that is this here.

24 Drawing on photographs that



1           are distorted like this is not something  
2           that's scientific.

3       BY MS. BAUGHMAN:

4           Q.           Well, these are -- those are photos  
5           that you took; right? Or you directed to be taken  
6           at your site visit?

7           A.           Those are photographs and the  
8           measurements are on 003, 012, and then you have  
9           the 6-inch water level from AEH in the pipe. And  
10          the dimension of the pipe is basically 12-inch  
11          approximately.

12          Q.           Okay. So are you refusing to draw  
13          the fall height on Exhibit 41, your picture marked  
14          number 9? You won't do it?

15                       MS. O'LEARY: Object to form.

16                       THE WITNESS: It's described  
17          in my report and the fall height, the  
18          fall height is from the rim to the water  
19          level in the pipe when it's operating.

20       BY MS. BAUGHMAN:

21          Q.           Okay. But you don't want to draw  
22          it?

23                       MS. O'LEARY: Object to form.

24                       THE WITNESS: I don't feel

1           comfortable to draw it on a picture that  
2           is distortion.

3       BY MS. BAUGHMAN:

4           Q.           Okay. And why and what -- why is  
5       Exhibit 9 distorted? What's distorted about it?

6           A.           Because it is a photograph of  
7       something that is actively that is one dimensions  
8       and the photograph itself is, you know, one  
9       dimension things with distortions. That's what  
10      happens. That's why you can -- it is very  
11      difficult to do visual evaluation if you don't do  
12      measurements because the distortion just leads you  
13      to -- to estimates that are not correct.

14          Q.           And how do you know -- when you  
15      did -- when you dropped the rope down, how do you  
16      know that the rope was straight? Could you see  
17      the rope?

18          A.           Yes, I did see the rope --

19          Q.           Okay.

20          A.           -- and it was straight.

21          Q.           Do you have a picture of the rope  
22      hanging down when you made the measurement?

23                      MS. O'LEARY: Object to  
24                      foundation.

1 THE WITNESS: It is on 003.

2 BY MS. BAUGHMAN:

3 Q. No, no, no.

4 I mean, when you dropped the rope  
5 down, right, to figure out the length there, do  
6 you have a picture of you when you did that?

7 MS. O'LEARY: What's the  
8 exhibit number you're pointing to?

9 MS. BAUGHMAN: Number 1.

10 THE WITNESS: Right. It is on  
11 009.

12 BY MS. BAUGHMAN:

13 Q. The rope? No, you drew the rope on  
14 009.

15 A. No. This is on 009. This one is a  
16 different one. You go to Exhibit 40 and this is  
17 009 on Exhibit 40. There I did not draw anything  
18 on 009 in Exhibit 40. You made me draw something  
19 on Exhibit 41.

20 Q. Hold on a minute.

21 A. And what you can see there is a  
22 rope.

23 Q. But those are the same picture.

24 A. They are the same pictures, but

1       there you made me draw on it.

2               Q.           Okay. Did you just draw on top of  
3       what the rope -- of where the rope was?

4               A.           That's what you asked me to do.

5               Q.           Okay. All right. Okay.

6                       And is there any kind of a --  
7       there's no measurement or scale on HENNET\_USA 9  
8       that would allow us to measure that rope distance;  
9       correct? Independent of what you-all did?

10              A.           You don't have -- I couldn't put a  
11       scale on there. Otherwise, I would have done it.

12              Q.           Okay. Okay. And other than the  
13       diagram that's drawn on Figure 3-4 of AH, do you  
14       have any other basis to disagree with the  
15       statement in the AH report that the effluent pipe  
16       is likely to be flowing full in the Hadnot Point  
17       Water Treatment Plant spiractors?

18                      MS. O'LEARY: Object to  
19       foundation.

20                      THE WITNESS: In the AEH's  
21       report, somewhere in there, it just says  
22       that I made calculations for the  
23       condition of the pipe using a dimension  
24       of 12 inches for the pipe, and at the

1           flow rate that comes out of the  
2           spiractors, I estimated that the depths  
3           of water in the pipe is 6 inches.

4       BY MS. BAUGHMAN:

5           Q.           And where is that calculation in  
6           your report?

7                       Is that in your report?

8           A.           I -- I just -- I just used the AEH  
9           diagrams that I put in my report and it is there.

10          Q.           I know.

11                       Is that calculation in your report?

12          A.           The calculation for -- for what?

13          Q.           For -- for -- you just said you did  
14          a calculation to see whether the level of water in  
15          the pipe would be 6 inches based on the -- the  
16          amount of water going through the spiractor or  
17          through the water treatment plant.

18                       I was just wondering: Is that  
19          calculation in your report?

20          A.           I didn't do that calculation.

21                       MS. O'LEARY: Object to form.

22                       THE WITNESS: The EA -- AEH  
23          did that calculations, and it is a  
24          reasonable answer.

1 BY MS. BAUGHMAN:

2 Q. I want to ask you something else  
3 about the AH report while we're here.

4 If you could turn to pages 3 -- page  
5 3-8 first of the AH report, Exhibit 38.

6 A. Yes.

7 Q. And there is a picture of the Hadnot  
8 Point Water Treatment Plant spiractor effluent  
9 pipe and it's labeled "1941/1942."

10 Do you have any reason to believe  
11 that the date of that photograph is not correct?

12 MS. O'LEARY: Object to  
13 foundation.

14 THE WITNESS: I have no  
15 understanding of the source of the  
16 photographs and it's not described. So  
17 this is -- this is -- this is what it is.

18 BY MS. BAUGHMAN:

19 Q. Right.

20 But do you have some reason to  
21 believe that the date is incorrect as stated by AH  
22 in its report?

23 MS. O'LEARY: Object to form.

24 THE WITNESS: With the

1 exceptions is I don't see where it comes  
2 from. So whether it is even -- I have  
3 no -- I have no information that  
4 would -- that would basically tell you  
5 where that picture actually comes.

6 BY MS. BAUGHMAN:

7 Q. Right.

8 A. Except what is written under it.

9 Q. Right.

10 A. And that's what it is.

11 Q. Okay. So the next page, on page 3-9  
12 they have a spiractor effluent pipe for Hadnot  
13 Point labeled "1944/1945."

14 Do you have a basis to believe that  
15 that date is incorrect?

16 MS. O'LEARY: Object to form.

17 THE WITNESS: Same thing. I  
18 have no way to verify if this is from  
19 there and if it is from that date.

20 I -- I don't know but you see --

21 BY MS. BAUGHMAN:

22 Q. But do you have -- what I'm asking  
23 is: Do you have information that leads you to  
24 believe that's the wrong date?

1           A.           I have no information to verify  
2 this.   None.

3           Q.           Either way?

4           A.           Either way.

5           Q.           Okay.

6                        Okay.   Okay.   I want to ask you some  
7 questions about the water buffalos.   And while  
8 we're -- while we've got Exhibit 39 handy, the  
9 pictures from February 11th, let me ask you a few  
10 questions about those photos.

11                      If you turn to page 89, what is that  
12 a picture of?

13           A.           This is a photograph of a station  
14 basically where water buffalos can be filled up at  
15 the base.

16           Q.           Okay.   And are they filled up  
17 through that red hose?

18           A.           Yes.

19           Q.           Okay.   Is there any reason that when  
20 the water buffalos are filled up, the Marines  
21 can't just put the hose right into the tank  
22 instead of holding it above the tank?

23           A.           Well, they have to hold it because  
24 with the pressure that goes through that pipe, it



1 will just leave the water.

2 Q. I see.

3 But is there any reason they can't  
4 put it inside the water buffalo to fill it up  
5 instead of holding it above the water buffalo?

6 A. Well, when I observed it, I did it,  
7 the way I did it is, I kept the hose on top of  
8 the --

9 Q. Right.

10 A. -- on top of the water.

11 Q. So your observation was in February  
12 of 2025; correct?

13 A. That's my observation, yes.

14 Q. Did you have any conversations with  
15 any Marines about what the normal protocol is to  
16 fill a water buffalo?

17 A. They told me that. So I did it. I  
18 didn't instruct them to do it in any way.

19 Q. So you did have a conversation with  
20 the Marine?

21 A. No, no. I did not have a  
22 conversation with the Marine themselves. I just  
23 came up with the water buffalo, and I just climbed  
24 on it to be able to take pictures. And then they

1     they say -- I just told them, fill it up.

2             Q.        Okay.

3             A.        I mean, do it and that's it.

4             Q.        So that's --

5             A.        That's all. That's all my  
6     conversation with them. That's it.

7             Q.        Got it. Okay.

8                     Have you had any conversation with  
9     any other individual regarding how water buffalos  
10    were filled up at Camp Lejeune?

11            A.        I have not had conversation about  
12    that because -- but there is information that in  
13    the historian report that shows how it should be  
14    done and so on.

15            Q.        Okay.

16            A.        And how it was done over time.

17            Q.        Okay. You're referring to the DOJ's  
18    expert's -- historian expert's report; correct?

19            A.        Yes.

20            Q.        Okay. Have you yourself done any  
21    investigation, independent of the historian, on  
22    how water buffalos were filled up at Camp Lejeune,  
23    other than watching this one be filled up in 2025?

24            A.        Well, yes, I looked for information

1 that describes, you know, the geometry of the  
2 water buffalos, what -- what they weigh. And I  
3 found what I found, and based on that, I just -- I  
4 just understood that for the water buffalos that I  
5 found information on the dimensions of, they were  
6 filled up through the filling hole by connecting  
7 the hose to the filling hole that there's a  
8 strainer to it.

9 That's -- that's what I recall. I  
10 think it is in my report the diagram of the water  
11 buffalos, and that's what I relied upon to say  
12 this is the way a water buffalos was filled up.

13 Q. Okay. So other than looking at the  
14 dimensions of water buffalos, did you do anything  
15 else to investigate how water buffalos were filled  
16 at Camp Lejeune?

17 Let me strike that and start over.

18 Other than watching one water  
19 buffalo be filled up in 2025 and reviewing the  
20 dimensions of water buffalos, did you do anything  
21 else to investigate how water buffalos are filled  
22 up?

23 MS. O'LEARY: Objection and  
24 foundation.

1 BY MS. BAUGHMAN:

2 Q. Your investigation, not the  
3 historian.

4 MS. O'LEARY: Object to form  
5 and foundation.

6 THE WITNESS: I relied on  
7 the -- I borrowed the information that  
8 the historian had put together, which is  
9 more than what I had found on water  
10 buffalos and, you know, the protocol of  
11 filling it and so on over time.

12 BY MS. BAUGHMAN:

13 Q. Okay. I'm just trying to get the  
14 universe of what you're relying for how water  
15 buffalos were filled up.

16 So we know you're relying on the  
17 historian's report, the DOJ's historian.

18 A. Uh-huh.

19 Q. We know you're relying on watching  
20 one water buffalo be filled up in February 2025.  
21 And we know you're relying on the dimensions of  
22 the water buffalo.

23 Is there anything else you're  
24 relying on?

1 MS. O'LEARY: Object to  
2 foundation.

3 BY MS. BAUGHMAN:

4 Q. For how water buffalos were filled  
5 up at Camp Lejeune?

6 MS. O'LEARY: Same objection.

7 THE WITNESS: Well, you know,  
8 that I mention and so are in my report.  
9 Right? I -- in an appendix of my report,  
10 you have water buffalos with the  
11 dimensions marked on them.

12 BY MS. BAUGHMAN:

13 Q. We -- that's one of the three things  
14 I mentioned.

15 Is there anything else?

16 A. Well, I have also, you know, I have  
17 seen all of a sudden after my report two  
18 affidavits by people who apparently witnessed  
19 water buffalos being filled.

20 Q. Okay. There's that.

21 Anything else?

22 A. And that was new to me.

23 Q. I understand.

24 A. That was major reason why I went

1 back to kind of look at that.

2 Q. Right.

3 Anything else?

4 A. That's all I can think about right  
5 now.

6 Q. Okay. So do you have any  
7 information that leads you to believe that when  
8 Marines filled up water buffalos at Camp Lejeune,  
9 they did not put the hose inside the water buffalo  
10 to fill it up?

11 MS. O'LEARY: Object to  
12 foundation.

13 THE WITNESS: I have seen  
14 descriptions that you would hook up the  
15 hose to the filling hole, the filling  
16 port that is a strainer. I have seen  
17 that.

18 And then I have seen the  
19 information that some water buffalos were  
20 filled up through the manhole, and that  
21 came with those affidavits that came  
22 after my report on that.

23 And also in Dr. Sabitini's  
24 rebuttal report to my report, it says the

1           water buffalos sometimes are filled up  
2           through the manhole, and that was the  
3           reason why I just wanted to see how do I  
4           do it today, and that's what I did.

5       BY MS. BAUGHMAN:

6           Q.           I'm going to respectfully object as  
7       nonresponsive, and maybe you don't understand my  
8       question. So I'm going to try it again.

9                        When you -- okay. Let me just ask  
10      you. Let me back up.

11                      You watched one water buffalo be  
12      filled up in February 2025; right?

13           A.           That's right.

14           Q.           Okay. Before that, had you yourself  
15      ever seen a water buffalo be filled up?

16           A.           Not before that.

17           Q.           Okay.

18           A.           Hold on. Except on a video that  
19      Dr. Sabatini put in his report.

20           Q.           Okay. So when you wrote your report  
21      in December of 2024, you had never seen a water  
22      buffalo be filled up; correct?

23           A.           No. The only information I had is  
24      what I have in my report and information in the

1     historian report.

2             Q.         Right.

3                         So that means when you signed your  
4     report on December 9, 2024, you had never seen a  
5     water buffalo be filled up; correct?

6             A.         Personally, I have never seen.

7             Q.         Okay.

8             A.         I had never seen a water buffalo  
9     being filled up --

10            Q.         Okay.

11            A.         -- by then.

12            Q.         So it's possible to fill a water  
13     buffalo by taking that red hose and putting it  
14     inside the tank to fill it up; right?

15            A.         Everything is possible.

16            Q.         Okay. What's your basis to say that  
17     was never done?

18                         MS. O'LEARY: Object to  
19     foundation.

20                         THE WITNESS: Maybe it was  
21     done, maybe it was not, but it was also  
22     done through the -- through the port, the  
23     filling port. That's documented, and it  
24     was also done as I observed it.



1                   And it was also done as  
2           Dr. Sabatini attachment to his report,  
3           which is a YouTube video of the filling  
4           up of a water buffalo. That's -- and in  
5           that case, I did it basically the same  
6           ways I observed.

7   BY MS. BAUGHMAN:

8           Q.       All right. So you have not done any  
9           calculations regarding the amount of  
10          volatilization that occurs during the filling of a  
11          water buffalo through a manhole cover; right?

12          A.       No. I have observed it and I have  
13          seen the extensive aeration that occurs, and I  
14          have basically concluded that it's quite similar  
15          as far as losses are concerned than the calculated  
16          losses that I have in my report --

17          Q.       Okay.

18          A.       -- that where the water buffalo was  
19          filled up through a strainer.

20          Q.       I'll object as nonresponsive.

21                   I just want to know: Have you done  
22          a calculation? Have you done a calculation on the  
23          amount of volatilization that occurs when you fill  
24          a water buffalo through a manhole cover?

