UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NORTH CAROLINA
SOUTHERN DIVISION

FRANK MOUSSER,	)	
	)	
Plaintiff,	)	Docket No.
	)	7:23-CV-00667-BO-RN
v.	)	
	)	
UNITED STATES OF AMERICA,	)	
	)	
Defendant.	)	

****

MONDAY, OCTOBER 26, 2026
TRANSCRIPT OF BENCH TRIAL - DAY 1
BEFORE THE HONORABLE TERRENCE W. BOYLE
UNITED STATES DISTRICT JUDGE

TAMMY JOHNSON, CVR-CM-M, RVR
Official Court Reporter
United States District Court
Raleigh, North Carolina
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Monday, October 26, 2026, 9:48 a.m.

P R O C E E D I N G S

09:48:53 THE COURT: Good morning. I thought we'd start a few
09:48:53 minutes early so we can have a longer lunch. I'm ready to go.
09:48:55 If you want to have the plaintiffs introduce themselves and
09:49:00 then give me a five-minute summary of why you should prevail,
09:49:06 and then I'll go to the defendants and you can tell me who's
09:49:09 here and who you are, and I'll give you five minutes to tell me
09:49:13 why they shouldn't prevail.
09:49:17 MR. DOWLING: Thank you, Your Honor. Mike Dowling,
09:49:18 on behalf of the plaintiff, Frank Mousser. This is
09:49:21 Mr. Mousser, Your Honor. He's a resident of Texas. Your
09:49:23 Honor, Elliott Abrams from the Wake County Bar; Matthew Quinn,
09:49:27 Lewis & Roberts in Raleigh; and J.J. Snidow from Keller
09:49:30 Postman.
09:49:31 THE COURT: Okay.
09:49:32 MR. DOWLING: May it please the Court. Your Honor,
09:49:36 Frank Mousser was poisoned by the toxic water at Camp Lejeune.
09:49:40 Official government records, official government investigations
09:49:44 and studies, and the Department of Justice's own answer in this
09:49:47 case show that the drinking water at Camp Lejeune was highly
09:49:47 contaminated with solvents, including TCE, trichloroethylene,
09:49:54 when Mr. Mousser was stationed there.
09:49:54 There is no legitimate scientific dispute that TCE
09:50:01 causes kidney cancer. It's been banned by the EPA. It's been

09:50:05 classified as a known carcinogen. But tragically, the water at
09:50:09 Camp Lejeune, at minimum, contained thousands of gallons of
09:50:13 this cancer-causing poison, and Mr. Mousser was there when
09:50:17 those poisons were at their absolute highest.
09:50:19 Mr. Mousser left Camp Lejeune in 1986, Your Honor,
09:50:23 and he left the Marines in 1988. He married, and he had a
09:50:27 successful career in the car industry. In 2020, after a bout
09:50:32 of extreme back flank pain, Mr. Mousser was diagnosed with
09:50:36 upper tract urothelial cancer in the kidney. Doctors removed
09:50:40 his right kidney, Your Honor, and part of his bladder in 2020,
09:50:43 but that did not solve Mr. Moser's problems. To the contrary,
09:50:49 Mr. Mousser's problems had only just begun.
09:50:51 After Mr. Moser's kidney was removed in 2020, his
09:50:55 other kidney became diseased. He's been diagnosed with chronic
09:50:58 kidney disease and his lone kidney, Your Honor, will not last
09:51:02 long. Dialysis and a kidney transplant are in Mr. Mousser's
09:51:06 future. His life has been shortened by a decade.
09:51:09 Unfortunately, this cancer has recurred. It came
09:51:12 back in 2024. Mr. Mousser must undergo, to stay on top of
09:51:18 this, a painful and undignified monitoring and surveillance
09:51:22 program, Your Honor. It's something called a cystoscopy where
09:51:24 they insert a camera into your penis to explore and make sure
09:51:28 there isn't cancer recurring there. He's had over a dozen such
09:51:33 procedures.
09:51:33 Your Honor, he's never been the same since his kidney

09:51:35 cancer diagnosis in 2020. He was once a happy, energetic
09:51:39 person. He was a hard worker and a good sleeper with a happy
09:51:42 marriage and little to worry about. But the evidence will
09:51:45 indisputably show that after his kidney was removed, he became
09:51:48 depressed, withdrawn, and anxious about his health, about his
09:51:52 future, and his ability to support his family. He's suffered
09:51:57 economically, he's suffered physically, and he's suffered
09:52:00 psychologically as a result of being poisoned at Camp Lejeune.
09:52:02 So we are here to seek justice for Mr. Mousser, Your
09:52:06 Honor. We will present the case in essentially three phases.
09:52:09 In the first phase, you're going to hear from Morris Maslia.
09:52:12 He was an engineer at the ATSDR. This is the independent
09:52:15 government agency that studied the contaminated water at Camp
09:52:18 Lejeune. He will explain to you very briefly the
09:52:21 groundbreaking peer-reviewed science that he and a team of
09:52:24 government experts did to reconstruct what this contamination
09:52:27 was, to hindcast and understand the extent of this
09:52:30 contamination.
09:52:30 Your Honor, the first phase should be short. I'm
09:52:35 offering this as context and to set the stage for the Court
09:52:38 because, frankly, when this man was at Camp Lejeune, there
09:52:40 should be no legitimate dispute about the extent of the
09:52:44 contamination at Camp Lejeune. The Government's own evidence,
09:52:47 we believe, acknowledges such.
09:52:49 The second phase will be about causation, Your Honor.

09:52:52 You'll hear the testimony of Dr. Benjamin Hatten, a
09:52:55 toxicologist who comprehensively reviewed all of the literature
09:52:58 about TCE, and he will explain to you why the amount of TCE
09:53:03 that was in the water at Camp Lejeune can cause kidney cancer.
09:53:07 He's a general causation expert.
09:53:08 You'll hear the testimony of Dr. Kelly Reynolds.
09:53:11 She's an exposure scientist at the University of Arizona. She
09:53:15 determined the number of days that Mr. Mousser was actually on
09:53:17 the base. She pulled out the days that he wasn't physically
09:53:20 there to give us a more granular understanding of when he was
09:53:24 actually there and when he was not. He was there for 891 days,
09:53:29 Your Honor. Five-hundred and seventy-four of those days were
09:53:33 the at the peak TCE contamination at Camp Lejeune.
09:53:36 You'll hear from Dr. Joseph Del Pizzo, a urologist
09:53:39 who performed a differential etiology. He considered all the
09:53:42 possible causes, all of the possible potential contributors to
09:53:46 this disease, and after analyzing the entire record, he
09:53:49 determined that the cause in this case was Mr. Mousser's
09:53:53 substantial exposure to the water at Camp Lejeune.
09:53:56 You'll hear testimony of Dr. Cooper by deposition.
09:54:00 We took a de bene esse deposition, the Court may be aware.
09:54:02 He's an expert in kidney transplants. He does 60-some a year.
09:54:06 He will explain how this man will need a kidney transplant and
09:54:09 how his life has been shortened as a result of this cancer.
09:54:12 You'll hear from an economist and a life care planner

very briefly. And finally, you'll hear from Mr. Mousser himself and his wife, Heather, of 33 years, and they will tell you in ways no one else can, Your Honor, how destructive Mr. Mousser's kidney cancer has been and the devastation it's caused in his life.

Your Honor, the damages in this case are enormous. There's hundreds of thousands of dollars of lost wages. He had to leave a successful career early because of this. There's hundreds of thousands of dollars in past medical expenses and future medical expenses related to this kidney transplant. The non-economic damages, obviously, are going to dwarf the economic damages in this case, and so this is a seven-figure damages case, Your Honor.

And you should know that the Government alleges it's entitled to an offset against any award that you apply in this case, and that's based on a series, we contend, of baseless assumptions that cannot withstand scrutiny. Ultimately, we do concede that some level of an offset will -- should apply to the award, but it should be far less than what the Government is requesting.

So in the final analysis, Judge Boyle, we will ask for you to find that justice for a poisoned Camp Lejeune Marine is served by issuing a significant damages award in this case. Thank you, Your Honor.

THE COURT: All right. Thank you. And thank you for

keeping to the time limitations there generally.

Let's see, I'll hear from Mr. Bain.

MR. BAIN: Yes, Your Honor. Adam Bain for the United States, and I have with me at counsel table Haroon Anwar, John Carpenito, Gio Antonucci and Megan Gaddy.

I wanted to let you know, Your Honor, we'll have a number of attorneys presenting witnesses. We're trying to do this as efficiently and as streamlined as possible. We took seriously your admonition that this should be a sprint, not a marathon, so you'll see a number of different attorneys presenting witnesses.

Your Honor, this case is about one of life's most difficult questions, why do good people like Mr. Mousser who honorably served his country suffer from disease and what caused that disease? This case is about following the science. That's important, even when the science doesn't provide an answer or a ready explanation for these veterans who've been waiting years for their day in court.

People want explanations even when none exists, and sometimes the most ready explanation, because of all the advertising, is the one that they focus on. It's not surprising that people will come into court today and assume that Mr. Mousser's cancer was caused by his exposure, but we have to look at the science and the statistics, and, in fact, the science shows that it's not statistically likely at all

that Mr. Mousser's cancer was caused by his exposure to water.

We ask you, Your Honor, to keep an open mind and follow the science. Judge Richard Posner famously stated that the courtroom is not for scientific guesswork, even of the inspired sort, that the law follows science. It does not lead science. So the law lags science; it does not lead it.

So here the evidence will show that there cannot be a conclusion that Mr. Mousser's cancer, which was diagnosed in 2020, was caused by his exposure to water back in the 1980s. At the pretrial conference, Your Honor acknowledged this case is all about causation. In other words, you stated, "Does the plaintiff get through the door?" And only if the plaintiff unlocks that causation door do we need to get to the issue of damages.

This Court has defined what is needed to open the causation door. It's exposure, general causation and specific causation, those three elements. And the Court stated that in one of its prior orders, that those three elements are there and they're designed to show that the Court comprehensively looks at the causation issue.

This case doesn't involve a dispute about whether Mr. Mousser was exposed. He was. But as the Court stated, just because someone stands outside in a thunderstorm doesn't mean that they were struck by lightning. They were just exposed to the thunderstorm.

09:58:22 And the question here is, was there an exposure
09:58:26 sufficient to cause Mr. Mousser's illness? So the issues are
09:58:32 really going to be whether there was a sufficient exposure for
09:58:36 Mr. Mousser, what that exposure was, general causation, whether
09:58:41 that exposure can, in fact, cause the disease. Unlike what
09:58:44 Mr. Dowling said, there is a genuine dispute as to that. And
09:58:47 specific causations, whether, in fact, the chemical caused the
09:58:53 disease.
09:58:53 So the key for general causation is looking at the
09:58:57 epidemiological studies, and you will hear from experts on both
09:59:00 sides on the epidemiology. The key is if you look at the
09:59:04 incidence of disease in the Camp Lejeune group when compared to
09:59:08 the Camp Pendleton group, there is no statistically significant
09:59:12 difference between those two groups. The Government did very
09:59:15 comprehensive epidemiological studies comparing the Camp
09:59:18 Lejeune Marines to the Camp Pendleton Marines.
09:59:21 And if I can have my assistant, Mr. Carpenito, show
09:59:25 one slide of the statistically significant or insignificant
09:59:29 associations with the smoking one as well, this will show you
09:59:34 what we're -- what we're kind of looking at and what's
09:59:37 important here.
09:59:37 So these are the most relevant statistics that you
09:59:44 will hear about regarding any of the diseases that can be
09:59:49 associated with Mr. Mousser's cancer. Mr. Mousser had upper
09:59:52 tract urothelial cancer, which was a cancer of the renal pelvis

09:59:57 part of the kidney, which is actually the urothelial cells that
10:00:01 go from the kidney down to the bladder. So we're looking at
10:00:04 three diseases here, urothelial cancer, urinary bladder cancer,
10:00:08 and kidney and renal pelvis cancer.
10:00:10 This Court has stated in a prior order that in order
10:00:14 to have a real association, it has to be statistically
10:00:18 significant. And you're going to hear a lot about statistics,
10:00:21 and I just want to show you what's important about this, if I
10:00:24 can approach the easel.
10:00:26 This is called the confidence interval, and it's
10:00:29 extremely important. It describes whether or not what we're
10:00:32 seeing here is real or is within the margin of error. And what
10:00:37 we're seeing here from these statistics, because the confidence
10:00:41 interval -- that's this ratio from 0.95 to 1.25 -- includes 1,
10:00:46 in other words, this lower level is not above 1, that means
10:00:52 these very slight associations are not outside normal. They're
10:00:59 in the margin of error. These are not real associations.
10:01:02 There's virtually no difference between the Camp Lejeune cohort
10:01:06 and the Camp Pendleton cohort when they were examined.
10:01:09 Now, if you look at what a real association looks
10:01:12 like, look at what it says about smoking for urothelial cancer.
10:01:17 You'll see there that the association is 4, which means that
10:01:21 the rate of urothelial cancers or smokers is 4 times higher
10:01:26 than it is for nonsmokers. You'll also see that the confidence
10:01:30 interval, the lower end of it, is well above 1, and that means

10:01:35 that this is really a statistically significant association.
10:01:38 This is the most relevant study that was done for the Camp
10:01:42 Lejeune population with respect to these diseases.
10:01:45 THE COURT: So nobody got sick from the water at Camp
10:01:48 Lejeune; that's your position?
10:01:49 MR. BAIN: That's not our position, Your Honor.
10:01:51 THE COURT: That's just what you told me.
10:01:52 MR. BAIN: The plaintiff has the burden of proof of
10:01:55 showing --
10:01:55 THE COURT: So Congress wasted all of its time in
10:01:58 adopting this law?
10:01:59 MR. BAIN: That's not what we're saying, Your Honor.
10:02:01 THE COURT: It is what you're saying. It's exactly
10:02:04 what you're saying.
10:02:05 MR. BAIN: But the plaintiff has the burden to show
10:02:07 that Mr. Mousser's cancer was caused by it, under the science
10:02:10 and the law. And what the Congress did, Your Honor --
10:02:11 THE COURT: Weave your way back from all those
10:02:14 negatives that you just presented.
10:02:15 MR. BAIN: Well, what I can say to that, Your Honor,
10:02:18 if you'll allow me, Congress passed that statute to allow
10:02:22 someone like Mr. Mousser to have his day in court, to have the
10:02:25 opportunity --
10:02:25 THE COURT: With no relief?
10:02:26 MR. BAIN: He has the opportunity to prove through

10:02:29 experts that he's entitled to --
10:02:31 THE COURT: Yeah, I think I get it.
10:02:32 MR. BAIN: Yeah, so Congress could have passed a
10:02:36 compensation scheme that didn't require the plaintiff to show
10:02:40 causation.
10:02:41 But another really important point, Your Honor, and
10:02:44 just very briefly. I don't want to take too much time.
10:02:47 THE COURT: Well, you've taken your five minutes.
10:02:49 MR. BAIN: Yeah. Very briefly, Your Honor, specific
10:02:51 causation is going to be very important in this case, and that
10:02:54 was -- is even if the water can cause the disease, did the
10:02:59 water cause Mr. Mousser's disease? And for that particular
10:03:04 question, an expert has to show that looking at all the
10:03:08 different causes of disease, the water is more likely than any
10:03:11 other risk factor that Mr. Mousser had.
10:03:13 Here, a very important risk factor, as shown by this
10:03:18 chart, is smoking. So the question is, is smoking a more
10:03:21 likely cause for Mr. Mousser's illness than his exposure to
10:03:25 water, even if we assume the water can cause the disease?
10:03:28 Here, the evidence is going to show that Mr. Mousser had a
10:03:32 smoking habit, and, in fact, that habit continued until 2020.
10:03:38 He was smoking just a few weeks before he was diagnosed with
10:03:42 his cancer. That is much more likely a cause of Mr. Mousser's
10:03:46 illness than his exposure to water, especially at these very
10:03:50 low levels you're seeing here.

10:03:51 Finally, Your Honor, I would say that only if the
10:03:56 plaintiff shows causation do you need to get to damages. We
10:03:59 don't think they're going to meet their burden of proof on
10:04:01 causation. But if they do, as Mr. Dowling said, the statute
10:04:07 requires that the Court apply an offset. Mr. Mousser has
10:04:11 already received $300,000 of past VA benefits that have been
10:04:18 applied for him.
10:04:18 THE COURT: Does that just show how serious his
10:04:22 illness was?
10:04:23 MR. BAIN: That does. Yes, it does show how serious
10:04:26 his illness was.
10:04:26 THE COURT: Yeah.
10:04:26 MR. BAIN: We don't -- we don't dispute that he has a
10:04:28 serious illness, and he's had a lot of problems that you'll
10:04:31 hear about, and the VA has adequately compensated --
10:04:33 THE COURT: This is opening statement and I shouldn't
10:04:35 be asking you questions, but you've gone on for 15 or 20
10:04:38 minutes, so you've exhausted the remedy.
10:04:42 MR. BAIN: Yes, Your Honor. I understand and I will
10:04:45 wrap up. We will just ask you at this time that -- we will ask
10:04:50 for a verdict for the defendant at the end of the evidence, and
10:04:54 we hope that you'll keep an open mind and listen to what we
10:04:56 have to offer. Thank you.
10:04:57 THE COURT: Oh, I'll keep a very open mind.
10:04:58 MR. BAIN: Thank you.

10:04:59 THE COURT: All right. Call your first witness.
10:05:01 MR. DOWLING: Your Honor, plaintiffs call Morris
10:05:02 Maslia. Your Honor, may I approach to set up the courtroom?
10:05:05 THE COURT: Yeah.
10:05:05 THE CLERK: Place your left hand on the Bible and
10:05:05 raise your right hand, and state and spell your name for the
10:05:28 record.
10:05:28 THE WITNESS: My first name is Morris, M-O-R-R-I-S,
10:05:28 middle name, Lavi, L-A-V-I, last name, Maslia, M-A-S-L-I-A.
10:05:28 MORRIS L. MASLIA, P.E., D.WRE, DEE,
10:05:28 was sworn at 10:05 a.m., and testified as follows:
10:05:28 THE WITNESS: Good morning, Your Honor.
10:05:40 THE COURT: Good morning. And just since you're the
10:05:43 first witness, I'll say to keep your voice up. There are a lot
10:05:47 of people in the courtroom. The acoustics are good here, but
10:05:50 they're not perfect, and we don't have amplification. This is
10:05:53 an old-time courthouse, so just bear that in mind and keep your
10:06:00 voice up.
10:06:01 THE WITNESS: Thank you. I appreciate that.
10:06:02 DIRECT EXAMINATION BY MR. DOWLING:
10:06:03 Q. Could you state your name for the record, sir?
10:06:06 A. Morris L. Maslia.
10:06:08 Q. And what's your profession, sir?
10:06:09 A. I'm a retired civil engineer and a registered professional
10:06:13 engineer.

10:06:14 Q. What did you do before you retired, sir?
10:06:17 A. I was employed full-time by the Agency for Toxic
10:06:21 Substances and Disease Registry as a research environmental
10:06:25 engineer.
10:06:26 Q. And did you work on a project relating to reconstructing
10:06:29 the historical water contamination at Camp Lejeune?
10:06:32 A. Yes, I did. I worked on the Camp Lejeune study conducted
10:06:36 by ATSDR.
10:06:38 Q. Mr. Maslia, the plaintiffs have stipulated in this case
10:06:41 that Mr. Mousser was stationed at Camp Lejeune from
10:06:44 October 18th, 1982, through September 7th of 1986. What was
10:06:49 the state of the drinking water at Hadnot Point between 1982
10:06:53 and February of 1985?
10:06:56 A. It was the highest period of contamination. That included
10:07:02 trichloroethylene, TCE; tetrachloroethylene, or PCE; vinyl
10:07:08 chloride; and BTEX products, which would be benzene.
10:07:12 Q. And are you here to testify today about that, sir?
10:07:14 A. Yes, I am.
10:07:15 Q. Okay. Mr. Maslia, on the exhibit binder that's near your
10:07:19 seat, you can refer to that, sir, but then I also have on this
10:07:22 demonstrative exhibit an annotated version of Plaintiff's
10:07:24 Exhibit 1. Can you explain to Judge Boyle what Exhibit 1 is,
10:07:29 sir?
10:07:30 A. Yes.
10:07:32 Q. And you can use the blow-up too, Morris.

10:07:35 A. Yes. Exhibit 1 is a typical form that they were using at
10:07:42 Camp Lejeune in the early 1980s, where they would record
10:07:47 values of water samples and the trihalomethanes, or THMs, that
10:07:52 they were required by EPA to take samples of and analyze.
10:07:57 Q. What was the date of this report, sir?
10:08:00 A. The date of this report is -- the sample was collected on
10:08:08 26 February 1981, and it was analyzed on March 9th, 19- -- no,
10:08:11 I'm sorry, that's '81, yeah.
10:08:15 Q. Okay. So it was analyzed in 1981. And to be clear, can
10:08:17 you just explain very briefly what were they actually testing
10:08:22 for at this time?
10:08:23 A. In the late 1970s to the early 1980s, EPA promulgated
10:08:30 regulations that water systems of a certain size had to test
10:08:33 for trihalomethanes, or THMs, and so that's what they were
10:08:37 testing for, and they would go out to different locations.
10:08:40 Like, the first line there that says "WTP" would -- would
10:08:44 be at the Hadnot Point Water Treatment Plant. The one that
10:08:48 says "NH-1" would be the old Naval Hospital at Hadnot Point.
10:08:52 So they would take different -- and the others are different
10:08:55 locations. The last one, "FC" stands for French Creek area,
10:08:59 and so -- and then they would process those.
10:09:03 Q. So they were testing for trihalomethanes. That's
10:09:06 something different than solvents; is that correct?
10:09:10 A. That is correct, sir.
10:09:11 Q. Okay. And you said these samples, at least some of them,

10:09:14 were taken at Hadnot Point, sir?
10:09:17 A. I believe in this list, all of them were, but at different
10:09:21 locations.
10:09:23 Q. And what is that annotated down here? What did Mr. Neal
10:09:26 note about the water in the remarks section?
10:09:29 A. He noted that the water was highly contaminated with other
10:09:34 chlorinated hydrocarbons, and then in parentheses he puts
10:09:36 (solvents).
10:09:38 Q. And Mr. Neal, was he a government scientist?
10:09:42 A. He was the Chief of the Laboratory Services at Camp
10:09:47 Lejeune at that time.
10:09:49 Q. Okay. Was the water sampled again after this point in
10:09:51 time, sir?
10:09:52 A. I didn't --
10:09:53 Q. Was the water sampled again after this time and revealed
10:09:57 something similar to this?
10:09:59 A. Yes. It was sampled a number of -- on a number of
10:10:02 occasions, and we had -- the documents show similar comments
10:10:09 about chlorinated -- the water being highly contaminated with
10:10:14 chlorinated solvents.
10:10:16 Q. Sir, what is a Superfund site?
10:10:20 A. A Superfund site is a -- it could be a hazardous waste
10:10:23 site that EPA evaluates to determine if it -- if it should be
10:10:29 placed on their national priorities list, or NPL list, of the
10:10:34 most hazardous waste sites in the -- in the U.S.

10:10:39 MR. DOWLING: And, Your Honor, plaintiffs would move
10:10:40 to admit Plaintiff's Exhibit 1.
10:10:42 THE COURT: It'll be received.
10:10:42 (Plaintiff's Exhibit Number 1 received.)
10:10:42 MR. BAIN: Your Honor -- Mike, do you have a copy of
10:10:45 the exhibits for --
10:10:47 MR. QUINN: Counsel, we provided all the notebooks.
10:10:50 They should be at counsel's table and also were electronically
10:10:55 provided as well.
10:10:55 MR. BAIN: Okay.
10:10:59 Q. I'm sorry. You said a Superfund site is a site declared
10:11:08 pursuant to CERCLA; is that right?
10:11:10 A. Ask -- repeat your question.
10:11:13 Q. Why don't we start over? I'm sorry.
10:11:14 A. Okay.
10:11:14 Q. What is a Superfund site?
10:11:16 A. Okay. A Superfund site is a site that is classified by
10:11:21 EPA, once they do an analysis, to determine if the hazard is at
10:11:28 such a level that it requires cleanup under the Superfund -- or
10:11:33 under CERCLA.
10:11:34 Q. Was Camp Lejeune ever declared to be a Superfund site?
10:11:37 A. Yes, in 1989.
10:11:40 Q. And do you know, from your investigation at the ATSDR, how
10:11:45 much money was spent on cleanup at Camp Lejeune?
10:11:48 A. I do not know a specific number, but my estimate would be

it would be in the many, many millions of dollars.
Q. I'll refer you to Plaintiff's Exhibit 2 in the exhibit binder, and Plaintiff's Exhibit 2 is defendant United States of America's Responses to Plaintiff's Second Set of Interrogatories. Do you see that, sir?
A. Yes, I do.
Q. And on the second page, the plaintiff asked the defendant, quote, "As of January 1, 2024, please identify the amount of money expended by the U.S. Navy to clean up the environmental contamination resulting from contaminated groundwater at Camp Lejeune. This interrogatory seeks a reasonably approximate answer and not perfect exactness." Did I read that correctly, sir?
A. Yes, you did.
Q. And there's a bunch of objections under the response section, but if you flip to the last page, last paragraph says, "Without prejudice to the foregoing objections, the United States responds that as reflected on the publicly available Department of Defense Cleanup website," and there's a URL, "referenced in the Defense Environmental Programs Annual Report to Congress for Fiscal Year 2022, the DON reported actual and planned spending of approximately 321 million on installation restoration programs at Camp Lejeune through fiscal year 2023. This figure includes all IRP efforts at Camp Lejeune, which include, but are not limited to, groundwater remediation. It

10:13:11 1 does not include funds spent on Military Munitions Response
10:13:15 2 Program, which is specific to cleanup of munitions on closed
10:13:17 3 ranges." Did I read that correctly?
10:13:19 4 A. Yes, you did.
10:13:19 5 MR. DOWLING: Plaintiffs offer Exhibit 2, Your Honor.
10:13:21 6 THE COURT: Received.
10:13:21 7 (Plaintiff's Exhibit Number 2 received.)
10:13:22 8 Q. And so it's fair to say, at least from what the Government
10:13:25 9 has acknowledged, that hundreds of millions of dollars have
10:13:27 10 been spent to clean up this contamination; is that right?
10:13:32 11 A. That's what the exhibit indicates, yes.
10:13:34 12 Q. Now, you said you previously worked for the ATSDR, right?
10:13:38 13 A. Yes.
10:13:38 14 Q. And give Judge Boyle just a really high-level overview of
10:13:41 15 what ATSDR's mandate is.
10:13:44 16 A. ATSDR, or the Agency for Toxic Substances and Disease
10:13:44 17 Registry, was formed under CERCLA, or the Comprehensive
10:13:50 18 Environmental Response -- Response and Liability Act of 1980,
10:13:56 19 also known as Superfund, and they were given the responsibility
10:14:00 20 to investigate health aspects of hazardous waste and if -- and
10:14:07 21 if the public were exposed or not exposed. So they're a
10:14:09 22 scientific finding agency and not a regulatory agency.
10:14:18 23 Q. Okay. How long did you work at ATSDR?
10:14:20 24 A. For 26 years.
10:14:22 25 Q. And what was your last title when you were employed there?

10:14:24 A. Research environmental engineer and scientific project officer.
10:14:27 Q. Exhibit 3 in plaintiff's notebook is a copy of your CV; is that correct, sir?
10:14:29 A. Yes, it is.
10:14:31 Q. Is that a true and accurate reflection of your professional and educational attainment?
10:14:33 A. Yes, it is.
10:14:34 MR. DOWLING: Plaintiffs offer Exhibit 3, Your Honor.
10:14:36 THE COURT: Received.
10:14:37 (Plaintiff's Exhibit Number 3 received.)
10:14:38 Q. Tell the Court about your educational background, sir.
10:14:39 A. I've got a bachelor of civil engineering and a master's of science in civil engineering from the Georgia Institute of Technology, as well as coursework towards a doctorate in civil engineering, and I also have experience in groundwater modeling, groundwater fate and transport modeling, and public health aspects.
10:14:43 Q. So groundwater modeling, in layman's terms, does that involve modeling the flow of the water underneath the ground?
10:14:47 A. Yes, it does.
10:14:50 Q. And what is fate and transport modeling?
10:14:57 A. Fate and transport describes how a potential contaminant would flow with the groundwater and characterize where it would be underground.
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10:15:32 Q. Do you have training, education, experience in groundwater modeling?
10:15:34 A. Yes, I do.
10:15:35 Q. You have training, education, experience in historical contamination reconstruction?
10:15:38 A. Yes, I do.
10:15:40 MR. DOWLING: Your Honor, plaintiffs tender Mr. Maslia as an expert in groundwater modeling and historic water contamination reconstruction.
10:15:40 THE COURT: He'll be allowed to express his opinions.
10:15:41 Q. Let's talk about your official work investigating contamination at Camp Lejeune. So you've, obviously, worked on the Camp Lejeune historical contamination reconstruction; is that right?
10:15:43 A. That is correct.
10:15:45 Q. And what was your overall role in the project?
10:15:48 A. I was the overall project officer for the water modeling aspect of the project. The project consisted of two components. One was the epidemiological and toxicological aspects, and one was the water modeling aspect, to provide results that the epidemiologists needed to conduct their epidemiological studies.
10:15:50 MR. DOWLING: Pardon me, Your Honor. I just need to set up.
10:15:52 Q. Are you familiar with Plaintiff's Exhibit 4 in your
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notebook, which is also blown up on the easel?
A. Yes, I am.
Q. Describe what Plaintiff's Exhibit 4 is.
A. It shows an overall view of the areas investigated by ATSDR for the health studies and the water modeling studies, and the topmost area in orange is what's known as Tarawa Terrace. That was primarily a housing area, enlisted personnel.
In the middle area, which is the pinkish area, was Holcomb Boulevard, another area where personnel resided and also now the home of the new Naval Hospital.
And then in the south, the gray area in the south there, is the original Camp Lejeune that was established in the early 1940s, and it also contained the original Naval Hospital, as well as bachelor quarters and other commercial entities like the PX, movie theaters.
THE COURT: That's where the dry cleaner was?
THE WITNESS: They had a dry cleaner there, but the dry cleaner, the off-site dry cleaner, is right at the top at Tarawa Terrace right there.
THE COURT: Okay.
MR. DOWLING: Plaintiffs offer Exhibit 4, Your Honor.
THE COURT: It'll be received.
(Plaintiff's Exhibit Number 4 received.)
Q. How many water distribution systems -- you've described

some of them, but overall, how many distribution systems --
A. Overall, and if you look at the lower square, it shows all the water distribution systems there at Camp Lejeune. There are eight water -- different water distribution systems at Camp Lejeune, or at least when we were doing our analysis.
THE COURT: The resource is groundwater in every case?
THE WITNESS: One-hundred percent groundwater, Your Honor.
THE COURT: Okay.
A. And the three that ATSDR was looking at is where family housing and other personnel lived and worked, and those are the three I've just described to you.
Q. Can you describe what kinds of buildings are located at Hadnot Point?
A. Yes. At Hadnot Point, which is the gray area there, they have, for example, building H-1, which is where the commanding officers of the camp are, and administrative buildings. They also have equipment maintenance facilities there to repair and maintain all the military equipment, as well as, as I said previously, commercial-type establishments like the PX.
When we were there, they had, you know, fast-food restaurant chains, Burger King and so on and stuff -- stuff like that, swimming pools, movie theaters. And as I said, at Hospital Point, which is the point jutting out into Northeast

10:19:19 Creek there, that's where the original Naval Hospital was
10:19:22 located.
10:19:23 Q. What about where would all the enlisted Marines live?
10:19:25 A. Say --
10:19:25 Q. Where would the enlisted Marines live?
10:19:29 A. Typically they would -- they would live at Hadnot Point
10:19:33 area when the base first became operational.
10:19:37 Q. What type of dwellings?
10:19:39 A. They were bachelor quarters.
10:19:41 Q. Barracks?
10:19:42 A. Barracks, yes, sir.
10:19:44 Q. All right. Would you say Hadnot Point was the nerve
10:19:47 center of the base?
10:19:49 A. Yes. Yes. And even when we were conducting the study at
10:19:54 ATSDR, it was still the operational center of the base.
10:19:57 Q. Even when you were studying it?
10:19:59 A. Yes.
10:20:01 Q. Would Marines do field training at an area near Hadnot
10:20:04 Point, based on your investigation?
10:20:07 A. Yes, they would, and I'm not privy to the type of training
10:20:11 they would do, but we -- while we were there conducting some
10:20:15 field investigations of their water systems, they actually were
10:20:20 conducting a field exercise around the water treatment plant.
10:20:25 Q. Was there an area to do field training near Hadnot Point?
10:20:27 A. I'm sorry?

10:20:27 Q. Was there an area to do field training near Hadnot Point?
10:20:32 A. Yes. Yes. On the larger map, all that yellow -- yellow
10:20:37 area to the west is also part of Camp Lejeune.
10:20:45 Q. So you said they discovered in the early 1980s that
10:20:49 solvents were in the water; is that correct?
10:20:51 A. That is correct.
10:20:52 Q. What were the various solvents that were in the water?
10:20:55 A. The solvents that were discovered -- discovered were
10:21:00 trichloroethylene, TCE; tetrachloroethylene, or PCE or PERC;
10:21:04 and vinyl chloride, which is a degradation product of PCE; and
10:21:13 benzene.
10:21:15 Q. And what are the general uses of TCE, let's say?
10:21:20 A. TCE is primarily used as a degreaser or solvent for
10:21:26 equipment maintenance. PCE is typically used as a dry cleaning
10:21:33 agent in dry cleaners, and benzene is a byproduct of gasoline.
10:21:42 If you ever -- before they had the caps on the cars that you'd
10:21:47 fill up your tank, if you filled up your car, you would smell
10:21:50 the sweet smelling, and that was benzene.
10:21:54 Q. So I want you to describe in layman's terms the process
10:21:58 that you and your colleagues at ATSDR took to investigate,
10:22:02 study and reconstruct that contamination. Just give him an
10:22:05 overview of the process and the steps you took, sir.
10:22:08 A. When we were approached by the epidemiological side of
10:22:13 ATSDR to see if we could do that, we proposed a study that,
10:22:17 one, would discover what data were available, what data we

could use, and then also we wanted to use the historical reconstruction process, which uses computer modeling to fill in gaps when you have very limited or unavailable data. We had previously very successfully used that in the childhood cancer cluster investigation in Toms River, New Jersey, and so the epidemiologist thought that would be a good tool for them to get the answers that they needed.