1           A.           I have not done --

2                       MS. O'LEARY:   Object to form.

3                       THE WITNESS:    Sorry.

4                       I have not done additional  
5               calculations to from what is in my report  
6               because I consider that it was similar.

7   BY MS. BAUGHMAN:

8           Q.           Okay.   And in your report, you don't  
9   have a calculation on the volatile -- the amount  
10   of volatilization from filling a water buffalo  
11   through the manhole cover; right?

12          A.           I have it through calculations  
13   through a strainer in my report.

14          Q.           Not through the manhole cover?

15          A.           Not through the manhole cover.

16          Q.           Okay.

17          A.           And then what I observed led me to  
18   conclude that it was pretty similar.

19          Q.           Okay.   I'll object as nonresponsive  
20   to everything after "not through the manhole  
21   cover."

22                       When you observed that one water  
23   buffalo being filled in February 2025, did you  
24   make any measurements related to volatilization?

1           A.           I didn't do measurements, but I did  
2 observations.

3           Q.           Okay. And this may be obvious, but  
4 I just -- I just want to ask you.

5                       So when we're talking about the  
6 contaminants that -- that were in the water at  
7 Camp Lejeune -- PCE, TCE, the other VOCs -- if  
8 they're volatilizing out of the water, right, you  
9 couldn't see them; right?

10          A.           I couldn't see them, but I could  
11 smell the chlorine, which is also volatile organic  
12 compound. And when you do that, I could smell the  
13 chlorine coming out.

14          Q.           Okay. And you can't see the  
15 chlorine either; right?

16          A.           You cannot see it but --

17          Q.           Okay.

18          A.           -- I could -- I could smell it, and  
19 then that's why you go to geochemistry to estimate  
20 the partitioning.

21          Q.           Okay. So did you do a calculation  
22 on how much VOCs would come out of the water when  
23 you fill a water buffalo based on chlorine  
24 smelling?

1           A.           Not based on that. That's an  
2 observation.

3           Q.           Okay.

4           A.           I didn't do a calculation on it.

5           Q.           Okay.

6           A.           It's an observation.

7           Q.           Did you make any measurement on how  
8 much chlorine was coming out of the water when the  
9 water buffalo was being filled?

10          A.           I did not measure that. I didn't  
11 have the -- what would have been needed to do  
12 that, no.

13          Q.           Okay.

14          A.           And also I would like to take a  
15 break at some point.

16                       MS. BAUGHMAN: We can take a  
17 break right now. That's fine. Okay?  
18 Going off the record.

19                       THE VIDEOGRAPHER: Time is  
20 11:31 AM. We're now off the record.  
21 (A recess was taken.)

22                       THE VIDEOGRAPHER: The time is  
23 11:42 AM. We are now on the record.

24 BY MS. BAUGHMAN:

1           Q.       All right. Dr. Hennet, I want to  
2 ask you a few more questions about Exhibit 40,  
3 which are the pictures from a prior visit of yours  
4 before 2025 to the Camp Lejeune.

5                    Have you got that in front of you?

6           A.       Yes, I do.

7           Q.       Okay. Can you tell me -- the one  
8 that's page 3, we're looking at CLJA PHOTOS SSPA  
9 number 3.

10                   What's that a picture of?

11          A.       This is a picture of the top of --  
12 the best I can recall -- the top of a spiractor.

13          Q.       Do you know at which plant?

14          A.       I think this one would have been  
15 Hadnot Point.

16          Q.       Okay. And can you -- is it possible  
17 to measure the fall height based on this picture?

18          A.       You cannot access it, no.

19          Q.       Okay.

20          A.       You cannot see it either.

21          Q.       It looks like -- from the picture,  
22 it looks like the water is full all the way to the  
23 top.

24                   Is that true?

1 MS. O'LEARY: Object to  
2 foundation.

3 THE WITNESS: No, I don't  
4 think so.

5 BY MS. BAUGHMAN:

6 Q. Okay. If you turn to page 7 of  
7 Exhibit 40, what's that a picture of?

8 A. That's a picture of a water buffalo.

9 Q. And we're talking a little bit  
10 earlier about how in your report, your December  
11 2024 report we've marked as Exhibit 31, you did  
12 calculations assuming there was a filler pipe with  
13 a strainer, right, and that's how it was filled  
14 through that filler pipe with a strainer; right?

15 A. That's correct.

16 Q. Okay. Is there a flow pipe with a  
17 strainer on the water buffalo picture in page --  
18 on page 7 of Exhibit 40?

19 A. Not -- not on this one.

20 Q. Okay. So you -- you observed some  
21 water buffalos, even if you didn't see them  
22 filled, in your prior visit to Camp Lejeune,  
23 correct, before 2025?

24 A. Yes, parked.

1 Q. Did you look for the -- the filler  
2 pipe with the strainer while you were there?

3 A. This one didn't have one. So.

4 Q. Okay. So you knew that some water  
5 buffalos didn't have that?

6 A. In 2024 I knew that, yes.

7 Q. Okay. Did you do an investigation  
8 to see during what years the water buffalos had a  
9 filler pipe with a strainer?

10 A. Outside of what I mentioned before,  
11 you know, which is the historian report as well as  
12 the schematics of water buffalos historically, I  
13 have nothing else.

14 Q. Okay.

15 A. But in '24 this one that I saw had  
16 no -- no filler pipe.

17 Q. Okay. If you look at page 12,  
18 that's the picture of a spiractor that was sitting  
19 on a truck bed; is that right?

20 A. Yes.

21 Q. And that was found near the Holcomb  
22 Boulevard Water Treatment Plant?

23 A. I think it was either on a truck bed  
24 parked next to the Holcomb Boulevard.

1 Q. Okay.

2 A. I believe so, yeah.

3 Q. All right. So if you turn to  
4 picture 20 of Exhibit 40, is that another picture  
5 of a water buffalo?

6 A. That's correct.

7 Q. And, again, there's no filler pipe  
8 with a strainer on this one?

9 A. Yeah, again 2024, water buffalo.

10 Q. Okay.

11 A. I took a picture of it.

12 Q. Okay.

13 A. I mean, I had a picture of it taken.

14 Q. Then if you turn to page 25, is that  
15 a -- is that that -- the same spiractor that was  
16 sitting on the truck bed near the Holcomb  
17 Boulevard Water Treatment Plant?

18 A. Yes.

19 Q. Okay. And you used your -- your  
20 card there, your Metro card as a scale?

21 A. That's not mine but...

22 Q. That's what was used for the  
23 scaling?

24 A. That's what was used for the



1 scaling, yes.

2 Q. All right. So again we turn to page  
3 39. It's another picture of a water buffalo;  
4 right?

5 A. It's a picture of a water buffalo.  
6 I don't know if it's the same one or not. I don't  
7 know but --

8 Q. Okay.

9 A. -- it is, yes.

10 Q. Again, there's no filler pipe with a  
11 strainer on that one; right?

12 A. No. That's again 2024. This is  
13 what I saw.

14 Q. Okay. And then picture 42. This is  
15 similar to a picture we saw from your 2025 visit.

16 This is where the Marines would fill  
17 up the water buffalos?

18 A. Yes.

19 Q. Okay. All right. When you were  
20 writing your report, your December 2024 report,  
21 did you review the technical manuals that came  
22 with the water buffalos that explained how the  
23 water buffalos should be filled up?

24 MS. O'LEARY: Object to

1 foundation.

2 THE WITNESS: I don't  
3 recollect that. You have to show me  
4 that.

5 BY MS. BAUGHMAN:

6 Q. Were you aware when you wrote your  
7 report in December 2024 that some water buffalos  
8 during the time frame of the 1950s through 1986,  
9 in fact, did not come with the filler pipe with a  
10 strainer? Did you know that?

11 A. I didn't know that then.

12 Q. Okay.

13 A. With the exception of what was in  
14 the historian report, and I don't recollect the  
15 details of that.

16 Q. Okay. I want to ask you some. If  
17 we could turn to your report, Exhibit 31. And  
18 turn to a different subject here. If we could  
19 turn to page 5-29.

20 Are you there? Okay.

21 So you've opined that there was a  
22 what you call a long-time average TCE  
23 concentration of 227 micrograms per liter for  
24 water supplied by the Hadnot Point Water Treatment

1 Plant; right?

2 A. You have to show me where I say  
3 that.

4 Q. Sure.

5 The first paragraph under your  
6 exhibit on page 5-29. Look at that last sentence.  
7 You say:

8 "Considering that Hadnot Point or  
9 HP-651 was being pumped 39% of the time yields a  
10 TCE long-time average concentration of 227  
11 micrograms per liter for Hadnot Point Water  
12 Treatment Plant supplied water."

13 Do you see that?

14 A. Yes, I do.

15 Q. Okay. And this -- so -- so your  
16 calculation of 227 micrograms per liter for the  
17 long-time average is based on the 39 percent,  
18 right? The Hadnot Point water 651 was being  
19 pumped 39 percent of the time; correct?

20 A. Yes.

21 Q. And also based on your calculation  
22 of an average concentration for TCE in Hadnot  
23 Point Water Treatment Plant from January 21, 1985  
24 to February 5, 1985 of 582 micrograms per liter;

1 right?

2 A. Yes.

3 Q. Okay. And in case you didn't -- you  
4 seem hesitant. Look at the first sentence of that  
5 paragraph. You wrote:

6 "The average concentration measured  
7 for TCE at Hadnot Point Water Treatment Plant over  
8 the period January 21 through February 5, 1985, is  
9 582 micrograms per liter."

10 Do you see that?

11 A. Yes, I do.

12 Q. So to get to the 227 for the  
13 long-time average, you had two inputs to that  
14 calculation, the 39 percent and the 582; right?

15 A. Yes.

16 Q. Okay. So I want to ask you first  
17 about the calculation of the average concentration  
18 for TCE at the Hadnot Point Water Treatment Plant  
19 of 582. Okay? I want to talk about how you  
20 reached that number. Okay?

21 So first let's -- let's look at page  
22 5-23 of your report.

23 A. Yes.

24 Q. Okay. And in the paragraph at the

1 top of the page in the middle, you refer to these  
2 18 water samples; right? You see that in the  
3 middle of that paragraph you say:

4 "Eighteen water samples were  
5 collected from locations in the two distribution  
6 systems."

7 Okay? And that's referring to this  
8 time frame when the Hadnot Point Water Treatment  
9 Plant was supplying water to Holcomb Boulevard;  
10 correct? That --

11 A. Yes.

12 Q. -- January 27 to February 5, '85  
13 time frame; right?

14 A. I think that's correct.

15 Q. Okay. Look at the sentence right  
16 before:

17 "During that period of time" --  
18 right, referring to January 27 to February 5,  
19 '85 -- "HP-WTP, the Hadnot Point Water Treatment  
20 Plant, supplied the entirety of the water in the  
21 Holcomb Boulevard system which was shut down  
22 following a fuel release incident."

23 Do you see that?

24 A. Yes.

1           Q.           So during that time frame, these 18  
2 water samples were collected from the two  
3 distribution systems, and then you say:

4                       "The average TCE concentration in  
5 the treated water was 582."

6                       Right?

7           A.           Yes, that's what I say.

8           Q.           Okay. So look at -- let's look at  
9 page 5-24 of your -- hold on.

10                      We look at page 5-27 of your report,  
11 which you've labeled as Exhibit 5-3.

12                      You see the title of that Exhibit  
13 5-3 is "COC Concentrations in the Holcomb  
14 Boulevard and Hadnot Point Systems During Shutdown  
15 of Holcomb Boulevard Water Treatment Plant:  
16 January 27 to February 5."

17                      And you say the water -- okay.

18                      So these are the 18 numbers that you  
19 used to calculate the average; correct?

20           A.           Well, it's probably correct. I  
21 don't know.

22           Q.           Well, I have questions about it. So  
23 I want to make sure we're on the same page.

24                      You did the calculations; right?

1           A.           Yeah.

2           Q.           Okay. Okay. So if you go back to  
3 page 5-23 in your report?

4           A.           Yes.

5           Q.           In the last sentence says -- okay.  
6 So the 582 let's go back to that.

7                        "Eighteen water samples were  
8 collected from locations in two distribution  
9 systems. The average TCE concentration of treated  
10 water was 582 micrograms per liter."

11                      Do you see that statement? Are with  
12 me?

13          A.           I see the statement, yes.

14          Q.           And then the last sentence, or you  
15 go on to say:

16                      "The data for the period January 27  
17 to February 5, 1985 that contains the data for the  
18 period when the Hadnot Point Water Treatment Plant  
19 was providing 100% of the Holcomb Boulevard water  
20 supply are summarized in Exhibit 5-3."

21                      Right?

22          A.           That's what it says, yes.

23          Q.           Okay. So the data to calculate this  
24 average of 582 micrograms per liter are in

1 Exhibit 5-3; correct?

2 A. Well, you know, I have to  
3 refresh -- to double-check that, but I think it  
4 appears to be correct.

5 Q. That's what the report --

6 A. Yeah.

7 Q. -- says; right?

8 A. (Reviews document.)

9 Yes, I think that's correct.

10 Q. Okay. So I want to ask you about  
11 that, this data that were used to calculate the --  
12 the 582 microgram per liter average TCE  
13 concentration. All right?

14 Exhibit 5-3 shows the location where  
15 those samples were taken; correct?

16 A. Yes.

17 Q. Okay. So just for reference,  
18 building number 20 is the Hadnot Point Water  
19 Treatment Plant; right?

20 A. Yes.

21 Q. Okay. And so the last entry on page  
22 527 for building number 20, that sample date was  
23 February 5, 1985.

24 Do you see that?



1 A. Yes.

2 Q. Okay. And the value for TCE was  
3 429; right?

4 A. Yes.

5 Q. Okay. But that sample was taken the  
6 day after HP-651 had been shut down; correct?

7 A. Same day or the day after. I don't  
8 know.

9 Q. Well, look at the heading of your  
10 Exhibit 5-3 on this page. Right in the heading of  
11 your Exhibit 5-3 it says --

12 A. Yes.

13 Q. -- "Supply Well HP-651 Was Shut Down  
14 on February 4, 1985"; correct?

15 A. Yes.

16 Q. Okay. So this sample of 429 for  
17 building 20 was taken a day after HP-651 was shut  
18 down; correct?

19 A. Yes, and -- yes, and it represent  
20 treated water that is in the reservoirs. Yeah.

21 Q. Right.

22 But the whole point of doing this  
23 calculation is to figure out what the  
24 concentrations were when HP-651 was running;

1 right? Was being pumped?

2 A. Yeah. Well, it was, the calculation  
3 is what was the water that was delivered on  
4 average, what was the concentration on average in  
5 the water that was delivered in -- in both areas  
6 until February 5. That's what I recall.

7 Q. Well, let's go back to page 5-23.

8 A. Here we go.

9 Q. The first sentence on page 5-23 of  
10 your report says:

11 "There is available data for COC  
12 concentrations in treated water from Hadnot Point  
13 Water Treatment Plant over the period January 27  
14 to February 5, when it is known that supply well  
15 HP-651 was being pumped."

16 Okay. Is it the whole point of this  
17 calculation of you're trying to figure out the  
18 average TCE concentration in the water while  
19 HP-651 was being pumped; right?

20 A. No. Actually, this is when the --  
21 when the water that was supplied to both system  
22 was coming from Hadnot Point Water Treatment  
23 Plant.

24 Q. But the purpose of your calculation

1 is to figure out what -- how much -- how much TCE  
2 was in the water when HP-651 was being pumped?

3 A. Yes, and HP 51 -- 651 was being  
4 pumped and said it was shut down on February 4th,  
5 but then, you know, it takes -- what you have in  
6 the reservoirs that is being provided to the rest  
7 of the system, it takes -- it takes a while to  
8 flush that through.

9 Q. Okay. Well, if we look at the  
10 number for building number 20 on January 31st,  
11 right, which is two -- two lines up, we know on  
12 January 31st HP-651 was, in fact, being used;  
13 right?

14 A. 651? Was being pumped, yes.

15 Q. Yes. Okay.

16 And so when on January 31st the  
17 number was 900 micrograms per liter; right?

18 A. Yes.

19 Q. So it's almost -- it's more than  
20 double than the number the day after HP-651 had  
21 been turned off; correct?

22 A. Yes, and you have a variability.  
23 You have some variation in the concentrations.

24 Q. Is there an explanation for that

1 variation the fact that HP-651 had been turned off  
2 the day before?

3 A. Well, it would have some effect, but  
4 you also have -- I have to go back to this to --  
5 to go into details of where you want to go. You  
6 know, you also have dates 1/29/85 that were lower  
7 and -- well, you have a variability. Right? It's  
8 not one number. And I estimated a number that is  
9 representative --

10 Q. Okay.

11 A. -- for the long-term things and I  
12 did it the way I explain I did it, and that's what  
13 it is.

14 Q. Let me ask you this.

15 Would you agree that the February 5,  
16 1985 sample from building 20 does not represent  
17 the concentration of TCE in the water being pumped  
18 from Hadnot Point while HP-651 is pumping?

19 A. Well, but it contains water that was  
20 pumped at HP-651 and that's what's contaminated.

21 Q. And it contains -- it also contains  
22 water when HP-651 was not being pumped; right?

23 A. Well, that depends how flush the  
24 system was. You have to look at the timing by the

1 hour and, you know, I don't recall the detail of  
2 that. But it is. You have the effect of 651. No  
3 question about it and --

4 Q. There's also no question that there  
5 would have been water in that sample, that 4/29  
6 sample on February 5th, that was from wells other  
7 than HP-651 because HP-651 was not being pumped on  
8 February 5th; right?

9 MS. O'LEARY: Object to  
10 foundation.

11 THE WITNESS: Yes, and, again,  
12 I will have to go to the hour. When was  
13 it stopped exactly and when -- how much  
14 time it takes to flush the system, and --  
15 and I see what you -- what you are  
16 getting at.

17 It says you have slightly less  
18 concentration then, therefore, might have  
19 to be a little bit higher. It would not  
20 change it by much at all.

21 BY MS. BAUGHMAN:

22 Q. Okay. Let me ask you some more  
23 questions about this then.

24 Building 670. I think we talked

1 about this earlier. Building 670 is the Holcomb  
2 Boulevard Water Treatment Plant; right?

3 A. Yes, and that's the reservoirs in  
4 that -- in that system, yes.

5 Q. Okay. So there are five samples  
6 included in your calculation on Exhibit 5-3 that  
7 were from building 670.

8 Do you see that?

9 A. Yes.

10 Q. Okay. And the numbers of TCE at  
11 building 670, the Holcomb Boulevard Water  
12 Treatment Plant, the measurements for TCE were  
13 8.2, 340, 27, 24, and 26; right?

14 A. Let me just get to find it.

15 Where did you get the 842?

16 Oh, yeah. Yes.

17 Q. Okay. And two of those samples were  
18 taken on January 29th and three of them were taken  
19 on January 31, 1985; right?

20 A. Yes.

21 Q. Okay. And I averaged those five  
22 and, you know, I could -- you could use a  
23 calculator on your phone or whatever, but probably  
24 sounds right.

1                   If you have the 8.2, 340, 27, 24,  
2                   26, the average of that is 85 micrograms per  
3                   liter. Okay? Take my word for that.

4                   Let me ask you this question.

5                   Do you believe 85 micrograms per  
6                   liter is representative of the amount of TCE in  
7                   Hadnot Point Water Treatment Plant water when 651  
8                   is running?

9                   MS. O'LEARY: Object to form  
10                  and foundation.

11                  THE WITNESS: Well, the 651  
12                  was running during that time, right, and  
13                  the systems were connected. So the water  
14                  on average that was provided by the  
15                  system included what was in the  
16                  reservoirs at 670, and that's  
17                  basically -- that's basically my  
18                  understanding of the system.

19                  BY MS. BAUGHMAN:

20                  Q.            Okay.

21                  A.            So all of this was representative of  
22                  the system. So some places receive water with low  
23                  concentration and some places with higher  
24                  concentrations.

1           The purpose of what I did was to get  
2   an estimate, a long-time estimate as I said, of  
3   how much concentration of TCE the water supplied  
4   by Hadnot Point would contain when the effect of  
5   651 is filled.

6           Q.       Right. Okay.

7                    So let me ask you this.

8                    How -- during this time frame of  
9   January 27 to February 5, 1985, how were -- how  
10   did Hadnot Point water treatment -- Hadnot Point  
11   provide the water to Holcomb Boulevard? Like how  
12   did Hadnot Point actually get into the Holcomb  
13   Boulevard system?

14           A.       Right. My understanding is that you  
15   have connection -- you have two connections.  
16   That's what I recall. And they open, at least one  
17   of them, and then it goes into the system. And  
18   the distribution system in my assumptions goes  
19   through the reservoir of 670 to kind of keep  
20   pushing that through.

21           Q.       Okay. So you're saying, okay, the  
22   connection is in the piping in the water  
23   distribution system Hadnot -- between Hadnot Point  
24   and Holcomb Boulevard; right?



1           A.           (Nods head).

2           Q.           Okay. So -- so water in the Hadnot  
3 Point water distribution system gets into the  
4 Holcomb Boulevard water distribution system;  
5 correct?

6           A.           (Nods head).

7           Q.           Okay. Is there a way for water  
8 that's in the water distribution system of Holcomb  
9 Boulevard to get into the Holcomb Boulevard Water  
10 Treatment Plant?

11          A.           It's not a treatment. It's a  
12 reservoir. It's not -- it's after the treatment  
13 plant. It's a reservoir.

14          Q.           Okay. So how does water that's in  
15 the Holcomb Boulevard water distribution system  
16 end up in the reservoir?

17          A.           Because everything is connected.  
18 That's my understanding.

19          Q.           Are there not valves that prevent  
20 water in the water distribution system from  
21 backing up into the reservoir?

22          A.           I do not know about the valve  
23 situation exactly there.

24          Q.           Did you investigate that?

1           A.           I did not investigate that. I made  
2 the assumptions that I made in my -- in my report.

3           Q.           Does the Holcomb Boulevard Water  
4 Treatment Plant have a backflow prevention from  
5 the distribution system into the reservoir?

6           A.           That I do not know.

7           Q.           Do you know what a check valve is?

8           A.           I do.

9           Q.           What is it?

10          A.           It's -- it's a valve that basically  
11 make -- forces a flow to go only in one direction.  
12 If it goes in the other one, it tends to shut  
13 down, if it's perfectly working.

14          Q.           So were there check valves in the  
15 Holcomb Boulevard water distribution system to  
16 prevent water from the distribution system to back  
17 up into the reservoir?

18          A.           I do not know. I assume that it was  
19 not the case. I assume that the waters that was  
20 delivered is the waters that is characterized by  
21 this data, and I made that calculation as I  
22 explained it. And if I am wrong, well, maybe then  
23 I would be corrected if I am shown wrong, but this  
24 is what I did.

1 Q. Just a minute.

2 Would it make sense that there would  
3 be check valves to prevent water from the Holcomb  
4 Boulevard water distribution system from backing  
5 up into the reservoir?

6 A. I don't know. I don't have an  
7 answer for that.

8 Q. Did you talk to anyone at the  
9 Holcomb Boulevard or Hadnot Point who works at  
10 those treatment plants or anyone from Camp Lejeune  
11 about whether there are check valves that prevent  
12 water from the Holcomb Boulevard distribution  
13 system from backing up into the reservoir?

14 A. I have not asked that question.

15 Q. Okay. If there were check valves to  
16 prevent water from the Holcomb Boulevard water  
17 distribution system from backing up into the  
18 reservoir, then your -- your numbers for building  
19 670 should not have been used in this calculation.

20 Would you agree with me?

21 MS. O'LEARY: Object to  
22 foundation.

23 THE WITNESS: Well, we  
24 can -- we can argue about that. That

1 depends. Again, that depends on the  
2 setup on piping and -- and all of that  
3 and whether or not those reservoirs were  
4 still providing certain areas with water.

5 BY MS. BAUGHMAN:

6 Q. Well --

7 A. I don't -- I told you, I don't know  
8 if there was check valves or not, and I assumed  
9 that that was part of the system and that was  
10 concentrations that were in the system. That's  
11 what I assumed.

12 Q. You assumed that water from the  
13 Hadnot Point Water Treatment Plant, while 651 was  
14 pumping, would get into the Holcomb Boulevard  
15 distribution system and then would be able to back  
16 up into the reservoir for Holcomb Boulevard;  
17 right?

18 A. Again, I just assume that's part of  
19 the system. That's the data for the system. I  
20 just made a simple average of all of that to  
21 present to long term. Whether it's 582 or 600 or  
22 we can argue about that, but I clearly stated the  
23 way I did it.

24 Q. Let me ask you.

1                   The sample that says building --  
2   it's the third one -- building 670 "upstream of  
3   reservoir" in your Exhibit 5-3.

4                   What does "upstream of reservoir"  
5   mean?

6           A.       Well, it's upstream of the  
7   reservoir.

8           Q.       So that's not a sample from the  
9   reservoir; right?

10          A.       This is just how it was described,  
11   and I would interpret that as you say that it's  
12   upstream from the reservoir. That means it's as  
13   the water flows --

14          Q.       That would be part --

15          A.       -- it would be before the reservoir,  
16   but it could still be treated water. It could  
17   still be the water that is being provided.

18          Q.       Well, the water that was being  
19   provided in that time frame of January 27 to  
20   February 5, 1985 was not coming from the Holcomb  
21   Boulevard reservoir; right?

22                   MS. O'LEARY: Object to  
23   foundation.

24                   THE WITNESS: Well --

1 BY MS. BAUGHMAN:

2 Q. Because Holcomb Boulevard Water  
3 Treatment Plant was shut down; right?

4 A. Well --

5 MS. O'LEARY: Same objection.

6 THE WITNESS: -- what was shut  
7 down was the treatment. Right? Because  
8 you had some contamination in the system,  
9 and that was shut down. You had a fuel  
10 leak, if I recall --

11 BY MS. BAUGHMAN:

12 Q. Right.

13 A. -- and that was shut down.

14 Q. Right.

15 Where was the fuel leak? Do you  
16 remember?

17 A. It was -- I believe it was on top of  
18 one reservoir. I don't remember the details of  
19 it.

20 Q. So building 670, the reservoir here  
21 that was sampled and included in your  
22 calculations, was that the reservoir that had the  
23 leak in it?

24 A. I do not know that.

1 Q. Okay.

2 A. It is a description of where exactly  
3 the sample was taken. It is not -- I could not  
4 figure out exactly the way it was.

5 MS. BAUGHMAN: Okay. I'm  
6 going to hand you what I've marked as  
7 Exhibit 42 to your deposition.

8 (Document marked for  
9 identification as Exhibit 42.)

10 BY MS. BAUGHMAN:

11 Q. And Exhibit 42 is a one-page  
12 document Bates-stamped CLJA\_USMCGEN and the last  
13 four numbers are 6684.

14 Have you seen this document before?

15 A. Specifically that one single page  
16 here, I may have seen it. I don't know for sure.

17 Q. Okay. So you see this starts out at  
18 the top Sunday, January 27, 1985 at 1300, and it  
19 describes what happened there in terms of that  
20 gasoline leak.

21 A. Right.

22 Q. Right?

23 And about 25 percent down the page  
24 it says:

1                   "Then the reservoir was drained of  
2   1,000,000 gallons and hosed down with fire hose  
3   for several hours."

4                   Do you see that?

5           A.       Exactly.

6           Q.       And that's referring to a reservoir  
7   at Holcomb Boulevard Water Treatment Plant;  
8   correct?

9           A.       That's correct.

10          Q.       Okay. And that's all on the entry  
11   for Sunday, January 27th; correct?

12          A.       That's correct.

13          Q.       Then it says:

14                   "Monday - January 28th - the  
15   reservoir was refilled, at 1400," which would be  
16   2:00 PM; correct?

17                   And then it says "plant  
18   turned" -- oh, I'm sorry.

19                   It says "the reservoir was refilled,  
20   at 1400 plant turned off."

21                   Do you see that?

22          A.       I see that.

23          Q.       Okay. What water was used to refill  
24   that reservoir? Where did it come from?



1           A.           Well, that may be the explanation of  
2 why you had contamination in that reservoir. It's  
3 just -- I don't know exactly where it came from.  
4 It may have come from -- partly from Hadnot Point  
5 Water Treatment Plant and partly from --

6           Q.           But you don't know?

7           A.           -- and partly from some wells.  
8                        I do not know --

9           Q.           I mean --

10          A.           -- but it was refilled with water  
11 and that water was not something that went through  
12 the plant.

13          Q.           Well, how do you know that it wasn't  
14 refilled with water from Holcomb Boulevard?

15          A.           Well, I don't know.

16          Q.           You don't know either way?

17          A.           Either way.

18          Q.           Okay.

19          A.           But the fact that it had some  
20 contamination in it, it may have been a blended  
21 matter because you need a million gallon of water  
22 to take it where you can.

23          Q.           Well, let's talk about that for a  
24 minute.

1                   If we don't -- if we set aside the  
2 upstream of reservoir sample because we don't know  
3 where that was taken; right?

4                   The four other samples from building  
5 670 Holcomb Boulevard reservoir are 8.2, 27, 24,  
6 and 26.

7                   You see that?

8           A.       I see that.

9           Q.       They're very low; right?

10          A.       Yeah.

11          Q.       So we don't know how that reservoir  
12 was refilled; correct? What water was used to  
13 refill it; fair?

14          A.       We don't know --

15          Q.       Okay.

16          A.       -- but it had some contamination in  
17 it.

18          Q.       Yeah.

19                   If the Holcomb Boulevard reservoir  
20 did not have check valves to prevent water from  
21 the Holcomb Boulevard distribution system from  
22 going into the reservoir, wouldn't the reservoir  
23 overflow?

24          A.       You have overflow. You have

1 overflow vents or overflow structures in each  
2 reservoir. So they could overflow, but if you put  
3 more water than the reservoir contains, it would  
4 overflow. I mean, that's a logical thing. Right?