Q. Did you gather any information from the community?

A. Yes. The way we did, being a scientific agency, when the community would tell us, and we might even have to ask them where barracks were or where some history -- historical information, they would tell us. We had a Camp Lejeune panel that the community attended. It was open to the panel, and they would provide us information, and then we would go and investigate it and see if we could document it scientifically.

Q. Did you ever rely on experts? Other than maybe community members that have personal knowledge, did you have any kind of panels or anything with experts?

A. Yes, we did. In conducting these types of studies and investigations, it's critical that you get feedback during different phases of your project, and so we put together, when we were studying the Tarawa Terrace area, an expert panel consisting of national and international experts, as well as representatives from the Marine Corps, the Navy community. And then we also put together a panel -- and that was in 2005. In

10:24:11 2009, when we were studying the Hadnot Point area, we put
10:24:14 together a similar panel with similar type membership.
10:24:20 Q. And so you took all this data and you essentially used
10:24:24 software; is that correct, to make these groundwater and fate
10:24:28 and transport models?
10:24:30 A. Yes. We used the MODFLOW series of soft- -- family of
10:24:36 groundwater flow modeling, which was developed by the U.S.
10:24:39 Geological Survey. We used the MT3DMS software, which was
10:24:46 developed by somebody out of the University of Alabama and is
10:24:49 now publicly available and accepted by everybody for fate and
10:24:53 transport modeling. And we also used the software developed by
10:24:57 EPA called EPANET, which is -- distributes the water through
10:25:02 pipes and tanks.
10:25:04 Q. And so what was the ultimate product that you all
10:25:08 generated as a result of your investigations?
10:25:12 A. The ultimate product was what the epidemiologists
10:25:18 requested, and that was the monthly mean or average
10:25:22 concentrations for the period of operations of the facilities.
10:25:28 Q. And did you do that with respect to Tarawa Terrace and
10:25:32 Hadnot Point/Holcomb Boulevard?
10:25:34 A. Yes. Yes, we did.
10:25:36 Q. And those were separate reports?
10:25:38 A. Those are a separate series of reports.
10:25:41 Q. Did you do this work by yourself, Mr. Maslia?
10:25:44 A. No, I did not. Obviously, on a project of this

10:25:47 complexity, I put together a team, multidisciplinary team,
10:25:50 consistent -- consisting of hydrogeologists, groundwater
10:25:56 modelers, fate and transport modelers, data analysts. We had a
10:26:02 university partner that if we needed some special applications
10:26:06 to be developed, as well as provide us with people to also
10:26:11 conduct modeling.
10:26:12 Q. The software tools that you mentioned, MODFLOW, MT3DMS and
10:26:16 EPANET, are those software tools that are accepted as reliable
10:26:21 in your field?
10:26:22 A. Yes, they are.
10:26:26 Q. Were you able to determine from your investigation what
10:26:28 the likely source of TCE contamination was at Hadnot Point?
10:26:33 A. Yes. The most likely source was the landfill area, which
10:26:40 is -- you have a point to the landfill area, which is to the
10:26:45 north. Yeah, right there. And there was a little also in the
10:26:51 Hadnot Point Industrial Area, which is that right there.
10:26:56 Q. And what types of activities were happening in the
10:26:58 Industrial Area?
10:27:00 A. Again, in the Industrial Area, they had maintenance
10:27:04 activities going on, both from military equipment, vehicles and
10:27:11 that type of activity primarily there. They also had what is
10:27:17 known as the Hadnot Point Fuel Farm, where they had buried
10:27:21 drums of fuel.
10:27:24 Q. Was it determined that there was leakage from these
10:27:27 sources of TCE?

10:27:29 A. Well, from the -- at the landfill, there was because it
10:27:33 was not a lined landfill, okay? It's just placed into the
10:27:38 landfill at the time that the landfill opened up. And in the
10:27:41 Hadnot Point Industrial Area, there were some TCE leakage from
10:27:48 some selected sources and from the benzene. At that time, when
10:27:54 they placed fuel tanks in the ground, unlike today, there was
10:27:58 no concrete pad if there should be a spill or whatever, and so
10:28:03 as they filled up with gasoline, it flexed the pipes from point
10:28:09 to point, and leakage occurred out of those joints because the
10:28:14 tanks were going up and down, depending on the level of
10:28:17 petroleum in there.
10:28:19 Q. And you testified previously that the source of
10:28:21 contamination at Tarawa Terrace was the ABC Dry Cleaners?
10:28:25 A. Yes. That was a privately-owned dry cleaning facility
10:28:30 across Highway 24 from Tarawa Terrace and about 900 feet to the
10:28:38 closest Camp Lejeune water supply wells at Tarawa Terrace.
10:28:43 Q. Let's turn to the actual ATSDR report itself. Have you
10:28:46 had a chance to review Plaintiff's Exhibit 6.1 through 6.22
10:28:50 prior to the trial?
10:28:51 A. Yes, I have.
10:28:53 MR. DOWLING: And, Your Honor, those exhibits are on
10:28:55 a thumb drive. They're voluminous. It's the complete ATSDR
10:28:57 report, but we've put them on a thumb drive for you, Your
10:29:01 Honor.
10:29:02 THE COURT: What's that?

10:29:03 MR. DOWLING: You don't need -- I'm just telling you
10:29:05 that the voluminous reports, they'll be in the record.
10:29:08 Q. And those are all official government reports, Mr. Maslia?
10:29:14 A. Yes, they are.
10:29:16 Q. Okay. And do they document and set forth the official
10:29:19 activities and investigations of the ATSDR?
10:29:22 A. From the water modeling part of the study, they do, yes.
10:29:26 Q. And were those reports in Exhibit 6.1 through 6.22, were
10:29:30 they created in the course of the ATSDR's official activities?
10:29:33 A. Yes, they were.
10:29:33 Q. Were those reports prepared in anticipation of litigation?
10:29:37 A. No, they were not.
10:29:38 Q. When were those reports prepared?
10:29:40 A. We started officially in July of 2003, when we made our
10:29:47 first visit, me and a colleague, to Camp Lejeune, and then
10:29:51 gathered data, began the modeling. And then the Tarawa Terrace
10:29:56 series began publication in 2007, and the -- it concluded with
10:30:02 the Hadnot Point series, which were published in 2013.
10:30:08 Q. So long before the Camp Lejeune Justice Act?
10:30:10 A. Absolutely.
10:30:11 MR. DOWLING: Your Honor, plaintiffs offer Exhibits
10:30:13 6.1 through 6.22 into evidence received.
10:30:16 THE COURT: Received.
10:30:16 (Plaintiff's Exhibit Number 6 Containing Plaintiff's
10:30:16 Exhibit Numbers 6.1 through 6.22 received.)

10:30:16 Q. Mr. Maslia, have you had a chance to review Plaintiff's
10:30:19 Exhibits 7, 8 and 9 in the exhibit binder here?
10:30:25 A. Yes, I have.
10:30:26 Q. Have what are Exhibits 7, 8 and 9?
10:30:28 A. Those are appendices contained in the Terrawa Terrace and
10:30:32 Hadnot Point reports, and they provide the average
10:30:41 concentration on a monthly basis from when operations began
10:30:47 until when the water treatment plant shut down at Tarawa
10:30:50 Terrace. And same thing with Hadnot Point, till they removed
10:30:53 the contaminated wells out of the system.
10:30:56 MR. DOWLING: Offer Exhibits 7, 8 and 9, Your Honor.
10:30:57 THE COURT: Received.
10:30:57 (Plaintiff's Exhibit Numbers 7 through 9 received.)
10:30:57 MR. DOWLING: Your Honor, may I approach?
10:30:59 THE COURT: Yeah.
10:31:17 Q. Do you recognize the document that's been marked as
10:31:20 Plaintiff's Exhibit 10?
10:31:21 A. Yes. That's figure A27 from our Hadnot Point/Holcomb
10:31:26 Boulevard Chapter A summary of findings report.
10:31:31 Q. Okay. And can you explain to Judge Boyle what these
10:31:35 shapes on the actual chart reflect?
10:31:37 A. Your Honor, the symbols, the squares, the circles, the --
10:31:43 both the triangles and the diamonds are actual sample points,
10:31:47 water quality samples that were taken and analyzed by either
10:31:53 the lab at Camp Lejeune or a contract lab. Okay, so that's

10:31:56 actual measured sample.
10:31:58 Q. Explain to Judge Boyle what is on this chart.
10:32:03 A. Okay. The lines going up and down are the different
10:32:07 contaminants. The pink or magenta line there, it goes there
10:32:11 and goes all the way to the top there. That's the
10:32:16 concentration, mean monthly concentration of TCE, okay?
10:32:20 Then we also have the lower line, very lower line in red,
10:32:26 is benzene. And then in the middle we've got
10:32:32 tetrachloroethylene and, I believe, vinyl chloride, and those
10:32:37 were all reconstructed generated by computer modeling for this
10:32:46 particular period. And to just explain that beige band that
10:32:50 goes from top to bottom, that's the period that the
10:32:56 epidemiologists were interested in for the epidemiological
10:32:59 study.
10:33:00 Q. What does this dotted line here reflect?
10:33:03 A. Those dotted lines reflect what is known as the maximum
10:33:07 contaminant level, or MCL. That's a level set or standard set
10:33:10 by the U.S. EPA. For example, for PCE and TCE and benzene,
10:33:17 it's 5 micrograms per liter, and for vinyl chloride, it's
10:33:22 2 micrograms per liter. And at the time that they were set,
10:33:25 they were also the lowest level that those contaminants could
10:33:30 be remediated to.
10:33:33 Q. What do the ATSDR's reconstructed monthly mean
10:33:36 concentrations show about the levels of TCE at Hadnot Point in
10:33:40 relation to the MCL?

10:33:43 A. It shows that it's substantially higher than the MCL. In
10:33:50 fact, somewhere in the high, high, high hundreds, the simulated
10:33:55 value.
10:33:55 Q. And would you say it was highly contaminated with TCE?
10:33:58 A. Yes.
10:33:59 Q. Now, you were retained by the Plaintiffs' Leadership Group
10:34:01 in this case after you retired from the ATSDR; is that correct?
10:34:05 A. Long after I was retired. Long after I was retired.
10:34:07 Q. And you drafted a report and a rebuttal report as part of
10:34:10 your retention?
10:34:11 A. Yes, I have.
10:34:12 Q. Is Exhibit 11 a true and accurate copy of your
10:34:15 October 25th, 2024, report?
10:34:18 A. Yes, it is.
10:34:19 MR. DOWLING: Plaintiffs offer Exhibit 11, Your
10:34:20 Honor.
10:34:20 THE COURT: Received.
10:34:21 (Plaintiff's Exhibit Number 11 received.)
10:34:21 Q. Are the opinions in that report true, accurate and
10:34:23 reliable?
10:34:24 A. Yes, they are.
10:34:25 Q. Is Exhibit 12 a true and accurate copy of your
10:34:28 January 14th, 2025, rebuttal report that you offered -- that
10:34:30 you authored?
10:34:35 A. Yes, that's the rebuttal report.

10:34:37 MR. DOWLING: Plaintiffs offer Exhibit 12, Your Honor.
10:34:38 THE COURT: Received.
10:34:39 (Plaintiff's Exhibit Number 12 received.)
10:34:39 MR. DOWLING: Plaintiffs offer Exhibit 10, Your Honor.
10:34:43 THE COURT: Received.
10:34:43 (Plaintiff's Exhibit Number 10 received.)
10:34:43 Q. What is your opinion about the reliability of the ATSDR's groundwater and fate and transport reconstructions?
10:34:49 A. They meet the reliability from a scientific standpoint that they use consistent scientific methods and methods that are accepted in the groundwater flow and contaminant fate and transport profession.
10:34:52 Q. Was your work peer reviewed?
10:34:56 A. Multiple times.
10:34:59 Q. And you said it was not prepared in anticipation of litigation?
10:35:03 A. That is correct.
10:35:07 Q. And are the opinions you express today and in the ATSDR historical reconstructions, do you hold all the opinions to a reasonable degree of scientific certainty?
10:35:09 A. Yes, I do.
10:35:11 Q. Mr. Maslia, in your own words, I want you to describe the nature and extent of the contamination of the finished water at
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Hadnot Point between 1982 and 1985.
A. Okay. I'll just look at that -- at that chart. Between 1982 and 1985, the finished water, which is the water that comes out of the treatment plant that we considered -- that's the exposure point for anyone drinking water at Camp Lejeune -- was extremely high. Do you have the -- yeah, up -- up there. As I said, it's over 700 micrograms per liter, and it was high for the duration of -- going back some time as well.
Q. So that entire time period, the water was highly contaminated?
A. Yes, highly contaminated.
Q. And you hold that opinion to a reasonable degree of scientific certainty?
A. Yes, I do.
Q. And you understand from this annotation that that's when Mr. Mousser was on base?
A. Yes. Yes. I'm reading the box there. Yes.
MR. DOWLING: Pass the witness, Your Honor.
THE COURT: You're finished?
MR. DOWLING: Pass the witness.
THE COURT: Yeah.
MR. ANWAR: Your Honor, permission to approach the witness with our witness binder.
THE COURT: Yes.
MR. ANWAR: Thank you. Your Honor, permission also

10:36:55 to have my colleague help me with my demonstratives.
10:36:57 THE COURT: Yeah.
10:36:58 MR. ANWAR: Thank you.
10:36:58 THE WITNESS: Do I put this plaintiff's notebook down? This is the first time I've done this.
10:37:03 THE COURT: Sure. Make yourself comfortable.
10:37:05 THE WITNESS: Okay.
10:37:11 CROSS-EXAMINATION BY MR. ANWAR:
10:37:44 Q. Mr. Maslia, my name is Haroon Anwar. I'm with the Department of Justice and represent the United States. We met at your prior depositions in this case, right?
10:37:44 A. That is correct.
10:37:47 Q. Okay. And you understand that you're under oath to tell the truth today, right?
10:37:50 A. Yes, I am.
10:37:52 Q. It's the same oath you were under when we spoke at your deposition, and so you understand that, correct?
10:37:53 A. I understand that.
10:37:55 Q. Okay. I'd like to start by discussing how it is you came to be an expert in this case. As a litigation expert testifying here today, you consider yourself to be a part of the Bell Legal Group team, correct?
10:37:56 A. I'm retained by the plaintiff's legal group.
10:37:56 Q. And in your invoices, you specifically state, "Thank you for the opportunity to be part of the Bell Legal Group team,"
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10:38:25 correct?
10:38:25 A. Yes. Yes.
10:38:27 Q. You were retained by the Bell Legal Group in July 22,
10:38:30 right?
10:38:30 A. That is correct.
10:38:32 Q. This was about a month before the passage of the Camp
10:38:34 Lejeune Justice Act, correct?
10:38:37 A. I'm not sure when it was passed, but if you tell me that
10:38:40 that's when it was passed, that's okay with me.
10:38:43 Q. Okay. And it was Jerry Ensminger that puts you in touch
10:38:46 with that -- with Ed Bell and the Bell Legal Group in
10:38:49 July 2022, right?
10:38:50 A. That is correct.
10:38:51 Q. Okay. However, July 2022, that communication wasn't the
10:38:56 first time you've communicated with the Bell Legal Group,
10:38:58 right?
10:39:00 A. I've met some of the members previously.
10:39:03 Q. You've been communicating with the Bell Legal Group dating
10:39:05 back to at least 2009, right?
10:39:07 A. Again, when I was at ATSDR, because I was at ATSDR at that
10:39:14 time, it may have been a letter or email, mostly with the CAP,
10:39:24 the Community Assistance Panel. I don't specifically -- and I
10:39:29 think we've discussed before -- I don't specifically recall
10:39:34 communicating from -- as a member of ATSDR to a legal outfit.
10:39:38 Actually, I think that probably would not be in accordance with

10:39:43 agency policy without going through the Office of the General
10:39:46 Counsel.
10:39:46 Q. Mr. Maslia, let's take a look at the -- the binder at tab
10:39:49 1 in your binder.
10:39:51 A. Exhibit 1?
10:39:52 Q. Yes.
10:39:53 A. Okay.
10:39:54 Q. This is an email exchange between you, Mr. Ensminger and a
10:39:58 paralegal from the Bell Legal Group, right? [sic]
10:39:59 A. Right.
10:39:59 Q. It's dated October 26, 2009, right?
10:40:04 A. Wait. Okay. There's two -- two dates on here. So one is
10:40:07 October 26th at 11:12 and one is at 10:58.
10:40:15 Q. It's dated October 26, 2009, right?
10:40:19 A. Yes.
10:40:19 Q. Okay.
10:40:19 MR. ANWAR: Your Honor, I move this email into
10:40:21 evidence.
10:40:22 THE COURT: Received.
10:40:22 (Defendant's Exhibit Number 80 received.)
10:40:22 Q. At the time of this email in October of 2009, you were
10:40:27 employed by ATSDR, right?
10:40:28 A. That is correct.
10:40:30 Q. And you were leading ATSDR's water modeling efforts
10:40:33 related to Camp Lejeune, right?

10:40:34 A. That is correct.
10:40:35 Q. By October 2009, the Tarawa Terrace model had been
10:40:38 completed, right?
10:40:40 A. Yes.
10:40:42 Q. However, ATSDR's water modeling efforts related to Hadnot
10:40:46 Point were ongoing, right?
10:40:49 A. Yes, they were in the beginning stages.
10:40:52 Q. The Hadnot Point water model wasn't completed until 2013,
10:40:56 right?
10:40:56 A. It was pub- -- the results were published in March of
10:40:59 2013.
10:41:00 Q. So this communication with the Bell Legal Group took place
10:41:03 years before the Hadnot Point water model was completed,
10:41:05 correct?
10:41:08 A. Well, I've got a question -- question because I don't
10:41:11 understand something here. You're saying it's from Jerry
10:41:14 Ensminger, and I see that. Where is it showing Bell Legal
10:41:16 Group because I don't --
10:41:17 Q. At the bottom of the chain, the signature block there
10:41:23 states Bell Legal Group, correct?
10:41:24 A. Oh, you mean on the -- on the back of the page?
10:41:27 Q. Correct.
10:41:27 A. That page you're talking --
10:41:28 Q. And so my question to you, Mr. Maslia --
10:41:32 A. Well, that was -- that was -- just to clarify, that was

10:41:35 from somebody at the Bell Legal Group to Jerry Ensminger.
10:41:41 Q. So my question to you, Mr. Maslia, is, and I'd ask for a
10:41:45 yes or no answer, Hadnot Point water model wasn't completed
10:41:49 until 2013, right?
10:41:50 A. Yes.
10:41:51 Q. So this communication took place with the Bell Legal Group
10:41:54 years before the Hadnot Point water model had been completed?
10:41:57 A. That's the date on it, but you're mischaracterizing the
10:42:00 email.
10:42:00 Q. The answer is --
10:42:01 A. I said yes. I said yes, but I'd like to be allowed to
10:42:05 explain that.
10:42:06 Q. And the Hadnot Point water model --
10:42:07 THE COURT: It's okay. I get it. I understand what
10:42:09 he's trying to do. Forget about it. He's their witness.
10:42:17 That's the point.
10:42:20 MR. ANWAR: What's that?
10:42:20 THE COURT: Enough said. Go ahead. Move on.
10:42:25 Q. Let's take a look -- let's take a look at tab 2 in your
10:42:43 binder, Mr. Maslia.
10:42:43 MR. ANWAR: And, Gio, if you could flip the chart.
10:42:46 A. I have tab number 2, yes, sir.
10:42:53 Q. This is an email exchange between you and ATSDR's water
10:42:57 modeling team dated January 12th, 2007, right? [sic]
10:43:03 A. Yes. Yes, it is.

10:43:05 MR. ANWAR: Your Honor, I'd offer this into evidence.
10:43:07 THE COURT: Received.
10:43:07 (Defendant's Exhibit Number 976 received.)
10:43:08 Q. As of January 2007, ATSDR's water modeling team was working to complete the Tarawa Terrace model, right?
10:43:16 A. That is correct.
10:43:17 Q. So this email was about six or seven -- or six months or seven months before the Chapter A summary for the Tarawa Terrace model was published, right?
10:43:27 A. Yes. The Chapter A for Tarawa Terrace was officially published, I believe, in July or the end of June 2007. We had an executive summary that we needed for Congressional testimony that was released on June 13th, 2007.
10:43:46 Q. And we have highlighted at the -- the email, the email at the bottom of the chain, is an email from you to ATSDR's water modeling team, right?
10:43:53 A. It's not highlighted -- it's not highlighted on my copy.
10:43:57 Q. Sure. The email at the bottom of the chain is an email from you to ATSDR's water modeling team, right?
10:44:03 A. That is correct, sir.
10:44:05 Q. And you stated in that email, which is highlighted there on the demonstrative, that, "As the agency is under tremendous pressure, if not outright criticism, to immediately provide a report on Tarawa Terrace, we no longer have time to debate this matter any further, i.e., I'm calling it a tie in the, quote,

10:44:23 'battle of the models'. Therefore, as project officer for this
10:44:28 project, I have made the following decision and I'm requesting
10:44:31 everyone involved abide by my decision," correct?
10:44:34 A. That is correct. That's a typical -- from a project
10:44:37 management standpoint, we had two different models we were
10:44:41 looking at, Your Honor, and they were getting slightly
10:44:44 different values, and modelers by nature love to keep on
10:44:48 modeling forever --
10:44:50 Q. Mr. Maslia --
10:44:50 A. I'm not finished. And so I had to make a project
10:44:56 management decision based on the best available information
10:45:00 that I had.
10:45:01 Q. Mr. Maslia, let's look at the end of your email. At the
10:45:08 end of the email, you stated, "The bottom line, it's time to
10:45:12 stop modeling and, quote, 'fine tuning models,' as we do not
10:45:15 have the data to justify further modeling analyses. The agency
10:45:19 does not have the time to devote to additional modeling
10:45:23 analyses. We have a CAP meeting scheduled in the beginning of
10:45:27 March, and I must have a completed report." That's what you
10:45:30 stated, right?
10:45:31 A. That is -- that is correct, and that is -- that is a
10:45:35 typical groundwater fate and transport modeling project
10:45:39 decision.
10:45:40 Q. And the CAP refers to ATSDR's Community Assistance Panel
10:45:43 for Camp Lejeune, right?

10:45:44 A. That is correct.
10:45:46 Q. And Mr. Ensminger was on the CAP, right?
10:45:48 A. At that time, he was, yes.
10:45:50 Q. Now, Mustafa Aral is included in this email that you sent,
10:45:53 correct?
10:45:54 A. That is correct.
10:45:55 Q. And Dr. Aral was a member of ATSDR's water modeling team,
10:45:58 right?
10:45:59 A. That is correct. He was the principal investigator for
10:46:02 the university partner that we had a cooperative agreement
10:46:05 with.
10:46:05 Q. Mustafa Aral was one of your professors at Georgia Tech,
10:46:08 correct?
10:46:08 A. That is correct.
10:46:09 Q. And he was retained as an expert for plaintiffs in this
10:46:12 litigation, right?
10:46:13 A. That is correct.
10:46:13 Q. He disclosed an expert report in this case, right?
10:46:16 A. That is correct.
10:46:17 Q. You reviewed the report, right?
10:46:19 A. I've read through it, yes.
10:46:20 Q. And you attended or listened to Mr. Aral's deposition in
10:46:25 this case, right?
10:46:26 A. That is correct.
10:46:28 Q. Now, Dr. Aral wasn't identified on Mr. Mousser's trial

witness list. He's not testifying in this case, right?
A. No.
MR. DOWLING: Objection. He's asking who the plaintiffs are going to call to -- a witness.
THE COURT: Yeah, sustained.
Q. Okay. Let's take a look at binder tab 3. I'm showing you what's been marked as United States Exhibit 81.
A. Okay.
MR. ANWAR: And just for the record, binder tab Exhibit 2 was United States Exhibit 80, and binder tab Exhibit 1 was United States Exhibit 976.
Q. This is an email that Robert or Bob Faye sent to you the following day on January 13, 2007, right?
A. That is correct.
MR. ANWAR: And I -- Your Honor, I'd offer it into evidence.
THE COURT: Received.
(Defendant's Exhibit Number 81 received.)
MR. ANWAR: Gio, will you please flip the chart?
Q. The subject line of the email is "MT3DMS results," right?
A. Yes. Yes, that's the subject.
Q. Okay. And in the email, that -- so the MT3DMS refers to the contaminant fate and transport model used in the Terrawa Terrace model, right?
A. That is correct.

10:47:44 Q. Okay. And in the email, Bob Faye, Robert Faye, starts out
10:47:48 by stating, "Hi, Morris, I have rerun the fate and transport
10:47:52 model with a biodegradation rate of .005 -- 0005 as you
10:47:58 required. The results are only marginally acceptable and
10:48:01 certainly do not represent the, quote, 'best' calibration.
10:48:05 Nevertheless, I intend to finish the report with the current
10:48:08 simulation results and explain them to the best of my ability.
10:48:11 Because of the marginal results, several issues have come to
10:48:14 mind that I need to share with you, in which I hope to discuss
10:48:18 with you in the future. I have listed these issues below,"
10:48:20 correct?
10:48:21 A. That is correct.
10:48:22 Q. And then in the next paragraph, number 1, Bob Faye states,
10:48:25 "I will find it very difficult to defend these results to my
10:48:29 technical peers or in a court of law," correct?
10:48:31 A. That is correct.
10:48:33 Q. In number 2, paragraph number 2, Bob Faye states, "I
10:48:37 believe we have violate -- I believe we have violated a
10:48:40 fundamental role of good modeling procedure. We let the,
10:48:44 quote, 'tail wag the dog' and assigned extraordinary
10:48:47 credibility to simulated numbers rather than to
10:48:50 well-established concepts. When a choice must be made between
10:48:53 accepting less than desirable model results or violating or
10:48:58 compromising valid conceptual models, I believe we should
10:49:01 accept the undesirable results and explain in the limitations

of the simulations in that context," correct?
A. I could save the Court a lot of time reading this. We've been over this in my previous depositions, and I've known Mr. Faye for at least 40-some-odd years professionally. And Mr. Faye is the person calibrating the Tarawa Terrace model, and, of course, he had his point of view, and as he and I talked, he was really upset. I won't use the words he used, but he was upset about not using the values that he thought were best.

Now, the people at Georgia Tech had a different model for -- because we needed some other computing done, and they used a slightly different number, and that's where I'll pick the point in the middle. And so this was sort of a reaction from Mr. Faye to my email saying, well, we can't model anymore. We can't fine tune. I'm the project officer and this is the decision I've made.

Q. Mr. Maslia, that's what Mr. Faye said, correct? Right?
A. This is his email. I'm not disputing that.
Q. Okay. And you mentioned you've known Mr. Faye for 40-some-odd years, right?
A. Yes. I've --
Q. And you were --
A. -- known him since we were at the U.S. Geological Survey.
Q. And you were just explaining the context of Mr. -- of the email, correct?

10:50:34 A. That is correct.
10:50:36 Q. Okay. Now, but you introduced Mr. Faye to plaintiff's
10:50:38 lawyers in this case, right?
10:50:40 A. Yes.
10:50:40 Q. And Bob Faye was, in fact, retained as an expert by the
10:50:43 plaintiff's lawyers in this litigation, right?
10:50:45 A. Yes.
10:50:46 Q. And during the course of your work, you spoke with Bob
10:50:48 Faye, right?
10:50:49 A. Yes.
10:50:49 Q. And Bob Faye actually started preparing a rebuttal report
10:50:52 for this litigation, right?
10:50:55 A. That I'm not sure of.
10:50:58 Q. If you testified to that in your deposition, you wouldn't
10:51:01 disagree, would you?
10:51:02 A. No. No.
10:51:03 Q. Okay. And you attended and listened to depositions of the
10:51:08 other water modeling experts in this case, right?
10:51:10 A. Yes.
10:51:10 Q. However, you did not attend or listen to a deposition of
10:51:14 Bob Faye, right?
10:51:15 A. That is correct.
10:51:17 Q. Let's turn to binder tab 4, which is marked as United
10:51:22 States Exhibit 66.
10:51:25 MR. ANWAR: Gio, if you could flip the chart.

10:51:30 Q. This is -- this is the transcript from ATSDR's expert
10:51:35 panel on April 30th, 2009, right?
10:51:39 A. Yes, it is.
10:51:39 MR. ANWAR: Your Honor, I'd offer this into evidence.
10:51:41 THE COURT: Received.
10:51:42 (Defendant's Exhibit Number 66 received.)
10:51:42 Q. The transcript is entitled, "Analysis and Historical
10:51:46 Reconstruction of Groundwater Resources and Distribution of
10:51:49 Drinking Water at Hadnot Point/Holcomb Boulevard and Vicinity
10:51:52 U.S. Marine Corps Base Camp Lejeune," North Carolina, right?
10:51:56 A. Yes.
10:51:58 Q. And the expert panel focused on the development of the
10:52:00 Hadnot Point water model, right?
10:52:04 A. It focused on the activities around -- ATSDR's activities
10:52:09 with respect to Hadnot Point for the historical reconstruction.
10:52:13 Q. And as of -- as we discussed before, as of 2009, the
10:52:16 Hadnot water model had not been completed, right?
10:52:18 A. That is correct.
10:52:19 Q. It was completed in 2013, correct?
10:52:21 A. That is correct.
10:52:22 Q. Now, as lead of ATSDR's water modeling efforts, you
10:52:26 organized this expert panel, right?
10:52:29 A. Yes, I organized it, but it was really -- all the
10:52:34 logistics were done by a government contractor, Eastern
10:52:38 Research Group.

10:52:39 Q. This expert panel is one of the peer-review panels or one
10:52:43 of the peer -- part of the peer-review process that you
10:52:46 referred to in your direct exam testimony, right?
10:52:49 A. No, these are expert panels, okay? And having done the
10:52:56 ATSDR reports and published journal articles, that's not the
10:53:01 same as a independent peer review. We brought these people
10:53:07 together for their expertise, being national and international
10:53:11 renowned experts in groundwater modeling, contaminant fate and
10:53:15 transport, water distribution system modeling. And the panels
10:53:19 also, unlike peer review, these panels, we specifically
10:53:25 requested members from all the stakeholders, the Marine Corps,
10:53:29 the Navy, the --
10:53:31 Q. Mr. Maslia, that wasn't my question. Let's turn to page
10:53:36 161, starting -- I'd like you to take a look at line 12.
10:53:41 A. Page 151?
10:53:41 Q. 161.
10:53:44 A. 161, okay, sure.
10:53:48 MR. DOWLING: Your Honor, I'm sorry, he has --
10:53:49 Mr. Mousser has to use the restroom. Would it be possible to
10:53:52 have a really brief recess?
10:53:53 THE COURT: Yeah.
10:53:54 MR. DOWLING: Okay. Sorry.
10:53:55 THE COURT: All right. We'll take a 10-minute
10:53:57 recess.
10:54:36 (A recess was taken from 10:54 a.m. to 11:05 a.m.)

11:05:22 MR. DOWLING: Your Honor, I apologize for that. I may ask leave that he be allowed to leave if he needs to.
11:05:25 THE COURT: Yeah, he can just leave when he wants.
11:05:27 MR. DOWLING: Thank you, Your Honor.
11:05:29 THE COURT: And go ahead with your cross.
11:05:31 MR. ANWAR: Thank you.
11:05:33 Q. (By Mr. Anwar) Mr. Maslia, before the break, I had asked you to turn to binder tab 4, which is marked as United States Exhibit 66. This is a transcript from ATSDR's expert panel on April 30, 2009, correct?
11:05:44 A. That is correct.
11:05:50 MR. ANWAR: And if I haven't offered it into evidence, I would like to offer it.
11:05:52 THE COURT: Received.
11:05:53 MR. ANWAR: Thank you.
11:05:55 (Defendant's Exhibit Number 66 received.)
11:05:56 Q. Let's turn to page 161 of the expert panel transcript, and there are some comments there in the middle of the page from a Dr. Bair. That's a Dr. Edwin Bair, correct?
11:05:56 A. No, I believe that's Dr. Scott Bair, who was one of the experts that we asked to serve on the panel.
11:05:57 Q. Okay. Thank you for that correction. Starting on line 12, Dr. Bair stated, "There's a huge change in the law for expert testimony in the mid '9- -- mid '90s between the *Frye* rule and the Merrell Dow Pharmaceutical lawsuit, where the
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judge now sits as the gatekeeper of what is acceptable science. It is -- it is up to the scientists prior to the trial and the expert witnesses or the engineers to convince the judge, who's the gatekeeper, that what they're doing is not junk science that just appeared, but it has foundations and validations in the steps that people have been talking about," correct?

A. That's what it says.

Q. Okay. And Dr. Bair continues onto the next page.

MR. ANWAR: And, Gio, if you could flip the chart.

Q. "So I just -- I don't know where this is headed one way or the other for lawsuits. It seems like everybody's walking around the hat without ever putting it on, but I think that effort that you've talked about has to be way up front before you put any of the effort into looking at Camp Lejeune," correct?

A. That's what it says, yes.

Q. And Dr. Aral, in the next line on page -- on line 6, states, "Oh, I agree with that," correct?

A. That is correct.

Q. And then further down in the exchange, on line 15, you respond and you say, "I know. That's a problem for us," correct?

A. Yes.

Q. Let's turn to page 175 of the expert panel transcript, looking at line 7.

11:07:54 A. Did you say 175?
11:07:58 Q. Actually, let's turn to page 174. I apologize. Starting
11:08:08 at line 18, there's a statement from a Dr. Rao Govindaraju,
11:08:13 correct?
11:08:14 A. That is correct.
11:08:16 Q. And Dr. Govindaraju is a civil engineering professor at
11:08:21 Purdue University, right?
11:08:23 A. Yes, he's civil engineering professor. I forget at this
11:08:29 point which university he was associated with at the time we
11:08:34 invited him.
11:08:36 Q. And at line 18, Dr. Govindaraju states, "I just wanted
11:08:40 to -- you know, before lunch, we were talking about what if it
11:08:44 were to do a court case and so on. And when you're given this
11:08:48 charge and when I started looking at the document, I was not
11:08:51 preparing myself by trying to advise people what one should do
11:08:55 in case of litigation. And maybe if that is the case -- if
11:09:00 that is the case, our objective function should be somewhat
11:09:04 different. I thought we were going to be doing this to see how
11:09:07 we can reduce uncertainty and stuff like that. So I just want
11:09:11 us to be able to explain that if we should be thinking in terms
11:09:15 of what would fly in a court of law or see what we can do,"
11:09:19 correct?
11:09:19 A. That's what it says. However, if I can explain something,
11:09:23 your implication to me is that ATSDR was doing this project for
11:09:30 litigation purposes, and that is absolutely 100 percent false,

11:09:35 okay? I'm not finished.
11:09:37 These people that we invited on were primarily, you know,
11:09:42 academia, private industry, consulting industry, and they most
11:09:47 likely are involved, or were involved in litigation. But we
11:09:50 made it very clear, not only in the ATSD -- in the Camp Lejeune
11:09:55 study, but in previous studies like Dover Township childhood
11:10:00 cancer cluster, that ATSDR would not do the studies in the face
11:10:06 of litigation. In fact, we had asked all parties to hold off
11:10:11 on any litigation so we could do the scientific work.
11:10:14 Q. And just to be clear, so the question that Dr. Govindaraju
11:10:17 posed is, "I just want us to be able to explain that if we
11:10:23 should be thinking in terms of what would fly in a court of
11:10:26 law," and on page 175, at line 7, you responded, "Well, the
11:10:32 answer is anyone can sue or sue anyone at any time of day, but
11:10:37 for anything so, no" --
11:10:38 THE COURT: Is this really important? Let's get on
11:10:40 to something that's meaningful in this case. This is just
11:10:43 going sideways. Unnecessary, totally.
11:10:46 MR. ANWAR: Understood, Your Honor. I will finish my
11:10:48 question here.
11:10:49 Q. "So we're not gearing our study for that. What we're
11:10:52 gearing our study for is for to be able to provide the
11:10:56 epidemiologists and the epidemiologists to be able to assess
11:10:59 the epi results," correct?
11:11:01 A. You read that correctly. That's exactly what I just said

11:11:03 a minute -- a minute ago, that we're doing it for scientific
11:11:08 purposes, regardless of what panel members or anyone else has
11:11:12 in terms of litigation. We have never -- when I say "we," I'm
11:11:15 talking about when I was at ATSDR -- we never did any studies
11:11:19 in light of litigation.
11:11:22 Q. Now, let's talk a little bit specifically about the Hadnot
11:11:25 Point -- about Hadnot Point and the Hadnot Point water model
11:11:30 since that's the water model that Mr. Mousser is specifically
11:11:33 relying on to prove his exposure to contaminated water.
11:11:37 You testified during your direct about the contaminants at
11:11:42 issue in Hadnot Point. The main contaminant or volatile
11:11:46 organic compound of concern at Hadnot Point was TCE, correct?
11:11:50 A. TCE, yes, for that -- for the exhibit that was shown and
11:11:56 indicated where Mr. Mousser resided at Camp Lejeune during that
11:12:01 time period.
11:12:02 Q. And the observed contaminant concentration sampling data
11:12:07 from the contaminated wells in the Hadnot Point Water Treatment
11:12:11 Plant was limited to the period between 1982 and 1985, right?
11:12:16 A. That is correct.
11:12:17 Q. Okay.
11:12:17 A. However, however, subsequent to removing the contaminated
11:12:24 wells, there were extraction wells at the landfill, and there
11:12:30 was a contaminant that --
11:12:32 THE COURT: How about not volunteering information
11:12:34 that's not in the answer to a question? We're trying to get

11:12:37 through this case, not extend it into a marathon, okay? Just
11:12:41 listen to him, answer what he says, don't embellish. Just do
11:12:45 it.
11:12:45 THE WITNESS: Okay. Thank you.
11:12:48 Q. Mr. Maslia, please turn to tab 8 in your binder, which is
11:12:53 marked as United States Exhibit 90.
11:13:00 A. Tab 8?
11:13:00 Q. Yes.
11:13:00 A. I'm -- I'm there.
11:13:02 Q. This is the Chapter A summary report for the Hadnot Point
11:13:06 water model, correct?
11:13:08 A. Yes, it is.
11:13:09 MR. ANWAR: Your Honor, I would offer this into
11:13:11 evidence.
11:13:11 THE COURT: Received.
11:13:11 (Defendant's Exhibit Number 90 received.)
11:13:11 Q. You're listed as a primary author on this report, right?
11:13:16 A. That is correct.
11:13:18 Q. And let's turn to page A62.
11:13:23 A. A62. Okay, I'm there.
11:13:32 Q. On page A62, Table A18 summarizes the available observed
11:13:38 contaminant concentration sampling data at the Hadnot Point
11:13:41 Water Treatment Plant, right?
11:13:43 A. That is correct.
11:13:44 Q. Okay. And so for TCE, which we discussed was the primary

11:13:48 contaminant at concern, there appears to be on the table a
11:13:53 total of eight observed contaminant concentration samples from
11:13:57 the Hadnot Point Water Treatment Plant, correct?
11:13:59 A. That is correct.
11:14:00 Q. Okay. So there are one sample from May of 1982, correct?
11:14:06 A. Yes.
11:14:06 Q. Two samples from July of 1982, correct?
11:14:09 A. That is correct.
11:14:10 Q. Four samples from December of 1984, correct?
11:14:13 A. From -- from -- I'm sorry, from December 4th?
11:14:19 Q. December of -- December -- December of 1980.
11:14:22 A. Oh, yes. Yes.
11:14:24 Q. One sample came from February of 1985, right?
11:14:28 A. That is correct.
11:14:30 Q. So eight stamp -- eight samples for four months between
11:14:35 1982 and 1985, right?
11:14:36 A. That is correct.
11:14:37 Q. Okay. And the sample from May 27, 1982, was measured at
11:14:42 1400 micrograms per liter, right?
11:14:44 A. That is correct.
11:14:46 Q. But the subsequent samples were lower, correct?
11:14:48 A. That is correct.
11:14:50 Q. So the same -- looking at the same table, just two months
11:14:53 later on July 27, 1982, those samples were measured at 19 and
11:14:59 21 micrograms per liter, respectively, for TCE, right?

11:15:02 A. That is correct.
11:15:03 Q. And then for DCE, PCE, vinyl chloride and benzene, there
11:15:07 were even fewer samples, correct?
11:15:10 A. That is correct. That's the reason we were conducting the
11:15:14 historical reconstruction because we had limited data.
11:15:20 Q. I want to talk with you briefly about the available data
11:15:23 pertaining to pumping schedules of wells.
11:15:25 A. Okay.
11:15:26 Q. In terms of data pertaining to pumping schedules of wells,
11:15:29 ATSDR only had data from 1998 to 2008 for the Hadnot Point
11:15:35 water model, right?
11:15:36 A. That was daily -- daily pumping data.
11:15:39 Q. And you would agree whether contaminant well --
11:15:42 contaminated wells at Hadnot Point were pumping would have a
11:15:45 significant impact on the contaminant concentrations entering
11:15:50 the Hadnot Point Water Treatment Plant, right?
11:15:53 A. They can have an impact on it, but as our sensitivity
11:15:58 analyses showed, they did not have a significant impact on it.
11:16:05 Q. Let's take a look -- let's talk about the sensitivity and
11:16:09 uncertainty analysis. Let's turn to binder tab 9, which has
11:16:13 been marked as United States Exhibit 96.
11:16:17 A. Okay. I'm there.
11:16:20 Q. Mr. Maslia, this is the Chapter A Supplement 6 Report for
11:16:23 the Hadnot Point Water Model, correct?
11:16:25 A. That is correct.

11:16:26 MR. ANWAR: Your Honor, I'd offer this into evidence.
11:16:28 THE COURT: Received.
11:16:28 (Defendant's Exhibit Number 96 received.)
11:16:28 MR. ANWAR: Thank you.
11:16:29 Q. This report is characterized or entitled,
11:16:34 "Characterization and Simulation of Fate and Transport of
11:16:37 Selected Volatile Organic Compounds in Vicinities of the Hadnot
11:16:41 Point Industrial Area and Landfill," correct?
11:16:43 A. That is correct.
11:16:44 Q. It was published in March of 2013, right?
11:16:47 A. Yes.
11:16:48 Q. And you're identified as an author on the report?
11:16:50 A. Yes, I am.
11:16:51 Q. Okay. Let's turn to page S6.44.
11:17:01 A. Did you say 44?
11:17:03 Q. Yes.
11:17:03 A. Okay. Okay, I'm there.
11:17:07 Q. Yes.
11:17:07 MR. ANWAR: And, Your Honor, may I approach?
11:17:07 THE COURT: Yeah.
11:17:08 MR. ANWAR: Thank you.
11:17:09 Q. I'd like to take a look at figure S6.23. Do you see that
11:17:48 there?
11:17:49 A. Yes, I do.
11:17:53 Q. Figure S6.23 on page S6.44 shows the results of the

11:18:01 uncertainty analysis for the Hadnot Point water model at the
11:18:05 water treatment plant, right?
11:18:07 A. That is correct.
11:18:09 Q. Okay. And this -- this is an uncertainty analysis about
11:18:13 the water supply well monthly operational schedules, right?
11:18:16 A. It uses -- uses the monthly supply well operations.
11:18:22 Q. And you would agree this uncertainty analysis shows
11:18:25 variation in monthly simulated contaminant concentration levels
11:18:28 based on changes in the pumping schedules, correct?
11:18:31 A. Yes.
11:18:33 Q. And so looking at figure S6.23, the pink line shows the
11:18:39 simulated monthly TCE concentrations from the Hadnot Point
11:18:44 calibrated model, correct?
11:18:45 A. That is correct.
11:18:47 Q. And that's the same pink line that was displayed on the
11:18:50 figure that we looked at during your -- your direct
11:18:54 examination, correct?
11:18:55 A. Yes, TCE.
11:18:57 Q. So during the first half of the 1980s, according to this
11:19:00 figure, the period when Mr. Mousser was at Camp Lejeune, the
11:19:03 model routinely simulated TCE concentrations exceeding
11:19:08 400 micrograms per liter, correct?
11:19:13 A. Yes.
11:19:15 Q. However, different assumptions about well pumping
11:19:17 schedules resulted in concentrations as low as about

11:19:20 20 micrograms per liter, right?
11:19:24 A. Yes.
11:19:24 Q. And that's what's represented in the gray; that's the
11:19:26 delta, based on the changes in the pumping schedules, correct?
11:19:29 A. That's the range generated by the Monte Carlo, Latin
11:19:35 Hypercube sampling method.
11:19:36 Q. And so that's over an order of magnitude difference in
11:19:39 range, correct?
11:19:40 A. Yes.
11:19:43 Q. Let's take a look at the next page, S6.45.
11:19:45 A. Okay.
11:19:48 Q. There is -- on that page, there's a section entitled,
11:19:52 "Discussion Communications," correct?
11:19:54 A. That is correct.
11:19:58 Q. On the right-hand side, on the first full second paragraph
11:20:01 there, there is a paragraph that starts, "For contaminant fate
11:20:07 and transport modeling." Do you see that?
11:20:09 A. Yes, I do.
11:20:09 Q. Okay. So that paragraph reads, "For contaminant fate and
11:20:13 transport modeling reported herein, however, insufficient water
11:20:17 quality data existed to conduct a statistical analysis for
11:20:21 assessment of model calibration fit," correct?
11:20:24 A. That is correct.
11:20:25 Q. And then the sentence goes on to state, "In addition,
11:20:28 specific data pertinent to the timing of initial deposition of

11:20:32 contaminants to the ground or subsurface, chronologies of waste
11:20:36 disposal operations, such as dates and times when contaminants
11:20:39 were deposited in the Hadnot Point Landfill, or descriptions of
11:20:43 the temporal variation of contaminant concentrations in the
11:20:47 subsurface generally are not available," correct?
11:20:49 A. That is correct. That is, when we're doing a complex
11:20:56 project like this, it's critical that we inform anyone who
11:21:00 wants to read or anyone who wants to use the modeling results
11:21:03 what our assumptions and what the limitations are, and this is
11:21:07 typically done in this profession of groundwater modeling and
11:21:11 fate and transport modeling.
11:21:13 Q. Mr. Maslia, if we look at the next paragraph, in the
11:21:17 bottom middle portion of the paragraph, there's a sentence
11:21:20 starting "Thus." Do you see that?
11:21:23 A. "Thus," yeah.
11:21:25 Q. It states, "Thus, the ranges of values presented in the
11:21:29 sensitivity analysis section of this report assess a limited
11:21:33 number of input and output model parameters," correct?
11:21:36 A. That is correct.
11:21:37 Q. And then the next sentence goes on to state, "The results,
11:21:40 i.e., range of concentration presented in the sensitivity
11:21:43 analysis reported herein, should not be considered or
11:21:47 interpreted as the results of a robust or comprehensive
11:21:50 uncertainty analysis," correct?
11:21:51 A. That is correct, and we had to put that sentence, or I

felt necessary to put that in there because we were conducting and we conducted a targeted uncertainty analysis where we targeted one variable, which was the pumping schedule. Owing to the computational burden of doing a complete or robust uncertainty analysis, we did not have the computational equipment. It was taking somewhere from six to eight hours just for a single run. And so we would not be able to do that, so we did what we thought would give us the next best thing for an uncertainty and targeting a specific variable, in this case pumping.

Q. Mr. Maslia, I just have a few more questions.

A. Sure.

Q. If you could try to answer my questions yes or no, I'd appreciate it, in the interest of time. Let's take a look at binder tab 10.

A. 10?

Q. Yes.

A. Okay.

Q. This is what's been premarked as United States Exhibit 239. This document is entitled, "Public Health Assessment for Camp Lejeune Drinking Water, U.S. Marine Corps Base Camp Lejeune, North Carolina," correct?

A. That is correct.

Q. And it's dated January 20, 2017, correct?

A. Correct.

11:23:09 MR. ANWAR: Your Honor, I would move this into
11:23:11 evidence.
11:23:11 THE COURT: Received.
11:23:12 (Defendant's Exhibit Number 239 received.)
11:23:12 Q. Let's turn to page X, or Roman Numeral X, which is the
11:23:19 page ending in Bates stamp 23.
11:23:22 A. Okay. Hold on. Okay, I'm there.
11:23:27 Q. In the last full paragraph on the page, sort of in the
11:23:30 middle of the page, you're -- you're cited there. Do you see
11:23:35 that?
11:23:38 A. Oh, okay, the references to Maslia, et al.?
11:23:41 Q. Correct. So in that sentence -- and I'll just read it --
11:23:43 it says, "ATSDR conducted historical reconstruction modeling to
11:23:48 estimate past contaminant concentrations at MC -- at Marine
11:23:51 Corps Base Camp Lejeune's water supplies. The drinking water
11:23:55 public health assessment uses the concentrations generated by
11:23:58 the historical reconstruction effort published in 2013 to
11:24:02 complete a new exposure evaluation that estimates potential
11:24:07 exposure doses, upper-bound cancer risk, and potential
11:24:09 non-cancer health effects," correct?
11:24:11 A. That's what that states.
11:24:12 Q. Okay. Let's turn to the page ending in Bates stamp 32.
11:24:17 A. Okay.
11:24:17 MR. ANWAR: And it is Roman Numeral XIX, for the
11:24:28 record.

11:24:28 A. Okay.
11:24:29 Q. And on that section, there is a discussion of overall
11:24:34 limitations and conclusions, right?
11:24:35 A. That's what the left column says.
11:24:40 Q. And the second sentence there starts, "However,
11:24:42 limitations exist in the environmental datasets used to make
11:24:46 that assessment. When such data limitations appear, ATSDR
11:24:50 chose conservative health protective data interpretation
11:24:54 options that were estimates of exposure in the upper end of the
11:24:58 range of recommended values," correct?
11:25:00 A. That's what that states.
11:25:01 Q. And then the next paragraph reads, "Limitations related to
11:25:05 VOCs include the lack of water sampling data prior to 1982,
11:25:10 uncertainty about when contaminant -- contamination first
11:25:13 occurred in water supplies, reliance on the testing of finished
11:25:17 water for leaving the treatment plant rather than at the point
11:25:19 of exposure, i.e., the faucet or the shower, for estimating
11:25:24 exposure, limited information about site specific exposure
11:25:28 parameters, lack of indoor air samples, uncertainties that are
11:25:32 intrinsic to the use of models to predict inputs to the
11:25:35 assessment," and then it goes on, but did I read correctly?
11:25:38 THE COURT: You think this is effective cross to do
11:25:41 something like this? Have you ever watched a movie? Have they
11:25:44 ever done this in a movie? I doubt it. You'd walk out of the
11:25:48 theater. You don't have to answer.

11:25:53 Q. That's what the report says, correct?
11:25:55 A. That's what the report says.
11:25:57 Q. Okay.
11:25:57 A. It's another example of the agency, a different group within the agency, using our results and providing the readers with what -- the assumptions and limitations.
11:26:08 MR. ANWAR: I just have a few more questions, Your Honor, on this.
11:26:10 THE COURT: Go on. You're wasting everybody's time. Go ahead.
11:26:13 Q. Let's go ahead and take a look at binder tab 8 again.
11:26:17 MR. ANWAR: That's -- for the record, it's United States Exhibit 90.
11:26:22 A. Did you say number 7?
11:26:23 Q. Number 8.
11:26:24 A. Number 8.
11:26:25 Q. And this is the Chapter A summary and findings for the Hadnot Point model, correct?
11:26:33 A. For Hadnot Point, yes, summary and findings.
11:26:35 Q. And we discussed this earlier, right?
11:26:37 A. Yes. Yes.
11:26:38 Q. Let's turn to page 1 -- A179.
11:26:42 A. 179?
11:26:42 Q. Yes.
11:26:44 A. Okay.

11:26:45 Q. Let me know when you're there.
11:26:53 A. Okay. Okay, one more page. Okay, I'm there.
11:27:16 Q. This is a question and answers section entitled, "Appendix 9" in the Hadnot Point report, correct?
11:27:19
11:27:22 A. That is correct.
11:27:23 Q. Okay. Let's turn to page A182.
11:27:29 A. Okay.
11:27:32 Q. And at the top there, there's a question there that identifies the reconstructed results from the Hadnot Point model and asks, "What does this mean in terms of my family's health," correct?
11:27:39
11:27:43
11:27:47
11:27:48 A. That is correct.
11:27:49 Q. And the first line of the answer reads, "ATSDR's exposure estimates cannot be used alone to determine whether you or your family suffered any health effects as a result of past exposure to TCE contaminated drinking water at U.S. Marine Corps Base Camp Lejeune," correct?
11:27:54
11:27:57
11:28:01
11:28:05
11:28:06 A. That is correct.
11:28:07 Q. Let's turn to page A1 -- A1A -- 181. Excuse me. And in the middle of the page on page A181, there's a question, "Can ATSDR water modeling results be used to determine the concentrations of VOCs that my family and I were exposed to on a daily basis," correct?
11:28:19
11:28:26
11:28:29
11:28:33
11:28:35 A. That's what it says, yes.
11:28:37 Q. And the answer is, "No, the available data are not

11:28:41 specific enough to accurate -- accurately estimate daily levels
11:28:44 of VOCs, PCE, TCE, 1,2-DCE, vinyl chloride and benzene in the
11:28:52 Hadnot Point/Holcomb Boulevard study area," correct?
11:28:55 A. That's what it says.
11:28:59 Q. Okay. So if experts in this case relied on ATSDR's water
11:29:02 model for Hadnot Point to estimate Mr. Mousser's exposure on a
11:29:07 daily basis in ATSDR's own words, according to the report, the
11:29:11 available data are not accurate -- or are not specific enough
11:29:14 to accurately estimate daily levels, right?
11:29:18 A. Because it would -- our reports and our analyses stopped
11:29:24 at the monthly mean concentration. They would have to do an
11:29:28 exposure assessment, which was not for us to do. That was the
11:29:32 epidemiology side of the -- of the house --
11:29:34 Q. So but the --
11:29:35 A. -- doing that. So because we have a calibrated model,
11:29:38 calibrated models, and we believe they're reliable, someone can
11:29:44 take the input and run it for a daily basis if they want to.
11:29:49 Q. But the response, again, reflected in the report --
11:29:52 A. That's the agency's point of view.
11:29:53 Q. -- "No, the available data are not specific enough to
11:29:56 accurately estimate daily levels of VOCs in the Hadnot Point/
11:29:59 Holcomb Boulevard study area," correct?
11:30:02 A. That was the agency's policy and point of view.
11:30:06 Q. Okay. Thank you.
11:30:07 MR. ANWAR: Your Honor, no further questions, but I

11:30:08 do want to note on the record that, as outlined in the motion
11:30:13 in limine we filed in advance of trial, the United States
11:30:17 renews -- renews its objection to the use of ATSDR's water
11:30:21 models to determine Mr. Mousser's exposure levels. The water
11:30:24 models were not developed for that purpose. They're not
11:30:26 reliable for that purpose, and the water models were developed
11:30:29 for a different purpose that did not require the models to be
11:30:32 accurate or reliable, and those models and the epi studies that
11:30:37 they informed went on to inform policy decisions about VA
11:30:41 benefits. Thank you.
11:30:43 THE COURT: The objection is overruled entirely.
11:30:45 Okay. Do you have any --
11:30:47 MR. DOWLING: We have no further questions for this
11:30:48 witness.
11:30:48 THE COURT: You're finished?
11:30:49 MR. DOWLING: We're done with this witness, Your
11:30:50 Honor.
11:30:50 THE COURT: Okay. Thank you, sir.
11:30:51 THE WITNESS: Thank you, Your Honor.
11:30:52 THE COURT: All right.
11:30:52 (The witness exits the witness stand at 11:30 a.m.)
11:30:56 MR. DOWLING: Your Honor, permission to move out to
11:30:58 reorient the courtroom for the next witness.
11:30:59 THE COURT: What's that?
11:31:00 MR. DOWLING: Can we move around the courtroom to get

set up?

THE COURT: Yeah, yeah, yeah, go ahead and get set for the next witness.

MR. DOWLING: Your Honor, there was a slide that was showed by the Government at the outset, and we would like to use it for this particular witness. I understand it's not in the courtroom anymore, but we would ask that we be permitted to explain what they showed the Court earlier. We can get started, but could you ask one of them to go get the foamboard?

THE COURT: Can you provide them with that?

MR. DOWLING: Can you get what you showed in opening with the risk ratios?

MR. BAIN: Yes.

MR. SNIDOW: We can get started.

MR. BAIN: Yeah, we'll get that.

MR. DOWLING: We can get started, though.

Your Honor, the plaintiff calls Dr. Benjamin Hatten.

THE COURT: Okay.

MR. SNIDOW: And good morning, Your Honor. J.J. Snidow on behalf of the plaintiff, Your Honor.

THE COURT: I'm sorry?

MR. SNIDOW: J.J. Snidow on behalf of the plaintiff, Your Honor.

THE COURT: Okay.

THE CLERK: Please place your left hand on the Bible

and raise your right hand, and state and spell your name for the record.

THE WITNESS: Yes. It's Benjamin W. Hatten, B-E-N-J-A-M-I-N W H-A-T-T-E-N.

BENJAMIN W. HATTEN, M.D., M.P.H.,

was sworn at 11:32 a.m., and testified as follows:

THE COURT: And let me just say that this is a non-jury trial, so the judge is the decider of fact, in addition to being the person responsible for the law, and so the fact that I make a comment doesn't and should not be interpreted that I have any position about facts. I'm hearing the facts. I'm going to decide those based on the evidence that that we receive.

But I also have a dual responsibility to move the case along, and so don't assume that I have a position because I'm moving the case along. That's my natural function. Anyway, just so you-all know, I don't want to be deterred from interrupting or asking questions, but the fact that I may do that at some point in time has no bearing on the outcome of the case.

MR. SNIDOW: May I proceed, Your Honor?

THE COURT: Go ahead.

MR. SNIDOW: Thank you.

DIRECT EXAMINATION BY MR. SNIDOW:

Q. State your name for the record, sir.

11:34:05 A. Yeah, it's Benjamin Hatten.
11:34:07 Q. And what do you do for a living?
11:34:08 A. I'm a physician, a medical toxicologist and emergency
11:34:12 physician.
11:34:12 Q. Where did you go to medical school?
11:34:14 A. University of Texas Southwestern Medical School in Dallas.
11:34:18 Q. After you got your M.D., did you do any postgraduate
11:34:21 training?
11:34:22 A. Yes. I did residency training in emergency medicine in
11:34:24 Denver, Colorado, and then a medical toxicology fellowship in
11:34:30 Oregon, as well as getting a master's in public health in
11:34:34 epidemiology and biostatistics in Oregon.
11:34:36 Q. Do you have any academic appointments?
11:34:38 A. Yeah, I'm an associate professor at the University of
11:34:41 Colorado School of Medicine.
11:34:43 Q. Are you board certified?
11:34:45 A. Yes, both in emergency medicine and medical toxicology.
11:34:48 Q. Do you teach?
11:34:50 A. Yes, I teach in the School of Medicine, our Toxicology
11:34:55 Fellowship Program, and at the School of Public Health at
11:34:57 University of Colorado.
11:34:59 Q. Do you have personal experience determining if a substance
11:35:02 causes cancer?
11:35:03 A. Yes. I see patients in my clinic who have concerns about
11:35:08 an exposure, as well as teaching about that to the

Toxicology -- within the Toxicology Fellowship Program.
Q. And are you actually the person in your program who teaches the fellows how to determine whether a substance causes cancer?
A. Yes. I'm the faculty member who does causation teaching for the fellows and learners who are rotating on the -- through the Fellowship Program.
Q. In developing your opinions in this case, did you use the same causation principles that you actually teach to your students?
A. Yes, I use the same methodology that I always use.
MR. SNIDOW: Your Honor, at this time, we'd like to tender Dr. Hatten as an expert in epidemiology and toxicology.
THE COURT: Do you have any objection?
MS. GADDY: No objection.
THE COURT: He'll be received on that basis and allowed to express his opinions in those areas.
MR. SNIDOW: Thank you, Your Honor.
Q. Dr. Hatten, do you spend most of your time professionally doing expert witness work?
A. No, I spend most of my time doing a mix of clinical work, teaching and research and other academic projects.
Q. Am I right that's about 80 to 90 percent of your time outside of being an expert?
A. Correct. I spend maybe 10 to 20 percent of my time doing

11:36:21 expert work.
11:36:22 Q. When you have served as an expert witness, has it always
11:36:25 been on the plaintiff's side of the case?
11:36:28 A. No, and, in fact, I probably am more often on the defense
11:36:31 side, roughly two-thirds for the defense and a third for the
11:36:36 plaintiffs.
11:36:36 Q. Am I correct you and I have actually been on different
11:36:38 sides of a case in the past?
11:36:39 A. Yes, we have.
11:36:40 Q. You were testifying for the defense; is that right?
11:36:42 A. Yes. That is correct.
11:36:44 Q. Now, Dr. Hatten, in this case, what are you here to talk
11:36:46 about?
11:36:46 A. I'm here to talk about how exposure at Camp Lejeune -- to
11:36:53 the water at Camp Lejeune and the chemicals that are found
11:36:56 there are -- or is a cause of kidney cancer.
11:37:00 Q. Did you prepare a written report?
11:37:02 A. I did.
11:37:02 Q. If you could look in volume 1 of the binder in front of
11:37:05 you and go to Exhibit 34, could you just confirm -- oh, sorry.
11:37:12 It's behind it.
11:37:14 A. It was a different binder, I think.
11:37:25 Q. If you go to Exhibit 34, can you confirm that that is your
11:37:28 report?
11:37:36 A. This is Maslia --

11:37:37 MR. SNIDOW: May I approach, Your Honor?
11:37:40 THE COURT: Yeah.
11:37:40 MR. SNIDOW: Exhibit 34.
11:37:46 Q. Dr. Hatten, is this your expert report in this case?
11:37:50 A. Yes, this appears to be.
11:37:51 MR. SNIDOW: Your Honor, at this time, we'd like to
11:37:52 move Exhibit 34 into evidence.
11:37:54 THE COURT: It'll be received.
11:37:55 (Plaintiff's Exhibit Number 34 received.)
11:37:55 Q. Dr. Hatten, did you also submit a curriculum vitae?
11:37:59 A. Yes, and I believe it's attached to here.
11:38:03 MR. SNIDOW: May I approach, Your Honor?
11:38:03 THE COURT: Yes.
11:38:03 MR. SNIDOW: Exhibit 35.
11:38:03 Q. Is this your CV, Dr. Hatten?
11:38:07 A. Yes, that's correct.
11:38:11 MR. SNIDOW: Your Honor, I'd move Exhibit 35 into
11:38:11 evidence.
11:38:11 THE COURT: It'll be received.
11:38:12 MR. SNIDOW: Thank you.
11:38:15 (Plaintiff's Exhibit Number 35 received.)
11:38:15 Q. Dr. Hatten, what methodology did you use to reach the
11:38:18 opinions in this case?
11:38:20 A. I used my standard methodology, which is to identify an
11:38:24 exposure outcome relationship of concern. In this case, that's

11:38:29 exposure to the water at Camp Lejeune and the outcome of kidney
11:38:32 cancer. And then I performed a comprehensive literature
11:38:36 search, evaluated the evidence, and then applied the Bradford
11:38:42 Hill criteria to that evidence to then weigh the evidence and
11:38:48 determine causality.
11:38:50 Q. Is that the same methodology you use in all cases?
11:38:53 A. Yes, that is.
11:38:53 Q. Is that the same methodology you'd use regardless of the
11:38:56 burden of proof in a case?
11:38:57 A. Yes, that is correct.
11:38:58 Q. What are your opinions?
11:39:00 A. My opinions are that the water at Camp Lejeune is a cause
11:39:04 of -- or exposure to the water at Camp Lejeune is a cause of
11:39:07 kidney cancer, and specifically, the compounds that have been
11:39:12 identified as contaminants in that water.
11:39:14 THE COURT: Now, when you say water, are you talking
11:39:15 about consuming water, like, a glass of water, or are you
11:39:18 talking about something that water interacts with, like, coffee
11:39:23 or iced tea, or washing yourself with water? What are you
11:39:27 talking about?
11:39:28 THE WITNESS: Yeah, those are all routes of exposure.
11:39:30 So, for example, brewing coffee doesn't destroy these
11:39:34 substances. It's still in the water. In addition to consuming
11:39:38 it, you also have some degree of dermal exposure, so exposure
11:39:42 through your skin if you're bathing in it or showering in it,

and some of that is also vaporized and you inhale some of it. So there are multiple ways that that water and those compounds that are in the water can get into your body.

THE COURT: Okay.

Q. You hold those opinions to a reasonable degree of medical and scientific certainty?

A. Yes, I do.

Q. Now, Dr. Hatten, I want to -- I want to talk with why you believe the water at Camp Lejeune is a cause of kidney cancer, and then we'll go to the chemicals. Is that okay?

A. Yes.

Q. Could you please explain to Judge Boyle, has that precise question been looked at by scientists?

A. Yes, it has.

Q. And what studies were those?

A. Those are the studies that were produced by the ATSDR over a span of about ten years.

Q. How were those studies set up?

A. They were set up to identify both military and civilian personnel who were at Camp Lejeune during a period when there was contamination of the water system, and then compared to -- in large part, compared to Camp Pendleton, which is another military base that is expected to have similar demographics or similar sets of Marines and civilian personnel, to see whether there's a higher risk of cancer at Camp Lejeune compared to

11:41:07 Camp Pendleton.
11:41:08 Q. So why didn't the authors just compare the people at Camp
11:41:11 Lejeune to, say, the general population?
11:41:15 A. They did that because we would expect that Marines and
11:41:18 military personnel would be healthier than the general
11:41:21 population. These are people who are physically fit and chosen
11:41:24 because --
11:41:24 THE COURT: And younger.
11:41:26 THE WITNESS: And younger.
11:41:26 A. You can adjust for the age in looking at population of a
11:41:31 similar age, but overall, you want to compare like with like,
11:41:35 so you're trying to make sure that the only thing that's
11:41:38 different is the base they were stationed on as best you can
11:41:41 when performing an epidemiologic study.
11:41:44 Q. So given that, if the water at Camp Lejeune didn't cause
11:41:48 kidney cancer, would there be any reason why the people at Camp
11:41:51 Lejeune would have higher rates of kidney cancer than the
11:41:55 people at Camp Pendleton?
11:41:56 A. Not that we're aware of, and I haven't heard of a good
11:41:58 explanation for why that would be the case, other than the
11:42:02 water contamination.
11:42:03 THE COURT: Were they higher than they were at Camp
11:42:04 Pendleton?
11:42:06 THE WITNESS: Yes, it was higher than Camp Pendleton,
11:42:07 and even for Camp Lejeune, it was higher than the general

11:42:11 population, which is really unexpected, whereas Camp Pendleton
11:42:14 was lower than the general population, the rates of kidney
11:42:18 cancer.
11:42:21 Q. How many studies like the ones you just described to the
11:42:23 Court have been published?
11:42:24 A. There have been five studies that looked specifically at
11:42:28 Camp Lejeune.
11:42:29 Q. And over how many years have those studies been published?
11:42:32 A. It was over the course of ten years. So beginning -- the
11:42:36 first two were published in 2014, and the last two were in
11:42:40 2024.
11:42:41 Q. Why are those studies -- looking at Camp Lejeune comparing
11:42:44 to Camp Pendleton, why are those studies so important to your
11:42:46 analysis?
11:42:48 A. Again, it's the way that they were designed, and it's also
11:42:51 particularly important when we have data directly from the
11:42:56 people who were exposed, we have direct data from these --
11:42:59 these people, and we can see how many people die of kidney
11:43:03 cancer who had this exposure.
11:43:06 THE COURT: Well, is there an expiration date on the
11:43:09 exposure? Like, you said it was 2014 to 2024.
11:43:17 THE WITNESS: That's when they were published, but
11:43:18 they studied the period from the early 1970s to 1985.
11:43:23 THE COURT: Oh, okay. All right.
11:43:23 THE WITNESS: So the publications happened in 2014

and 2024, but the dataset they were looking at was expose -- exposures from the '70s to the mid '80s.