5 Q. Do you consider yourself an expert  
6 in the design of water treatment plants?

7 MS. O'LEARY: Object to form.

8 THE WITNESS: I am not an  
9 expert in the design of water treatment  
10 plant.

11 BY MS. BAUGHMAN:

12 Q. Okay.

13 A. But I have seen many of them and I  
14 have visited these.

15 Q. Okay. Isn't it normal for a water  
16 treatment plant to have a check valve to prevent  
17 the water in the distribution system from backing  
18 up into the reservoir?

19 MS. O'LEARY: Object to  
20 foundation.

21 BY MS. BAUGHMAN:

22 Q. Isn't that the ordinary way these  
23 things are designed?

24 MS. O'LEARY: Object to

1 foundation.

2 THE WITNESS: It can be the  
3 ordinary way, but specifically for those  
4 I do not know.

5 BY MS. BAUGHMAN:

6 Q. Okay. Let me ask you both times.

7 Do you know whether it is standard  
8 practice to have a check valve in a water  
9 treatment plant to prevent water from the  
10 distribution system from backing up into the  
11 reservoir? Do you know?

12 A. I -- it would make sense to, but I  
13 do not know specifically for those if it was that  
14 way.

15 Q. You did not --

16 A. But it would make sense.

17 Q. It would make sense.

18 And you did not investigate whether  
19 there was a check valve preventing water from the  
20 Holcomb Boulevard distribution system from backing  
21 up into the reservoir.

22 You did not look into that; is that  
23 true?

24 A. I did not look into that.

1           Q.           Okay. And just to be clear to make  
2           sure we're on the same page.

3                       If you turn to page 5-33 of your  
4           report, in Opinion 7, you talk about the Holcomb  
5           Boulevard Water Treatment Plant. In the last  
6           sentence on this page, you talk about the  
7           connection between Hadnot Point and Holcomb  
8           Boulevard and you say:

9                       "When this occurred" -- you're  
10          referring to when -- when there was high demand  
11          such that Holcomb Boulevard did not have  
12          sufficient water levels. You said:

13                      "When this occurred, the Hadnot  
14          Point Water Treatment Plant provided supplemental  
15          water through a by-pass valve or a booster station  
16          that allowed Hadnot Point Water Treatment Plant  
17          water to supplement Holcomb Boulevard Water  
18          Treatment Plant."

19                      Do you see that?

20          A.           I see that, yes.

21          Q.           Is it your opinion that during the  
22          time frame of January 27 to February 5, 1985, it  
23          was the by-pass valve or the booster station that  
24          allowed Hadnot Point to provide water to the

1 Holcomb Boulevard distribution system?

2 A. That was one of the connections. I  
3 don't recall exactly the name of it, but it was  
4 -- I think it was one of the connections that was  
5 open.

6 Q. Are there any other ways for Hadnot  
7 Point to provide water to Holcomb Boulevard, other  
8 than this by-pass valve or booster station?

9 A. I think there were two connections,  
10 and I don't remember the name of them.

11 Q. Okay. But they're part of the  
12 distribution system; right? The two distribution  
13 systems are connected?

14 Or there's a way to connect them  
15 with a valve?

16 A. Yeah, that's the connections between  
17 the two systems. Yeah.

18 Q. Okay. All right.

19 A. That's my understanding.

20 Q. All right. So I want to ask you a  
21 few questions about tank SLCH 4004. That's one of  
22 the numbers on Exhibit 5-3, the measurement of  
23 318.

24 Do you know where that tank is

1 located?

2 A. Hold on. Hold on. You are losing  
3 me here. 5-3?

4 Q. Yes. It's page 5-27 of your report.

5 A. Oh, sorry. I thought it was a page.  
6 5-3. Start to be a bit mixed up here. Okay.

7 Q. Okay.

8 A. Sorry for that.

9 Q. Okay. You're on -- you're on page  
10 5-27 of your report; right?

11 A. Yes.

12 Q. Okay. So I just want to ask a few  
13 questions about the sample for tank SLCH 4004.

14 Do you see that?

15 A. Hold on. Hold on. Tank, tank,  
16 tank. S-2323?

17 Q. No. S -- it says SLCH 4004.

18 The bottom third of the page.

19 A. Oh, tank SLCH. Okay.

20 Q. Okay. So that has a measurement of  
21 318 micrograms per liter.

22 Do you see that?

23 A. I see that.

24 Q. Okay. Do you know where that tank

1 is located?

2 A. I do not recall.

3 Q. Okay. So we looked it up and it's a  
4 Midway Park water tower.

5 And would you agree that the Midway  
6 Park water tower is furthest from the Hadnot Point  
7 Water Treatment Plant?

8 MS. O'LEARY: Object to form  
9 and foundation.

10 THE WITNESS: I cannot answer  
11 that question just like this. I don't  
12 recollect.

13 BY MS. BAUGHMAN:

14 Q. Okay. Okay. Do you know whether  
15 there was contaminated water in the Midway Park  
16 water tower when Holcomb Boulevard Water Treatment  
17 Plant was shut down?

18 MS. O'LEARY: Object to form.

19 THE WITNESS: I don't know  
20 that. I don't know.

21 BY MS. BAUGHMAN:

22 Q. Do you know whether there was a mix  
23 of Hadnot Point and Holcomb Boulevard water in the  
24 Midway Park water tower when this sample was taken



1 on January 31st?

2 A. I don't recollect. I don't -- I  
3 don't know. I don't recollect. I mean, this is  
4 digging in the details that I don't recollect.

5 Q. Okay. Now, you'd agree that if we  
6 don't include, at a minimum, the samples from  
7 building 670, the Holcomb Boulevard Water  
8 Treatment Plant reservoir, that your number for  
9 the average amount of TCE in the water when HP-651  
10 was running would be substantially higher?

11 MS. O'LEARY: Object to form.

12 THE WITNESS: I would agree  
13 with that.

14 BY MS. BAUGHMAN:

15 Q. Okay.

16 A. If it -- if you exclude those values  
17 that are lower than the rest, it will raise the  
18 average of. Yes, I agree with that.

19 Q. Okay. So in your report, you talk  
20 about performing a check on your calculations.  
21 This is on page 5-29.

22 Right after your -- the calculation  
23 of .39 times 582, you say that there was a check  
24 on the validity of the 220 some microgram per

1 liter average.

2 Do you see that?

3 A. I see that.

4 Q. Okay. And part of that included you  
5 used -- in that first sentence, you say that your  
6 check on the validity of the 220 some microgram  
7 per liter average TCE concentration can be made  
8 using ATSDR's assumption of 28 wells pumping. And  
9 then you cite Morris Maslia, ATSDR report from  
10 March 2013.

11 Do you see that?

12 A. I see that.

13 Q. Okay. So -- so when you're doing  
14 this check, you're assuming that 28 wells were  
15 pumping at the same time at the Hadnot Point Water  
16 Treatment Plant; right?

17 A. Yes. Yes. I borrowed the  
18 assumption that -- that ATSDR had done that. You  
19 have -- to satisfy the demand, you had an average  
20 of 28 wells pumping over the long period of time.

21 MS. BAUGHMAN: I'm handing you  
22 what I've marked as Exhibit 43 to your  
23 deposition.

24 (Document marked for

1 identification as Exhibit 43.)

2 BY MS. BAUGHMAN:

3 Q. Which is the report that you cite in  
4 Footnote 100; correct?

5 And that we'll -- we marked for the  
6 record. It's Chapter A: Summary of Findings --  
7 Summary and Findings, and this is from Hadnot  
8 Point, Holcomb Boulevard, March 2013 and it is  
9 Exhibit 43. It starts at CLJA\_WATERMODELING\_ 01-0  
10 000942579.

11 Actually, let me make sure. Let me  
12 see that.

13 A. (Hands document).

14 Q. Okay. Good.

15 All right. So I want to go to where  
16 you've referenced what you've referenced for the  
17 28 wells pumping, which would be on page A14.

18 Wouldn't you agree that what Figure  
19 A6 on page A14 is showing is the number of  
20 operating wells, not the number of wells pumping  
21 at the same time?

22 MS. O'LEARY: Object to  
23 foundation.

24 THE WITNESS: Well, my

1           understanding is that my reading of that  
2           it was that those were are the ones that  
3           are being operated to satisfy the demand  
4           that you have on top of that was the  
5           figure.

6       BY MS. BAUGHMAN:

7           Q.           So if you're looking Figure A5  
8           that's on page A12, this shows the operational  
9           chronology.

10                       This shows when wells were in  
11           operation; correct?

12           A.           (Reviews document.)

13                       Where does it say that?

14           Q.           Well, the title is "Operational  
15           chronology"; right?

16           A.           Yeah.

17           Q.           And it's providing when it started  
18           and when it stopped?

19           A.           Yeah, it says that. Yes.

20           Q.           Right. Okay.

21                       And then if you turn to page A11, at  
22           the very last text at page A11 says:

23                       "An operational chronology for  
24           water-supply wells in the study area during the

1 period 1942-2008 is shown in Figure A5."

2 Right?

3 "This graph shows dates of operation  
4 for each well that supplied raw water to the water  
5 treatment plants and the dates when some of the  
6 wells were permanently taken out of service."

7 So you agree that's what -- that's  
8 what A5 means?

9 A. You lost me. I don't know where you  
10 are.

11 Q. Okay. Page A11.

12 A. Yeah.

13 Q. The very last set of text, like the  
14 last full sentence on that page. Last two  
15 sentences is referring to Figure A5.

16 And it says "An operational  
17 chronology" --

18 A. Hold on. I don't know where you  
19 are.

20 Q. Look at my. Look at my. You see  
21 this pink part here. That's where I'm reading  
22 from on page A11.

23 A. Okay. Okay.

24 Q. Okay?

1           A.           Thank you.

2           Q.           It says:

3                        "An operational chronology for  
4   water-supply wells in the study area during the  
5   period 1942-2008 is shown in Figure A5."

6                        Which we were just looking at;  
7   right?

8           A.           Uh-huh.

9           Q.           Okay. "This graph shows dates of  
10   operation for each well that supplied raw water to  
11   the water treatment plants and the dates when some  
12   of the wells were permanently taken out of  
13   service."

14                       So you agree with me that that's  
15   what Figure A5 shows; right?

16          A.           That's my understanding, yes.

17          Q.           Okay. Then if you look at page A13  
18   of this report, there is a sentence. And I'm  
19   going to I highlighted it here so you can see  
20   generally where on the page it is on A13. Okay?  
21   And it says:

22                        "Based on documented and  
23   reconstructed information, an average of 28 wells  
24   supplied water each month to the Hadnot Point

1 Water Treatment Plant during the period  
2 1942-2008."

3 You see that?

4 A. I see that.

5 Q. And then that refers to Figure A6,  
6 which is what you cited in your -- in your report;  
7 right?

8 MS. O'LEARY: Object to form  
9 and foundation.

10 THE WITNESS: Okay.

11 BY MS. BAUGHMAN:

12 Q. Okay. So that's an average of 28  
13 supplied water each month.

14 That doesn't say that they were  
15 supplying them all at the same time, does it?

16 MS. O'LEARY: Object to form  
17 and foundation.

18 THE WITNESS: What my reading  
19 of this was that to satisfy the demand --  
20 for this Figure A6 -- to satisfy the  
21 demand that is on top of the figure, this  
22 is the wells that you had to operate,  
23 and -- and on average, you had to operate  
24 28 wells on a monthly average basis

1 to -- to satisfy the demands.

2 That's what -- that's the way  
3 I read this.

4 BY MS. BAUGHMAN:

5 Q. Let me ask you about that.

6 I'm going to give you. Okay. I'm  
7 handing you what I've marked as Exhibit 44 to your  
8 deposition.

9 (Document marked for  
10 identification as Exhibit 44.)

11 THE WITNESS: Thank you.

12 BY MS. BAUGHMAN:

13 Q. And the Exhibit 44 I believe is also  
14 for the record it's Bates-stamped CLJA?  
15 WATERMODELING\_07-0000019001 through 19004.

16 Now, I believe that this Exhibit 44  
17 actually is in your report. Just have to figure  
18 out where. Here it is.

19 Okay. So in your report on page  
20 4-18, it's Exhibit I-9 of your report.

21 This is -- this is information that  
22 you used to determine -- I'll wait till you get  
23 there.

24 Are you looking for your report?



1 A. What page are you?

2 Q. Page 4-18.

3 A. 4-18?

4 Q. Yeah.

5 A. Yes, I am there.

6 Q. Okay. So Exhibit 4-18 is a document  
7 that you used to determine the frequency of use of  
8 supply wells from November 18, '84 to February 4,  
9 '85.

10 You used this to determine that 39  
11 percent pumping frequency for HP-651; correct?

12 MS. O'LEARY: Object to form.

13 THE WITNESS: Yes, that's the  
14 information that I found --

15 BY MS. BAUGHMAN:

16 Q. Okay.

17 A. -- for that well.

18 Q. Okay. Let me ask you.

19 If you look at this document, the  
20 last -- the last 8 wells like on I-9, those  
21 are -- those are wells that service Holcomb  
22 Boulevard; correct?

23 A. I don't recall that, but it's  
24 possible.

1           Q.           Okay. Okay. So assuming that's  
2 true -- and I believe it is true -- that those are  
3 all serving Holcomb Boulevard, one could add up  
4 how many wells were operating on each day to  
5 figure out.

6                       Based on what -- based on your  
7 assumption of 28, shouldn't there be 28 wells  
8 operating for Hadnot Point each day to make your  
9 assumption of 28 correct for your calculation?

10                      MS. O'LEARY: Object to form  
11 and foundation.

12                      THE WITNESS: First of all,  
13 the assumption I made is the way I end up  
14 with it is what is written in the ATSDR  
15 report. Right?

16 BY MS. BAUGHMAN:

17           Q.           Okay.

18           A.           Now, this period of time here is a  
19 particular period of time. It's when you had  
20 incidents and -- and some wells were shut down and  
21 those kind of issues.

22                       So this -- this was during basically  
23 the period where they were trying to figure out  
24 what the heck is going on and this, you know, some

1 wells were not being used because of that. So --  
2 so data, and this is the data.

3 And I looked at that data, and this  
4 is 39 percent of the time 651 was down. I have no  
5 other data for the frequency of use of 651.

6 Q. Okay.

7 A. It could have been less. It could  
8 have been more.

9 Q. But you would agree that this period  
10 of time -- November 20, '84 to February 4, 1985 --  
11 was not necessarily representative of how the  
12 wells were operated in the -- for the Hadnot Point  
13 water distribution system because they were making  
14 this investigation about contamination; right?

15 A. I --

16 MS. O'LEARY: Object to form  
17 and foundation.

18 BY MS. BAUGHMAN:

19 Q. Isn't that what you just said?

20 A. What I said is that during that  
21 period of time, some wells had been shut down.  
22 Right? So you had less wells available in that  
23 sense. And the 39 percent, if you had more wells,  
24 logically could have been less. Right?

1           Q.           Well, isn't it also true in the  
2       seven months prior to your time frame of  
3       November 28, '84 to February 4, '85, there were  
4       six or seven wells that were new that had just  
5       come online?