THE COURT: All right.

Q. And when those researchers looked, did, in fact, on the whole, the population at Camp Lejeune have higher rates of kidney cancer than the population at Camp Pendleton?

A. Yes, they did.

Q. I want to look at just one example.

MR. SNIDOW: We're not going to go through all five, Your Honor.

Q. But am I right, Dr. Hatten, you reviewed the Bove 2024 mortality study?

A. Yes, I did.

MR. SNIDOW: May I approach, Your Honor, with Exhibits 73 and seventy- --

THE COURT: Yeah.

Q. Dr. Hatten, can you confirm that what I've given you is the Bove 2024 [sic] mortality study, as well as the supplemental data?

A. Yes, that is correct.

MR. SNIDOW: Your Honor, I'd like to move those two into evidence at this time.

THE COURT: They'll be received.

(Plaintiff's Exhibit Numbers 73 and 74 received.)

Q. How was this study designed? Is it the same as the ones

11:45:03 we've been discussing?
11:45:05 A. Yes. Yes. It was identifying military and civilian
11:45:11 personnel, so both military and civilian personnel who were
11:45:15 assigned to Camp Lejeune and compared to Camp Pendleton, as
11:45:20 well as looking at rates compared to the general population of
11:45:25 people who died from various cancers, including kidney cancer
11:45:28 is one of those.
11:45:30 Q. I think you told the Court this study looked at people who
11:45:32 were on base between 1975 and 1985?
11:45:37 A. The military station -- duration of dates was 1975 to '85.
11:45:43 The civilian personnel went a little earlier, to the early
11:45:45 1970s.
11:45:46 Q. So if someone like Mr. Mousser, for example, were on base
11:45:50 at Camp Lejeune between '75 and '85, am I correct he'd be
11:45:54 exactly the type of person the study looked at?
11:45:56 A. Yes, he would be potentially even one of the subjects
11:46:00 here. We just don't have identifying factors for any to be
11:46:03 able to identify any individual person.
11:46:05 Q. Now, you mentioned it looked both at Marines and
11:46:09 civilians. For the Marines, what did this study show?
11:46:11 A. It showed an elevated risk of -- or rate of kidney can- --
11:46:15 dying from kidney cancer, 20 -- a little over 20 percent higher
11:46:21 compared to Camp Pendleton.
11:46:23 Q. How about for the civilians?
11:46:25 A. It also showed an elevated rate, around a 40 percent

11:46:27 higher rate of death from kidney cancer.
11:46:31 Q. Did the authors of this study also calculate what are
11:46:34 called standardized mortality ratios?
11:46:37 A. Yes, and that's comparing death rates to the general
11:46:41 population.
11:46:42 Q. For kidney cancer among the Marines at Camp Lejeune, was
11:46:45 the kidney cancer risk actually higher than in the general
11:46:48 population?
11:46:49 A. Yes, the kidney cancer risk was higher than in the general
11:46:52 population.
11:46:52 Q. And same thing for the civilians?
11:46:53 A. Yes, that is correct.
11:46:56 Q. In this study, Dr. Hatten, did the authors treat upper
11:47:01 tract urothelial cancer as kidney cancer or as some other type
11:47:05 of cancer?
11:47:05 A. They treated it as kidney cancer, so that specific type of
11:47:09 kidney cancer was included in the general assessment of kidney
11:47:14 cancer in this study.
11:47:16 Q. Did the authors of this study break down the kidney cancer
11:47:19 risk based on how much time people had spent on this?
11:47:23 A. Yes. So they didn't look at estimates of amount consumed.
11:47:31 They looked at how long somebody -- how much time somebody was
11:47:35 on base to see whether that had an increased risk of kidney
11:47:39 cancer.
11:47:41 Q. And for those Marines who had been on base for one to five

quarters, did they have an increased risk of kidney cancer?
A. Yes, they did. It was approximately 36 percent higher.
Q. So does this study provide evidence that one to five quarters on base is sufficient to increase the risk of kidney cancer?
A. This study shows that people who were actually on base for that long had that rate -- that much higher rate of death. So it's not a theoretical risk modeled on something. This is actual data from the actual people who were there at the base.
Q. I want to shift from the overall water at Camp Lejeune and talk about a few of the chemicals, okay?
THE COURT: Talk about what?
MR. SNIDOW: A few of the chemicals, Your Honor.
THE COURT: Okay.
Q. Could you first tell the Court what chemicals were found in the water at Camp Lejeune?
A. Yeah, that included TCE, or trichloroethylene; PCE, or tetrachloroethylene; benzene and vinyl chloride were the concerning chemicals that were found.
Q. Starting with TCE, does TCE cause kidney cancer?
A. Yes, TCE unequivocally causes kidney -- exposure to TCE unequivocally causes kidney cancer.
Q. Is there scientific consensus on that point, Dr. Hatten?
A. Yes. That's a question that's been looked at multiple times by many different scientific groups. I performed my own

11:49:03 analysis, but they all agree that TCE is a cause of kidney
11:49:08 cancer.
11:49:09 Q. All right. That includes the International Agency for the
11:49:11 Research on Cancer?
11:49:12 A. Yes.
11:49:13 Q. Does it include the National Toxicology Program?
11:49:15 A. Yes.
11:49:16 Q. Does it include the United States' Environmental
11:49:17 Protection Agency?
11:49:19 A. Yes.
11:49:19 Q. And what do each of those agencies and more say about the
11:49:22 link between TCE and kidney cancer?
11:49:24 A. They say that it is a cause of kidney cancer, exposure to
11:49:27 TCE is a cause of kidney cancer.
11:49:29 Q. Is there evidence that TCE causes kidney cancer at the
11:49:32 levels found at Camp Lejeune?
11:49:35 A. Yes, both data directly from Camp Lejeune and other data
11:49:38 that looks at similar levels of exposure.
11:49:41 Q. And what's the best evidence, in your view, that TCE at
11:49:45 the levels at Camp Lejeune can cause kidney cancer?
11:49:48 A. The best evidence comes from looking directly at the data
11:49:51 from Camp Lejeune and saying, is this -- do we see an increased
11:49:55 risk with people who got -- were estimated to have more TCE at
11:49:59 Camp Lejeune?
11:50:00 Q. Let me show you a chart that the Government showed in

11:50:04 opening, and I think what the Government said is based on the
11:50:11 Camp Lejeune studies, there was -- there's no difference in
11:50:15 kidney cancer rates between the people at Camp Lejeune and the
11:50:18 people at Camp Pendleton. Is that a fair overall assessment of
11:50:21 what the evidence shows?
11:50:24 A. No. I mean, the -- those point estimates are higher than
11:50:28 1, so they're increased. It is a small increase, but it is an
11:50:32 increased rate. It's a higher rate.
11:50:34 Q. And you see at the top there it says, "The Cancer
11:50:37 Incidence Study." You're familiar with that study, right?
11:50:38 A. Yes.
11:50:39 Q. Is that the only study that was done looking at Camp
11:50:41 Lejeune and Camp Pendleton?
11:50:44 A. No. We just talked about a mortality study which looks at
11:50:47 people who actually died from the disease, who died from kidney
11:50:51 cancer, and that's a very -- when you're doing an epidemiologic
11:50:56 study, that's a very hard endpoint because somebody can't not
11:50:59 be dead from something, and so you know exactly, usually, why
11:51:03 that person died when you're putting them into a study.
11:51:07 Q. And the results of that study that you just described to
11:51:09 the Court, do those appear to be on this chart?
11:51:12 A. They are not on that chart.
11:51:13 Q. Okay. Now, besides the Camp Lejeune studies, is there
11:51:17 other evidence that TCE can cause kidney cancer at the level
11:51:20 found at Camp Lejeune?

11:51:20 A. Yes, there is.
11:51:22 Q. And what's that?
11:51:23 A. So there's both occupational exposure studies at levels of
11:51:29 exposure that are similar to Camp Lejeune, as well as other --
11:51:32 another study of water contamination, so where municipal water
11:51:37 systems were contaminated with TCE, and it evaluated risk of
11:51:42 kidney cancer in people who were exposed to the water system,
11:51:46 which is very -- a very similar type of exposure to Camp
11:51:50 Lejeune.
11:51:50 Q. Am I right those look -- those water contamination studies
11:51:54 looked at levels below occupational levels, fair?
11:51:56 A. Correct.
11:51:58 Q. And they showed increased risk of kidney cancer; is that
11:51:59 right?
11:52:00 A. Yes. That is correct.
11:52:01 Q. All right. And I don't want to go through every single of
11:52:05 these studies, but am I correct you made a summary chart of the
11:52:09 study showing the levels at which these chemicals can cause
11:52:11 kidney cancer?
11:52:12 A. Yes, I did.
11:52:13 MR. SNIDOW: May I approach, Your Honor?
11:52:14 THE COURT: Yeah.
11:52:14 MR. SNIDOW: Thank you.
11:52:31 Q. And is this the chart that you created, Dr. Hatten?
11:52:33 A. Yes.

11:52:35 Q. And does this chart demonstrate the levels of the various
11:52:39 chemicals at Camp Lejeune that increased the risk of kidney
11:52:42 cancer?
11:52:43 A. Yes. This is a chart just showing various ways of
11:52:48 assessing exposure and the relative risk that's associated, or
11:52:54 hazard rate ratio, depending on how the study was performed.
11:52:57 It's associated with that metric of exposure in the studies.
11:53:02 MR. SNIDOW: Your Honor, this is EX 147. I'd like to
11:53:03 move it into evidence.
11:53:04 THE COURT: What's that?
11:53:04 MR. SNIDOW: It's 147. I'd like to move it into
11:53:07 evidence.
11:53:08 THE COURT: It'll be received.
11:53:08 MR. SNIDOW: Thank you.
11:53:09 (Plaintiff's Exhibit Number 147 received.)
11:53:11 Q. Did you also create a summary chart of all the results in
11:53:14 the literature you reviewed that are statistically significant?
11:53:17 A. Yes, I did.
11:53:18 Q. And first, could you explain to the Court what that means?
11:53:21 A. So statistical significance testing is a way to assess the
11:53:28 data and whether the finding is likely to be representative of
11:53:33 the population underneath, or it might have happened just by
11:53:37 chance, and it's one way to help evaluate whether the findings
11:53:45 are true or just occur as a chance finding when you're -- when
11:53:49 you're doing an analysis.

11:53:51 MR. SNIDOW: May approach with 146, Your Honor?
11:53:56 THE COURT: Yeah.
11:53:56 Q. Dr. Hatten --
11:53:56 THE COURT: What's the chance that this poison could be communicated to the population at Camp Lejeune other than by water?
11:54:09
11:54:11 THE WITNESS: It's through the water system. That's really the only way. It wouldn't get into the food supply or things like that, other than when water was -- may have been added.
11:54:13
11:54:17
11:54:19
11:54:20 THE COURT: So you can restrict it scientifically to water?
11:54:22
11:54:22 THE WITNESS: Correct. Correct.
11:54:23 THE COURT: And that's part of the process?
11:54:25 THE WITNESS: Yes.
11:54:25 THE COURT: Okay.
11:54:29 MR. SNIDOW: Your Honor, I'd like to move Dr. Hatten's summary of the statistical -- statistically significant studies -- that's Plaintiff's Exhibit 146 -- into evidence, please.
11:54:30
11:54:33
11:54:37
11:54:37 THE COURT: It'll be received.
11:54:37 MR. SNIDOW: Thank you, Your Honor.
11:54:38 (Plaintiff's Exhibit Number 146 received.)
11:54:38 Q. Now, did you also create a chart showing the positive results in the literature, regardless of whether they are
11:54:43

11:54:45 statistically significant or not?
11:54:47 A. Yes, I did.
11:54:48 Q. Now, just --
11:54:48 THE COURT: Why couldn't it be airborne?
11:54:52 THE WITNESS: Well, it can be vaporized, so the water
11:54:55 can turn to steam and it can carry those particles with it, but
11:55:00 it generally --
11:55:02 THE COURT: So if you had a lawn care event and you
11:55:07 were spraying water all over and it was contaminated, would
11:55:11 people get exposed to it?
11:55:14 THE WITNESS: They potentially would, but it would
11:55:15 likely be a very small amount. The bigger concern would be
11:55:18 showering when you're in an enclosed space, and you have more
11:55:21 vapor that you inhale in a steamy shower than if you're
11:55:26 outdoors. There's enough breeze and everything that it
11:55:29 dissipates really quickly.
11:55:32 THE COURT: Okay.
11:55:35 Q. Now, Dr. Hatten, am I correct when you're looking at just
11:55:37 a single study, you're particularly concerned about statistical
11:55:41 significance?
11:55:41 A. Correct, and evaluating whether the findings in that study
11:55:46 might have occurred by chance or are truly representative of
11:55:50 what happens in the real world.
11:55:52 Q. What about when the studies keep coming out and they
11:55:55 continue to show positive risk? What does that indicate to

you?
A. That's a very strong finding for causality that the -- and particularly if they show the same numbers over and over again, the same estimates of risk, then you have a lot more confidence that even nonstatistically significant findings are truly representative of the population.
Q. I'm showing you 148. Is this the summary chart that you made of all the result -- positive results in the literature?
A. Yes, that is correct.
MR. SNIDOW: Your Honor, move 148 into evidence.
THE COURT: It's received.
(Plaintiff's Exhibit Number 148 received.)
THE COURT: Was there any comparative study done of people who lived in the Jacksonville area who were not on Camp Lejeune?
THE WITNESS: Not that I'm aware of. I believe they chose Camp Pendleton because it was --
THE COURT: Across the country?
THE WITNESS: Across the country and operating at similar times and similar volume so you have a --
THE COURT: Yeah, but wouldn't it have been good to go to the city of Jacksonville, which is next door to Camp Lejeune, and take a sample there?
THE WITNESS: Yeah, I don't know -- I don't know what the rationale was, but I believe it was to make sure it was

11:57:08 military -- a dedicated base compared to a dedicated base, but
11:57:14 I did not perform that actual study, so...
11:57:16 THE COURT: All right.
11:57:19 Q. Based on these study results, can you say to a reasonable
11:57:23 degree of medical certainty that TCE causes kidney cancer at
11:57:25 the levels found at Camp Lejeune?
11:57:28 A. Yes.
11:57:29 Q. How about PCE? Is there evidence that PCE causes kidney
11:57:32 cancer?
11:57:32 A. Yes, there is.
11:57:33 Q. What's that?
11:57:35 A. There's evidence both from the studies we've been speaking
11:57:38 about, and there have also been water contamination studies
11:57:42 looking at -- system contamination studies looking at PCE in
11:57:47 Cape Cod or in northern New England.
11:57:50 Q. Is there evidence that PCE can cause kidney cancer at the
11:57:54 levels found at Camp Lejeune?
11:57:56 A. Yes, there is.
11:57:58 Q. Is the same true for the other chemicals that you
11:58:01 reviewed?
11:58:02 A. Yes, those other chemicals both have positive associations
11:58:08 and at -- positive associations at the levels of exposure that
11:58:11 are estimated at Camp Lejeune.
11:58:14 Q. Now, aside from the epidemiology for a moment, is there
11:58:17 evidence from animal studies and toxicology studies about

11:58:21 whether TCE causes kidney cancer?
11:58:23 A. Yes, and this is something where we actually know kind of
11:58:27 exactly how it causes kidney cancer, based on animal models
11:58:31 that have actually been confirmed in studies of people, and it
11:58:35 has to do with the way TCE is metabolized, and there are
11:58:40 studies that people who are able to metabolize it with
11:58:44 glutathione and people who can't.
11:58:46 It's the combination with glutathione that damages the DNA
11:58:49 in the kidney and causes kidney cancer. And people who can't
11:58:53 metabolize with glutathione, they have a genetic mutation.
11:58:55 Those people don't develop kidney cancer when they're exposed
11:58:58 to TCE. But the people who are able to metabolize it with
11:59:03 glutathione, we see elevated rates of kidney cancer. So this
11:59:07 is a situation where we know exactly how TCE causes the cancer.
11:59:11 THE COURT: It gets into their blood system?
11:59:12 THE WITNESS: It gets into their bloodstream. It's
11:59:17 partially metabolized, and then one of the metabolites goes to
11:59:20 your kidney and your urine, and it causes damage while it's
11:59:24 sitting there in your kidney.
11:59:26 THE COURT: Okay.
11:59:27 Q. Is there any indication that that mechanism that you were
11:59:30 describing to the Court, there's some sort of threshold in how
11:59:32 TCE is metabolized?
11:59:34 A. There's no identified threshold for how -- what level of
11:59:39 exposure you see that metabolism stop or start.

11:59:42 THE COURT: And where does this -- what is it, TCP?
11:59:46 THE WITNESS: TCE.
11:59:46 THE COURT: TCE. Where does this come from?
11:59:48 THE WITNESS: It's primarily a degreasing solvent, so it's used -- it's an industrial chemical that's produced, but it's pri- --
11:59:54 THE COURT: It's a petro --
11:59:55 THE WITNESS: Yeah, it's a chemical produced in an industrial plant, and it's used for primarily, at least at Camp Lejeune, as a degreaser for degreasing industrial parts or heavy machinery.
12:00:09 THE COURT: Okay.
12:00:10 Q. So, Dr. Hatten, I want to wrap up just by quickly summarizing your opinions. Does every scientific organization you're aware of classify TCE as a known carcinogen?
12:00:21 A. Yes.
12:00:22 Q. Do those organizations say that TCE causes kidney cancer specifically?
12:00:26 A. Yes, they identify the kind of cancer that TCE causes is kidney cancer.
12:00:31 Q. Is there evidence that it causes kidney cancer at the levels found at Camp Lejeune?
12:00:35 A. Yes, and that's summarized in these charts.
12:00:38 Q. Is there similar evidence for the other chemicals?
12:00:39 A. Yes, there's similar evidence.

12:00:42 Q. Is there similar evidence for the water at Camp Lejeune itself?
12:00:43 A. Yes, and if you're looking at Camp Lejeune water as a whole, not just the individual compound, there's also evidence that -- that we've talked about that identifies increased risk with exposure to that water as a whole.
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12:00:59 Q. My last question, Dr. Hatten, based on the studies you describe in your report and your charts, what kind of person at Camp Lejeune would have the highest risk of getting kidney cancer?
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12:01:06
12:01:08
12:01:08 A. And this is important in toxicology, is that if you have increased exposure, you're likely to have an increased risk of developing a disease, and in this case, it would be people who were there the longest at the periods where there was the highest degree of exposure in the water system, and that's my understanding, at least, and I haven't reviewed his file, but is a similar time frame for when Mr. Mousser was on base.
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12:01:31
12:01:35 Q. Are all these opinions to a reasonable degree of medical and scientific certainty?
12:01:37
12:01:38 A. Yes, that is correct.
12:01:39 MR. SNIDOW: Pass the witness, Your Honor.
12:01:42 THE COURT: Okay.
12:01:42 MS. GADDY: Your Honor, permission to approach with our witness binders.
12:01:44
12:01:44 THE COURT: Can't hear you.

12:01:44 MS. GADDY: Permission to approach with our witness binders for this witness.
12:01:47 THE COURT: I'm sorry, your voice doesn't carry.
12:01:52 MS. GADDY: I'm sorry, Your Honor. Permission to approach with our witness binders.
12:01:55 THE COURT: Yeah, okay. Go ahead.
12:01:57 MS. GADDY: And if I could ask my colleague to help me with the demonstratives as well.
12:01:58 THE COURT: Okay.
12:02:01 MS. GADDY: Your Honor, may I proceed?
12:02:03 THE COURT: Yeah.
12:02:05 CROSS-EXAMINATION BY MS. GADDY:
12:03:22 Q. Good afternoon, Dr. Hatten. My name is Megan Gaddy. I represent the United States. You understand you're still under oath, correct?
12:03:22 A. Yes.
12:03:22 Q. I'd like to first ask you a few questions about your qualifications. You are a medical toxicologist and an emergency medicine physician, right?
12:03:28 A. Correct.
12:03:30 Q. You're not a board certified oncologist, correct?
12:03:32 A. I'm not a board certified oncologist, correct.
12:03:32 Q. You're not a board certified urologist, right?
12:03:35 A. Correct. I'm not a neurologist.
12:03:38 Q. You've never published any original research assessing
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12:03:41
12:03:44
12:03:47
12:03:50
12:03:53

12:03:56 kidney cancer as an outcome to exposure to any of the four
12:03:59 chemicals at issue in this case, correct?
12:04:01 A. I have not published something to that effect.
12:04:06 Q. Moving on to your work in this case, Dr. Hatten, in your
12:04:09 kidney cancer report for this case, you state, "In the case of
12:04:13 Camp Lejeune exposures, the standard for causation has been
12:04:17 statutorily defined as either sufficient to conclude that a
12:04:20 causal relationship exists, or sufficient to conclude that a
12:04:24 causal relationship is at least as likely as not," right?
12:04:28 A. Yes, you read that correctly.
12:04:30 Q. You go on in your report and state, "Such a change
12:04:33 represents a different and reduced causation standard than
12:04:36 typically assessed," correct?
12:04:39 A. Yeah, I believe I discuss it in the context of how you
12:04:42 weigh the evidence, what the burden of evidence is to make that
12:04:47 assessment.
12:04:47 Q. So the answer to my question is yes, correct?
12:04:49 A. Well, I believe in my report, I list both a traditional
12:04:54 sufficient to cause and as well as when it meets an as likely
12:05:01 as not standard. So I -- it is not exclusively that I present
12:05:09 the analysis weighed against both standards.
12:05:13 Q. Right, and you state in your report that such a change
12:05:16 represents a different and reduced causation standard than
12:05:19 typically assessed. You state that in your report, right?
12:05:21 A. I think I just said that, that it's what -- how the

12:05:28 evidence is weighed, what standard the evidence is weighed
12:05:32 against.
12:05:33 Q. You've never used the at least as likely as not standard
12:05:36 in your expert witness work before this case, right?
12:05:39 A. I have not weighed evidence against that standard in other
12:05:45 cases, and I think I explained my methodology earlier in
12:05:50 response to Mr. Snidow's question.
12:05:52 Q. You've testified at your deposition in this case that the
12:05:55 standard for weighing evidence has been altered by the
12:05:58 legislature, right?
12:05:59 A. That is how I -- that is my understanding, and I believe
12:06:04 what I testified to before, that there is an option for a
12:06:11 weighing against an as likely as not standard, but the other
12:06:15 option is to say, yes, this is definitely a cause, and I
12:06:20 believe I make those statements in my report.
12:06:24 Q. Dr. Hatten, so is the answer to my question yes?
12:06:26 A. I don't know how to answer it differently than what I just
12:06:31 did.
12:06:32 Q. Other than your deposition testimony where you say, "The
12:06:35 standard for weighing evidence has been altered by the
12:06:37 legislature" -- that's my question. You testified to that,
12:06:39 correct?
12:06:41 A. Right. I think I just explained this, that it is both the
12:06:46 traditional way of saying is this -- is there sufficient
12:06:49 evidence to say this is definitely a cause, and then another

12:06:54 set of -- another option that was provided was to say, is there
12:06:58 sufficient evidence that it is at least as likely as not.
12:07:02 Q. Dr. Hatten, you're not an expert in statutory
12:07:05 interpretation, correct?
12:07:11 A. No, I wouldn't hold myself out as an expert in statutory
12:07:14 interpretation.
12:07:16 Q. Before your testimony today, you read the Court's order
12:07:19 regarding expert opinions, and the at least as likely as not
12:07:21 standard in this case, correct?
12:07:23 A. I read a court order on that topic. I don't know if
12:07:27 that's the one you're referring to, or if there are multiple
12:07:30 orders.
12:07:30 Q. Okay.
12:07:31 MS. GADDY: May I approach, Your Honor?
12:07:31 THE COURT: Yeah.
12:07:38 Q. I'm going to hand you what will be marked for
12:07:39 identification as U.S. Exhibit 2000.
12:07:43 MS. GADDY: And, Your Honor, I have copies for the
12:08:00 Court.
12:08:02 THE COURT: You can give it to the clerk.
12:08:11 Q. Dr. Hatten, this is the court order that you reviewed
12:08:14 before your testimony today, correct?
12:08:22 A. I believe this is.
12:08:23 Q. And directing your attention to the bottom of page 17 of
12:08:27 the Court's order, and at the bottom of that page, it reads,

"At this juncture, to the extent experts in this litigation premise their epidemiological conclusions on a reduced level of methodological rigor because this is a legal proceeding involving a claim where the burden of proof is equipoise, their opinion violates Rule 702." Did I read that right?

A. I believe you read it correctly.

Q. And you read this before your testimony today, correct?

A. Yes.

Q. But you hadn't read this order before your deposition in this case on May 12th, 2025, right?

A. I don't believe it was -- well, actually, I don't know when this was produced, but I don't believe it was produced at the time of my deposition.

Q. And at that deposition, you testified that you review your legal standard as an expert witness when it varies from the usual way that evidence is weighed, correct?

A. Correct, and I think that's what I've testified to today.

Q. You've authored expert reports regarding general causation in other cases, right?

A. Yes, I have.

Q. You authored an expert report in the case of *In Re: Zantac* in 2022, correct?

A. Yes. I've offered multiple expert reports in Zantac litigation.

MS. GADDY: Your Honor, may I approach?

12:09:54 THE COURT: Yeah.
12:10:02 Q. I'm going to hand you what will be marked for
12:10:04 identification as U.S. Exhibit 2001. Dr. Hatten, this is your
12:10:26 expert report in the *In Re: Zantac* litigation in 2022, correct?
12:10:31 A. It appears to be.
12:10:33 Q. And you testified as an expert witness for the defendants
12:10:36 in that case, right?
12:10:37 A. Yes.
12:10:38 Q. And in that case, you provided opinions as to whether
12:10:42 there is reliable evidence demonstrating that therapeutic
12:10:46 ranitidine use is a cause of esophageal, gastric, pancreatic,
12:10:51 liver or bladder cancer in humans, right?
12:10:55 A. Yes.
12:10:56 MS. GADDY: And if I could have my colleague go to
12:10:58 the first posterboard.
12:10:59 Q. Dr. Hatten, on page 4 of your Zantac report under the
12:11:10 section titled "Causation," as reflected on this board, you
12:11:14 write, "Additionally, as a scientific principle, a lack of
12:11:18 causality is assumed for any observed association with the
12:11:22 requirement to assemble a convincing and comprehensive body of
12:11:26 evidence to reject such an assumption before accepting
12:11:29 causation," right?
12:11:31 A. Yes.
12:11:31 THE COURT: As a side note, in 1993, in this
12:11:37 courtroom, I tried, for two or three weeks, the patent on

12:11:43 Zantac and had lawyers and parties jammed full in the
12:11:50 courtroom, so it's come around full circle now.
12:11:53 THE WITNESS: Full circle, yeah.
12:11:53 MS. GADDY: It's a small world.
12:11:55 Q. So, Dr. Hatten, turning to page 4 of your Camp Lejeune
12:11:59 report, which is in your binder and reflected on this
12:12:04 posterboard, you also have a section titled, "Causation," in
12:12:08 which you write, "As a scientific principle, a lack of
12:12:13 causality is assumed for any observed association with the
12:12:16 requirement to assemble evidence that rises to the standard of
12:12:20 causation in order to reject such an assumption. Under the at
12:12:23 least as likely as not standard, this means that only the
12:12:27 assumption of less likely than not need be rejected to
12:12:31 establish a causal link." You wrote that in your Camp Lejeune
12:12:33 report, right?
12:12:35 A. Yes.
12:12:37 Q. And you're here testifying for plaintiff Frank Mousser,
12:12:40 right?
12:12:41 A. I'm here testifying to try and help the Court understand
12:12:45 the science in this case.
12:12:47 Q. And specifically for plaintiff Frank Mousser today,
12:12:49 correct?
12:12:49 A. Again, I'm here -- I provide the same testimony, no matter
12:12:54 what side would hire me and just try and provide a service to
12:12:57 the Court to be able to help you understand the science as best

12:13:02 I can.
12:13:03 Q. Dr. Hatten, my question is we're here for plaintiff Frank
12:13:06 Mousser's case today, right?
12:13:08 A. Correct.
12:13:09 Q. And on direct, you presented to the Court your evaluation
12:13:13 of the kidney cancer epidemiological literature, right?
12:13:17 A. Yeah. Or a summary of it, yes.
12:13:20 Q. And you're aware that Mr. Mousser was diagnosed with UTUC
12:13:22 or upper tract urothelial carcinoma, right?
12:13:26 A. Correct.
12:13:28 Q. UTUC is more similar histologically to bladder cancer than
12:13:32 to kidney cancer, right?
12:13:34 A. Yeah, I believe those -- I state those words in my report.
12:13:37 Q. And histologically in this context refers to the cellular
12:13:41 type of the cancer type generally, right?
12:13:43 A. Yes, that is correct.
12:13:45 Q. And you maintain that the opinions in your kidney cancer
12:13:48 report apply to UTUC, right?
12:13:50 A. Yes, and I believe I state in the report the
12:13:55 epidemiologist who studied this lumped those specific types of
12:13:59 cancer together with general kidney cancer, and when they are
12:14:03 analyzed separately, those specific types of cancer, they show
12:14:07 essentially identical risks as other types of kidney cancer, or
12:14:12 kidney cancer as a whole when it's evaluated as kind of a
12:14:17 larger group.

12:14:19 Q. And you also provide opinions in the case of another
12:14:22 plaintiff in this litigation, Mark Cagiano, right?
12:14:24 A. I don't know any of the plaintiffs' names other than today
12:14:28 it was on a -- that was who was listed on the trial, but I've
12:14:35 not reviewed any individual medical records or any details for
12:14:42 any individual plaintiff.
12:14:44 Q. If I show you a copy of your report for plaintiff Mark
12:14:47 Cagiano, would that refresh your recollection as to whether you
12:14:50 provided opinions to his case specifically?
12:14:54 A. I don't believe I altered my report for kidney cancer for
12:14:59 any specific plaintiff, so -- and, again, I don't know the
12:15:03 names of any of the specific plaintiffs other than what I
12:15:08 showed up for court, so...
12:15:10 MS. GADDY: Your Honor, if I may approach.
12:15:12 THE COURT: Sure.
12:15:17 Q. I will hand you what will be marked for identification as
12:15:19 U.S. Exhibit 2003. Dr. Hatten, this is your specific causation
12:15:51 report for plaintiff Frank -- sorry, excuse me -- for Mark
12:15:54 Cagiano, correct?
12:15:55 A. This is a bladder cancer specific evaluation of exposure
12:16:05 for a specific plaintiff. It's not a specific causation
12:16:07 report, but it's an evaluation of exposure, or not a full
12:16:11 specific causation report, but it's evaluation of exposures
12:16:16 that were identified for a specific bladder cancer patient.
12:16:22 Q. And, Dr. Hatten, if you could turn to page 2 of that

12:16:25 report under the title, "Exposures" and then "Time on Base."
12:16:31 Do you see that?
12:16:33 A. Yes.
12:16:33 Q. You write, "Mark Cagiano experienced exposures at Camp
12:16:37 Lejeune that are recognized to be hazardous to human health
12:16:40 when considering bladder cancer as an outcome," right?
12:16:44 A. Yes.
12:16:45 Q. And plaintiff Mark Cagiano has UTUC, doesn't he?
12:16:51 A. I do not know what specific type of cancer he has. As I
12:16:54 said, I haven't reviewed any medical records for any plaintiff,
12:16:58 only this expo- -- only exposure estimates.
12:17:02 Q. And specifically for plaintiff Mark Cagiano, who has UTUC,
12:17:05 you assessed bladder cancer as an outcome, right?
12:17:08 A. Again, I don't know whether or not he has UTUC. I
12:17:14 assessed it in the context of bladder cancer, so...
12:17:17 Q. So you assessed bladder cancer epidemiological literature
12:17:21 for Mr. Cagiano's UTUC but not for Mr. Mousser's UTUC, correct?
12:17:28 A. Again, I do not know what type of cancer this plaintiff
12:17:32 has other than I was told it was a bladder cancer and asked to
12:17:36 evaluate the evidence surrounding bladder cancer and levels of
12:17:41 exposure, so I'm not able to answer that knowledgeably because
12:17:45 I don't have direct knowledge of what type of cancer is
12:17:47 occurring in this case.
12:17:49 Q. So which epidemiological literature depended on what
12:17:52 counsel told you to apply, correct?