6                       MS. O'LEARY:   Object to  
7       foundation.

8                       THE WITNESS:   There were some  
9       new ones that were -- that were  
10      available.

11     BY MS. BAUGHMAN:

12           Q.           And they were being used.   They were  
13      being pumped?

14           A.           Well, that I would --

15                       MS. O'LEARY:   Objection.  
16      Foundation.

17                       THE WITNESS:   That I would  
18      have -- you have to show me where that is  
19      being said for those particular wells.

20     BY MS. BAUGHMAN:

21           Q.           Okay.   Would it surprise you that if  
22      you added up on your Exhibit I-9 the number of  
23      Hadnot Point wells that were operating from  
24      November 28 to February 4 that it was an average

1 of 13 per day?

2 MS. O'LEARY: Object to form  
3 and foundation.

4 BY MS. BAUGHMAN:

5 Q. Based on Exhibit I-9?

6 MS. O'LEARY: Same objections.

7 THE WITNESS: It could be,  
8 but it is also a period of time where  
9 less water was being used as well. You  
10 had some period of time historically  
11 where more water was because the base was  
12 more busy and so on.

13 BY MS. BAUGHMAN:

14 Q. So you're saying from November 28,  
15 1984 to February 4, 1985, there was less water  
16 being used than normal?

17 A. Well, for just a single system. You  
18 have to go back to that figure you had where I  
19 say. It's Figure A15 I believe.

20 You know, again, I have to get  
21 through memory about those kind of things and if  
22 I -- I would like to see that Figure A15 again.

23 Q. A14. A14. I think you're  
24 looking --

1 MS. O'LEARY: A5?

2 THE WITNESS: Oh, was it A5.

3 Yeah.

4 BY MS. BAUGHMAN:

5 Q. So we were looking at --

6 A. Yeah, yeah.

7 Q. It's page A12.

8 A. That's Figure A6. A6.

9 Q. Yeah, it's page A14. Okay.

10 A. A6. A6.

11 Q. So let me ask you the question  
12 again.

13 Are you -- I think you told me just  
14 a minute ago that the time frame of November 28,  
15 '84 to February 4, '85 was a time frame when there  
16 was less demand for water than normal.

17 Is that your testimony?

18 A. My testimony is that if you go to  
19 Figure A6, that shows basically total monthly flow  
20 in millions of gallons per day, right, for the  
21 Hadnot Point system. You can see that over some  
22 period of time it was close to 5 million gallon  
23 per day, and when you go down to the -- to the '85  
24 percent of time, it was a lot more like 3. So

1       that's much you use less wells because of that.

2               Q.       And -- and you'd pump less water  
3       from the wells?

4               A.       No, I don't think so. I think you  
5       use less wells.

6               Q.       Okay. So if the demand is lower,  
7       then that means the amount of water going through  
8       the treatment plant is lower; right?

9               A.       Yes.

10              Q.       Okay. So you'd need less water from  
11      the wells; right?

12              A.       No. You need less wells.

13              Q.       And less water?

14              A.       You need less number of wells to use  
15      the water you need.

16              Q.       Right, which is a lower amount of  
17      water than normal?

18              A.       Not normal. That's the amount of  
19      water you need. So how many wells you need to  
20      provide that water because those wells, basically  
21      when you put them on, they produce what they  
22      produce.

23              Q.       Okay. So in the earlier time frame,  
24      let's say from the 1940s all the way through

1 January 1970, there would be more wells being  
2 operated.

3 Is that what you're saying?

4 MS. O'LEARY: Object to form.

5 THE WITNESS: I would -- I  
6 would logically say yes, you need more  
7 wells during that period of time. Yes.

8 BY MS. BAUGHMAN:

9 Q. Okay. So when you're doing this  
10 check on the system, you assumed 28 wells pumping  
11 and 39 percent frequency of use for 651?

12 MS. O'LEARY: What page is  
13 that?

14 MS. BAUGHMAN: Page 529 at the  
15 bottom.

16 BY MS. BAUGHMAN:

17 Q. And you used a value of 16,297 in  
18 water pumped from Hadnot Point 651; right?

19 A. That's a reasonable calculation.

20 Q. Okay.

21 A. Right? That means you had high  
22 contamination in 651. That's what it says.

23 Q. Uh-huh.

24 A. And it's pretty close to what was



1 measured in 651.

2 Q. Right, but you're talking about a  
3 measured -- so the end of the sentence you say:

4 "Which is consistent with the  
5 measured TCE concentration of 18,900 micrograms  
6 per liter when supply well HP-651 was pumping in  
7 February 1985."

8 Correct?

9 A. Yeah.

10 Q. Okay.

11 A. That's why you have a measurement.

12 Q. But while you're doing this  
13 measurement in February '85, there weren't 28  
14 wells pumping then. There was much less; right?

15 MS. O'LEARY: Object to  
16 foundation.

17 THE WITNESS: Yes, and if you  
18 have less wells, that means the  
19 concentration would have been higher.

20 BY MS. BAUGHMAN:

21 Q. Right.

22 A. On the calculated concentration  
23 would have been higher and closer to the 19,000.

24 Q. But it wouldn't be correct -- the

1 calculations at the top of page 530, it wasn't  
2 correct to use 28 divided by .83 because there  
3 weren't 28 wells pumping in February 1985.

4 We know that based on your Exhibit  
5 I-9 where you can count the number of X's and  
6 determine in that time frame how many wells were  
7 pumping; right?

8 MS. O'LEARY: Object to form  
9 and foundation.

10 THE WITNESS: Yes, and, again,  
11 I am talking about long term here.

12 BY MS. BAUGHMAN:

13 Q. But this calculation wasn't done for  
14 long term. This is --

15 A. No, it is. The calculation compares  
16 just two things. It's what you would calculate  
17 making the assumption that I made. Right? It's  
18 28 wells and the average concentration. That's  
19 what you would calculate. You get 16,000.

20 What was measured in a device  
21 19,000. For me, this indicates that this well was  
22 heavily contaminated. I am not saying that it's  
23 an exact value. It was heavily contaminated and  
24 it's consistent with that.

1 Q. Okay. But your calculation is  
2 dividing by 28 wells --

3 A. Yes.

4 Q. -- for a number from February 1985  
5 and there were not 28 wells --

6 A. Right.

7 Q. -- pumping in '85; correct?

8 A. Well, according to the information  
9 we have, there were less wells pumping then.

10 Q. Right.

11 A. But that will give you  
12 concentrations at a higher. That is consistent  
13 with this well 651 being the well that is heavily  
14 contaminated.

15 Q. I'm going to ask you some more  
16 questions about Exhibit I-9 in your report. So  
17 going back to page 4-18 of your report.

18 We agreed that this is the data that  
19 you used to determine -- to reach your result that  
20 Hadnot Point 651 pumped 39 percent of the time;  
21 correct?

22 A. Again, which page is that?

23 Q. 4-18.

24 A. Sorry. Okay.

1                   That's the only data available that  
2 shows you by the people who are working there  
3 which wells were on, which wells were off --

4           Q.        Okay.

5           A.        -- during the period of time that is  
6 dated.

7           Q.        Let me ask you about that then.

8                   Who prepared the document that is  
9 your Exhibit I-9? Who -- who prepared it?

10          A.        Well, basically it is a reproduction  
11 of what is in Exhibit 44.

12          Q.        Right.

13          A.        Which is handwritten and put into an  
14 Excel spreadsheet.

15          Q.        Okay.

16          A.        And I probably have one of my staff  
17 to do it.

18          Q.        Okay. So let me -- let me ask a  
19 different question.

20                   Who prepared Exhibit 44?

21          A.        Somebody at the base.

22          Q.        Who at the base?

23          A.        I do not know.

24          Q.        When was Exhibit 44 prepared?

1                   And wait. For the record, I think  
2                   you just said this, but just for the record,  
3                   Exhibit 44 is the document that is the basis for  
4                   your Exhibit I-9; correct?

5                   A.           Yes.

6                   Q.           Okay. When was Exhibit 44 prepared?

7                   A.           The exact date I don't know, but it  
8                   would have been after, after the last date that  
9                   you have on the -- on this, which is, you know,  
10                  after January 6, 1985.

11                  Q.           Okay. But do you know if it was  
12                  prepared in 1985 or years after that?

13                  A.           That I do not know. That's the only  
14                  document we found that is an independent document,  
15                  that is, doesn't have any -- anything that's done  
16                  by, you know, either me or somebody else. It's  
17                  -- that's the information that's out there in the  
18                  file.

19                  Q.           Right.

20                               But you don't know when it was  
21                  prepared? You do not know when Exhibit 44 was  
22                  prepared; correct?

23                  A.           Well, I do not know when exactly it  
24                  was prepared, no.

1           Q.           Okay. Do you know what the source  
2 of information was? In other words, whoever  
3 prepared Exhibit 44, what did they use to prepare  
4 this?

5           A.           They use their knowledge of the  
6 system. That's what I understand.

7           Q.           You understand based on what?

8           A.           Because it was prepared for them  
9 when they were just trying to figure out the  
10 problem and -- and, you know, I don't know who did  
11 that, but it was not done by either ATSDR or  
12 myself or anybody else. It was done by people  
13 that worked at the plant, and this is basically  
14 something that you accept like you accept data  
15 sheets from the laboratories that are handwritten.

16          Q.           How do you know it was -- how do you  
17 know Exhibit 44 was prepared by someone at the  
18 plant? Where does it say that?

19          A.           Well, that's my deduction because it  
20 was part of the documents that were basically  
21 archived and -- and produced, and those documents  
22 were from the base. They were not from anybody  
23 else.

24          Q.           So do you know whether Exhibit 44

1 was prepared based on other documents and data, or  
2 was it prepared as things were happening at the  
3 time? Like what was the source of the information  
4 used to prepare Exhibit 44?

5 MS. O'LEARY: Object to form.

6 THE WITNESS: My  
7 understanding is that the knowledge of  
8 the people at the plant and for some  
9 reason that was done.

10 BY MS. BAUGHMAN:

11 Q. You say that's your understanding.  
12 That's you're speculating, aren't  
13 you?

14 MS. O'LEARY: Object to form.

15 THE WITNESS: Well, I am  
16 taking that as information that's  
17 independent and that's available.

18 BY MS. BAUGHMAN:

19 Q. Okay. But you don't know who  
20 prepared Exhibit 44 and you don't know when it was  
21 prepared; right?

22 MS. O'LEARY: Object to form.

23 Asked and answered.

24 THE WITNESS: I answered

1           that.

2                       I do not know who prepared it,  
3           and I don't know exactly when it was  
4           prepared.

5   BY MS. BAUGHMAN:

6           Q.        Okay. And you don't know how it was  
7           prepared. Based on some compilation of other  
8           information or data you don't know how this was  
9           prepared; fair?

10                   MS. O'LEARY: Object to form.

11                   THE WITNESS:   Somebody at the  
12           water treatment plant put this together  
13           at some point. That's all I know.

14   BY MS. BAUGHMAN:

15           Q.        But you don't know what they based  
16           it on?

17                   MS. O'LEARY: Object to form.

18                   THE WITNESS:   I know they  
19           based it on their knowledge.

20   BY MS. BAUGHMAN:

21           Q.        And that's your guess?

22                   MS. O'LEARY: Object to form.

23                   THE WITNESS:   Obviously, I  
24           did not invent that. They based it on



1           their knowledge.

2       BY MS. BAUGHMAN:

3           Q.       And you're basing that on what?

4           A.       You don't generate a document like  
5       this in the archived material just dreaming of it.  
6       You base it on something which is knowledge, and  
7       that's my understanding and that's -- that's the  
8       only document that talks about how often the wells  
9       were cycled, and it is in the record that the  
10      wells were cycled. They were not always on. None  
11      of them were always on.

12          Q.       Have you had any conversations with  
13      anyone who worked at any water -- at the Hadnot  
14      Point -- well, this is about the Hadnot Point  
15      Water Treatment Plant; right?

16                 So have you had any conversations  
17      with anyone who worked at Hadnot Point Water  
18      Treatment Plant about Exhibit 44?

19                 MS. O'LEARY: Object to form.

20                 THE WITNESS: I don't recall  
21      exactly, but I think that I had asked. I  
22      mean, nobody knew anything about that.  
23      That's my understanding.

24                 And the reason nobody knew

1           about that is because the people who are  
2           still there, or were still there in 2005  
3           and later, weren't there when that was  
4           done. That's all I know, or at least  
5           none of them knew about who did that.

6       BY MS. BAUGHMAN:

7           Q.           Okay. So -- so you actually took  
8           this Exhibit 44 to Hadnot Point and asked people  
9           who worked there about it?

10          A.           No.

11                       MS. O'LEARY: Object to form  
12           and foundation.

13                       THE WITNESS: Sorry.

14                       I did not do that. I did not  
15           take this and show them who did this. I  
16           just -- I vaguely recall that I ask, you  
17           know, you have some information on when  
18           the wells were used or not and who knows  
19           about that, and there was nobody there  
20           who knew about it.

21       BY MS. BAUGHMAN:

22           Q.           Okay.

23           A.           Of the frequency of use of the  
24           wells.

1           Q.           So you haven't asked anyone who  
2 worked at the water -- at the Hadnot Point Water  
3 Treatment Plant specifically about Exhibit 44; is  
4 that true?

5           A.           I don't recall if I did or not, but  
6 nobody -- my recollection is that nobody knew  
7 anything about this.

8                       MS. O'LEARY:   Have we been  
9 going --

10                      THE WITNESS:   That are still  
11 there.

12                      MS. O'LEARY:   Sorry.   We've  
13 been going a little over an hour.   Can we  
14 take a just a short break?

15                      MS. BAUGHMAN:   Let me just  
16 finish up on a couple of things on this  
17 and then we can do that.

18 BY MS. BAUGHMAN:

19           Q.           Okay.   Can you tell me the name of  
20 anyone who you spoke to regarding Exhibit 44 and  
21 how it was prepared?

22                      MS. O'LEARY:   Object to  
23 foundation.

24                      THE WITNESS:   I cannot tell

1           you the name of anyone.

2                   MS. BAUGHMAN:   Okay.   If you  
3           want, we can take a break.   That's fine.

4                   THE VIDEOGRAPHER:   The time is  
5           12:52 PM.   We are now off the record.

6                   (A recess was taken.)

7                   THE VIDEOGRAPHER:   The time is  
8           1:06 PM.   We are now on the record.

9                   MS. BAUGHMAN:   Thank you.

10   BY MS. BAUGHMAN:

11           Q.           Okay.   Dr. Hennet, I'm going to hand  
12   you what I've marked as Exhibits 45 and 46 to your  
13   deposition.

14                   (Document marked for  
15           identification as Exhibit 45.)

16                   (Document marked for  
17           identification as Exhibit 46.)

18   BY MS. BAUGHMAN:

19           Q.           Exhibit 45 is CLJA\_WATERMODELING\_  
20   050001040308 through 319, and it starts "Questions  
21   for Mr. Mundt" dated August 5, 2008.