12:17:53 A. That's absolutely incorrect. I identified it based on the
12:17:59 location of the cancer as formulated by the epidemiologist who
12:18:06 conducted the studies, and that's how I evaluated these, the
12:18:12 literature. Like I said, the literature surrounding UTUC that
12:18:17 occurs in the kidney demonstrates very similar findings to
12:18:23 overall kidney cancers, and when it was looked at individually
12:18:27 as a separate type of cancer, it also showed similar rates or
12:18:31 risks of cancer.
12:18:32 Q. I appreciate that, Dr. Hatten, but my question is you
12:18:35 applied bladder cancer epidemiological literature to Mark
12:18:39 Cagiano's UTUC but not to Mr. Mousser's UTUC, right?
12:18:43 A. Again, I don't know how to answer that other than to say
12:18:49 that I applied the kidney -- I evaluated the kidney cancer
12:18:54 literature for cancers that occurred in the kidneys and were
12:18:57 classified as such in the epidemiologic literature, and I
12:19:01 applied bladder cancer literature to cancers that occurred in
12:19:06 the bladder, so I -- and I don't know the details of this
12:19:14 plaintiff's cancer. I just have not reviewed any of that
12:19:16 material.
12:19:17 Q. In your kidney cancer report in this case, you do not
12:19:21 report any risk estimates that are specific to UTUC, do you?
12:19:24 A. In the report you just handed me, or the --
12:19:32 Q. In your kidney cancer general causation report.
12:19:36 A. Well, I believe I discuss that on page 10 where I state
12:19:44 that, "The measures of association in studies that include

12:19:49 urothelial, renal pelvis cancers are similar to studies that do
12:19:51 not include urothelial cancers," so it's the same whether you
12:19:55 include it or not. Then I also say, "In studies that directly
12:19:58 compare urothelial, renal pelvis cancers to other kidney
12:20:02 cancers, the measures of association are similar. Lynge, 1997
12:20:06 and Raasch-Nielsen, 2003." I believe those findings are listed
12:20:12 in the -- either the summary tables or the appendix that's in
12:20:15 this report. So I don't think the question you asked is
12:20:19 correct. In fact, I think that's an incorrect question, and I
12:20:22 actually do provide specific examples of risk estimates from
12:20:26 the literature.
12:20:27 Q. Can you point to me anywhere in your kidney cancer report
12:20:29 where you identify a specific risk estimate, not a study, a
12:20:34 risk estimate for UTUC?
12:20:39 A. Let me see if it's in the appendix because I believe I
12:20:46 refer to the appendix. I don't think the appendix is included
12:20:58 here, at least in the copy I have. I can see if it's in --
12:21:08 Q. It should be in your report that I handed you, Appendix 1,
12:21:13 kidney cancer exposure chart.
12:21:20 A. I won't be able to read this because it's so small, but --
12:21:22 Q. Right.
12:21:22 A. -- like, this printout is so small.
12:21:26 Q. And in your exposure chart, which you reference as
12:21:29 Appendix 1, you have a column that says, "Renal Pelvis/Notes,"
12:21:32 right? Do you recall that?

12:21:35 A. Yes.
12:21:35 Q. You don't report specific risk estimates for UTUC in that
12:21:38 column, do you?
12:21:39 A. I think I noted whether that was present or not, and then
12:21:43 in the notes, I indicated some -- detailed those findings. I
12:21:47 don't recall if I specifically listed the risk estimate in
12:21:51 there or not, other than saying it's very similar.
12:21:54 It's also incredibly easy to just look at the original
12:21:57 study and look at that risk estimate if you have a question
12:22:02 about a specific number, but I think, as I state in here, that
12:22:06 it is very similar to kidney cancer numbers.
12:22:11 Q. Dr. Hatten, you're the general causation expert in this
12:22:13 case for plaintiffs, correct?
12:22:15 A. Correct.
12:22:16 Q. And your chart that you just referenced does not report
12:22:19 the specific risk estimate for UTUC. I'd have to go to each
12:22:23 study and try to find that myself, correct?
12:22:25 A. I mean, or you could also understand that I said it's very
12:22:32 similar. If you're asking about a specific number, that is
12:22:36 very easy to look at the original literature if it is not in
12:22:39 this chart. I don't recall if I listed it in the notes in the
12:22:42 chart or not, and the print is too small to confirm one way or
12:22:46 another here, but that does not change my conclusions whether
12:22:51 that is listed or not, and I provided my rationale in the
12:22:54 report for why I lumped those together.

12:22:58 Q. I'd like to now ask you about your literature search in
12:23:00 this case. A reliable determination of causation requires
12:23:05 conducting a comprehensive literature search of the
12:23:08 epidemiological literature, correct?
12:23:11 A. Yes.
12:23:12 Q. It's important that a literature search be crafted to
12:23:15 produce both positive and negative results for the relationship
12:23:19 being examined, right?
12:23:19 A. It's important for the literature search to be
12:23:23 comprehensive, so it includes both, but not that it produces
12:23:28 one or the other.
12:23:29 Q. And in this case, you claim to have systematically
12:23:32 searched the literature using PubMed and Google Scholar, right?
12:23:37 A. Yes.
12:23:38 Q. You didn't detail your exact searches in your report,
12:23:41 right?
12:23:43 A. I think I stated what I searched for, but I don't know if
12:23:47 your expectation is for something different than that.
12:23:51 Q. One couldn't replicate your exact search of the
12:23:54 epidemiological literature with the description in your report,
12:23:57 right?
12:23:59 A. I don't know why somebody couldn't do that. I believe
12:24:01 somebody could.
12:24:03 Q. But you didn't detail your exact searches in your report,
12:24:06 right?

12:24:06 A. I believe I -- I don't know if I stated it explicitly in
12:24:12 my report or in the deposition, but I discussed the search
12:24:15 terms that I used.
12:24:17 Q. In your report, you didn't document specific inclusion or
12:24:22 exclusion criteria for your literature search either, right?
12:24:24 A. I very clearly state what I defined as the exposure in the
12:24:31 outcome within my report, and those are the -- that's how you
12:24:36 do a literature search, is you identify an exposure and an
12:24:38 outcome relationship. You perform a search that is broad
12:24:42 enough to include everything, and evaluate the literature to
12:24:45 determine what literature is relevant, given the exposure and
12:24:49 outcome relations and definitions that you have established.
12:24:53 Q. I want to next talk about the way you evaluated
12:24:56 epidemiological studies in this case. When evaluating
12:25:00 epidemiological studies, it's important to take into account
12:25:03 the precision of a study's risk estimate, right?
12:25:08 A. That is a factor to consider when evaluating literature,
12:25:17 but precision is a very technical term, depending on how it's
12:25:23 used, so I'd appreciate it if you have a specific question, if
12:25:26 you would be -- elaborate on what you're asking about.
12:25:29 Q. Sure. One way to evaluate precision of a risk estimate is
12:25:33 through what's called a confidence interval, right?
12:25:37 A. Within the context of how wide the confidence interval is,
12:25:42 that generally defines a more precise point est- -- or your --
12:25:49 the spread of point estimates that are reasonably to be

12:25:53 expected is more precise, and that means grouped closer
12:25:56 together. So in statistical terms, precision means how closely
12:26:00 things are grouped. Like, we're shooting arrows at a target;
12:26:02 the closer they are together is the representation of
12:26:08 precision, whereas accuracy is how close they are to the true
12:26:12 value.
12:26:12 Q. So, Dr. Hatten, is the answer to my question yes?
12:26:14 THE COURT: I can't hear your questions. And, you
12:26:17 know, this is impeachment and you're trying to undermine the
12:26:23 credibility of the witness. I mean, that's the point of it.
12:26:28 And you're having a judge as the trier of fact, not a jury, so
12:26:35 the way you shape your use or even participation in impeachment
12:26:44 should bear on that.
12:26:47 MS. GADDY: Your Honor, if I may continue, the
12:26:49 question I asked --
12:26:50 THE COURT: Yeah, you can continue, but how long are
12:26:52 you going to be?
12:26:53 MS. GADDY: I will go as fast as I can. I don't
12:26:54 anticipate --
12:26:54 THE COURT: I can't hear you. I just can't hear you.
12:26:57 MS. GADDY: I don't anticipate going too long, but if
12:26:57 Your Honor would allow me, I have some more questions, but I
12:27:00 don't anticipate going too --
12:27:01 THE COURT: All right.
12:27:02 MS. GADDY: I'll keep it as brief as possible.

12:27:04 Q. (By Ms. Gaddy) Dr. Hatten, when a confidence interval
12:27:08 includes 1.0, it is not considered statistically significant,
12:27:12 right?
12:27:13 A. By traditional statistical testing, typically a confidence
12:27:20 interval that includes 1 is not considered statistically
12:27:23 significant.
12:27:23 Q. And the Court's order that you reviewed before your
12:27:27 testimony today also upholds that definition of statistical
12:27:31 significance, right?
12:27:33 A. Correct.
12:27:34 Q. And in your expert report in this case, you do not include
12:27:38 confidence intervals for any of the risk estimates that you
12:27:40 cite in your report, right?
12:27:41 A. I identify when risk estimates are statistically
12:27:48 significant within the body of the report. So although I
12:27:52 didn't list the confidence intervals beside every risk
12:27:56 estimate, I identify when there are statistically significant
12:27:59 findings, yeah.
12:28:03 Q. But in your expert report in the *In Re: Zantac* case, you
12:28:07 included the confidence intervals for the study results you
12:28:09 cited in that report, correct?
12:28:10 A. I would have to look back at it. I probably did. I think
12:28:17 in the Zantac reports I did, but if the implication is that
12:28:21 that is not considered, that is absolutely incorrect, and as I
12:28:25 said, I explicitly state when things are statistically

12:28:28 significant within my report.
12:28:32 Q. And on page 24 of your *In Re: Zantac* report, which has
12:28:37 been marked United States Exhibit 2002, you have a -- 2003,
12:28:42 excuse me -- you have a heading called "Bladder Cancer," right?
12:28:48 A. Yes.
12:28:48 Q. As reflected on this posterboard. And that section of
12:28:51 your report states, "Several studies have reported on the
12:28:55 relationship between ranitidine use and bladder cancer risk,"
12:28:58 right?
12:28:58 A. Yes. You read that sentence correctly.
12:29:04 Q. For each risk estimate in that section that you discuss,
12:29:08 you note the confidence intervals associated with each risk
12:29:11 estimate, right?
12:29:15 A. Yes.
12:29:15 Q. In your report in this case --
12:29:17 MS. GADDY: If my colleague could put up the next
12:29:19 slide.
12:29:19 Q. -- you do not include the confidence intervals for the
12:29:25 risk estimates you cite in this case, do you?
12:29:29 A. I don't believe I list them explicitly in the report.
12:29:32 Again, I note when they are statistically significant. Each
12:29:36 report is written independently, so it's tailored to the case
12:29:40 at hand.
12:29:41 Q. The possibility that an association occurred by chance
12:29:46 must be considered when assessing for causation, right?

12:29:50 A. Yes.
12:29:51 Q. And if a finding in a study is not statistically
12:29:55 significant, the likelihood that that finding may be due to
12:29:58 chance cannot be ruled out. You testified about that on
12:30:00 direct, right?
12:30:02 A. Yes, an individual finding in an individual study that is
12:30:08 not statistically significant, it is -- it's still impossible
12:30:14 to exclude the role of chance, even if something is
12:30:17 statistically significant. It is just less, much less likely,
12:30:20 and that has -- statistical significance is the kind of
12:30:26 convention for assess -- as a -- as one way of assessing
12:30:30 chance, but that's not the only way you assess the role of
12:30:33 chance in evaluating a study. You also look at the methods and
12:30:38 consistency of findings and how everything fits together as
12:30:43 ways of evaluating chance.
12:30:46 Q. And, Doctor, if a confidence interval is wide, that is an
12:30:50 indicator that the result is not precise, correct?
12:30:55 A. I believe we -- I was asked about this many times at the
12:30:59 deposition, and I explained that there is not a statistical
12:31:04 definition of a wide confidence interval. It's usually in
12:31:06 relation to one thing is wider than another. So it may be a
12:31:10 more less precise estimate if analysis -- if similar analyses
12:31:15 are performed.
12:31:16 Q. Dr. Hatten, in testifying for the defendant in the
12:31:18 *In Re: Zantac* case, you frequently referred to confidence

12:31:22 intervals as wide, didn't you?
12:31:23 A. I don't recall if I did or not.
12:31:26 Q. Well, let's look at it and see if it refreshes your
12:31:29 recollection.
12:31:29 MS. GADDY: If my colleague could put up the next
12:31:31 board.
12:31:31 Q. Dr. Hatten, you were deposed in the *In Re: Zantac* case
12:31:37 litigation as well, correct?
12:31:39 A. I've been deposed a number of times for Zantac litigation.
12:31:43 MS. GADDY: And, Your Honor, if I may approach.
12:31:46 THE COURT: How much longer do you have?
12:31:48 MS. GADDY: Your Honor, if you'll allow, I have -- I
12:31:51 have a number of questions. I'd like to get into the Camp
12:31:53 Lejeune studies as well.
12:31:55 THE COURT: You're just -- okay. All right. Let's
12:32:01 stop for lunch and come back at 1:30.
12:32:06 (Luncheon recess taken from 12:32 p.m. to 1:36 p.m.)
01:36:40 THE COURT: You can continue.
01:36:41 MS. GADDY: Thank you, Your Honor.
01:36:41 Q. Dr. Hatten, I'd like to get to the substance of your
01:36:45 opinions in this case. I'm going to start with your analysis
01:36:46 of TCE and then go to your Camp Lejeune analysis. For your
01:36:53 Bradford Hill analysis of TCE, you state in your report, "Many
01:36:59 studies demonstrate elevated measures of association," correct?
01:37:11 And I'll turn your attention to page 22 of your report.

01:37:17 A. Yes.
01:37:17 Q. And you go on to cite a number of studies, right?
01:37:20 A. Yes.
01:37:21 Q. And you state, "This body of literature provides strong evidence that exposure to TCE is a cause of kidney cancer, given the strength of association in the epidemiologic literature," right?
01:37:34 A. Yes.
01:37:35 Q. Let's talk about some of these studies you claim demonstrate strength of association. You cite the study Axelson 1994, right?
01:37:44 A. Yes, that's one of the studies I cite.
01:37:45 MS. GADDY: And, Your Honor, if I may approach.
01:37:47 THE COURT: Yeah.
01:37:47 MS. GADDY: And if my colleague can put up the flipboard.
01:37:50 Q. I'm going to hand you what will be marked for identification as U.S. Exhibit 2004. Dr. Hatten, this is the Axelson 1994 study that you cite in your report, correct?
01:38:17 A. Yes, it appears to be.
01:38:21 Q. And this study is titled "Updated and Expanded Swedish Cohort Study on Trichloroethylene and Cancer Risk," right?
01:38:23 A. Yes.
01:38:27 Q. Turning your attention to page 560 of this study, do you see Table 3 as reflected on the flip chart?
01:38:32
01:38:33
01:38:37

01:38:43 A. Yes, I see it on Table 3.
01:38:45 Q. And this table is titled "Overall Cancer Morbidity
01:38:50 1958-1987 in TRI-Exposed Men Less Than or Equal to 79 Years,"
01:38:57 right?
01:38:58 A. Yes.
01:38:59 Q. And TRI exposed is referring to TCE exposed, right?
01:39:03 A. I believe so.
01:39:05 Q. For kidney cancer, the, SIR or standardized incidence
01:39:10 ratio, was 1.16, right?
01:39:14 A. Correct.
01:39:15 Q. With a confidence interval of 0.42 to 2.52, right?
01:39:20 A. Yes. That's correct.
01:39:22 Q. That result does not meet the Court's definition of
01:39:24 statistical significance, right?
01:39:28 A. Correct.
01:39:31 Q. On the very first page of this study --
01:39:33 MR. GARAND: If my colleague could put up the next
01:39:35 page --
01:39:35 Q. -- page 556 of the study, do you see that? The last
01:39:46 sentence of that first paragraph reads, "It is concluded that
01:39:51 this study provides no evidence that trichloroethylene is a
01:39:55 human carcinogen, i.e., when the exposure is as low as for this
01:39:59 study population," right?
01:40:02 A. You read that correctly.
01:40:04 Q. And you cite this study for strength of association for

01:40:07 TCE, right?
01:40:08 A. Yes, it has an elevated point estimate, and it is not the
01:40:13 case that when considering strength of association, that only
01:40:18 statistically significant results are considered. You consider
01:40:20 the entire body of literature when determining -- making --
01:40:24 assessing strength of association.
01:40:27 Q. Right. You also cite to this study, Blair 1998, correct?
01:40:34 A. Yes.
01:40:34 MS. GADDY: And if my colleague could put up the next
01:40:36 flip chart, and if I could approach, Your Honor.
01:40:38 Q. I'm going to hand you what will be marked for
01:40:46 identification as U.S. Exhibit 2005. Dr. Hatten, this is the
01:41:06 Blair 1998 study that you cited in your report, correct?
01:41:10 A. Correct.
01:41:11 Q. And this study is titled "Mortality and cancer incidence
01:41:15 of aircraft maintenance workers exposed to trichloroethylene
01:41:19 and other organic solvents and chemicals: Extended follow-up,"
01:41:22 right?
01:41:23 A. Yes.
01:41:24 Q. On the first page of this study under "Abstract" and then
01:41:26 under "Results," it states, "Workers exposed to
01:41:33 trichloroethylene showed nonsignificant excesses," and then it
01:41:36 lists kidney cancer, correct?
01:41:39 A. Yes.
01:41:40 Q. And drawing your attention to the bottom of the abstract

01:41:42 under "Conclusion," the study concludes, "These findings do not
01:41:47 strongly support a causal link with trichloroethylene because
01:41:52 the associations were not significant, not clearly dose
01:41:55 related, and inconsistent between men and women," right?
01:42:00 A. You read that correctly, and that -- those are the
01:42:03 authors' words at the time the study was performed, which was
01:42:05 in 1998.
01:42:07 Q. And you cited this study in your report for strength of
01:42:10 association for TCE, correct?
01:42:13 A. Correct.
01:42:14 Q. You also state in your kidney cancer report that,
01:42:16 "Multiple studies have demonstrated monotonic exposure response
01:42:21 for increased intensity of TCE exposure with increased kidney
01:42:26 cancer," right?
01:42:29 A. Increased rates of kidney cancer with increased TCE
01:42:32 exposure.
01:42:33 Q. And you cite to this study, Bruning 2003, correct?
01:42:41 A. That is a study I cite in here.
01:42:43 Q. Okay.
01:42:43 MS. GADDY: If I may approach, Your Honor, and if my
01:42:45 colleague can flip to the next page.
01:42:47 Q. I'm going to hand you what will be marked for
01:42:55 identification as U.S. Exhibit 2006. This is the Bruning 2003
01:43:18 study that you cited in your report, correct?
01:43:21 A. Yes.

01:43:23 Q. And this study is titled "Renal cell cancer risk and
01:43:27 occupational exposure to trichloroethylene: Results of a
01:43:31 consecutive case-control study in Arnsberg, Germany," right?
01:43:35 A. Yes.
01:43:36 Q. And Mr. Mousser, who we're here about today, does not have
01:43:39 renal cell cancer, right?
01:43:43 A. Correct. Well, I do not know all of the details, but I've
01:43:47 been told that it is a renal pelvis cancer.
01:43:50 Q. And looking at page 283 of the study, or page 10 of the
01:43:56 document reflected on the flip chart, the study states, "The
01:44:02 evaluation of a clear dose response relation is generally
01:44:06 considered an important step towards a causal relationship
01:44:10 between exposure and effect from association studies. Neither
01:44:14 in our study nor in another large German case control study, an
01:44:19 increased risk was found with increasing TRI, i.e., TCE
01:44:24 exposure, assessed with cumulative exposure variables," right?
01:44:29 A. You read that correctly, and I don't think I ever
01:44:31 represented that this demonstrated a monotonic dose response.
01:44:35 I don't -- in fact, I think in the Exposure Response section of
01:44:38 my Bradford Hill, it states that there are other measures of
01:44:42 intensity of exposure, and this is an example, one example that
01:44:45 I provided.
01:44:47 Q. Well, let's look at another example you provide. You also
01:44:49 cite to the study, Hansen 2013, correct?
01:44:51 A. Yes.

01:44:57 MS. GADDY: And, Your Honor, if I may approach.
01:44:58 Q. I'm going to hand you what will be marked for
01:45:03 identification as U.S. Exhibit 2007. Dr. Hatten, this is the
01:45:26 Hansen 2013 study you cite in your report, right?
01:45:31 A. I believe so.
01:45:32 Q. And this study is titled "Risk of cancer among workers
01:45:37 exposed to trichloroethylene: Analysis of three Nordic cohort
01:45:41 studies," right?
01:45:43 A. Yes.
01:45:44 Q. And looking at page 4, the second paragraph, as reflected
01:45:49 on the poster chart reads, "No increased risk of kidney cancer
01:45:54 was observed in any country, either among men or women. The
01:45:59 pool standardized incidence ratio was 1.01 with a 95 percent
01:46:04 confidence interval of 0.70 to 1.42, based on 32 cases," right?
01:46:14 A. Yes.
01:46:16 Q. All right. On your direct examination, you testified and
01:46:20 you showed this Court a chart summarizing the statistically
01:46:24 significant kidney cancer risk estimates for Camp Lejeune, as
01:46:27 reflected in Plaintiff's Exhibit 146, correct?
01:46:41 A. Yes. This is Exhibit 146.
01:46:44 Q. And in your chart summarizing statistically significant
01:46:48 results for Camp Lejeune water and the Camp Lejeune studies,
01:46:52 you cite ten results, right?
01:46:55 A. Yes.
01:46:56 Q. Seven of those results are from the 2018 ATSDR's morbidity

01:47:00 study, right?
01:47:02 A. Yes.
01:47:03 Q. And then the other three are from the 2024 ATSDR mortality
01:47:07 study, correct?
01:47:08 A. Correct.
01:47:09 Q. I want to talk about those two studies. For the 2018 Camp
01:47:13 Lejeune morbidity study, which is Plaintiff's Exhibit 72, if
01:47:18 you could turn to that in your binder.
01:47:39 A. Yes.
01:47:40 Q. This is the 2018 Camp Lejeune morbidity study marked as
01:47:44 Plaintiff's Exhibit 72, correct?
01:47:47 A. Yes.
01:47:47 MS. GADDY: Your Honor, I'd move this study into
01:47:49 evidence.
01:47:50 THE COURT: It's received.
01:47:50 (Plaintiff's Exhibit Number 72 received.)
01:47:51 Q. Dr. Hatten, you're aware that Dr. Bove, the author of this
01:47:56 study, testified at deposition that this study was not
01:48:00 sufficiently sound to submit for publication to any peer-
01:48:02 reviewed journals, right?
01:48:05 A. I don't know if those are the exact words that he used,
01:48:08 but I believe it was published directly by the ATSDR.
01:48:13 Q. And not as a result of peer review -- for peer-reviewed
01:48:15 publication in a peer-reviewed journal, correct?
01:48:19 A. My understanding is it went -- underwent a review, a

01:48:21 scientific review, at ATSDR and then was published, but not in
01:48:26 a outside peer-reviewed journal.
01:48:29 Q. And you're aware that the study states, "However, results
01:48:33 of the study need to be interpreted with caution for several
01:48:37 reasons," right?
01:48:40 A. It may include that language in there, and I don't really
01:48:43 have context for it unless you want to show it to me and
01:48:45 discuss.
01:48:46 Q. Sure. If you could look at page 10 of the 2018 morbidity
01:48:49 study. At the very bottom of the page in that last paragraph,
01:49:08 it says, "However, results of this study need to be interpreted
01:49:12 with caution for several reasons," right?
01:49:16 A. Yes, it says that right after it says, "These study
01:49:19 results add to the scientific liter- -- literature and suggest
01:49:22 possible associations between the chemicals in the drinking
01:49:25 water at Camp Lejeune and these diseases."
01:49:27 Q. Great. Let's look at what else the study says on page 54
01:49:34 under the heading "Limitations." Do you see where it says,
01:49:42 "This study has several major limitations"?
01:49:47 A. Yes.
01:49:47 Q. It says, "The studies could not be sent to 20 percent of
01:49:50 the cohort due to lack of known addresses," right?
01:49:53 A. Yes.
01:49:54 Q. Some studies likely did not reach the intended recipient,
01:49:58 right?

01:49:59 A. Yes.
01:50:00 Q. Selection bias was a concern because of the low response
01:50:03 rate and past media coverage of Camp Lejeune, right?
01:50:08 A. Yes.
01:50:08 Q. The study could not verify the medical information in
01:50:11 about half of the responses because those respondents did not
01:50:15 complete a HIPAA form, right?
01:50:17 A. Yes.
01:50:19 Q. This reduced the precision of the results of this study,
01:50:21 right?
01:50:26 A. Yes, I believe that's what it states, precision of the
01:50:28 odds ratio estimates.
01:50:30 Q. There are also several sources of exposure
01:50:34 misclassification for the analysis of exposure response trends,
01:50:37 right?
01:50:38 A. Yes.
01:50:39 Q. And, again, on direct you highlight ten total
01:50:42 statistically significant results for Camp Lejeune water,
01:50:44 right?
01:50:45 A. Yes.
01:50:46 Q. And seven of those results that you highlighted on direct
01:50:49 come from this study, right?
01:50:51 A. They do, although the study is two parts. It's both a
01:50:55 survey and then an internal analysis of the civilian and the
01:50:59 military population. Many of these limitations are

01:51:02 specifically addressing the survey portion.
01:51:05 Q. Let's look at the other study you cited in these charts,
01:51:08 which is the 2024 ATSDR mortality study, which was already
01:51:13 moved into evidence as Plaintiff's Exhibit 73, which is also in
01:51:17 your binder. You testified earlier that the chart that you put
01:51:22 together for the Court today on direct found three
01:51:24 statistically significant findings for Marines from this study,
01:51:27 right?
01:51:28 A. Yes.
01:51:31 Q. These findings did not make it into the published version
01:51:34 of the study, right?
01:51:36 A. Yes, they did. You're -- you're incorrect.
01:51:38 Q. You had to go to the supplemental tables to find these
01:51:41 results, correct?
01:51:42 A. Those are published parts of the study. That's not a --
01:51:45 insinuating that that is not a published part of the study is
01:51:49 absolutely incorrect and not what any journal would ever tell
01:51:52 an author, that their supplemental materials are not part of
01:51:55 the study, the published parts of the study.
01:51:57 Q. Thank you, Dr. Hatten. These results were from the
01:51:59 supplemental tables and not the main study, correct?
01:52:04 A. No, you're not correct. It's part of the main study.
01:52:07 It's in a supplemental table. It is one of the -- it is not
01:52:12 the primary analysis that is published in the -- in that part
01:52:19 of the manuscript, but it is part of the -- part of the study.

01:52:24 Q. These results were not in the body of the study, correct?
01:52:28 MR. SNIDOW: Objection, Your Honor. Asked and answered at this point.
01:52:28 THE COURT: I'm sorry?
01:52:29 MR. SNIDOW: Asked and answered at this point.
01:52:31 THE COURT: Yeah, agreed.
01:52:32 MR. SNIDOW: We've covered this.
01:52:33 THE COURT: Move on.
01:52:36 Q. These results were part of the assessment of the full cohort of Camp Lejeune Marines, compared to the full cohort of the Camp Pendleton Marines, correct?
01:52:44 A. I believe at least one of the analyses found that as statistically significant, or found a statistically significant result was.
01:52:46 Q. You cite to Table -- Supplemental Table 2, correct, as one of your results?
01:52:55 A. I believe Tables 2 and 3.
01:53:00 Q. Right. And both of those tables are titled specifically with the full cohort mentioned in the title, correct?
01:53:04 A. Yes. It is full cohort in S2. S3 is also full cohort, both looking at underlying cause of death.
01:53:17 Q. Right. So the results that you cited in your table, were looking at the full cohort of Camp Lejeune Marines and the full cohort of Camp Pendleton Marines, right?
01:53:26 A. Correct.
01:53:29
01:53:32
01:53:35
01:53:37

01:53:39 Q. But the body of the ATSDR 2024 mortality study explains
01:53:46 that base locations before 1975 could not be determined using
01:53:51 DMDC data, right?
01:53:52 A. Could you point me to what you're discussing here?
01:54:00 Q. Yes. If you could turn to the body of the 2024 ATSDR
01:54:05 mortality study, Exhibit 81 -- or 80. That second paragraph on
01:54:18 page 3, it says, "Base locations before 1975 could not be
01:54:24 determined using DMDC data," right?
01:54:35 A. Yes, that's what it states.
01:54:37 Q. The study was not able to exclude people from the Camp
01:54:39 Pendleton cohort who may have also served at Camp Lejeune
01:54:43 before 1975, right?
01:54:48 A. Correct. If those people were included, you would expect
01:54:51 any -- and they had exposure to water at Camp Lejeune that may
01:54:56 have caused a case of kidney cancer, that would serve to lower
01:55:01 the point estimate, bias it toward the null, so it would make
01:55:05 it -- that would mean that these -- the full cohort analysis is
01:55:09 a underestimate of the true point estimate, or the true value
01:55:15 in the population if you were to study just the subgroup, so...
01:55:20 Q. All right. Let's look at a table that made it into the
01:55:23 body of the article.
01:55:24 MS. GADDY: If my colleague could flip to the next
01:55:28 chart, which reflects Table 2, which is located on page 6 of
01:55:33 the 2024 ATSDR study.
01:55:35 Q. This table is titled "Standardized mortality ratios or

01:55:42 SMRs Poisson regression risk ratios and 95 percent confidence
01:55:48 intervals CI for the Camp Lejeune and Camp Pendleton
01:55:51 Marine/Navy Personnel subgroup underlying cause of death,"
01:55:55 right?
01:55:56 A. Yes.
01:55:57 Q. For kidney and renal pelvis, the SMR for kidney at Camp
01:56:01 Lejeune was 1.11, right?
01:56:03 A. Correct.
01:56:04 Q. With a confidence interval of 0.93 to 1.31, right?
01:56:11 A. Yes, and I think, as I testified earlier, this is a higher
01:56:14 point estimate than the general population, which is not what
01:56:17 you would expect if you were comparing Marines to the general
01:56:21 population, and that's an example here of there being a higher
01:56:27 rate of kidney cancer deaths in the Camp Lejeune soldiers.
01:56:33 Q. Thank you, Dr. Hatten. For the risk ratio comparing Camp
01:56:36 Lejeune and Camp Pendleton, it was 1.21, right?
01:56:40 A. Yes.
01:56:41 Q. With a confidence interval of 0.95 to 1.54, right?
01:56:46 A. Yes.
01:56:48 Q. Neither of these findings meet the Court's definition of
01:56:51 statistical significance, do they?
01:56:52 A. Neither of the -- both of these have confidence intervals
01:56:57 that cross 1. If you'll notice, the number of cases analyzed
01:57:01 is less in the subgroup or the analysis that's in Table 2 when
01:57:06 you compare it to the supplemental tables, and those are

01:57:10 statistically significant.
01:57:10 So when you have slightly higher numbers of people
01:57:13 analyzed, you get the same risk estimate, and it's now
01:57:17 statistically significant because you have -- it's called power
01:57:18 in statistics where you have greater numbers, so you can make a
01:57:22 more precise estimate of the -- of the point estimate. So when
01:57:26 you do a -- analyze a smaller number of people, you don't get a
01:57:31 different number here. You just get a narrow -- or a narrower
01:57:35 or a wider confidence interval.
01:57:36 So the underlying data we can assume is the same for the
01:57:41 subgroup that is analyzed in Table 2, or the full cohort that's
01:57:45 analyzed in the supplementary tables.
01:57:47 Q. Dr. Hatten, my question was more simple. The two results
01:57:50 that I just read to you are not statistically significant,
01:57:53 right?
01:57:55 A. That is correct, and I was explaining the rationale for --
01:57:57 Q. Thank you.
01:57:57 A. -- how you consider the data.
01:58:01 Q. Let's look at another table from the supplemental file
01:58:04 that you did not discuss.
01:58:05 MR. GARAND: If my colleague could go to the next --
01:58:07 THE COURT: How much longer do you have?
01:58:08 MS. GADDY: Not much longer, Your Honor.
01:58:09 THE COURT: Really?
01:58:10 MS. GADDY: I'm wrapping up.

01:58:11 THE COURT: Let's keep you to that.
01:58:14 Q. All right. If you could turn to page 21 of the
01:58:17 supplemental file in your flip chart, or in your binder, excuse
01:58:20 me, which is Table S6, as reflected on the poster. This table
01:58:31 is titled "Hazard ratios and 95 percent lower and upper
01:58:35 confidence intervals for the Marines and Navy personnel
01:58:38 subgroup analysis of base duration between 1975 and 1985 at
01:58:44 Camp Lejeune with Camp Pendleton as a reference underlying
01:58:48 cause of death," right?
01:58:50 A. Yes, that's the title.
01:58:52 Q. And at the very bottom of this table is kidney cancer,
01:58:55 right?
01:58:57 A. Yes.
01:58:58 Q. None of the hazard ratios reported for kidney cancer in
01:59:01 this table are statistically significant, right?
01:59:05 A. That's correct.
01:59:06 Q. At the low duration, the hazard ratio is 1.33, right?
01:59:11 A. Yes.
01:59:12 Q. At the medium duration, the hazard ratio is 1.23, right?
01:59:17 A. Yes.
01:59:17 Q. At the high duration, the hazard ratio is 1.04, right?
01:59:21 A. Yes.
01:59:23 Q. So as duration increased, risk actually decreased for
01:59:27 kidney cancer, according to this table, right?
01:59:30 A. According to this table.