22                   Exhibit 46 is CLJA\_UST02-0004149161  
23   through 9194.

24                   Okay.   There you go.

1           A.           Thank you.

2                       MS. BAUGHMAN:   And let me give  
3           you.   There you go.

4   BY MS. BAUGHMAN:

5           Q.           Okay.   So have you seen these  
6   documents before?

7           A.           (Reviews document.)

8           Q.           And I'll provide some context if it  
9   helps.

10                   Exhibit 45 are questions sent by  
11   ATSDR to Mr. Mundt, who is a water treatment plant  
12   employee, and Exhibit 46 are the answers that were  
13   provided back.

14                   So with that context, are these  
15   documents you've reviewed before?

16           A.           I don't know.   I don't recollect  
17   those documents.

18           Q.           You don't recall them?

19           A.           I don't recall them.   I don't know  
20   if I ever saw them.   I don't know.

21           Q.           Okay.   All right.   So what I want to  
22   draw your attention to is, 45 just has the blank  
23   questions, right, that were sent.   46 are the  
24   answers that the ATSDR received back.

1                   And if you go to page that's  
2   Bates-stamped the last three numbers are 165 of  
3   Exhibit 46. Question number 6.

4           A.       Wait. Hold on. Can you repeat  
5   that? I was on the other exhibit.

6           Q.       Yeah. It's Exhibit 46. The last  
7   three numbers are 165.

8           A.       Okay.

9           Q.       Okay. So question number 6. ATSDR  
10   asked:

11                   "We found documents showing the  
12   daily pumping status for all Hadnot Point wells  
13   from November 28, 1984 to February 4, 1985."

14                   And they reference a CLW number,  
15   which if you compare, matches Exhibit 44.

16           A.       The first page of Exhibit 44 is?

17           Q.       You look, you see the CLW number in  
18   the middle? Look where I'm pointing to.

19           A.       Oh, I see that, yes.

20           Q.       6590?

21           A.       Yeah. Yeah.

22           Q.       And it's 6590. So they sent.  
23   They're asking about this document. Okay?

24           A.       Uh-huh.

1           Q.           So it says we found doc -- they're  
2 asking about Exhibit 44, which is in your report  
3 Exhibit I-9, and they say:

4                       "We found documents showing the  
5 daily pumping status for all Hadnot Point wells  
6 from November 28, '84 to February 4, 1985."

7                       And they give the CLW number of 6590  
8 through 6593.

9                       "Do any similar documents exist that  
10 might help us gain a better understanding of how  
11 wells were operated on a day-to-day basis  
12 historically?"

13                      The answer is:

14                      "We need more information. Where  
15 did the X's come from? If the information was  
16 taken off of the sheets and transferred to the CLW  
17 6590, where are the original sheets the  
18 information came off? We do not know of any other  
19 documents that might exist."

20                      Did I read that correctly?

21           A.           You did.

22           Q.           Okay. Do you know where the X's  
23 came from?

24                               MS. O'LEARY: Object to

1 foundation.

2 THE WITNESS: Somebody at the  
3 base at the water treatment plant  
4 generated this document. I answered  
5 before. I don't know who and I don't  
6 know exactly when.

7 BY MS. BAUGHMAN:

8 Q. Or, well, they say: "Was it taken  
9 off the sheets?" And it says: "Where are the  
10 original sheets the information came off?"

11 Do you know the answer to that?  
12 Where are the original sheets that this  
13 information came from?

14 MS. O'LEARY: Object to  
15 foundation.

16 BY MS. BAUGHMAN:

17 Q. For Exhibit 44?

18 MS. O'LEARY: Object to  
19 foundation.

20 THE WITNESS: I haven't seen  
21 any sheets that -- and it appears that I  
22 am not the only one who haven't seen any.

23 BY MS. BAUGHMAN:

24 Q. Right. Okay.



1                   So ATSDR asked people at the water  
2 treatment plant where this Exhibit 44 information  
3 came from, and they didn't know; right?

4           A.           It appears to be.

5           Q.           Yeah. But this isn't information  
6 that you had reviewed prior to signing off on your  
7 report in December of 2024; right?

8                   MS. O'LEARY: Object to form  
9 and foundation.

10                   THE WITNESS: I say I don't  
11 recollect this. I don't know if I saw it  
12 in the past or not. I don't recollect  
13 this.

14 BY MS. BAUGHMAN:

15           Q.           This isn't cited in your report, is  
16 it?

17           A.           I would have to check, but I don't  
18 think so.

19           Q.           Okay. What did you do to verify the  
20 accuracy of the data in your Exhibit I-9,  
21 Exhibit -- which is Exhibit 44?

22           A.           Well, since I couldn't find anything  
23 else and it was not generated by either ATSDR,  
24 myself or other, you know, other people here, my

1 assumption was that's from the base personnel who  
2 did that and put it in the archives, and that I  
3 just did it based on their knowledge and that's  
4 all I could do.

5 Q. I'm going to object as  
6 nonresponsive.

7 Did you do anything to verify the  
8 accuracy of the data that is on your Exhibit I-9  
9 in your report and that we've marked as Exhibit  
10 44?

11 MS. O'LEARY: Object to form.

12 THE WITNESS: Well, this is  
13 basically a document, an original  
14 document in the files that has this  
15 information, and I considered that.

16 BY MS. BAUGHMAN:

17 Q. Did you do anything to verify the  
18 accuracy of Exhibit 44?

19 MS. O'LEARY: Object to form.

20 THE WITNESS: I could not do  
21 more than just take this document as  
22 being an original document, just like  
23 ATSDR did for many documents, including  
24 the data sheets or the laboratory reports

1           or the handwritten notes and all of that,  
2           I mean.

3       BY MS. BAUGHMAN:

4           Q.           So you assumed it was accurate. You  
5       didn't do anything to verify?

6                       MS. O'LEARY: Object to form.

7                       THE WITNESS: I assumed that  
8       this is information and that is the only  
9       information that is found on the  
10      frequency of use of the wells.

11      BY MS. BAUGHMAN:

12           Q.           Okay. I'm handing you what I've  
13      marked as Exhibit 47 to your deposition.

14           A.           Thank you.

15                       (Document marked for  
16      identification as Exhibit 47.)

17      BY MS. BAUGHMAN:

18           Q.           Exhibit 47 is stamped CLJA\_USMCGEN a  
19      bunch of 0s then 4794 through 4798 and it is a  
20      handwritten document as well.

21                       Have you reviewed this document  
22      before?

23           A.           (Reviews document.)

24                       It kind of sounds familiar, but I

1 don't know for sure.

2 Q. Okay. If you look at page 3, you  
3 see that it says at the top "Wells that were on."

4 Do you see that?

5 And it lists dates January 28, '85;  
6 January 29; January 30; January 31st, all 1985.  
7 And then you go to the next page. February 1,  
8 '85; February 2, February 3, February 4th of '85.

9 Do you see that?

10 A. I see that.

11 Q. Okay. So the date range of the  
12 wells that were on is January 28, '85 to  
13 February 4, '85, similar to the time frame covered  
14 in Exhibit 44; correct?

15 MS. O'LEARY: Object to  
16 foundation.

17 BY MS. BAUGHMAN:

18 Q. At least it covers some of that time  
19 frame?

20 A. It covers some of that time frame.

21 Q. It covers most of the time frame  
22 when Holcomb Boulevard Water Treatment Plant was  
23 shut down; right?

24 A. According to the dates, yes.

1           Q.       Okay. Did you compare as part of  
2 your work in this case the information on Exhibit  
3 47 to Exhibit 44 to see if they match up?

4           A.       I don't recall. That would be  
5 another source of information, but I don't recall  
6 if I did compare it or not.

7           Q.       I mean, do you -- do you recall  
8 comparing any other data to Exhibit 44 to see if  
9 Exhibit 44 was accurate?

10          A.       Well, again, I don't recall exactly  
11 what I did there, but I notice that on this, you  
12 know, sometimes you have more than 20 wells  
13 operating. Sometimes you have less. If that's  
14 what you're after.

15          Q.       Okay. I'm going to object as  
16 nonresponsive.

17                   I'm asking you: When you wrote your  
18 report in this case -- and I'm going back to  
19 Exhibit 44 -- did you compare it to any other  
20 data?

21          A.       Well, I did not -- I do not recall  
22 having considered this or seen this. I may have  
23 seen it and in my report I relied on Exhibit 44.  
24 That's that.

1           Q.           Is there any basis to rely on  
2           Exhibit 44 as opposed to Exhibit 47?

3           A.           Well, probably not. It's -- let's  
4           say probably not. It's two different documents  
5           that should be look and if there are differences  
6           it gives you an appreciation of the uncertainty on  
7           the information. And, again, it's all for short  
8           period of time.

9                       Exhibit 44 was for a longer period  
10          of time, and I guess that's -- that's -- that  
11          allowed me to do some percentage of well being  
12          used better than this one would have because this  
13          one is a much shorter period of time.

14          Q.           Sure.

15                       But if there are discrepancies  
16          between Exhibit 44 and Exhibit 47, that would tell  
17          you that there is some uncertainty or error  
18          potential in Exhibit 44; correct?

19          A.           Yes, yes. And I am not sure, but I  
20          vaguely recollect that I may have looked for 651  
21          if it was different or not, but, again, this is by  
22          memory. I don't remember.

23          Q.           Okay. Well, you didn't write  
24          anything in your report about --

1 A. No.

2 Q. -- Exhibit 44, did you?

3 A. I don't -- I didn't do. I didn't do  
4 that, no.

5 Q. Okay. Would it surprise you that if  
6 I -- if you went through the exercise of comparing  
7 Exhibit 44 to Exhibit 47 that there are  
8 discrepancies for every day from January 28 to  
9 February 4 in terms of which wells were on and  
10 which wells were off?

11 MS. O'LEARY: Object to  
12 foundation.

13 BY MS. BAUGHMAN:

14 Q. At least one discrepancy per day?

15 MS. O'LEARY: Object to  
16 foundation.

17 THE WITNESS: I wouldn't be  
18 surprised if there are discrepancies but,  
19 you know, you have information. I would  
20 compare the 651 and those kind of things.

21 This is some things that I  
22 vaguely remember having seen, but I  
23 relied on the Exhibit 44 because it was  
24 longer period of time. That one has 69

1 days for information, and I understand  
2 that you have some and you have a lot of  
3 through the records that things that are  
4 not always consistent.

5 So you just, you know, you  
6 just clearly say what and state what you  
7 did, and I did that in my report. I did  
8 say exactly what I did. So you can read  
9 it.

10 BY MS. BAUGHMAN:

11 Q. Well, you didn't report to the court  
12 that there is uncertainty in the data, that you  
13 compared it to other data, and there were  
14 mismatches.

15 You didn't report that, did you?

16 MS. O'LEARY: Objection.

17 BY MS. BAUGHMAN:

18 Q. You did not include that in your  
19 report?

20 MS. O'LEARY: Object to form  
21 and foundation.

22 THE WITNESS: Specifically on  
23 this one, I don't think I did that in my  
24 report.



1 BY MS. BAUGHMAN:

2 Q. Right.

3 So you're saying you think you were  
4 aware of Exhibit 47. You compared it. You know  
5 that there were discrepancies, and you did not  
6 inform the court of that?

7 MS. O'LEARY: Object to form  
8 and foundation.

9 THE WITNESS: I didn't say  
10 that.

11 I say that this vaguely  
12 resembles some things that I may have  
13 seen, but I relied on this one because it  
14 had the most longest period of time.

15 Because what I was interested  
16 in was what was the frequency of use of  
17 well 651, and you don't get that from  
18 this. You get that from that.

19 BY MS. BAUGHMAN:

20 Q. But if you compare the two and you  
21 see that there are discrepancies, that tells you  
22 that there is an error rate in your data; right?

23 MS. O'LEARY: Object to form.  
24 Already asked and answered.

1 THE WITNESS: I do not know  
2 there are discrepancies on 651. I don't  
3 recall that.

4 BY MS. BAUGHMAN:

5 Q. Since Exhibit 44 does not indicate  
6 what the source is of the data, there's no way it  
7 can be verified; right?

8 MS. O'LEARY: Object to  
9 foundation.

10 THE WITNESS: Please can you  
11 repeat the question.

12 BY MS. BAUGHMAN:

13 Q. Since Exhibit 44 does not list the  
14 source of the data for the X's on the document,  
15 there's no way you can determine if it's  
16 accurate --

17 MS. O'LEARY: Object to form.

18 BY MS. BAUGHMAN:

19 Q. -- or verify the accuracy?

20 MS. O'LEARY: Object to form  
21 and foundation.

22 THE WITNESS: That's specific  
23 of the nature of the information  
24 available.

1 BY MS. BAUGHMAN:

2 Q. So HP-651 was put in service in July  
3 of '72; right?

4 MS. O'LEARY: Object to  
5 foundation.

6 THE WITNESS: That's my  
7 recollection.

8 BY MS. BAUGHMAN:

9 Q. Yeah. That's what it says in your  
10 report; correct?

11 A. Show me where --

12 Q. Sure.

13 A. -- but that's my recollection.

14 Q. Yeah. I'm happy to show you where.  
15 Let's see here.

16 A. (Reviews document.)

17 Q. Page 5-22. 5-22 at the bottom of  
18 the page you have opinions for Hadnot Point.

19 A. Yes.

20 Q. Okay. And your first sentence under  
21 Opinion 5 says:

22 "Supply wells HP-651 only supplied  
23 water to the Hadnot Point Water Treatment Plant  
24 from July 1972 until February 5, 1985."

1 Correct?

2 A. That's my understanding, yes.

3 Q. Okay. That's your understanding.

4 So if you add up the number of  
5 months then that HP-651 was operating, that would  
6 be -- it's 12 and a half years. So that would be  
7 153 months.

8 Does that sound right?

9 A. I take your word for it.

10 Q. Okay. And what you've done is  
11 you've used two months of data that is on your  
12 Exhibit I-9, our Exhibit 44, and you've  
13 represented that that is a surrogate for the other  
14 151 months that 651 was operating; right?

15 MS. O'LEARY: Object to  
16 foundation.

17 THE WITNESS: That's the only  
18 information that I found.

19 BY MS. BAUGHMAN:

20 Q. But I've accurately represented what  
21 you did; correct?

22 MS. O'LEARY: Object to  
23 foundation.

24 THE WITNESS: That's what I

1           did, and based on that information, you  
2           get 39 percent frequency of use for that  
3           particular well.

4       BY MS. BAUGHMAN:

5           Q.       Right.

6           A.       That's the only information for the  
7           frequency of use for that wells that I could find.

8           Q.       Okay. And just -- just to be sure,  
9           just to restate it to make sure we're on the same  
10          page.

11                    You took two months of data from the  
12          end of November of '84 until the beginning of  
13          February of '85. You calculated that HP-651 is  
14          operating 39 percent of the time, and from that  
15          you've assumed that it was always operating at 39  
16          percent of the time for the entirety of the 153  
17          months that it was in operation.

18                    Correct?

19                    MS. O'LEARY: Object to form  
20          and foundation.

21                    THE WITNESS: Yes, and it is  
22          consistent with the fact that the wells  
23          were cycled by -- by design and it is  
24          consistent.