01:59:32 Q. Finally, let's look at the 2024 ATSDR cancer incidence
01:59:37 study, and this is the last study we'll look at today, which is
01:59:40 marked for identification as U.S. Exhibit 242 in your binder.
01:59:46 If you could turn to page 10.
01:59:48 MS. GADDY: And if my colleague put up the next
01:59:50 posterboard.
01:59:51 Q. This is Table 5, correct?
02:00:01 A. I can't read it, but I will trust that it's Table 5 --
02:00:04 Q. It's on page 10.
02:00:04 A. -- that's represented here.
02:00:04 MS. GADDY: And, Your Honor, at this time, I move the
02:00:08 2024 cancer incidence study into evidence.
02:00:10 THE COURT: It'll be received.
02:00:10 (Defendant's Exhibit Number 242 received.)
02:00:12 Q. This table assesses several cancer outcomes that we can
02:00:15 see here, correct?
02:00:18 A. Yes.
02:00:19 Q. One of these cancer outcomes is urinary bladder, right?
02:00:25 A. Yes.
02:00:26 Q. With the subtype urothelial listed under it, right?
02:00:30 A. Yes.
02:00:31 Q. This table also lists kidney and renal pelvis, right?
02:00:35 A. Yes.
02:00:36 Q. Dr. Hatten, not a single one of the risk estimates in this
02:00:39 table for urinary bladder, urothelial or kidney and renal

02:00:43 pelvis are statistically significant, are they?
02:00:54 A. All of these have confidence intervals that cross 1.
02:00:56 Q. And so they're not statistically significant, right?
02:00:59 A. Based on the -- using a -- that definition of statistical
02:01:03 significance. I don't believe that the authors in this study
02:01:06 used that definition, and frequently you defer to the authors'
02:01:11 assessment of how they evaluate chance, but it is reported that
02:01:14 way, and for a traditional definition of statistical
02:01:17 significance, these all cross 1 -- cross 1.
02:01:20 Q. For kidney and renal pelvis, at low duration, the HR is
02:01:25 1.12, right?
02:01:27 A. Yes.
02:01:28 Q. At medium duration, the HR is 1.01, right?
02:01:33 A. Yes.
02:01:33 Q. At high duration, the HR is 0.94, correct?
02:01:38 A. Yes.
02:01:39 Q. So as duration at Camp Lejeune increased, kidney and renal
02:01:43 pelvis cancer incidence actually decreased, according to this
02:01:46 table, right?
02:01:48 A. Correct, although I believe Dr. Bove discusses in his
02:01:52 deposition that there was concern that people stationed longer
02:01:55 at the base were more likely to be deployed away, so they were
02:01:59 counted as having a longer duration, but did not -- that wasn't
02:02:03 actually measured, and their time was -- that was one of the
02:02:06 missed classifications. And, again, that serves to lower the

02:02:09 risk estimates, not raise them inappropriately.
02:02:12 Q. In fact, the HRs that I just read for medium and high
02:02:16 duration were not even elevated, right?
02:02:21 A. Not substantially elevated. The medium duration was
02:02:24 minimally elevated at 1.01.
02:02:27 Q. Let's go to Table 3 of this study, which is the last table
02:02:30 we'll talk about, which can be found on page 7 of this study.
02:02:33 MR. GARAND: And if my colleague could go to that
02:02:35 last posterboard.
02:02:36 Q. Table 3 is titled "Comparison of cancer outcomes at Camp
02:02:43 Lejeune versus Camp Pendleton among the Marines and Navy
02:02:46 personnel subgroup who began active duty and were stationed at
02:02:51 either base between 1975 and 1985," right?
02:02:54 A. Yes.
02:02:55 Q. And this table lists several outcomes as well, right?
02:02:58 A. Yes.
02:03:00 Q. Let's look a little more closely at some of the results in
02:03:03 this table. The HR for urothelial cancer -- let's look at --
02:03:16 this table lists results for urinary bladder, urothelial and
02:03:22 then kidney and renal pelvis, right?
02:03:24 A. Yes.
02:03:26 Q. Looking at the hazard ratios in this table comparing
02:03:29 cancer outcomes at Camp Pendleton versus Camp Lejeune, the
02:03:32 hazard ratio for urinary bladder cancer is not statistically
02:03:36 significant, right?

02:03:39 A. Again, not by a -- the traditional definition of a
02:03:43 confidence interval that crosses 1.
02:03:46 Q. And not by the Court's definition of statistical
02:03:48 significance in the order that you reviewed before your
02:03:51 testimony today, correct?
02:03:53 A. Correct, although that comment on statistical
02:03:55 significance, the way I read it for the Court's order, was that
02:03:58 there had to be -- the Court was ensuring that there was a --
02:04:02 at least a statistically significant association before
02:04:06 analyzing the exposure -- as part of analyzing the exposure
02:04:10 outcome relationship.
02:04:11 That is not to say that there aren't other ways of
02:04:15 evaluating chance and studies and that you throw out every
02:04:18 value because it is not statistically significant. And, again,
02:04:25 in the methodology of this study, the study authors proposed an
02:04:29 alternative way of evaluating chance, namely confidence
02:04:33 interval ratios, which are listed next to the results in this
02:04:36 table.
02:04:38 Q. The hazard ratio for urothelial cancer is not
02:04:41 statistically significant, right?
02:04:44 A. Not according to the traditional definition.
02:04:46 Q. And the hazard ratio for kidney and renal pelvis cancer is
02:04:50 also not statistically significant, correct?
02:04:53 A. Again, not according to the traditional definition.
02:04:55 Q. And in this table, there were 444 cases of urinary bladder

02:04:59 cancer at Camp Lejeune and 456 cases at Camp Pendleton, right?
02:05:08 A. Correct.
02:05:09 Q. There were 429 cases of urothelial cancer at Camp Lejeune
02:05:14 and 440 cases at Camp Pendleton, right?
02:05:18 A. And you're saying these words -- these -- listing these
02:05:21 numbers -- these are correct -- but without knowing the number
02:05:23 of people analyzed, they don't mean things when you're
02:05:27 comparing two rates.
02:05:29 Q. Thank you, Dr. Hatten. There were 710 cases of kidney and
02:05:32 renal pelvis cancer at Camp Lejeune and 721 cases at Camp
02:05:37 Pendleton, right?
02:05:38 A. Again, you're reading these numbers correctly, but they
02:05:41 have no meaning other than listing the numbers of people at
02:05:44 each base with that --
02:05:45 THE COURT: I get it. Let's get out of this. Are
02:05:47 you finished?
02:05:48 MS. GADDY: Yes, Your Honor. I have no further
02:05:50 questions at this time.
02:05:51 THE COURT: I can't hear you at all. Speak --
02:05:52 MS. GADDY: I'm sorry, Your Honor.
02:05:52 THE COURT: Speak so I can hear you.
02:05:56 MS. GADDY: At this time, the United States renews
02:05:58 its Daubert challenge to Dr. Hatten and moves for his opinions
02:06:02 to be excluded in their entirety.
02:06:04 THE COURT: Denied.

02:06:05 MS. GADDY: If I may just elaborate briefly, Your
02:06:06 Honor, for the record.
02:06:08 THE COURT: For the record, okay, go ahead.
02:06:10 MS. GADDY: Dr. Hatten altered --
02:06:10 THE COURT: You expect to lose?
02:06:13 MS. GADDY: Dr. Hatten altered and reduced his
02:06:15 causation methodology because of the at least as likely as not
02:06:18 burden of proof standard, in violation of Federal Rule of
02:06:21 Evidence 702 and this Court's order dated June 5th, 2026. For
02:06:26 the first time since his expert report dated nearly two years
02:06:29 ago, Dr. Hatten attempts to reconcile the deficiencies in his
02:06:33 report by reporting --
02:06:34 THE COURT: You can submit it into the record, if you
02:06:36 like.
02:06:38 MS. GADDY: Submit -- sorry, submit what, Your Honor?
02:06:38 THE COURT: You can submit it into the record. You
02:06:41 don't have to read it all.
02:06:42 MS. GADDY: Okay. I'm -- okay. If I can just
02:06:44 briefly summarize. Before the Court's order on June 5th, 2026,
02:06:48 Dr. Hatten believed he did not need to perform the same
02:06:51 comprehensive causation analysis that he performed when he
02:06:55 testified for defendants in a different case. This reduced
02:06:59 methodology impacted every stage of his analysis; his
02:07:02 literature search, of which he did not sufficiently document in
02:07:04 his report; the manner in which he reported the results of the

studies he did review; and his weighing of that evidence in forming his ultimate conclusions. Therefore, Your Honor, his opinions in this case are unreliable and be excluded. Thank you.

THE COURT: Thank you very much. I've considered your objection very carefully, and I've reflected on it, and I'll continue to deny the objection.

Okay. That's it. Do you have any further questions?

MR. SNIDOW: No, Your Honor.

THE COURT: What?

MR. GARAND: No, Your Honor.

THE COURT: Thank you, sir.

THE WITNESS: Thank you.

(The witness exits the witness stand at 2:09 p.m.)

MR. QUINN: Your Honor, at this time, we would call Kelly Reynolds to the stand, and with Your Honor's permission, to approach to set the courtroom up.

THE COURT: Set it up for what?

MR. QUINN: I apologize?

THE COURT: Set it up for what?

MR. QUINN: We're going to put up a blow-up board and just get our exhibit notebooks right up there.

THE COURT: All right.

THE CLERK: Place your left hand on the Bible, raise your right hand, and state and spell your name for the record.

02:08:38 THE WITNESS: Kelly Reynolds, K-E-L-L-Y
02:08:38 R-E-Y-N-O-L-D-S.
02:08:38 KELLY A. REYNOLDS, MSPH, PH.D.,
02:08:38 was sworn at 2:08 p.m., and testified as follows:
02:08:38 DIRECT EXAMINATION BY MR. QUINN:
02:08:38 Q. Good afternoon. Could you please state your name for the
02:09:40 record, ma'am?
02:09:41 A. Good afternoon. I'm Kelly Reynolds.
02:09:43 Q. What do you do for a living, Dr. Reynolds?
02:09:45 A. I'm an environmental health scientist.
02:09:47 Q. Have you prepared a CV in this case, or have you prepared
02:09:50 a CV?
02:09:50 A. Yes.
02:09:51 Q. Okay. If you could please turn to Exhibit 92. This
02:09:56 should be within Volume -- your notebook in Volume 3.
02:10:03 A. You said 92?
02:10:05 Q. Yes, ma'am.
02:10:10 A. Yes.
02:10:11 Q. Okay. Does that appear to be a copy of your CV?
02:10:13 A. It does, yes.
02:10:14 Q. Okay.
02:10:14 MR. QUINN: Your Honor, we would move Exhibit 92 into
02:10:17 the record.
02:10:17 THE COURT: It's received.
02:10:18 MR. QUINN: Thank you.

02:10:19 (Plaintiff's Exhibit Number 92 received.)
02:10:19 Q. What is an environmental health scientist?
02:10:24 A. Environmental scientists study the magnitude of exposure
02:10:27 to environmental contaminants and establish risk assessments
02:10:32 for those exposures.
02:10:32 Q. And within the field of environmental health science, do
02:10:36 you become involved with exposure science?
02:10:39 A. Yes. That's a primary exercise as part of the
02:10:42 environmental health sciences.
02:10:43 Q. Okay. And do you have a doctorate?
02:10:45 A. I do, I have a Ph.D. that was obtained in 1995 from the
02:10:49 University of Arizona in environmental sciences.
02:10:52 Q. Do you have any academic appointments?
02:10:54 A. Yes. So once I received my Ph.D. in 1995, I joined the
02:10:58 University of Arizona as a postdoctoral research fellow, and
02:11:03 then in that same year, I was promoted to research faculty. I
02:11:07 worked in that position until I moved to the College of Public
02:11:11 Health, and I was a tenured faculty associate professor in
02:11:15 2012. And then in 2018, I was promoted to full professor, and
02:11:22 in 2021 to 2022, I was the interim Dean of Research. And then
02:11:28 during that time, I established -- I co-founded and have since
02:11:31 directed the Environment, Exposure Science & Risk Assessment
02:11:34 Center, and for the last nine years, have been the Director of
02:11:37 the Western Region Public Health Training Center.
02:11:40 Q. Do you have professional experience with calculating the

02:11:43 exposure of humans to a substance?
02:11:45 A. Yes, I do. That's a common practice that I use -- that I
02:11:49 use in my research.
02:11:50 Q. And do you teach your students about calculating
02:11:52 cumulative exposure to substances?
02:11:54 A. Yes. My courses are primarily focused on the application
02:11:58 of regulatory risk assessment, but as part of those steps, we
02:12:01 do talk about epidemiology and cumulative exposure science.
02:12:06 Q. In your career, have you prepared any models in the field
02:12:09 of environmental health and including exposure science?
02:12:12 A. Yes. In collaborative projects and industry reports and
02:12:16 also published peer-reviewed literature, I've conducted a wide
02:12:20 variety of risk assessment modeling for chemicals and microbes.
02:12:22 Q. Thank you.
02:12:23 MR. QUINN: Your Honor, at this time, we would tender
02:12:25 Dr. Reynolds as an expert in environmental health science with
02:12:28 a specific focus in exposure science.
02:12:30 THE COURT: She'll be accepted as an expert and
02:12:33 allowed to express her opinion.
02:12:35 MR. QUINN: Thank you, Your Honor.
02:12:36 Q. Dr. Reynolds, what are you here about -- to talk about
02:12:39 today?
02:12:39 A. I'm here today to talk about my calculations related to
02:12:44 Mr. Mousser's time on base at Camp Lejeune, and also
02:12:49 considering the water concentrations of TCE, PCE, viny chloride

02:12:54 and benzene, and looking at specific exposure factors related
02:13:00 to ingestion of those contaminants through the drinking water
02:13:02 routes.
02:13:03 Q. Okay. And did you prepare a written report in this case?
02:13:06 A. Yes, I did.
02:13:06 Q. Could you please turn to Exhibit 91? This is also in
02:13:11 Volume -- the notebook you have open now, Volume 2 -- 3.
02:13:13 Excuse me.
02:13:21 A. Okay. Yes, I'm there.
02:13:23 Q. Does that appear to be a copy of the written report that
02:13:26 you prepared in this case?
02:13:31 A. Yes, it does.
02:13:31 Q. Okay.
02:13:32 MR. QUINN: Your Honor, we would move Exhibit 91 into
02:13:34 evidence.
02:13:34 THE COURT: It'll be received.
02:13:37 (Plaintiff's Exhibit Number 91 received.)
02:13:37 Q. All right. What are your opinions in this case, ma'am,
02:13:38 just briefly to get us started?
02:13:41 A. Well, in general, I evaluated exposures of Mr. Mousser
02:13:46 considering four different plausible ingestion variables, and
02:13:50 so I looked at his specific deposition testimony about his
02:13:55 ingestion rates, and then I also looked at other standard
02:13:59 formats of -- you know, information sources of what his
02:14:02 exposure might have been, and I compared that using the ATSDR

02:14:05 water model concentrations of the contaminants in the water
02:14:09 supply, and I looked at all of that in evaluation of his
02:14:13 exposure relative to the time he spent on base during the
02:14:16 months where different concentrations of contaminants were
02:14:20 expressed.
02:14:20 Q. And based on your work in this case, were you able to
02:14:22 calculate how much TCE, PCE, vinyl chloride and benzene that
02:14:27 Mr. Mousser consumed?
02:14:28 A. Yes, I was.
02:14:30 Q. And is this a standard methodology that is used in
02:14:33 exposure science?
02:14:34 A. Yes, it is.
02:14:35 Q. And it's the same methodology that you teach your students
02:14:38 when teaching them how to calculate exposure?
02:14:40 A. It is, yes.
02:14:42 Q. Now, have you prepared a short illustrative exhibit to
02:14:45 assist you in your testimony today and explaining your
02:14:49 opinions?
02:14:49 A. Yes, I have.
02:14:50 Q. Okay. This is the last time we'll switch notebooks, but
02:14:51 if you could please go to Volume 4, Exhibit 145.
02:15:12 A. All the way in the back.
02:15:13 Q. Yep, of course.
02:15:15 A. Yes. Okay.
02:15:26 Q. And does Exhibit 145 appear to be the illustrative exhibit

that you prepared to assist you to testify today?
A. Yes, it does.
Q. Okay.
MR. QUINN: Your Honor, we would move Exhibit 145 into evidence, please.
THE COURT: It's received.
(Plaintiff's Exhibit Number 145 received.)
Q. Okay. Now, Dr. Reynolds, as part of your work -- and I'm going to direct you, please, the first page of Exhibit 145.
A. Okay, yes.
Q. As part of your work, did you attempt to determine or reconstruct how many days that Mr. Mousser was on base at Camp Lejeune?
A. Yes, I did.
Q. Okay. And what period of time was Mr. Mousser on base, or was he assigned to Camp Lejeune, I should say?
A. Yes, he was on base from October 18th, 1982, through September 7th, 1986.
Q. Okay. And what records did you rely upon to reach that conclusion?
A. I used military records and also Mr. Mousser's deposition.
Q. Okay. And is it common in your profession to use these type of records in order to reconstruct historical events?
A. Yes, absolutely.
Q. Now, based upon your review of records, where did

02:16:29 Mr. Mousser reside and work while he was on base?
02:16:32 A. He lived and worked in French Creek area, in the French
02:16:36 Creek barracks, and that was served by the Hadnot Point water
02:16:39 system.
02:16:41 Q. Now, while Mr. Mousser was on base -- and you mentioned
02:16:44 from October '82 to September '86 -- was he -- he was assigned
02:16:47 to base -- was he physically on base the entire time during
02:16:50 that period?
02:16:51 A. No. There were several periods where he was deployed or
02:16:54 on leave for other reasons.
02:16:56 Q. What would result in Mr. Mousser leaving base during that
02:16:58 period of time?
02:17:00 A. Well, when he wasn't on base, I did not count those days
02:17:03 as potential exposure days, so they weren't considered in the
02:17:06 exposure assessment timeline.
02:17:07 Q. What kind of deployments did Mr. Mousser have?
02:17:10 A. What kind of appointments?
02:17:12 Q. I'm sorry, deployments. And if you could look at your --
02:17:15 A. Oh, deployments.
02:17:15 Q. Yeah.
02:17:15 A. Yes, so in my chart I list some of the times that he spent
02:17:21 away from base. For example, he was deployed October 18th,
02:17:26 1983, to February 10th, 1984, when he was on the USS Barnstable
02:17:32 County deployment, and that was a deployment to Beirut and
02:17:37 Grenada. When he was in Grenada, he was in combat. And then

after that time, he went on to Beirut, where he was hospitalized. So there was a pretty extensive period of time, 116 days, that he wasn't on base during that time frame.

There's another example that I give. I list nine different deployments, but another deployment was in January 23, 1985, to August 8th, 1985, and that was when he was deployed on the Mediterranean cruise.

Q. Now, based on your analysis, were you able to make a determination about how many days that Mr. Mousser was present at Camp Lejeune?

A. Yes. So overall, in the full time frame, he was stationed at Camp Lejeune 1421 days, but he spent 530 documented days away from base, and that leaves a result of 891 days that he spent on base, where he was exposed to the Hadnot Point water system.

Q. Now, as part of your methodology, did you attempt to determine how many days within a given month that Mr. Mousser would have been on base?

A. Yes. I evaluated the number of days in a given month that he spent on base.

Q. Why was that important to your methodology?

A. That's important because if you're consuming contaminated water on a daily basis, then your cumulative exposure should include every day in that month that you're on base. So an increased ingestion of contaminants generally leads to

02:19:06 increased exposure.
02:19:07 Q. Okay. Thank you. If you could please flip to the second
02:19:09 page of this illustrative Exhibit 145. Now, does the amount of
02:19:17 finished water at Camp Lejeune that a Marine drinks alter your
02:19:22 calculation of that Marine's consumption of the toxins at
02:19:25 issue?
02:19:27 A. Yes, an increased ingestion rate would result in an
02:19:29 increased exposure and increased cumulative mass of contaminant
02:19:34 that he would have consumed.
02:19:35 Q. Okay. How did you determine how much water that
02:19:38 Mr. Mousser was likely ingesting while he was on Camp Lejeune?
02:19:41 A. Well, because there's some uncertainty in those estimates
02:19:44 because we're trying to reconstruct historical behaviors, I
02:19:48 used a range of plausible values. So the first value that I
02:19:52 used -- well, in my report, I used a 1 liter consumption value.
02:19:57 Almost everybody drinks more than 1 liter of water, but it
02:20:00 served as kind of a baseline to set up our equations.
02:20:02 And then I moved into looking at more realistic exposures
02:20:06 for Mr. Mousser, and I specifically created a profile of what
02:20:12 he reported in his deposition as typical behaviors in terms of
02:20:16 what he would be consuming. And so that resulted in
02:20:22 3.49 liters on three heavier day activities and 2.54 liters on
02:20:27 four other days, which would be routine activities, for an
02:20:31 estimated 2.95 liters per day on average.
02:20:35 And then I looked at what the ATSDR calculated through

surveys of Marines specifically in a broader population to see what those levels were, and the ATSDR estimated for the Marine population at Camp Lejeune, that they consumed 6 liters of water on the three physical training days, and then 3.1 liters of water on the four other more routine days. And so they estimate an average rounded to 4.34 liters per day on average.

So those were ATSDR's assumptions for Camp Lejeune Marines. I had Mr. Mousser's testimony as part of my calculations and assumptions. And then we had another source of information for what military personnel should be planning for for water provision for the military during different activities, and so those are called the military *Field Manuals*. And so they estimate a planning guideline of 5.21 liters on routine activity days, so four days a week, and then 8.52 liters on three heavier days. So the total average for the military *Field Manuals* is approximately 6.63 liters per day.

Q. In your profession, is it common to use multiple ingestion scenarios when doing a consumption analysis?

A. Yes. Once we identify plausible values, we look at a range of potential exposures that are, you know, scientifically supported or supported from other evidence that might be plausible considerations. And so then you get -- you calculate the total mass of exposure through what's been ingested over these different levels, and you can compare and evaluate across

different studies how that might relate to health outcomes.
Q. Okay. If you could please turn to the third page of this illustrative 145.
A. Yes.
Q. If you could please describe how your calculation in this case worked to determine how much PCE, TCE, vinyl chloride and benzene that Mr. Mousser consumed.
A. Yes, certainly. So the first thing I considered were the numbers of -- the number of days on base that Mr. Mousser was present on base, and then I multiplied that by the liters per day, and that's where I used the different scenarios and put it into the calculation separately.

And then I looked at the monthly average mean concentrations of different contaminants based on the ATSDR water model, and then when you calculate that equation through, you end up with units in total micrograms.

So an example, if I take just the month of August 1983, Mr. Mousser spent that entire month on base, and so that's equivalent to 31 days. And then if we use the ATSDR scenario for Marines, 4.34 liters of water consumed, and then I multiply that by each of the individual August monthly mean concentrations for the different contaminants.

So for TCE, in August 1983, it was 659 micrograms per liter; for PCE, it was 32 micrograms per liter; and then vinyl chloride, 54 micrograms per liter; and benzene, 9 micrograms

per liter. So for each of those different concentrations, I multiplied by the number of days in that month, and the water ingested for that month times the concentration in that month, and you get a unit of total micrograms exposure.

Q. Okay. Thank you. Now, the blow-up that we have over on this side of the courtroom, does this reflect your conclusions about the amount of the chemicals in the water at Camp Lejeune that Mr. Mousser was consuming?

A. Yes, it does. So this represents the total of all the months that he spent on base in consideration of the different ingestion scenarios which are listed across the board.

Q. And if you could please just -- let's begin with TCE and your first ingestion scenario. If you could please describe what that number represents.

A. Sure. So TCE, total mass concentration exposure over the time Mr. Mousser spent at Camp Lejeune, using the ATSDR ingestion scenario, resulted in 1,160,828 total micrograms mass of exposure to the contaminant. If we use Mr. Mousser's testimony, ingestion rates, which were the lowest of the three plausible scenarios, it was a total mass of 788,229 micrograms of TCE that he was exposed to. And then if we use the military *Field Manuals*, which were the highest estimate of plausible ingestion scenarios, it's 1,771,027 total micrograms.

Q. And you similarly reached conclusions -- using the same methodology, you reached conclusions as to his consumption of

PCE, vinyl chloride, and benzene; is that correct?
A. That's correct.
Q. Okay. And this blow-up that we're looking at, just for the record, is this the same -- these are the same numbers, same opinions that are expressed on page 4 of this illustrative we're looking at, Exhibit 145?
A. That's correct, yes.
Q. Okay. Now, in addition to these cumulative consumption numbers, did you also look at consumption in terms of micrograms per liter month?
A. Yes, I did.
Q. Why did you do that, ma'am?
A. Because that was a value that was utilized in other studies, so I wanted to look at in the same way. What that value is, is whatever the monthly mean concentration was for the months that Mr. Mousser is on base, it was just added as a single value, a point value, for each of the months that he was present, and so you end up with the microgram per liter value.
The top numbers consider specific ingestion scenarios on a daily basis because those values were really not a single monthly exposure at a single event. He was exposed every day to those amounts, so that -- the bottom row puts the number into the context of another study, but my exposure calculations take it to the next step, considering his specific ingestion scenarios.

02:26:41 Q. Okay. Thank you, ma'am. So I have, I think, just one or
02:26:45 two final questions. Now, if you could please turn to page 5
02:26:49 of this Exhibit 145.
02:26:50 A. Yes.
02:26:51 Q. Did you also -- as part of your analysis, were you able to
02:26:55 determine how many days that Mr. Mousser was on base consuming
02:27:01 TCE?
02:27:01 A. Yes, when you look at his total days on base where there
02:27:04 was TCE contamination, estimating the water, there were 574
02:27:09 days.
02:27:10 Q. Okay. Thank you.
02:27:13 MR. QUINN: I have no further questions. Pass the
02:27:15 witness.
02:27:19 THE COURT: Any questions?
02:27:19 MR. ANTONUCCI: Yes, Your Honor.
02:27:19 CROSS-EXAMINATION BY MR. ANTONUCCI:
02:27:19 Q. Good afternoon, Dr. Reynolds.
02:27:20 A. Good afternoon.
02:27:20 Q. It's nice to meet you. My name is Giovanni Antonucci. I
02:27:24 represent the United States. You were retained by the
02:27:27 plaintiffs to reconstruct potential water ingestion models for
02:27:30 Marines at Camp Lejeune between 1953 and 1987, right?
02:27:35 A. Correct.
02:27:36 Q. And you were present in the courtroom for Dr. Hatten's
02:27:39 testimony, correct?

02:27:41 A. Yes.
02:27:41 Q. So you heard Dr. Hatten testify that three routes of
02:27:44 exposure include ingestion, inhalation and dermal exposure,
02:27:47 right?
02:27:48 A. Correct.
02:27:56 Q. You did not reconstruct potential inhalation exposures for
02:27:59 the plaintiffs, right?
02:28:01 A. Right.
02:28:02 Q. And you did not reconstruct potential dermal exposures for
02:28:02 the plaintiffs, right?
02:28:02 A. Correct.
02:28:02 Q. You only reconstructed potential exposures via the
02:28:05 ingestion pathway, correct?
02:28:07 A. That's correct.
02:28:13 Q. Dr. Reynolds, you explained on direct examination that
02:28:19 environmental health scientists may establish risk assessments
02:28:22 for exposures, but you did not perform a risk assessment for
02:28:25 this case, right?
02:28:26 A. No, that wasn't my charge for this case.
02:28:29 Q. And you did not offer an opinion about whether or not a
02:28:32 plaintiff's exposure was substantial, correct?
02:28:35 A. Correct.
02:28:36 Q. You did not offer an opinion about whether a plaintiff's
02:28:39 exposure can cause kidney cancer, right?
02:28:41 A. That's correct.

02:28:42 Q. And, in fact, you didn't offer an opinion about whether
02:28:45 plaintiff's exposure could cause any disease, right?
02:28:47 A. No. My charge was specifically to calculate the exposure
02:28:51 assessment and total mass micrograms of the contaminant.
02:29:00 Q. So that number represents your -- your estimate of the
02:29:05 total amount in micrograms of each chemical that you estimate
02:29:10 Mr. Mousser ingested during his entire time at Camp Lejeune,
02:29:12 right?
02:29:13 A. That's correct.
02:29:17 Q. You did not calculate Mr. Mousser's exposure to any
02:29:20 contaminant in terms of parts per billion, right?
02:29:23 A. That's correct.
02:29:25 Q. And just to be clear, parts per billion and total
02:29:28 micrograms are different units, right?
02:29:31 A. Yeah, so I guess I should step back because I did -- parts
02:29:34 per billion is the same as microgram per liter. So I did
02:29:37 calculate a microgram per liter concentration, as you see in
02:29:41 the chart here on the bottom row, but I found it valuable to
02:29:46 consider wholistically what Mr. Mousser's exposure would be
02:29:48 based on his ingestion rates and different scenarios for
02:29:52 ingestion. So it takes it a step further, evaluating a site-
02:29:56 specific and an individual-specific exposure.
02:30:01 Q. And just to be clear, parts per billion and micrograms per
02:30:04 liter, those are different units, right?
02:30:06 A. No, those are equivalent units. Oh, sorry. Parts per

million and microgram per liter.
Q. Parts per billion and total micrograms are different units, right?
A. Oh, correct. Yes.
Q. I'm sorry. I think the mistake was in my question. And the unit parts per billion is used to measure concentrations, right?
A. Yes.
Q. And total micrograms measures mass, right?
A. Correct.
Q. Dr. Reynolds, you testified shortly ago that you calculated Mr. Mousser's exposure to TCE in units of micrograms per liter months, right?
A. Yes.
Q. And so for TCE specifically, you calculated a cumulative exposure of 10,373 microgram-per-liter months, right?
A. Yeah, so that would be considered if you just took the month concentration and added that together on the number of months he was on base, not the daily exposure that he experienced.
Q. Understood. Dr. Reynolds, you agree that your reports don't explain how you performed that calculation, correct?
A. I believe my report does explain how I performed the calculation, what assumptions I used, and I provided a spreadsheet where the numbers were listed separately and then

02:31:27 calculated together.
02:31:28 Q. Sure. Why don't we take a look at that now?
02:31:31 MR. ANTONUCCI: Your Honor, may I have permission to
02:31:32 approach the easel?
02:31:33 THE COURT: Yeah.
02:32:05 Q. Dr. Reynolds, this is an enlargement of a table that
02:32:08 appears in Appendix 8 of your report from February 7th, 2025.
02:32:13 That's Plaintiff's Exhibit 91. Do you recognize this?
02:32:16 A. I believe so, but I cannot see that far. Is it in the
02:32:19 hard copy here?
02:32:20 Q. Yes, absolutely. So if you prefer to look at that,
02:32:22 Plaintiff's Exhibit 91 at Appendix 8, page 44.
02:32:31 A. Okay. I think that's another book here.
02:32:41 THE COURT: Good luck with that book.
02:32:44 THE WITNESS: Sorry?
02:32:44 THE COURT: Good luck with that book.
02:32:47 THE WITNESS: I've got the binders all messed up
02:32:49 already.
02:32:49 A. Well, while I'm looking for this, I want to clarify that
02:32:54 parts per billion is microgram per liter. I think I might have
02:32:56 misspoke with parts per million.
02:32:57 Okay, I'm at 91, and I think the charts here are going to
02:33:03 be too far for me to see, so is it possible to move this one
02:33:07 closer, this chart closer to me?
02:33:10 MR. ANTONUCCI: Your Honor, with the Court's

permission.

THE COURT: I don't care.

MR. ANTONUCCI: Okay. Thank you very much.

THE COURT: She can come down and look at it if she wants.

MR. ANTONUCCI: Would you prefer to come down, Dr. Reynolds?

THE WITNESS: Sure.

MR. ANTONUCCI: Okay.

Q. So, Dr. Reynolds, are you able to see the table that appears in Appendix 8 of Plaintiff's Exhibit 91?

A. Yes. Thank you.

Q. And, Dr. Reynolds, you agree that to calculate microgram per liter months, you added up the ATSDR as simulated mean monthly concentration of contaminants in drinking water for every month that Mr. Mousser was on base, right?

A. Correct.

Q. And 10,373 is the sum of all the values in that column that's labeled "TCE microgram per liter month," right?

A. That's correct, yes.

Q. And, in fact, in the Excel spreadsheet that you used to perform your calculations, you used the sum formula to add up the value of all of the cells in that column, right?

A. Correct.

Q. So, Dr. Reynolds, I'm going to briefly change the exhibit

now, but I'd like to compare what's there with the ATSDR's simulated mean monthly concentrations of contaminants in drinking water.

MR. ANTONUCCI: Your Honor, may I have permission to approach the easel?

THE COURT: Yeah.

Q. So, Dr. Reynolds, are you able to see the demonstrative showing ATSDR's mean monthly concentration of contaminants in drinking water for the time period Mr. Mousser was on base?

A. Yes.

Q. And you agree that these are the contaminant concentrations that you used for your analysis, right?

A. Yes.

Q. I would appreciate if you could please take a look at April of 1983. You'll see that ATSDR's simulated average concentration of TCE for April of 1983 is 372 micrograms per liter, correct?

A. That's -- yes.

Q. And, Dr. Reynolds --

MR. ANTONUCCI: Or rather, Your Honor, may I approach the easel once more?

THE COURT: Yeah.

MR. ANTONUCCI: Thank you.

Q. So, Dr. Reynolds, I have returned the illustrative aid that shows the enlargement of the table from Appendix 8 in your

report to the easel.

Dr. Reynolds, this -- you'll agree that for April of 1983, what we were just looking at for ATSDR's numbers, Mr. Mousser's exposure to TCE was 372 micrograms per liter month, right?

A. Yes.

Q. And as we just saw, ATSDR's simulated contaminant concentration in finished water at Hadnot Point in April 1983 was 372 micrograms per liter month, correct?

A. Yes.

Q. And you agree that for every month Mr. Mousser was exposed, you used the microgram-per-liter concentration of contaminants in finished water simulated by ATSDR as the microgram per liter month value in your table in Appendix 8, right?

A. Yes.

Q. You agree that Mr. Mousser was exposed between April 19th and April 30th of 1983, right?

A. Correct.

Q. That's a total of 12 days, right?

A. Yes.

Q. You agree that 12 days is less than one month, right?

A. Yes.

Q. And your table shows that between April 1st and April 19th, 1983, Mr. Mousser was not exposed to contamination at Camp Lejeune, correct?

02:37:10 A. Could you repeat those dates again, please?
02:37:12 Q. Yes, ma'am. Your table shows between April 1st and April
02:37:15 19th of 1983, Mr. Mousser was not exposed to contaminants at
02:37:20 Camp Lejeune, correct?
02:37:20 A. April 1st to April 18th because on the 19th I have him
02:37:25 back on base exposed.
02:37:27 Q. Excuse me. Thank you for that. So for the period of
02:37:29 April 1st through April 18th, 1983, Mr. Mousser was exposed to
02:37:35 TCE in drinking water at a concentration of 0 micrograms per
02:37:38 liter, right?
02:37:40 A. Yes, because he was not on base, correct.
02:37:42 Q. And you noted in your timeline for Mr. Mousser that he was
02:37:47 deployed to Norway at that time, right?
02:37:49 A. I believe so, yes.
02:37:52 Q. You did not multiply 372 micrograms per liter by 12 over
02:37:57 30 before you added it to the other ones, right?
02:38:01 A. No, these were the -- the 372 is the daily concentration.
02:38:04 They're monthly averages, but it's assumed that every day, that
02:38:09 was the concentration on that day. So I multiplied 12 days by
02:38:16 372 because he was exposed to that concentration for 12 days.
02:38:19 Q. Dr. Reynolds, I'm referring only to your calculation of
02:38:22 microgram per liters months right now --
02:38:24 A. Oh, okay.
02:38:24 Q. -- not to your total mass concentration, so --
02:38:26 A. Okay. Got you.

02:38:26 Q. -- I'll repeat my question.
02:38:28 You didn't multiply that 372 micrograms per liter by 12
02:38:33 over 30 prior to adding it to the other months, right?
02:38:36 A. No. I just took the single value and added it together
02:38:40 because that's what was done in other studies. So it was a
02:38:43 comparator to another study, but it was missing exposure
02:38:47 information that I think is important to consider, which is the
02:38:50 daily dose that he's exposed to.
02:38:52 Q. Understood. And by that, you're referring to the total-
02:38:54 mass-in-micrograms calculation that you performed, right?
02:38:57 A. Yes.
02:38:59 Q. So you counted for your microgram-per-liter-month
02:39:03 calculation ATSDR's entire monthly concentration amount for
02:39:06 each month Mr. Mousser was exposed, right?
02:39:09 A. It would be equivalent to a single day exposure and not
02:39:13 month.
02:39:14 Q. Mr. Mousser was only exposed to water at Camp Lejeune for
02:39:17 a part of the month of October of 1982, correct?
02:39:20 A. Let's see, October 1982. That's correct.
02:39:24 Q. That was 14 days out of 31, correct?
02:39:27 A. Correct.
02:39:29 Q. Mr. Mousser was only exposed to Camp Lejeune water for a
02:39:32 part of the month of December 1982, correct?
02:39:36 A. That's correct as well, yes.
02:39:37 Q. That's 12 days out of 31, right?

02:39:40 A. Yes.
02:39:41 Q. And for September 1984, Mr. Mousser was only exposed to
02:39:45 water at Camp Lejeune for a part of that month, right?
02:39:47 A. Correct.
02:39:48 Q. Fifteen days out of 30, right?
02:39:49 A. Correct.
02:39:50 Q. You agree that after February 1985, ATSDR simulated the
02:39:55 concentration of TCE as remaining at 0 micrograms per liter,
02:40:00 right?
02:40:01 A. Yes.
02:40:02 Q. And in your table in Appendix 8, you agree there are at
02:40:06 least ten separate rows prior to February 1985 where
02:40:10 Mr. Mousser was exposed for less than a full month, right?
02:40:12 A. I don't know the exact number, but that looks about right,
02:40:16 yes.
02:40:17 Q. Thank you, Dr. Reynolds. I'm done with this exhibit, if
02:40:20 you'd like to return to the witness stand.
02:40:22 A. Okay.
02:40:22 Q. Are you ready to proceed?
02:40:36 A. Sure.
02:40:37 Q. So, Dr. Reynolds, you calculated a range of plausible
02:40:41 exposure scenarios for each plaintiff, right?
02:40:44 A. Correct.
02:40:44 Q. And you agree that the central tendency exposure refers to
02:40:48 persons who have average or typical water intake rates, right?

02:40:53 A. Yes.
02:40:54 Q. And for adults, the central tendency exposure water
02:40:57 ingestion rate is 1.313 liters per day, correct?
02:41:01 A. That would be the general population adults, yes.
02:41:06 MR. ANTONUCCI: Your Honor, may I have permission to
02:41:07 approach the easel again?
02:41:08 THE COURT: I couldn't hear you.
02:41:10 MR. ANTONUCCI: Permission to approach the easel,
02:41:11 Your Honor.
02:41:12 THE COURT: Yeah, go ahead.
02:41:33 Q. Dr. Reynolds, you just testified that the central tendency
02:41:36 exposure is 1.313 liters per day, correct?
02:41:39 A. For general population, yes.
02:41:42 Q. Okay.
02:41:43 MR. ANTONUCCI: Your Honor, for demonstrative
02:41:45 purposes, I'll be approaching the easel to write on it. I ask
02:41:49 for your permission to do so.
02:41:51 THE COURT: Yeah, do whatever you need to do. It's
02:41:53 cross-examination. Get it going.
02:41:54 MR. ANTONUCCI: Thank you very much.
02:41:55 So for the record, in the box labeled "CTE" or
02:41:59 "Average," I am writing "1.313 liters per day."
02:42:12 THE COURT: If you were drinking the water and it had
02:42:15 bad stuff in it, would it taste different?
02:42:19 THE WITNESS: No, not necessarily, not for a lot of

these contaminants.

THE COURT: Water doesn't have a taste generally. It's bland.

THE WITNESS: Right, and even contaminated water, it can't be seen or tasted.

THE COURT: I can't hear you.

THE WITNESS: Even contaminated water doesn't necessarily --

THE COURT: It doesn't show up as poison?

THE WITNESS: No, no.

THE COURT: Okay. Why not?

THE WITNESS: A lot of these contaminants are tasteless, odorless, colorless, so they're not visible.

THE COURT: But they affect you?

THE WITNESS: Yes, yes.

THE COURT: All right.

Q. (By Mr. Antonucci) Dr. Reynolds, you agree that the reasonable maximum exposure refers to persons who are at the upper end of the exposure distribution, right?

A. Yes.

Q. That's approximately the 95th percentile, correct?

A. Yes, and it's still considered a reasonable exposure level.

Q. And that means that the reasonable maximum exposure water intake rate describes persons who drink water at a rate greater

than approximately 95 percent of the population, right?
A. Yes.
Q. And for adults --
THE COURT: Is that 95 percent of the population drinks water?
Q. -- the reasonable maximum exposure, Dr. Reynolds, describes --
THE COURT: Everybody drinks water at some point. I mean, I don't think there's anybody alive who hasn't had water.
MR. ANTONUCCI: Yes, Your Honor.
THE COURT: You're born with water.
MR. ANTONUCCI: Yes, Your Honor.
Q. And, Dr. Reynolds, perhaps you can clarify. The reasonable maximum exposure is a reference to the water ingestion rate, or, you know, the rate at which individuals drink water; is that right?
A. Well, when you survey a population and you get the data to look at what's the range of values of water people eat, there's an average exposure, which is what we call the 50th percentile, and that's the median or average amount that people drink. And then you have people who are at the really low end, and that would be the 5th percentile. And then at the high end would be the 95th percentile. So it's a bell-shaped curve distribution assessment.
Q. And, Dr. Reynolds, you agree that for adults, the

02:44:09 reasonable maximum exposure water ingestion rate is
02:44:13 3.229 liters per day, correct?
02:44:14 A. So you're talking about general population, not Camp
02:44:17 Lejeune Marines, who are -- have different activities than the
02:44:21 general population, but, yes, that's what EPA has estimated
02:44:26 through survey of the general population.
02:44:28 Q. Okay.
02:44:32 MR. ANTONUCCI: So for the record, I have marked the
02:44:34 reasonable maximum exposure on the demonstrative of 3.229
02:44:38 liters per day.
02:44:38 Q. So, Dr. Reynolds, one exposure scenario that you analyzed
02:44:42 for Mr. Mousser used water intake rates that you derived from
02:44:45 his deposition testimony, right?
02:44:47 A. Correct.
02:44:48 Q. And for the water intake rate for routine days, you used a
02:44:52 water intake rate of 2.543 liters per day, right?
02:44:56 A. That's correct.
02:44:57 Q. And for the water intake rate for training days, you used
02:45:01 a rate of 3.490 liters per day, right?
02:45:06 A. Correct.
02:45:06 Q. Okay.
02:45:07 MR. ANTONUCCI: For the record, I'm marking both of
02:45:09 those deposition-informed water intake rates on the chart.
02:45:11 Q. Dr. Reynolds, another exposure scenario that you analyzed
02:45:31 for Mr. Mousser used water intake rates from the U.S. military

02:45:34 1 *Field Manuals*, right?
02:45:35 2 A. Correct.
02:45:37 3 Q. And for the military *Field Manuals*, you used a water
02:45:40 4 intake rate of 5.21 liters per day for routine days, correct?
02:45:45 5 A. Correct.
02:45:45 6 Q. And for training days, you used a water intake rate of
02:45:50 7 8.52 liters per day, correct?
02:45:51 8 A. Yes.
02:45:52 9 MR. ANTONUCCI: For the record, I'm marking both on
02:45:54 10 the illustrative aid.
02:46:07 11 Q. And, Dr. Reynolds, you agree that for your report, you
02:46:11 12 reported total micrograms mass ingestion using deposition-
02:46:15 13 informed and *Army Field Manual* water intake rates, correct?
02:46:18 14 A. Along with -- that is correct, along with the ATSDR
02:46:22 15 estimates for Marines at Camp Lejeune as well.
02:46:33 16 Q. Dr. Reynolds, you agree that both *Field Manual* water
02:46:38 17 intake rates are higher than the central tendency exposure,
02:46:41 18 right?
02:46:42 19 A. You're referring to the central tendency exposure of the
02:46:45 20 general population, not Marines?
02:46:47 21 Q. Yes, Dr. Reynolds. For the central tendency exposure for
02:46:51 22 the general population, you agree that that's higher than the
02:46:55 23 water intake rate in -- or the *Field Manual* rates are higher
02:46:59 24 than that of -- than the CTE, correct?
02:47:02 25 A. Yes, 5.21 is higher than 1.3.

02:47:06 Q. And 8.52 is also higher than 1.3, right?
02:47:09 A. It is, yes.
02:47:11 Q. You did not use the central tendency exposure for the
02:47:14 general population to calculate a potential exposure for
02:47:17 Mr. Mousser, correct?
02:47:19 A. No, that wouldn't have been appropriate since his
02:47:21 population and activities were different than the general
02:47:25 population, and EPA acknowledges that. Where -- where you're
02:47:28 getting the CTE and the RME values, they acknowledge in their
02:47:32 Exposure Factors Handbook, which is where a lot of these values
02:47:34 come from, that Marines have a higher exposure, and they
02:47:38 reference the *Army Field Manuals* as well.
02:47:41 Q. And you agree that you did not use the reasonable maximum
02:47:45 exposure to calculate a potential exposure for Mr. Mousser,
02:47:48 right?
02:47:49 A. I did not use the general population RME, no.
02:47:53 Q. You used the deposition-informed and military *Field Manual*
02:47:55 intake rates, right?
02:47:57 A. That's correct, in addition to the ATSDR estimates for
02:48:00 Camp Lejeune Marines.
02:48:02 Q. You agree that the *Field Manual* water intake rate for
02:48:05 routine days is higher than the water intake rate for routine
02:48:08 days that Mr. Mousser recalled in his deposition, right?
02:48:11 A. Yes, they are.
02:48:12 Q. And the *Field Manual* water intake rate for training days

02:48:15 is higher than the water intake rate for training days that
02:48:18 Mr. Mousser recalled in his deposition, correct?
02:48:21 A. Yes.
02:48:22 Q. You're aware that your report states the *Army Field Manual*
02:48:25 ingestion values were selected as recommended for a moderate
02:48:28 temperature day in a tropical environment with temperatures
02:48:30 exceeding 80 degrees Fahrenheit, correct?
02:48:32 A. I believe I did state that in my report, but I need to
02:48:36 clarify that those values in the references of the *Army Field*
02:48:41 *Manuals* are actually for temperatures between 32 degrees and
02:48:45 80 degrees, so it's actually less than 80 degrees, not greater
02:48:48 than 80 degrees. There's a higher value that ranges from, I
02:48:52 think it's 8 for routine and up to 12 for training days if it
02:48:57 exceeds 80 degrees, but I chose the more moderate lower value
02:49:02 for my estimates.
02:49:03 Q. So, Dr. Reynolds, you're aware that your report states the
02:49:06 *Army Field Manual* ingestion values were selected as recommended
02:49:10 for a moderate temperature day in a tropical environment with
02:49:14 temperatures exceeding 80 degrees Fahrenheit, right?
02:49:15 A. The references state less than 80 degrees. That's where
02:49:20 those values come from. It's a less than 80 degrees down to
02:49:23 32 degrees. So there's only two values listed in the *Army*
02:49:26 *Field Manuals*. There's the less than 80 degrees and the
02:49:29 greater than 80 degrees, and these values are the less than
02:49:32 80 degrees.

02:49:33 Q. Dr. Reynolds, I'm not sure if you're understanding my
02:49:36 question. I asked you if you're aware of what your report
02:49:38 states, which is that the *Army Field Manual* ingestion values
02:49:41 were selected as recommended for a moderate temperature day in
02:49:45 a tropical environment with temperatures exceeding 80 degrees
02:49:48 Fahrenheit. You're aware that it says that, right?
02:49:50 A. It's true that it says a moderate temperature day, which
02:49:52 is where those values come from, and I acknowledge that in my
02:49:56 report it does say "exceeding 80 degrees," but that's
02:49:59 incorrect. It should be the less than 80 degrees.
02:50:02 Q. You presented results using *Field Manual* water intake
02:50:05 rates for the entire duration of Mr. Mousser's exposure, right?
02:50:09 A. Correct.
02:50:11 Q. And you're aware that the water intake rate of 8.52 liters
02:50:15 per day from the military *Field Manuals* is for heavy activity,
02:50:18 right?
02:50:18 A. Yes.
02:50:19 Q. You're aware that the *Field Manuals* described heavy
02:50:21 activity as forced marches and trenching or route marches with
02:50:25 heavy loads, right?
02:50:26 A. Yes.
02:50:27 Q. And you're aware that the military revised its fluid
02:50:30 replacement guidelines because they resulted in Marines
02:50:32 drinking too much water and having adverse reactions, right?
02:50:36 A. Yes.

02:50:37 Q. The *Field Manuals* you utilized were provided to you by the
02:50:39 plaintiff's legal team, correct?
02:50:41 A. They directed me towards the *Field Manuals*, but I did a
02:50:44 search of them myself and verified the information
02:50:48 independently.
02:50:50 Q. Dr. Reynolds, you agree that you don't account for
02:50:54 uncertainty in the daily levels of your exposure, correct?
02:50:59 A. Let me think about what that means. I accounted for
02:51:02 uncertainty by looking at four different plausible daily
02:51:05 ingestion rates, so there is uncertainty accounted for in my
02:51:09 estimates, but I didn't account for any uncertainty in the
02:51:12 concentration values that came from the ATSDR water model.
02:51:17 Q. So you agree that you did not account for uncertainty in
02:51:19 the daily levels of your exposure, right?
02:51:22 A. Well, you have to define what you mean by levels. If you
02:51:25 mean levels of the contaminant concentration, I did not account
02:51:29 for any uncertainty there, but I did account for ingestion
02:51:33 levels that drove exposure.
02:51:38 Q. You agree that you assumed ATSDR's mean monthly
02:51:41 concentration of contaminants was represented -- representative
02:51:45 of each day the person was on base, right?
02:51:48 A. Yes.
02:51:50 Q. Meaning you used average monthly values to estimate daily
02:51:53 contaminant concentration values, right?
02:51:56 A. Correct.

02:51:57 Q. Dr. Reynolds, I'd appreciate if you could turn to the
02:52:00 Plaintiff's Exhibit 6.1, which has already been admitted into
02:52:03 evidence.
02:52:06 MR. QUINN: Your Honor, 6.1 is on a thumb drive, but
02:52:10 I think we might have a paper copy here in the courtroom. If I
02:52:22 may approach, Your Honor, I think we might be able to get this
02:52:24 document.
02:52:24 THE COURT: Yes.
02:52:24 MR. QUINN: We don't have a paper copy, so...
02:53:00 MR. ANTONUCCI: Luckily, I do. May I approach, Your
02:53:04 Honor?
02:53:05 THE COURT: Yeah.
02:53:05 Q. Here you are, Dr. Reynolds.
02:53:11 A. Thank you.
02:53:18 Q. Dr. Reynolds, please turn to page A181 of Plaintiff's
02:53:23 Exhibit 6.1.
02:53:25 THE COURT: You know, I can't hear you. You're
02:53:27 looking down and reading it off the paper in front of you, and
02:53:31 you're speaking right into the desk, so speak up loud and
02:53:36 address it to the Court. I'm the fact finder. Give me some
02:53:39 facts.
02:53:40 MR. ANTONUCCI: Yes, Your Honor. My apologies.
02:53:41 Q. So, Dr. Reynolds, please turn to page A181 of Plaintiff's
02:53:45 Exhibit 6.1.
02:53:47 A. Yes, I'm there.

02:53:50 Q. You see where the ATSDR included a frequently-asked
02:53:55 question asking, "Can ATSDR water modeling results be used to
02:54:00 determine the concentration of VOCs that my family and I were
02:54:02 exposed to on a daily basis?" Do you see that?
02:54:05 A. Yes.
02:54:06 Q. And underneath the question, ATSDR stated, "No, the
02:54:09 available data are not specific enough to accurately estimate
02:54:13 daily levels of VOCs, PCE, TCE, 1,2-DCE, vinyl chloride and
02:54:19 benzene in the Hadnot Point/Holcomb Boulevard study area,"
02:54:21 right?
02:54:23 A. Yes, there were no daily values that were collected or
02:54:28 modeled, so what was used were monthly means, and those monthly
02:54:32 means are what I applied to daily values.
02:54:34 Q. You agree that you did not calculate exposure in terms of
02:54:38 micrograms per kilogram day, correct?
02:54:41 A. Correct.
02:54:41 Q. You simply multiply contaminant concentrations by the
02:54:44 intake rate and by the number of days of exposure, right?
02:54:47 A. Yes. That would be the way to get total mass, which is
02:54:49 what I was after.
02:54:50 Q. You agree that the unit of total mass alone doesn't
02:54:53 account for an individual's body weight, right?
02:54:56 A. That would be more of a physiological metabolic
02:55:00 assessment, so looking at what happens to -- once a contaminant
02:55:04 gets in the body, that's more for the causation experts to

think about.
Q. Sure. And you agree that the unit of total mass alone doesn't account for an individual's body weight, right?
A. Total mass does not account for body weight. That's more of a unit that's used in regulatory risk assessment because what we're trying to do is normalize the exposure risk assessment data for a person to animal toxicity studies, so to normalize those --
Q. Dr. Reynolds, you've answered my question.
A. Okay.
Q. You agree that in determining an individual's exposure to a given chemical as part of an exposure assessment, it's part -- it's important to know the individual's body weight, right?
A. No.
THE COURT: I can't hear you. Individual what?
Q. You agree, Dr. Reynolds --
THE COURT: You're reading it. Individual what?
MR. ANTONUCCI: Body weight.
Q. You agree that --
THE COURT: Individual body weight?
MR. ANTONUCCI: Yes, Your Honor.
THE COURT: Then say that.
A. So body weight is not necessary to know for an exposure assessment and for total mass exposure. You don't need to know

02:56:02 body weight. It doesn't matter how much Mr. Mousser weighed
02:56:06 back then to determine what he was exposed to.
02:56:10 Q. You agree that at your deposition, you were unable to
02:56:12 identify any chemicals for which it was not important to know
02:56:15 body weight for an exposure assessment, right?
02:56:17 A. Not for an exposure assessment. For a risk assessment.
02:56:21 Q. Dr. Reynolds, I'll direct the Court's attention to your
02:56:24 deposition, page 46. I'm reading from lines 11 through 15.
02:56:35 Dr. Reynolds, you were questioned under oath and you were
02:56:38 asked:
02:56:38 "Question: But sitting here today, you can't identify any
02:56:41 chemicals where body weight isn't important for exposure
02:56:44 assessment?"
02:56:44 There is an objection to form and foundation.
02:56:47 And you answered: "No, not specifically."
02:56:49 A. So I --
02:56:49 Q. You agree that exposure duration is a fundamental part of
02:56:54 exposure assessment, right?
02:56:56 A. No. Oh, sorry. Repeat -- is exposure duration a
02:56:59 fundamental part? Is that what you --
02:57:01 Q. You agree that exposure duration --
02:57:02 A. Duration.
02:57:02 Q. -- is a fundamental part of exposure assessment, right?
02:57:05 A. Yes, exposure duration, exposure frequency are important
02:57:08 parts.

02:57:08 Q. And you agree that your units of exposure in total micrograms do not include time, right?
02:57:14 A. Well, they do include time relative to the number of days he was on base exposed to those contaminants, yes.
02:57:20 Q. You agree that the units of your exposure assessment are total micrograms, right?
02:57:26 A. Yes, because the microgram per liter month is the day unit, and then when you multiply that by the number of days exposed, those units cancel out and give you total micrograms.
02:57:36 Q. So it doesn't give you total microgram days, right?
02:57:39 A. No, it's total micrograms is the unit.
02:57:44 Q. It doesn't give you total microgram months, right?
02:57:46 A. No, the day cancels out because we're multiplying it by the number of days exposed, so that's a very simple calculation for those units to cancel out.
02:57:56 Q. So, Dr. Reynolds, you did not analyze how your exposure calculations for Mr. Mousser compared to any epidemiology study, correct?
02:58:03 A. I didn't compare them directly, no.
02:58:07 Q. Thank you, Dr. Reynolds. I have no further questions for you.
02:58:10 THE COURT: Do you have any other questions?
02:58:11 MR. QUINN: No questions, Your Honor.
02:58:12 THE COURT: Thank you, ma'am.
02:58:13 THE WITNESS: Thank you.

02:58:13 (The witness exits the witness stand at 2:58 p.m.)
02:58:13 MR. ABRAMS: Your Honor, the plaintiff calls
02:58:16 Dr. Del Pizzo, the stand.
02:58:41 THE CLERK: Place your left hand on the Bible and
02:58:41 raise your right hand, and state and spell your name for the
02:59:16 record.
02:59:16 THE WITNESS: Joseph Del Pizzo, D-E-L P-I-Z-Z-O.
02:59:16 JOSEPH DEL PIZZO, M.D.,
02:59:16 was sworn at 2:58 p.m., and testified as follows:
02:59:04 THE COURT: Do your best to keep your voice up --
02:59:12 THE WITNESS: Yes, sir.
02:59:12 THE COURT: -- because I need to hear you.
02:59:15 THE WITNESS: Good afternoon, sir.
02:59:15 DIRECT EXAMINATION BY MR. ABRAMS:
02:59:15 Q. Dr. Del Pizzo, you're a urologic surgeon and an expert in
02:59:21 this case; is that right?
02:59:22 A. Yes.
02:59:22 Q. And before we go through the details, what is your opinion
02:59:27 about what caused Mr. Mousser's kidney cancer?
02:59:31 A. To a reasonable degree of medical certainty, his exposure
02:59:34 to the contaminated water at Camp Lejeune was more likely than
02:59:37 not the cause of his kidney cancer.
02:59:40 Q. You hold -- let's see, you're here to explain why that's
02:59:43 your opinion?
02:59:44 A. Yes.

02:59:46 Q. And you've seen Plaintiff's Exhibit 101 and 102. Those
02:59:50 are your reports; is that right? You don't need to look at
02:59:52 them. Just --
02:59:52 A. Yes.
02:59:53 Q. Those -- you've seen them. Those are your reports, right?
02:59:55 A. Correct.
02:59:56 MR. ABRAMS: Your Honor, we'd move his reports into
02:59:58 evidence.
02:59:58 THE COURT: They'll be received.
02:59:58 (Plaintiff's Exhibit Numbers 101 and 102 received.)
02:59:58 Q. And 104 is your CV?
03:00:01 A. That's correct.
03:00:02 MR. ABRAMS: We'd move that into evidence as well.
03:00:03 THE COURT: Received.
03:00:03 (Plaintiff's Exhibit Number 104 received.)
03:00:03 Q. Would you please give Judge Boyle a brief overview of your
03:00:10 background?
03:00:11 A. After completing medical school, I did a six-year surgical
03:00:15 residency in urologic surgery, general surgery and urologic
03:00:19 surgery, in Baltimore, Maryland, after which I completed a
03:00:22 one-year specialty fellowship in minimally-invasive kidney
03:00:26 surgery to treat kidney cancer and kidney donation. I
03:00:29 graduated from that in 2001.
03:00:32 Since that time, I've been on the full-time academic
03:00:34 faculty at New York Presbyterian/Weill Cornell Medical Center,

where I'm a professor of surgery and urology, and I direct the minimally-invasive kidney surgery program there.

THE COURT: Great.

Q. In this case, you're giving an opinion about a cause of Mr. Mousser's -- the cause of Mr. Mousser's kidney cancer; is that right?

A. That's right.

Q. And how does that come up in your day-to-day work?

A. Well, in my day-to-day work, I see and evaluate and diagnose patients with kidney cancer prior to treatment, obviously, and part of that evaluation is a full medical history where we look at the patient's personal history, personal medical history, employment history, social history and family history, along with scans when they're diagnosed with a kidney mass, and we do that to formulate a treatment plan.

MR. ABRAMS: Your Honor, we would tender Dr. Del Pizzo as an expert in the etiology or cause of kidney cancer.

THE COURT: He's accepted as an expert in that field and can express his opinions.

Q. So, Dr. Del Pizzo, why do you believe the water at Camp Lejeune is the cause of Mr. Mousser's kidney cancer?

A. Well, in short, this is a person who was exposed to a extremely high level and intensity of contaminated water at

03:01:46 Camp Lejeune, toxins that are known to generally be hazardous
03:01:50 to human health and to cause kidney cancer.
03:01:52 And with that, through his medical history and deposition
03:01:56 testimony, he did not have any other risk factors that I deemed
03:01:59 to be comparable to that, and, therefore, my opinion was that
03:02:02 it was more likely than not that contaminated water that was
03:02:05 the cause of his kidney cancer.
03:02:09 Q. And you say you compared the exposure to the water with
03:02:14 other potential exposures. Let's start with the exposure to
03:02:17 the water. You detail this in your report, but you provided in
03:02:26 there a discussion of how the studies that you looked at and
03:02:30 Dr. Hatten's opinion support your belief that the kidney cancer
03:02:35 was caused by the exposure to the water. So if you could talk
03:02:39 about how he maps onto those reports.
03:02:42 A. Well, first of all, I did rely on the general causation
03:02:44 expert to point out relevant literature, epidemiologic studies,
03:02:51 and then do these compounds cause kidney cancer and at what
03:02:57 levels, and were those the levels that were seen in the water
03:03:00 at Camp Lejeune, which was Dr. Hatten's opinion. We all heard
03:03:03 that today.
03:03:04 After that, you wanted to look at Mr. Mousser's specific
03:03:09 exposure to see where he plotted out in epidemiologic studies
03:03:14 that are known to have elevated hazard ratios for causing
03:03:17 kidney cancer.
03:03:20 Q. And so, if I may pull up that board we were just looking

03:03:24 at, it showed these numbers that Dr. Reynolds determined
03:03:29 Mr. Mousser ingested and was exposed to, right?
03:03:31 A. That's correct.
03:03:32 Q. And are those -- are these figures on the low end, the
03:03:37 medium end or the high end of exposures at Camp Lejeune?
03:03:40 A. I relied on her exposure metrics to tell me the exposures
03:03:43 and then plotted them into the Camp Lejeune studies, and
03:03:46 Mr. Mousser was at the very high level of exposure at the
03:03:50 height of the exposure, and a high individual exposure for all
03:03:53 of the individual compounds independently, and at the very high
03:03:57 level and medium exposure category for the total volume organic
03:04:01 compounds.
03:04:02 Q. And so when we're looking at this chart here, which is
03:04:05 Plaintiff's Exhibit 10, Mr. Mousser is there at the height of
03:04:11 the exposure?
03:04:11 A. That's correct.
03:04:12 Q. And the studies show that someone who's there at the
03:04:17 height of the exposure has a high risk of getting kidney cancer
03:04:20 from that exposure, right?
03:04:21 A. That's correct.
03:04:25 Q. Now, did that inform your opinion that that's what caused
03:04:28 his kidney cancer?
03:04:30 A. It's an important component, as I was -- then looked at
03:04:33 his medical history and deposition testimony in order to give
03:04:36 weight to the exposure of Camp Lejeune as a risk factor or

cause compared to other potential causes.

THE COURT: Is there any connection between smoking and kidney cancer in this case?

THE WITNESS: Well, he does have a history of cigarette smoking that I considered and weighed objectively. To what I was -- what I reviewed, and what his testimony was, his level of cigarette smoking was minimal. So you have somebody -- comparing the two risks, you know TCE causes kidney cancer and you know tobacco can cause kidney cancer, but his exposures were vastly different, so his smoking history is basically dwarfed by his exposure to the chemicals in the water.

THE COURT: Okay.

Q. And you looked at other studies outside of the Camp Lejeune studies. Tell us about -- don't go through all of them. Just give us maybe one that you think is important for Judge Boyle to --

A. Well, again, I relied on Dr. Hatten to --

MR. MARQUINA: Objection, Your Honor. Dr. Del Pizzo is not an epidemiologist, and according to the Court's order on late general causation opinions, the Court explained that specific causation experts can't opine on general causation.

THE COURT: Yeah, overruled.

THE COURT REPORTER: Can I get your name?

MR. MARQUINA: Eric Marquina.

THE COURT REPORTER: Thank you.
Q. You can go ahead.
A. Can you ask the question again?
Q. Yeah. Tell us about a non-Camp Lejeune study and compare exposure there to what Mr. Mousser was exposed to and how that supports your opinion.
A. Yeah, one study that I gleaned from Dr. Hatten's report is a study, the Andrews study from 2022. It's also a water contamination study. It looked at people who were exposed to levels of TCE in groundwater contamination over a 15-year period, and it showed elevated levels of risk for kidney cancer, up to 78 percent in a range that was statistically significant.

And every time you go from a Camp Lejeune study to a non-Camp Lejeune study, I understand that you can't directly compare them, but you can extrapolate and give some context. And in the study that I'm referring to, the people in those studies were exposed to between 0 and 27.6 micrograms per liter, and the important thing about that number is the intensity of Frank Mousser's exposure was much, much higher than that. He was exposed, as Dr. Reynolds was talking about, over the 700 micrograms per liter in a month, so it's a vastly more intense exposure than in the Andrews study.

THE COURT: Well, to make it simple, a liquid goes through your mouth, it goes into your stomach. I'm so far from

being a doctor, it's --

THE WITNESS: Well, you got that right, though.

THE COURT: We're on the same page.

THE WITNESS: Yeah.

THE COURT: So it goes to your stomach and then it goes to your bladder and then your kidneys --

THE WITNESS: No, it's filtered by your kidneys --

THE COURT: -- to treat it?

THE WITNESS: -- and then goes to your bladder and then --

THE COURT: Say that again.

THE WITNESS: The blood is filtered by the kidneys.

THE COURT: Okay.

THE WITNESS: So that's where it goes first.

THE COURT: Okay.

THE WITNESS: And then down to the bladder where --

THE COURT: Okay, so the --

THE WITNESS: -- the urine gets excreted.

THE COURT: -- bladder is the last step before you expel it?

THE WITNESS: Yes.

THE COURT: Okay.

Q. And the kidney is the filter?

A. That's correct.

Q. And these toxic substances go into the kidneys?

A. Yes.

THE COURT: And how do they get expunged from the kidney, or do they just stay in the kidney, the toxics?

THE WITNESS: Well, that's actually a good question because I don't think anyone really knows the answer to that. But they're basically filtered by the kidneys and then get into the urinary system, and at some point, something called carcinogenesis occurs where the toxin is able to affect your cell and cause a mutation, and it suppresses typical genes that typically suppress us from getting cancer, and once you lose that ability to prevent it, you're more likely to get a cancer down the road.

THE COURT: Common sense would tell you that a higher exposure or concentration in your kidney would be more deadly, right?

THE WITNESS: That's correct.

THE COURT: Okay.

Q. And Mr. Mousser was exposed to a very high concentration right?

A. Extremely high.

Q. And just like you said, looking at a non-Camp Lejeune study, we've got a concentration of 27. Mr. Mousser is at 700?

A. In one month, yes.

Q. Now, you've seen some of the Government's reports. There was a mention in one of them --

THE COURT: How long does it take for the effects to mature and to be vis- -- you know, to be present?

THE WITNESS: From the time of exposure to a cancer developing?

THE COURT: Yeah.

THE WITNESS: You know, there really is no latency period. It can happen -- it typically happens years or decades later.

THE COURT: Really?

THE WITNESS: Yes.

THE COURT: It can be as long as a ten-year period?

THE WITNESS: Longer, but, yes, it can.

THE COURT: Okay.

Q. Well, here we've got, you know, in the mid 30-year period, is there anything that -- about that that -- I mean, is that typical? This is -- talk about latency here.

A. I don't think it's atypical. I think that the really important thing is the intensity of the exposure and the intensity of the exposure to the carcinogen. The duration is important. The amount is important.

And then when -- if the driving mutate -- mutation in the cell occurs and you lose that tumor-suppressor gene, then you can develop the cancer 10 years later, 30 years later. There's no real latency period when it comes to that.