1 BY MS. BAUGHMAN:

2 Q. So the wells were cycled by design  
3 on and off; right?

4 A. Right.

5 Q. That was to avoid driving low  
6 quality water into the water distribution system;  
7 right?

8 A. Yes, that was by design --

9 Q. Okay.

10 A. -- and they were cycled on the other  
11 well in more than 30 of them and they were cycling  
12 them.

13 Q. So in terms of the cycling, was it  
14 typical for the cycling to be consistent each  
15 month, or was the cycling such that in some months  
16 some wells would be used more and in some months  
17 some wells would be used less?

18 A. We only have data for basically two  
19 and a half months or a little bit more than two  
20 months. So, you know, you cannot -- I agree that  
21 you cannot generalize, but that's the only  
22 information we have.

23 Q. Did you ask --

24 A. We know that it was not 100 percent

1 and we know that it was not zero percent. So you  
2 have some information that suppose 39 percent. So  
3 what else can I use?

4 Q. Okay. Did you ask -- did you talk  
5 to anyone at the water treatment plant about what  
6 the normal operation was in terms of cycling of  
7 the wells at Hadnot Point?

8 A. I did and they said they cycle them,  
9 and the thing is historically I don't know exactly  
10 how they did it, but right now everything is  
11 automated. So they can stop them, you know, not  
12 manually, but at the time they were just starting  
13 the wells manually.

14 Q. Okay.

15 A. Just go and prepare them and it's  
16 on, and then the next week somebody tells you shut  
17 down this one, open that one for some reasons, and  
18 that's the way it was done.

19 Q. Isn't it true that the ATSDR had  
20 data on the cycling of the wells for a period of  
21 10 years from 1998 to 2008?

22 MS. O'LEARY: Object to  
23 foundation.

24 THE WITNESS: Yes, but I use

1           that as completely not representative  
2           from what happened before the problems  
3           were discovered.

4       BY MS. BAUGHMAN:

5           Q.           And what -- for what reason?

6           A.           Just -- just because it was a  
7       different setting, different setting after, you  
8       know, for that period of time for which you know  
9       which wells were on and off, and -- and that  
10      includes the well for which they have data. It  
11      includes none of the ones that are -- that were  
12      contaminated, and the only information that  
13      is -- that is available for that frequency of use  
14      is what I just mentioned. It's -- it's Exhibit  
15      44.

16          Q.           Well, did you have available to you  
17      the 10 years of -- of pumping data from 1998 to  
18      2008?

19          A.           Yes, but in my opinion that, you  
20      know, extrapolating that all the way to 1950 is --  
21      is just kind of a -- it's one way to do it, but  
22      that doesn't mean it's right at all.

23          Q.           Did you compare your methodology  
24      from Exhibit 44 to the 10 years of data from 1998



1 to 2008 to see whether your methodology was valid?

2 MS. O'LEARY: Object to form  
3 and foundation.

4 THE WITNESS: At least the  
5 data I considered is within the period  
6 that contamination was there.

7 BY MS. BAUGHMAN:

8 Q. Object as nonresponsive.

9 As a check on your methodology, did  
10 you compare the data that you had in Exhibit 44 to  
11 the 10 years of data from '98 to 2008?

12 MS. O'LEARY: Object to form  
13 and foundation.

14 THE WITNESS: I didn't do  
15 that because I don't think it's  
16 representative to make such a comparison.

17 BY MS. BAUGHMAN:

18 Q. There are some wells that were  
19 operating during the time frame of Exhibit 44 that  
20 were also operating from '98 to 2008; right?

21 A. Yes.

22 Q. So you could look at that to see  
23 whether -- how often were those wells used in  
24 Exhibit 44, how often were they used in '98 to

1 2008 to see whether it matched up?

2 A. I didn't do that.

3 Q. You did not?

4 A. I did not.

5 Q. Okay. Do you know whether the data  
6 from '98 to 2008 indicates that the cycling  
7 occurred more in the period of months as opposed  
8 to days? In other words, certain -- some wells  
9 weren't used for a given month and then they were  
10 used more in the next month, or was it more in  
11 cycling in a matter a daily operation?

12 MS. O'LEARY: Object to form.

13 BY MS. BAUGHMAN:

14 Q. Did you look at that to see?

15 MS. O'LEARY: Object to form.

16 THE WITNESS: My  
17 understanding is, I did not consider that  
18 because my understanding of it is  
19 everything changed.

20 BY MS. BAUGHMAN:

21 Q. Why did everything change?

22 A. Because they just modernized and  
23 they just basically learn much more about the  
24 system after the problems were discovered, and

1 they modernized and they had new wells and they  
2 had all kind of new information and said do not  
3 operate like they did in 1950.

4 Q. Okay.

5 A. That's my understanding.

6 Q. And who did you rely on for that  
7 information?

8 A. Well, for -- well, several things,  
9 but one thing I recall I just -- when I was  
10 talking to the people at the water treatment  
11 plant, I just said, you know, things have changed  
12 and they, oh, everything is much modern now. We  
13 have scatter system, we have this, we have that,  
14 and they have learned a lot and they've modernized  
15 and that's expected.

16 Q. That conversation occurred in when?  
17 2025?

18 A. Probably before in some of my  
19 visits. That would have been during my visits.

20 Q. So when was the conversation about  
21 the modernization that you just talked about?  
22 When did you have that conversation?

23 A. It was -- it was previous visit  
24 because that was the first time that they were

1 just showing me the way the scatter system and so  
2 on and it was not the last visit. It was before.

3 Q. For this case or for another case?

4 A. I do not recollect that.

5 Q. Okay. Who did you speak to?

6 A. The people at the water treatment  
7 plant.

8 Q. The name. I want the name.

9 A. I did not ask name because  
10 everybody -- that was basically the rule of the  
11 game is you can talk to people, but you don't ask  
12 name and take notes of names.

13 Q. Okay. When did -- the person who  
14 told you this information about modernization,  
15 when -- what was the years that that person worked  
16 at the water treatment plant?

17 A. Probably quite recent because nobody  
18 there was there in the '80s that I understand.

19 Q. Were they there from '98 to 2008?

20 A. Possibly.

21 Q. Did you ask?

22 A. I didn't -- I don't recall.

23 Q. Okay. Is it your opinion that  
24 December 1984 represents a typical month for the

1 Hadnot Point water distribution system in terms of  
2 from the 1950s up until 1983?

3 MS. O'LEARY: Object to form.

4 THE WITNESS: Can you repeat  
5 please?

6 BY MS. BAUGHMAN:

7 Q. Yeah. Does December 1984 represent  
8 a typical month for the Hadnot Point Water  
9 Treatment Plant's operation and well cycling as  
10 compared to the three decades prior?

11 MS. O'LEARY: Object to form.

12 THE WITNESS: In 1984, there  
13 the problem was being investigated. The  
14 problem was there and there were wells  
15 that were shut down. They were trying to  
16 understand what was going on.

17 So it is what it is and we  
18 have the information we have for that  
19 period of time and, you know, what --  
20 what we know for the -- from the 1950s to  
21 the present is -- is not that  
22 well-documented as far as exactly what  
23 they were doing.

24 But the big picture is

1           documented. There were cycling wells,  
2           and when the wells would just produce  
3           less, they would just stop them and  
4           maintain them and so on and that's the  
5           type of an operations that -- excuse  
6           me -- that is consistent with what you do  
7           when you have a field of producing wells.

8       BY MS. BAUGHMAN:

9           Q.           Okay. I'm going to object as  
10          nonresponsive.

11                       December 1984 was not a typical  
12          month for Hadnot Point Water Treatment Plant  
13          operation because they were investigating the  
14          contamination at that time; right?

15                       MS. O'LEARY: Object to form.

16                       THE WITNESS: In that sense  
17          it was, but they still had to produce  
18          water to supply water.

19       BY MS. BAUGHMAN:

20           Q.           Okay. And you'd agree with me that  
21          new wells that seven new wells -- 611, 614, 621,  
22          627 and 639 -- those are all new wells that had  
23          come online less than seven months prior to  
24          December of '84; right?

1 MS. O'LEARY: Object to  
2 foundation.

3 THE WITNESS: I would have to  
4 double-check that. I don't recall the  
5 numbers anymore of the wells.

6 BY MS. BAUGHMAN:

7 Q. Okay. Would it surprise you that  
8 those seven new wells -- 611, 614, 621, 627, and  
9 639 -- had the capacity to supply half of the  
10 water needed for the Hadnot Point Water Treatment  
11 Plant?

12 MS. O'LEARY: Object to  
13 foundation.

14 THE WITNESS: Again, I will  
15 have to check and capacity doesn't mean  
16 what they can produce.

17 BY MS. BAUGHMAN:

18 Q. Right.

19 A. It's the capacity.

20 Q. Did you evaluate, did you perform  
21 the exercise of looking at Exhibit 44, your  
22 Exhibit I-9 in your report, to see how often the  
23 those seven new wells were used in that two-month  
24 time frame?

1 MS. O'LEARY: Object to  
2 foundation.

3 THE WITNESS: I did not  
4 evaluate that and -- and if the capacity  
5 was higher, maybe they were -- the  
6 schedule of cycling was different.

7 BY MS. BAUGHMAN:

8 Q. As compared to in the years prior  
9 when --

10 A. Yes.

11 Q. -- those wells weren't there; right?

12 A. Yeah.

13 Q. Okay. Okay. I'm going to ask -- I  
14 want to ask you about a different subject matter.

15 If you could turn to your Opinion  
16 number 11, I'll try to -- that is -- hold on.

17 So your Opinion number 11 on page  
18 5-37. You're critical there of ATSDR for not  
19 including available site-specific data; right?

20 In fact, if you turn to 5-38, in  
21 your in summary part of 5-38, you say -- you  
22 reference parameters that are inconsistent with  
23 site-specific data.

24 Is there any site-specific data that



1 you claim ATSDR did not consider other than the  
2 FOC, or fraction organic carbon data?

3 A. Well, that's the one that really  
4 matters. In addition to the errors I did for the  
5 Tarawa Terrace model, but that's the one that is  
6 important for -- for evaluating the timing of  
7 transport of the contaminants.

8 Q. Okay. FOC is part of calculating  
9 the retardation factor; right?

10 A. It's part of --

11 Q. Okay.

12 A. -- of that calculation.

13 Q. All right. But just before we talk  
14 about FOC, I just want to know.

15 Is there any other site-specific  
16 data that you claim ATSDR -- that was available to  
17 ATSDR but ATSDR did not consider in the modeling?

18 Is there anything else other than  
19 the FOC data?

20 A. Well, you know, the bulk density is  
21 not representative of the site. So that's another  
22 one. And -- and --

23 Q. I'm sorry. Was there -- wait.  
24 Wait.

1                   Was there bulk density data or are  
2                   you talking about a factor?

3                   I'm talking about site-specific  
4                   data.

5                   MS. O'LEARY: Object to form.

6                   THE WITNESS: Yeah. No, that  
7                   will not be site-specific data.

8                   BY MS. BAUGHMAN:

9                   Q.           Okay.

10                  A.           It's just errors that I did.

11                  Q.           Okay. So I'm not talking about  
12                  errors here. So let me try to rephrase it and see  
13                  if we're on the same page.

14                  I'm talking about site-specific data  
15                  that you claim existed but ATSDR didn't use for  
16                  the modeling.

17                  You've identified the FOC data.

18                  Is there any other site-specific  
19                  data that you claim ATSDR did not use?

20                  A.           That as far as geochemistry is  
21                  concerned, that's the one, that's the one I  
22                  flagged, and I don't have another one.

23                  Q.           You don't. Okay.

24                  So I want to talk about the FOC

1 data.

2 You -- if we look at page 5-17 of  
3 your report, you list the site-specific FOC data  
4 there; correct?

5 A. Let me see. 5-17? Yes.

6 Q. Okay. First question I have for you  
7 is: These data vary very widely, right, by a  
8 factor of at least 3 orders of magnitude?

9 A. This type of data does that, yes.

10 Q. Okay. So 3 orders of magnitude  
11 means like by a factor of at least a thousand?

12 A. Yeah, in some areas, you have more  
13 fraction organic carbon than some other areas,  
14 yes.

15 Q. Okay.

16 MS. O'LEARY: I'm sorry.

17 Object to foundation on the last  
18 question.

19 BY MS. BAUGHMAN:

20 Q. Which of the data that are listed on  
21 your Exhibit 3-2 on page 5-17 of your report,  
22 which of those samples are from Tarawa Terrace as  
23 opposed to Hadnot Point?

24 A. Well, all of the samples I believe

1 are in the Hadnot Point area, but as far as the  
2 hydrogeology are concerned, we are talking about  
3 the same type of materials beneath both. You  
4 don't have a stop just because you are changing  
5 addresses.

6 Q. Okay. Just to be clear, all of the  
7 FOC data that existed that you say ATSDR should  
8 have used, all of them is from Hadnot Point. None  
9 of it is from Tarawa Terrace; right?

10 MS. O'LEARY: Object to form.

11 Asked and answered.

12 THE WITNESS: I believe so  
13 because that's -- that's why it was  
14 measured, and it is measured in the  
15 materials for which groundwater moves.

16 BY MS. BAUGHMAN:

17 Q. Do you have any --

18 A. For both -- for both Tarawa Terrace  
19 and Hadnot Point areas.

20 Q. Okay. Do you have any FOC data from  
21 Tarawa Terrace such that you can say that the  
22 numbers are the same in Tarawa Terrace and Hadnot  
23 Point?

24 A. Its geological materials are the

1 same. Therefore, there is we have the data we  
2 have and it will be in the same range. As a  
3 geologist, I can tell you that.

4 Q. Do you agree that fraction organic  
5 carbon should not be used to estimate Kd if the  
6 organic carbon content is less than .001?

7 A. Well, this is kind of -- it is when  
8 the relationship starts to -- to not be that good  
9 anymore. But it is in every -- in every type of  
10 groundwater like this, you will have a wide range,  
11 and typically what is being done is because the  
12 groundwater is encountering all those materials,  
13 you typically take median value or geometric mean  
14 value or average value to represent those  
15 materials. And in some sense, that's what --  
16 that's what, you know, even ATSDR had to do.

17 Q. You're aware that the EPA and that  
18 other authors have published that you should not  
19 use fraction organic carbon to estimate Kd if the  
20 organic carbon content is less than .001; right?

21 MS. O'LEARY: Object to  
22 foundation.

23 THE WITNESS: It is -- it is  
24 not stated exactly like that.

1                   It is when the relationship  
2                   falls, starts not to be a linear  
3                   relationship in some sense, and it is  
4                   recommended that, you know, if you -- if  
5                   you start to go really low like that,  
6                   it's -- it's not -- it becomes highly  
7                   uncertain.

8       BY MS. BAUGHMAN:

9               Q.           Okay. So, and going back to your  
10           Opinion 11, you say at the top of page 5-38 that:

11                        "ATSDR's use of a low Kd value had  
12           the effect of accelerating arrival of contaminants  
13           at the supply wells."

14                        Okay. So my question is: Have you  
15           conducted a sensitivity analysis for your opinion  
16           that the retardation factor used by ATSDR had the  
17           effect of accelerating the arrival time?

18                        MS. O'LEARY: Object to form  
19           and foundation.

20                        THE WITNESS: Well,  
21           essentially what we are doing is the  
22           Tarawa Terrace model because they didn't  
23           make the same mistakes or assumptions and  
24           incorrect assumptions in the -- in the

1           Hadnot Point one. They were more  
2           reasonable there.

3       BY MS. BAUGHMAN:

4           Q.           Okay. I'm just asking: Did you  
5       conduct a sensitivity analysis to see what the  
6       effect would be about using a different  
7       retardation factor?

8           A.           Well --

9                       MS. O'LEARY: Object to form  
10       and foundation.

11                      THE WITNESS: The sensitivity  
12       analysis is that if you -- if you have  
13       higher values for the retardation factor,  
14       it will go slower, and if you have lower  
15       values for the retardation factor, it  
16       will go faster.

17       BY MS. BAUGHMAN:

18           Q.           I'll object as nonresponsive.  
19                       Did you run the model with different  
20       retardation factors to see what the effect would  
21       be?

22           A.           I did -- I didn't -- I did a  
23       calculation that I present in my report, which are  
24       basically the simplest type of calculations that

1 follow the -- the laws of hydrogeology, if you  
2 wish, to estimate transport. And this is the  
3 results are basically reasonable and that gives  
4 you a ballpark.

5 Q. Okay.

6 A. I mean, I'm not saying that it  
7 is -- that it is the totals or anything else.  
8 It's something that tells you this is the way it  
9 looks like.

10 Q. Objection.

11 A. And then -- and then you can go into  
12 complexity to hide the fact that you don't have  
13 information, but what you should never do is  
14 ignore the site-specific data. That's basically  
15 my point.

16 Q. Objection. Nonresponsive.

17 Okay. I'm at --

18 THE VIDEOGRAPHER: Time.

19 MS. BAUGHMAN: Yeah. Thank  
20 you. I know.

21 BY MS. BAUGHMAN:

22 Q. Did you go to the ATSDR model, not  
23 your calculations but the ATSDR model, change the  
24 retardation factor using the different FOC numbers



1 for Tarawa Terrace to see what effect that would  
2 have? Did you do that?

3 A. I believe Dr. Spiliotopoulos did  
4 that.

5 Q. Okay.

6 A. I don't. I didn't do that on the  
7 model. I just --

8 Q. All right.

9 A. -- I looked at -- looked at the  
10 calculation based on the evaluation, the data, and  
11 the parameters that are reasonable to make my  
12 estimate presented in my report.

13 Q. Let's talk about that. Let's go  
14 to -- I want to talk about your travel time  
15 calculation for Tarawa Terrace on page 5-15 and  
16 5-16 of your report.

17 And you calculated travel times for  
18 PCE to reach TT-26 --

19 A. Hold on. Hold on.

20 Q. You're going to know this without  
21 looking.

22 You calculated travel times for PCE  
23 to reach Tarawa Terrace 26 from ABC One-Hour  
24 Cleaners from three representative flow paths;

1 right?

2 MS. O'LEARY: Object to form.

3 THE WITNESS: Yes.

4 BY MS. BAUGHMAN:

5 Q. Okay. Did you select a flow path  
6 that was meant to be representative of a path line  
7 that leads to the first detection or first arrival  
8 of PCE at TT-26?

9 MS. O'LEARY: Object to form.

10 THE WITNESS: I just looked  
11 at the representative pathways for the  
12 situation with all of the simplification  
13 and uncertainty that are included in --  
14 in this. I used the ATSDR hydrological  
15 environment, which is oversimplified to  
16 start off with.

17 So all of this -- all of this  
18 tells you that if you do it in a simple  
19 manner, which it should be done first,  
20 you just get the range and that is the  
21 range.

22 The fastest pathways that I  
23 made a calculation for is if the  
24 contamination travels in layer 1 for most

1 of the distance to the well.

2 Remember that the well opening  
3 is in layer 3. So which ever way you go,  
4 at some point you have to go down there.  
5 And the pathways that I have are  
6 representative. It's a ballpark.

7 BY MS. BAUGHMAN:

8 Q. Okay. I'm going to object as  
9 nonresponsive.

10 Would you agree that your analysis  
11 regarding Tarawa Terrace and the travel time is  
12 not meant to determine when PCE would first arrive  
13 at TT-26? You did not do that calculation, did  
14 you?

15 MS. O'LEARY: Object to form.

16 THE WITNESS: No. The  
17 calculation is when -- when basically the  
18 contamination arrives, and you can have a  
19 molecule that arrive faster than I  
20 calculated and -- but what I am looking  
21 at is when does a substantial amount of  
22 contamination would have arrived at the  
23 well making a simple, a simple set of  
24 calculations that can be reproduced that

1 do not have errors or incorrect statement  
2 in, and that's what I did and that gives  
3 you a ballpark.

4 BY MS. BAUGHMAN:

5 Q. Okay. Have you reached an opinion  
6 or have you reached a conclusion within reasonable  
7 scientific certainty as to when TT-26 was first  
8 contaminated with PCE?

9 MS. O'LEARY: Object to form.

10 THE WITNESS: I did what I  
11 did, and it's expressed in my report.

12 BY MS. BAUGHMAN:

13 Q. You're aware that there is -- there  
14 are textbooks and peer-reviewed literature about  
15 how to calculate the breakthrough when  
16 contamination first arrives at a well; right?  
17 You're familiar with that?

18 A. Yes.

19 MS. O'LEARY: Object to  
20 foundation.

21 BY MS. BAUGHMAN:

22 Q. That's not what you did?

23 MS. O'LEARY: Sorry. Please  
24 slow down. Object to foundation.

1 BY MS. BAUGHMAN:

2 Q. You did not do a breakthrough  
3 analysis, did you?

4 MS. O'LEARY: Object to form  
5 and foundation.

6 THE WITNESS: I did a travel  
7 time analysis along three representative  
8 pathways. That's what I did.

9 BY MS. BAUGHMAN:

10 Q. You did not do a breakthrough  
11 analysis to determine when contamination would  
12 first occur at TT-26; correct?

13 MS. O'LEARY: Object to form  
14 and foundation.

15 THE WITNESS: As I said  
16 before, you can have a molecule arriving  
17 faster, but it is not what I did.

18 I said the typical travel time  
19 with all the uncertainty you have, and I  
20 recognize that, is basically the ballpark  
21 is as I estimated it in my report. And  
22 you have aspects of it that some of it  
23 can go faster, but you also have some of  
24 it can go slower.

1 BY MS. BAUGHMAN:

2 Q. Right. But --

3 A. And you have that.

4 Q. -- you agree with me. You  
5 understand the concept of breakthrough?

6 A. Yeah.

7 Q. Right.

8 And you agree with me that that's  
9 documented in textbooks that you would consider to  
10 be reliable on groundwater flow and transport;  
11 right?

12 MS. O'LEARY: Object to  
13 foundation.

14 THE WITNESS: Yes, you do.

15 BY MS. BAUGHMAN:

16 Q. There's -- there's a methodology to  
17 use to determine the breakthrough of a contaminant  
18 at a well; correct?

19 MS. O'LEARY: Object to  
20 foundation.

21 THE WITNESS: Yes, but we are  
22 talking about something different here.

23 I'm saying when -- when would  
24 you have expected contamination, you

1           know, substantial contamination to arrive  
2           at the well.

3       BY MS. BAUGHMAN:

4           Q.           Okay.

5           A.           I am not talking about a molecule.

6           Q.           You didn't do the breakthrough  
7       analysis; right?

8           A.           I -- I --

9                       MS. O'LEARY:   Object to form  
10          and foundation.

11                    THE WITNESS:    Sorry.

12                    I did not do a breakthrough  
13          analysis.

14       BY MS. BAUGHMAN:

15           Q.           Okay.   And what do you define as  
16          substantial contamination at TT-26?   What does  
17          that mean?

18           A.           It's when --

19                    MS. O'LEARY:   Object to  
20          foundation.

21                    THE WITNESS:    Yeah.

22                    It is when going from some of  
23          the pathways, the contamination is  
24          expected to arrive basically in a

1           substantial manner.

2       BY MS. BAUGHMAN:

3           Q.           Is there a number for substantial  
4       like -- like a certain microgram per liter that  
5       defines substantial contamination for you?

6           A.           I did not try to evaluate  
7       concentrations. I evaluate time because I think  
8       that's more important.

9           Q.           Okay. But you said you were  
10      calculating the time for substantial  
11      contamination.

12                      What do you define as substantial  
13      contamination?

14          A.           Something that --

15                      MS. O'LEARY: Object to  
16      foundation.

17                      THE WITNESS: Sorry.

18                      Something that would be  
19      measurable at the time, and I don't have  
20      a number. I did not do a breakthrough  
21      concentration arrival at the well.

22                      I just made how much time  
23      would it take for the concentration of  
24      the PCE on average along those three



1 different type of pathways to arrive at  
2 the well and that's what -- that's the  
3 simple things that I did. And this is a  
4 reasonable first step that should always  
5 be done to give you a ballpark of what is  
6 reasonable. And --

7 MS. BAUGHMAN: I'm going to  
8 object to the nonresponsive portion, and  
9 I will pass the witness.

10 MS. O'LEARY: Okay. If we can  
11 just take a few minutes break. Thank  
12 you.

13 MS. BAUGHMAN: I assume you  
14 won't be talking to your witness during  
15 the break?

16 MS. O'LEARY: I might be  
17 asking him about certain things, but  
18 that's appropriate.

19 MS. BAUGHMAN: That's not  
20 appropriate.

21 MS. O'LEARY: We can fight  
22 about that later.

23 THE VIDEOGRAPHER: Time is  
24 1:50 PM. We are now off the record.

1 (A recess was taken.)

2 THE VIDEOGRAPHER: The time is  
3 1:57 PM. We are now on the record.

4 MS. O'LEARY: Thank you.

5 EXAMINATION

6 BY MS. O'LEARY:

7 Q. And, Dr. Hennet, I have just a very  
8 few questions.

9 Near the end of Ms. Baughman's  
10 questions, she had several for you about the flow  
11 paths you used to calculate travel time of PCE to  
12 well TT-26.

13 Do you recall that?

14 And I have some -- I want to ask you  
15 about a few things in your report related to that.

16 So if you could go to your report,  
17 which is Exhibit 31, on page 5-15.

18 A. Yes.

19 Q. All right. In the last paragraph,  
20 the second sentence it says:

21 "The representative flow paths  
22 considered to represent PCE transport in  
23 groundwater are illustrated in Exhibit 3-1. The  
24 site-specific data for FOC is summarized in

1 Exhibit 3-2. Supporting materials for the  
2 calculated travel times are provided in Attachment  
3 D."

4 Did I read that correctly?

5 A. Yes.

6 Q. And so if I -- if you could turn to  
7 Attachment D from your report to page D-7 and to  
8 D-8.

9 A. Yes.

10 Q. Are you there?

11 Are the graphs shown on D-7 and D-8  
12 part of the supporting materials to your opinion  
13 on the arrival time of PCE at TT-26?

14 MS. BAUGHMAN: Objection.

15 Leading. Form.

16 THE WITNESS: Yes, this  
17 is -- this is basically what I relied  
18 upon to -- to support my calculation.

19 BY MS. O'LEARY:

20 Q. And how do these, the figures shown  
21 on D-7 and D-8, relate to your representative flow  
22 paths?

23 A. This is -- what this provides you is  
24 basically on the different layers the gradient of

1 groundwater flow.

2 Q. Oh. Are you looking at D-5 and D-6  
3 or D-7 and D-8?

4 A. Well, okay. That is on both what I  
5 just said.

6 But can you repeat the question?  
7 Because I think I missed the first question you  
8 asked.

9 Q. Yeah. So the figures shown -- well,  
10 let's back up.

11 The figures shown on D-7 and D-8  
12 that are labeled Figure F21 and Figure F25, F20  
13 and F24, do you see those figure labels?

14 A. Yes.

15 Q. Where does -- like where do these  
16 figures come from?

17 A. They come from the ATSDR work.

18 Q. Okay. And there's what looks to me  
19 like a plume shown on these figures; is that  
20 correct?

21 A. Yes.

22 Q. Okay. And why did you include  
23 figures showing the plume in Attachment D?

24 A. That's to show where ATSDR estimated

1 the concentration was in the groundwater  
2 environment in the -- in the different layers. I  
3 mean, in layer 1, 4-47 and in layer 3, 48.

4 Q. And why did you include these  
5 figures showing ATSDR's prediction of the plume in  
6 your report?

7 A. Well, it's -- it's because ATSDR  
8 calculation and estimate shows that the  
9 concentration or the contaminant, the contaminant,  
10 the COCs are basically traveling into those layers  
11 and they depicted the results here as plumes.

12 Q. Okay.

13 A. And that -- that shows you that you  
14 have transport in layer 1 and you have transport  
15 in layer 3.

16 MS. O'LEARY: Okay. I don't  
17 have any other questions. Thank you.

18 MS. BAUGHMAN: Great. Hold on  
19 one second. Let me just double-check.

20 Yeah, we're done.

21 THE VIDEOGRAPHER: This  
22 concludes for today's deposition. The  
23 date is June 4, 2025. The time is 2:02  
24 PM. We are now off the record.

(Signature not waived, the  
deposition concluded at 2:02 PM.)

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DECLARATION UNDER PENALTY OF PERJURY

I declare under penalty of perjury that I have read the entire transcript of my Deposition taken in the captioned matter or the same has been read to me, and the same is true and accurate, save and except for changes and/or corrections, if any, as indicated by me on the DEPOSITION ERRATA SHEET hereof, with the understanding that I offer these changes as if still under oath.

Signed on the \_\_\_\_\_ day of \_\_\_\_\_, 2025.

\_\_\_\_\_

REMY J.-C. HENNET, PhD



CERTIFICATE OF REPORTER

DISTRICT OF COLUMBIA )

I, Denise Dobner Vickery, a  
Registered Court Reporter and Notary Public of  
the District of Columbia, do hereby certify that  
the witness was first duly sworn by me.

I do further certify that the  
foregoing is a verbatim transcript of the  
testimony as taken stenographically by me at the  
time, place and on the date herein set forth, to  
the best of my ability.

I do further certify that I am  
neither a relative nor employee nor counsel of  
any of the parties to this action, and that I am  
neither a relative nor employee of such counsel,  
and that I am not financially interested in the  
outcome of this action.



DENISE DOBNER VICKERY, CRR, RMR  
Notary Public in and for the  
District of Columbia

My Commission expires: March 14, 2028

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Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF APRIL 1, 2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS

COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

Veritext Legal Solutions is committed to maintaining the confidentiality of client and witness information, in accordance with the regulations promulgated under the Health Insurance Portability and Accountability Act (HIPAA), as amended with respect to protected health information and the Gramm-Leach-Bliley Act, as amended, with respect to Personally Identifiable Information (PII). Physical transcripts and exhibits are managed under strict facility and personnel access controls. Electronic files of documents are stored in encrypted form and are transmitted in an encrypted

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