THE COURT: What do you make of the blood in his

03:09:44 urine when he was on base?
03:09:47 THE WITNESS: Well, the blood in the urine occurred
03:09:49 between November of 1983 and February of 1984.
03:09:54 THE COURT: Does that suggest anything in this case?
03:09:56 THE WITNESS: No.
03:09:56 THE COURT: Okay.
03:09:59 Q. I mean, that's the time when he's in two active war zones,
03:10:01 right?
03:10:02 A. That's correct. He was in Beirut and got airlifted out
03:10:04 when he had blood in his urine.
03:10:06 Q. And acute inflammation can happen from high-stress
03:10:08 situations, right?
03:10:08 A. Yes. Young men often get something called acute
03:10:14 prostatitis where they get an inflammation of their prostate
03:10:17 gland, which can cause blood in the urine in a young person.
03:10:21 And they can also get cystitis, which is inflammation of the
03:10:23 bladder, which can cause it as well.
03:10:25 Q. Okay.
03:10:26 THE COURT: So this is just a blind alley, that
03:10:29 episode? It has nothing to do with --
03:10:31 THE WITNESS: No, right, because he was evaluated at
03:10:33 that time with kidney x-rays and bladder evaluations. They
03:10:37 were all negative at that time.
03:10:37 THE COURT: Okay.
03:10:39 Q. And just to set the context, this man got to Beirut right

after the Hezbollah bombed the Marine barracks in Beirut, and he shows up in that active war zone.

A. It sounds like a stressful situation, yes.

Q. So kind of building on Judge Boyle's questions, and the Government has raised this issue about chronic inflammation as some other potential cause, has that ever been diagnosed?

A. Not in Mr. Mousser, no.

Q. And do you believe -- I mean, tell us about that. Why is chronic inflammation not an issue in this case?

A. Well, first of all, chronic inflammation as a risk factor is more specific to bladder cancer. It typically can occur in patients who have indwelling Foley catheters and urinary catheters all the time, repeated infections, bladder stones, things like that.

It can be a risk factor for kidney cancer as well, but then you'd have to have a history of chronic kidney stones, kidney stones that obstruct your kidney, cause repeated infections, and there's absolutely no history of that in Mr. Mousser at all.

Q. So it's just a non-issue?

A. I believe it's a non-issue.

Q. Did the burden of proof in this case affect your methodology or your opinion?

A. No.

Q. Okay. So to sum up, I don't know if we've -- everyone

03:12:02 agrees that TCE can cause kidney cancer, right?
03:12:05 A. Yes.
03:12:07 Q. And Mr. Mousser was exposed to a massive amount of TCE?
03:12:10 A. Yes.
03:12:12 Q. He's one of the highest exposed Marines?
03:12:15 A. Yes. What I saw, yes.
03:12:16 Q. How he maps onto those studies, he's at the top?
03:12:18 A. That's correct.
03:12:19 Q. Nothing else in his history compares or comes close to explaining why he got kidney cancer?
03:12:23 A. Not in my opinion, no.
03:12:25 Q. Dr. Del Pizzo, was the cancer in Mr. Mousser's kidney, kidney cancer?
03:12:31 A. Yes, he had a subset of kidney cancer called urothelial cell carcinoma of the kidney, but that is kidney cancer.
03:12:36 Q. And so this whole argument that -- that there's not -- that this isn't a kidney cancer case is incorrect?
03:12:40 A. Well, no, I mean, he had kidney cancer. He had his right kidney removed to treat his kidney cancer. That's what's done routinely for that disease. There are the same type of cells that line our kidneys and our bladder, but they're separate disease processes.
03:12:44 Q. Dr. Del Pizzo, is it your opinion to a reasonable degree of medical and scientific certainty that the Camp Lejeune water caused Mr. Mousser's kidney cancer?
03:12:47
03:12:52
03:12:55
03:12:58
03:13:02
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03:13:13
03:13:16

A. Yes.
Q. And is it your opinion to a reasonable degree of medical and scientific certainty that but for his exposure to the water at Camp Lejeune, he would not have gotten kidney cancer?
A. That is my opinion to a reasonable degree of medical certainty, yes.
MR. ABRAMS: No further questions.
THE COURT: You have any cross?
MR. MARQUINA: Yes, Your Honor.
THE COURT: You don't have to cross, but you can.
MR. MARQUINA: Very briefly, Your Honor.
THE COURT: Okay.
CROSS-EXAMINATION BY MR. MARQUINA:
Q. Dr. Del Pizzo, in your report, you included a section entitled "Bradford Hill Factors," right?
A. Yes.
Q. You aren't an epidemiologist, right?
A. No.
Q. You aren't a toxicologist?
A. No.
Q. You've never published peer-reviewed literature regarding the effects of TCE, right?
A. No.
Q. Or PCE?
A. No.

03:13:55 Q. Or vinyl chloride?
03:13:55 A. No.
03:13:55 Q. Or benzene?
03:14:06 A. No.
03:14:09 Q. And in reaching your conclusions about Mr. Mousser in this case, you relied on the general causation reports of Drs. Hatten and Bird, right?
03:14:16 A. Specifically Dr. Hatten, yes.
03:14:20 Q. Okay. Focusing on Dr. Hatten, you don't have any independent opinions from Dr. Hatten about whether the chemicals at issue in this case can cause kidney cancer, right?
03:14:31 A. I relied on him to tell me that they caused kidney cancer and at what levels.
03:14:37 Q. And sure enough, you relied on Dr. Hatten's conclusion that epidemiologic literature regarding renal cancers, that is, kidney cancers, applies to Mr. Mousser's specific type of cancer, which is UTUC, right?
03:14:48 A. I do agree with that.
03:14:50 Q. And so it's fair to say you yourself didn't review or consider epidemiology specific to bladder cancer when reaching your conclusions in this case, right?
03:14:58 A. No.
03:15:00 Q. Dr. Del Pizzo, you described Mr. Mousser's exposure to toxins in the water at Camp Lejeune as substantial, right?
03:15:06 A. Yes.

03:15:07 Q. You mentioned that Mr. Mousser was exposed to a
03:15:09 substantial duration, intensity and frequency of toxins, right?
03:15:13 A. Yes.
03:15:14 Q. Your reports themselves don't define the term
03:15:16 "substantial," right?
03:15:18 A. Correct.
03:15:21 Q. And indeed, you relied on Dr. Reynolds's exposure
03:15:23 calculations in reaching your conclusions for this case, right?
03:15:25 A. I relied on her exposure metrics to be able to compare
03:15:29 them directly to the Camp Lejeune epidemiology, yes.
03:15:35 Q. And specifically, those -- you relied on Dr. Kelly
03:15:38 Reynolds's exposure calculations, which were measured in
03:15:41 micrograms per liter months, right?
03:15:43 A. Yes.
03:15:45 Q. You didn't independently calculate the amount of toxins to
03:15:47 which Mr. Mousser was exposed to in this case, right?
03:15:50 A. No.
03:15:51 Q. You didn't take any steps to verify Dr. Kelly Reynolds's
03:15:52 exposure calculations in this case, right?
03:15:56 A. Not to verify the calculations other than trying to
03:15:59 understand how she got to them.
03:16:02 Q. But you yourself didn't engage in any mathematics to
03:16:04 verify those calculations?
03:16:05 A. No.
03:16:13 Q. Dr. Del Pizzo, Mr. Mousser's prognosis remained --

following his recurrence, remains governed by his initial UTUC diagnosis, right?
A. His overall prognosis from his bladder cancer recurrence?
Q. Yes.
A. Well, I think they're both important in looking at his overall prognosis, sure.
Q. You'd agree that the cause of Mr. Mousser's UTUC doesn't impact the treatment for that cancer, right?
A. Ask the question again.
Q. Sure. The etiology or cause of Mr. Mousser's UTUC doesn't impact its treatment?
A. That's correct.
Q. And you'd agree that Mr. Mousser has made a full recovery from his UTUC surgery or his nephroureterectomy, right?
A. From a medical standpoint or a surgical stand- -- from a surgical standpoint, yes.
Q. And he's also made a full recovery from his transurethral resection following his recurrence, right?
A. From a surgical perspective, yes.
Q. Dr. Del Pizzo --
MR. MARQUINA: Your Honor, may I approach?
THE COURT: Yeah.
Q. Dr. Del Pizzo, if you'll turn to tab 3 in that binder, that's your report, right --
A. Yes.

Q. -- for Mr. Mousser?
A. Yes.
Q. Let's turn to page 15.
A. Okay.
Q. At the very bottom in this section entitled "Differential Diagnosis" -- are you there?
A. The top of the page?
Q. At the very bottom. You describe Mr. Mousser's smoking history in this case, correct?
A. Yes.
Q. And in the description you explain, quote, "He did provide a brief history of tobacco use," which you quantified as 0.5 to 1.0 pack week, "while in the United States Marine Corps, but quit 30 years prior to his diagnosis of urothelial cell carcinoma of the renal pelvis," right?
A. Yes.
Q. And you also detail that there is testimony that Mr. Mousser smoked daily of unknown quantities in 2012 while working at a car dealership, right?
A. Yes.
Q. And so in your differential diagnosis, you credited those two time periods of smoking history for Mr. Mousser, right?
A. Based on his deposition testimony, yes.
Q. And sure enough, you gave his smoking history low weight in your differential diagnosis because, according to you, he

had low intensity and exposure to smoking, right?
A. Based on what was in his deposition, yes, and also, yes, low -- low in intensity tobacco use, especially compared to his exposure to the toxins in the water.
Q. And Dr. Del Pizzo, these were the only two periods of smoking that you included in your differential, correct?
A. That's the only -- that's what I was aware of, yes.
Q. Okay. So is the answer to my question yes --
A. Yes.
Q. -- Dr. Del Pizzo?
A. Yes.
Q. Thank you. And, Dr. Del Pizzo, you had an opportunity to review Mr. Mousser's medical records in reaching your opinions for this case, right?
A. Yes.
Q. Dr. Del Pizzo, I'll ask that you turn to tab 9 in the binder.
MR. MARQUINA: And, Your Honor, for the record, tab 9 is entitled "United States Exhibit 531." And, Your Honor, may I approach to set up a demonstrative?
THE COURT: Yes.
MR. MARQUINA: Your Honor, may I remain standing so I can use the demonstrative?
THE COURT: Stay there.
MR. MARQUINA: Thank you.

03:20:37 Q. Dr. Del Pizzo --
03:20:37 MR. MARQUINA: And for the record, I would represent
03:20:39 that this is a demonstrative blow-up of United States Exhibit
03:20:43 531.
03:20:45 Q. Dr. Del Pizzo, this is a primary care nurse telephone
03:21:08 encounter note, correct?
03:21:09 A. Yes.
03:21:13 Q. This is among Mr. Mousser's medical records?
03:21:14 A. Yes.
03:21:16 Q. This record is dated July 30th, 2020; is that right?
03:21:19 A. Yeah.
03:21:20 Q. You reviewed this medical record in reaching your opinion,
03:21:22 correct?
03:21:23 A. I don't know if I specifically reviewed this one.
03:21:26 Q. Dr. Del Pizzo, if you would turn to tab 6 in your binder.
03:21:36 A. Yes.
03:21:37 Q. That's your materials considered list, right?
03:21:38 A. Yes.
03:21:40 Q. If you'll go to the section towards the -- I think it's
03:21:44 around page 10, give or take, where it includes the VHA
03:21:48 records.
03:21:53 A. Exhibit A, is that what you said?
03:21:56 Q. I'm not sure where specifically it is, but for your
03:21:59 reference, this document includes Bates range 00667 Mousser VHA
03:22:07 894.

A. Yeah, I mean, it's in his medical record. I see it.
Q. And so that's included in your materials considered list, correct?
A. Yes.
Q. And you disclosed that at the time you disclosed your initial report for this case, right?
A. Yes.
Q. Okay. This record was dated a few months before Mr. Mousser was diagnosed with his UTUC, correct?
A. At the time of his diagnosis.
Q. Mr. Mousser was diagnosed with UTUC sometime around October 2020, right?
A. No, his surgery was in October 2020. He was diagnosed around this time, July or August of 2020.
Q. Thank you for that correction. Understood. So it's contemporaneous?
A. Yeah. Yes.
Q. And if you look at this record, this record includes an identification -- Mr. Mousser is identified as the caller, correct?
A. Yes.
Q. Mr. Mousser calls complaining and states that he had a lot of blood in his urine for the last ten days and that he feels pain to the kidney area, right?
A. Yes.

03:23:11 Q. Dr. Del Pizzo, if you'll turn to the next page.
03:23:12 Mr. Mousser was given a tobacco use screening, correct?
03:23:26 A. Yes.
03:23:28 Q. The patient -- and the record states that Mr. Mousser
03:23:31 stated he uses tobacco, but not every day, right?
03:23:34 A. That's what the record states.
03:23:38 Q. And it states that Mr. Mousser was advised to quit smoking
03:23:41 and/or using tobacco, right?
03:23:44 A. Yes.
03:23:45 Q. The exhibit includes -- the medical record includes a
03:23:48 discussion with patient about various topic -- the topics of
03:23:50 discussions that will help him quit smoking; is that right?
03:23:53 A. Yes, although I would say that this looks like a
03:23:56 preprinted questionnaire and nothing specifically typed in.
03:23:59 Q. I understand, Dr. Del Pizzo.
03:23:59 A. Yeah.
03:23:59 Q. But if you could please just answer my question. That's
03:24:02 what the record includes, correct?
03:24:04 A. Yes.
03:24:11 Q. And if you'll turn to the next page, Dr. Del Pizzo.
03:24:22 Mr. Mousser was offered behavioral counselor -- counseling and
03:24:24 other support strategies to assist with quitting, according to
03:24:27 this medical record, correct?
03:24:28 A. Yes.
03:24:31 Q. And he was not interested in receiving additional

information about how to use the treatment options discussed, right?
A. Right.
Q. He was offered FDA-approved cessation medications, and there was a discussion about those options, correct?
A. That's what the record says.
Q. And he was not interested, according to this record, in a prescription for tobacco-cessation medications, right?
A. I do see that line, yes.
Q. And, lastly, the record states that Mr. Mousser stated that he smokes a little bit, which he describes as one pack per week, right?
A. Yes.
Q. Dr. Del Pizzo, you did not reference this record in your report for Mr. Mousser, did you?
A. No.
MR. MARQUINA: No further questions, Your Honor.
THE COURT: Do you have anything further?
MR. ABRAMS: Yes, Your Honor.
REDIRECT EXAMINATION BY MR. ABRAMS:
Q. We'll address the smoking issue with Mr. Mousser, but you said you've seen the -- you've seen preprinted records before?
A. Yes.
Q. And this indicates to you that that's one of those?
A. It looks like a typed form, yes.

Q. Anything about what we just heard that you think we need to go over?
A. No, I think it's very nonspecific and, again, it doesn't take away the very high exposure to the chemicals. And, again, you know, cigarette -- I'm not saying cigarette smoke is not a risk factor for kidney cancer. It is, but it's much more of a risk factor for bladder cancer.
THE COURT: That's it.
MR. ABRAMS: Thank you, Your Honor.
THE COURT: Thank you very much for your testimony. We'll take a recess now and resume in 10 or 15 minutes.
(A recess was taken from 3:26 p.m. to 3:41 p.m.)
MR. ABRAMS: Your Honor, the plaintiff calls Mr. Mousser's wife, Heather Mousser.
Ma'am, come on up.
And I'm going to give her some space while they swear her in.
THE COURT: That'd be good.
THE CLERK: Place your left hand on the Bible, raise your right hand, and state and spell your name for the record.
THE WITNESS: Heather Mousser, H-E-A-T-H-E-R M-O-U-S-S-E-R.
HEATHER MOUSSER,
was sworn at 3:42 p.m., and testified as follows:
THE COURT: You ready?

MR. ABRAMS: Yes, Your Honor.

DIRECT EXAMINATION BY MR. ABRAMS:

Q. Mrs. Mousser, would you please tell Judge Boyle how you are related to Frank?

A. I've been married to him for 33 years.

THE COURT: Good.

Q. Tell us about Frank before cancer.

A. Okay. What type of guy he was? He was a good guy, very outgoing and -- because you have to be if you're in the car business. He made friends with everybody, had a lot of friends, a good family man, and we did a lot of stuff together, a normal, happy marriage.

THE COURT: Great.

Q. And walk Judge Boyle through, if you would -- you-all have been married for 33 years?

A. Thirty-three years.

Q. And where do you live?

A. In Kerrville, Texas.

Q. And Frank, after he got out of the Marines, what business was he in?

A. The car dealership. He was married to the car dealership second. Yeah, so he was a salesman. He worked his way up. He was in finance. He was a car sales manager, a general sales manager. He did everything in the car business.

Q. Outgoing guy?

03:44:00 A. Yeah, you have to be.
03:44:02 Q. Sunny disposition?
03:44:04 A. Yeah, absolutely. You can't be Eeyore in the car
03:44:09 business.
03:44:10 Q. So Frank is diagnosed with cancer in 2020?
03:44:18 A. Uh-huh.
03:44:18 Q. Tell us about how that's affected him.
03:44:24 A. It's pretty much turned his life upside down, our lives.
03:44:31 It's just after the kidney was removed and everything, he just
03:44:44 became more scared of what was going to be -- what was going to
03:44:46 come next because shortly after the kidney was removed and we
03:44:50 went to the doctor together and -- actually, it was six months
03:44:54 after -- and they told us he was in -- he had CKD in the
03:44:59 remaining kidney. So we were nervous about -- you know,
03:45:02 because you only have one other one left, so.
03:45:05 And then shortly after that, he was diagnosed with
03:45:11 diabetes, so all this stuff stemmed from that, and it's -- it
03:45:18 just made him more withdrawn and depressed, and he doesn't have
03:45:26 all the relationships that he had before.
03:45:27 Q. Let's see, how has the cancer affected y'all's
03:45:41 relationship?
03:45:44 A. Well, he also got insomnia, and he also has to wake up in
03:45:50 the night several times to use the restroom, so since I'm still
03:45:55 working, he's not even sleeping in the same room anymore, so.
03:45:59 And we -- due to the -- due to his health and the medications

03:46:08 and stuff, we're no longer intimate either.
03:46:16 Q. Now, you talked about going back to the doctor six months
03:46:23 after his kidney is removed?
03:46:24 A. Uh-huh.
03:46:24 Q. And you said that he was diagnosed with something called
03:46:29 CKD?
03:46:29 A. CKD, uh-huh, chronic kidney disease.
03:46:33 Q. And what does that mean?
03:46:35 A. That his other kidney was starting to -- was diseased and
03:46:39 failing and not doing what it should.
03:46:45 Q. And what did the doctor say about what that means for
03:46:52 Frank's life?
03:46:54 A. That he was just going to have to constantly be monitored
03:46:58 for the rest of his life.
03:47:01 Q. And if his other kidney fails him, what does that mean?
03:47:13 A. Well, he would die, or get a transplant, I guess, if he
03:47:23 could.
03:47:28 Q. Now, Frank is first diagnosed in 2020 with cancer?
03:47:38 A. Right.
03:47:38 Q. And then he's diagnosed with CKD. And then what happened
03:47:46 last year?
03:47:48 A. They found another -- not another. They found a polyp in
03:47:53 his bladder during one of the routine cystos that he has to go
03:47:58 through, which is horrible, but -- and they were monitoring
03:48:04 that, and it had gotten bigger, so they decided to take it out.

03:48:07 And even though they thought it wasn't cancer, they found out
03:48:11 after they took it out that it was.
03:48:14 Q. And so just last year, they found a second tumor?
03:48:21 A. Yes, and they said that -- you know, that he could have a
03:48:25 recurrence of it, so, yeah.
03:48:29 Q. And what did they tell you it came from?
03:48:34 A. The same type of -- the same type of cancer that he had
03:48:41 prior. They said it was made up of the same type of cells.
03:48:49 I'm very uncomfortable up here.
03:48:56 Q. The Government's experts have said that this -- basically
03:49:05 that the kidney cancer has not had an effect on Frank's life,
03:49:09 that he's fine.
03:49:11 A. Oh, well that's wrong. I've lived with him, so I know,
03:49:14 and it's totally turned his life around, so that's not true.
03:49:26 MR. ABRAMS: Your Honor, I've got what I'll mark as
03:49:28 Plaintiff's Exhibit 210, and I'll hand this out. Your Honor,
03:49:41 this is a 1006 summary of medical records that kind of detail
03:49:47 the progression of Frank's life from 2020 up until recently.
03:49:55 May I approach?
03:49:56 THE COURT: Yeah.
03:50:11 Q. And, ma'am, I'm not going to read all of these, but --
03:50:14 MR. GARAND: Your Honor, objection. It's untimely
03:50:18 and argumentative as well due to the highlights.
03:50:21 THE COURT: Overruled.
03:50:27 Q. Ma'am, if I could direct your attention, I've got these

numbered, and some of the type is small, but you can see this. Let's look at number 2. You see there where it says, "Does the veteran's kidney conditions, including neoplasms, affect his ability to work," and it says, "Yes"?

A. Yes.

Q. And you've been through some of these records. That's one of many doctors who have found that his cancer prevents him from working?

A. That's correct.

Q. Now, tell us about that.

A. Well, he went through the surgery and the recovery and then he went back to work, but it just wasn't the same. It just was a lot harder for him.

Q. And what's happening with him?

A. Well, with the not sleeping at night and everything, that makes -- makes it that much harder just to get up and go to work, but then he doesn't have the same dynamic with customers and stuff that you need to have. And I know because I worked with him from 2015 on, so I've been with him 24/7, so I know that's -- that's what changed because he's afraid that -- he's afraid of dying. He's afraid of leaving me. He's been my rock. He's always been there for me. He just couldn't do -- couldn't do it anymore. He couldn't do the same -- couldn't be the same person.

Q. And you mentioned he's having to get up all the time at

night. You see that second entry on number 2? Is that where it says that a doctor has found that his urinary frequency is associated with post-operative changes of the bladder cuff resection?

A. Uh-huh.

Q. And so when they went in and took out his kidney, they also had to take out a piece of his bladder, right?

A. The ureter down to the bladder, and then part of the bladder, yeah.

Q. And then looking at number 3, we've got an entry, "Depression most likely secondary to the surgery and his diagnosis, compounded by insomnia and sleep deprivation."

A. That's correct.

Q. And that's what you've seen?

A. Absolutely.

Q. What's that like?

A. I mean, it's hard because he's -- just like I said, he's just not the same person. He's always been happy. He used to make me laugh every day, and now it's just -- it's not the same. We don't know what depression is like, I guess, if we don't have it, but he has it.

Q. I want to go to page 3.

MR. ABRAMS: And, Your Honor, I've only got maybe three more of these in the record, but this is going to this idea that the Government is saying he's recovered and he's fine

and you shouldn't give him any money, and when you go through the records, you see exactly what his wife is seeing.

MR. GARAND: Your Honor, objection as to improper argument.

THE COURT: Overruled.

Q. So looking at the middle of page 3, there's a sentence that says, "Veteran is concerned about meds' impact on kidney and does not feel that his primary care provider will look at it enough." Do you see that?

A. Yes.

Q. And that's his primary care provider at the VA, right?

A. Yeah.

Q. You-all have a difficult relationship with the VA?

A. Unfortunately, yeah. I mean, they were good with the -- with the surgery and everything like that, but the care he -- when he goes to the doctor, it's never the same doctor. A lot of times, it's a different doctor. So we go to urology. We see whatever doctor is up at that time. It's not the same one.

Or he has an appointment and it gets canceled, and it's impossible to make another one. It's just -- it's a -- it's a constant struggle with the VA. And I even said, "Let me take care of it; let me try to call and stuff," and it's -- it's very difficult.

Q. And if you-all had the resources to do so, would he go to the VA or a private doctor?

03:55:30 A. Private doctor, every time.
03:55:38 Q. Looking at the top of page 4, I want to ask you if you
03:55:41 recall this period of time. It says, "Veteran is reeling from
03:55:45 the news that he has stage 3b renal failure. He did not
03:55:51 realize he would get worse news than that he had cancer. He is
03:55:57 aware of where renal failure leads." It says, "it leads," but
03:56:02 it means renal failure.
03:56:03 It says, "Frank is overwhelmed with the news and is now
03:56:10 having to take on the role as the ill one. He feels that the
03:56:14 doctors left him with this bomb and left him to his own
03:56:18 devices. He's not sleeping well, tired all the time, and has
03:56:23 little motivation."
03:56:25 A. It's true. He used to do a lot of stuff. But, yeah, he
03:56:31 doesn't have the motivation, for sure.
03:56:38 Q. Then we've got the next doctor, who says -- the question
03:56:41 is, "Does the veteran's condition impact his ability to work?"
03:56:45 It says, "Yes." See that?
03:56:48 A. Yes.
03:56:48 Q. Middle of the page.
03:56:50 A. Uh-huh.
03:56:50 Q. And then we've got at the next page, top of the page,
03:57:02 "Veteran got worse news. His kidney is really failing quickly.
03:57:07 Likely will be on dialysis in six months. He doesn't want to
03:57:11 sleep. He's making the most of the time he has." You see
03:57:17 that?

03:57:18 A. Yes.
03:57:18 Q. "He worries all day and night about what's going to happen." You see that?
03:57:20
03:57:23 A. I do.
03:57:24 Q. Is that what you've seen?
03:57:26 A. It is. You know, he's always been very strong.
03:57:35 Q. And, of course, this is back from 2021. This is before the Camp Lejeune Justice Act, all right?
03:57:38
03:57:42 A. I think that was 2022.
03:57:44 Q. Going back to the number --
03:57:46 A. And this is 2021.
03:57:50 Q. Yeah, yeah. Well, what we just read is from 2021, and then the Justice Act is not till late '22, right?
03:57:53
03:57:55 A. Right.
03:57:55 Q. Now, if one of the Government's experts says that he's making all this up for litigation purposes, what do you say to that?
03:58:01
03:58:05
03:58:05 MR. GARAND: Objection. Again, argumentative.
03:58:07 THE COURT: Overruled.
03:58:08 A. I say it's not true. I mean, it's -- it's -- it's just not true because I know -- I know my husband.
03:58:13
03:58:22 Q. And this compilation is entirely consistent with what you've seen, a decline in his enjoyment of life, his worries, his depression --
03:58:27
03:58:32
03:58:33 A. Oh, yeah.

Q. -- inability to sleep, inability to work; is that right?
A. That's right. He lost a lot of friends. I mean, doesn't want to go anywhere, doesn't feel good enough to go anywhere. I got to go places on my own, and it's just very hard.
MR. ABRAMS: Your Honor, we would commend this summary to you. There's a lot of medical records, but this is an important piece of this because --
THE COURT: I'm sorry, I couldn't hear you. What are you saying?
MR. ABRAMS: I'm not going to go through the rest of these, but we've tried to summarize what's in the records.
THE COURT: All right.
MR. GARAND: And, Your Honor, I just object to that exhibit as incomplete.
Q. Ma'am, I want to ask you about this smoking issue. You've seen the record that says he was smoking in 2020.
A. I didn't see it. I heard.
Q. Well, tell us --
A. There's no possible way he's smoking in 2020. I mean, like I said, I worked with him from 2015 on, worked and lived with him day in and day out. I would know --
Q. Well, let's --
A. -- if that were the case.
Q. -- back up. Was he a smoker? You guys have been married for 33 years.

A. Right.
Q. Was your husband a smoker?
A. He did in the Marines. He had smoked -- like, sometimes he would have a smoke when he drank a couple beers or went out with friends, but I don't -- I don't remember it.
Q. So cigarettes in the house?
A. No. I wouldn't allow it.
Q. And so, you know, this record from this VA thing says that he said he was smoking in 2020. Is that true?
A. That's absolutely not true.
Q. Is this consistent with what you've seen with the VA, where they are not listening to you and just writing up, you know, reports?
MR. GARAND: Objection, Your Honor. Argumentative.
THE COURT: Sustained. Let's move on with it.
Q. Mrs. Mousser, does Frank feel betrayed by the Marines?
A. I mean, not the Marines that he was part of. He feels betrayed by how they poisoned him and they're not accepting responsibility for it. He loves the Marines. He can't go by a Marine and not talk to him. He's always been a proud Marine.
MR. ABRAMS: Thank you, Your Honor. That's all we have.
THE COURT: Do you have any cross?
MR. GARAND: Yes, Your Honor, briefly.
CROSS-EXAMINATION BY MR. GARAND:

04:02:05 Q. Mrs. Mousser, we were just looking at this exhibit that
04:02:11 plaintiff's counsel was showing you, the highlighted treatment
04:02:14 records. He identified number 8 on page 3, correct?
04:02:18 A. I don't -- I don't know. Yes, I guess.
04:02:35 Q. On page 4, he identified number 10, correct?
04:02:37 A. Yes.
04:02:44 Q. And, ma'am, that's a 2021 record, correct?
04:02:45 A. Yeah.
04:02:46 Q. And number 8 is also a 2021 record, right?
04:02:49 A. Uh-huh.
04:02:49 Q. He identified number 11, which is also a 2021 record,
04:02:54 right?
04:02:54 A. Uh-huh.
04:02:54 Q. And he also identified number 12, which is a 2021 record,
04:02:59 correct?
04:03:00 A. Yes.
04:03:05 Q. Okay. Mrs. Mousser, I just have a few questions for you.
04:03:09 You've been married to Mr. Mousser since 1993, correct?
04:03:12 A. Yes.
04:03:14 Q. You and Mr. Mousser don't currently have any relationship
04:03:16 with his parents or siblings; is that right?
04:03:19 A. That's correct.
04:03:20 Q. And as far as you know, Mr. Mousser hasn't had a
04:03:23 relationship with his parents or siblings for many years,
04:03:26 right?

04:03:26 A. That's correct.
04:03:28 Q. Let me ask about your work history. You and Mr. Mousser
04:03:31 moved to Seguin, Texas, to help Mr. Richard Mercer with his car
04:03:36 dealership, correct?
04:03:36 A. Correct.
04:03:36 Q. And you currently still work for Mercer Motor Company,
04:03:40 right?
04:03:41 A. Right.
04:03:41 Q. You began working there in January of 2023 when
04:03:44 Mr. Mousser started working there, right?
04:03:45 A. That's correct.
04:03:47 Q. You're an office manager?
04:03:48 A. Yes.
04:03:50 Q. And prior to working for Mercer Motor Company, you worked
04:03:52 for Del Rio Motors?
04:03:53 A. That's correct.
04:03:53 Q. And you worked there with Mr. Mousser, right?
04:03:55 A. Yes.
04:03:55 Q. Mr. Mousser now receives health care through the VA,
04:04:00 correct?
04:04:01 A. Yes.
04:04:02 Q. And you and Mr. Mousser have not had to pay any
04:04:05 out-of-pocket -- pay anything out of pocket for any of the
04:04:08 appointments related to his kidney cancer diagnosis and his
04:04:11 chronic kidney disease, correct?

04:04:12 A. That's correct.
04:04:14 Q. And you receive health benefits through Mercer Motor Company, right?
04:04:16
04:04:18 A. Well, yes.
04:04:21 Q. You're aware that Mr. Mousser was offered health benefits with Mercer Motor Company when he worked there, but chose to stay with the VA for health coverage, correct?
04:04:24
04:04:27
04:04:31 A. I don't -- I don't know.
04:04:33 Q. Do you have any reason to dispute that that's true?
04:04:35 A. No.
04:04:40 Q. Mr. Mousser is no longer working, right?
04:04:42 A. That's correct.
04:04:44 Q. And he can't work because it was too taxing on his health, right?
04:04:46
04:04:46 A. Right.
04:04:48 Q. He couldn't work because he had a lot of pain, right?
04:04:51 A. He did.
04:04:52 Q. He couldn't work because his blood pressure would be up, right?
04:04:55
04:04:55 A. It would be.
04:04:56 Q. His eyes would be puffy?
04:04:57 A. Most mornings, yes.
05:00 Q. And he would experience these symptoms at least a few times a week, right?
05:03
05:04 A. At least.

Q. He just physically couldn't do the job anymore, right?
A. That's correct.
Q. And while working at Mercer Motor Company, he was on his feet all day long, right?
A. Well, up and down a lot.
MR. GARAND: No further questions.
THE COURT: All right. Is that it for this witness?
MR. ABRAMS: Yes, Your Honor.
THE COURT: Are you finished?
MR. ABRAMS: Yes.
THE COURT: Okay. Thank you very much, ma'am.
THE WITNESS: Thank you.
(The witness exits the witness stand at 4:05 p.m.)
MR. DOWLING: Your Honor, the plaintiff calls himself, Frank Mousser.
THE COURT: Okay.
MR. DOWLING: Can we move about the courtroom?
THE COURT: Yeah.
THE CLERK: Place your left hand on the Bible, raise your right hand, and state and spell your name for the record.
THE WITNESS: Frank Mousser, F-R-A-N-K M-O-U-S-S-E-R.

FRANK MOUSSER,

was sworn at 4:05 p.m., and testified as follows:

MR. DOWLING: May I proceed, Your Honor?
THE COURT: (Nods head.)

04:06:35 DIRECT EXAMINATION BY MR. DOWLING:
04:06:35 Q. You're Frank Mousser?
04:06:39 A. I am.
04:06:41 Q. Mr. Mousser, I want to ask you about a day about six years
04:06:44 ago, August 26, 2020. What do you remember about that day?
04:06:51 A. That's the day I found out I had kidney cancer.
04:06:56 Q. And tell the judge how you found that out.
04:06:59 A. I did some scans prior to that day, and then was called
04:07:02 back to the doctor's office to review the results of those
04:07:06 scans. He called me on the phone when I was home and said I
04:07:10 needed to immediately come back to the VA hospital in
04:07:12 Kerrville.
04:07:12 And I said, "Doc, this sounds serious," and he goes -- and
04:07:16 I said, "Is it?" He said, "Frank, I don't want to discuss
04:07:21 that. Just get down here." In Kerrville, we only live about
04:07:25 15 minutes away from the VA, so I proceeded over there.
04:07:29 Q. And what happened when you got there? What was your
04:07:32 discussion about?
04:07:36 A. Well, right -- right away it wasn't about the kidney scan.
04:07:38 It was about a set of floor mats one of my salesmen owed him
04:07:41 because I had been in the car business, right? But he said,
04:07:44 "Come in, look, I have these scans." I looked at the scan, and
04:07:49 he -- and he looked, too, and he said, "There's something
04:07:54 serious going on here." He said, "We don't see this every
04:07:59 day." He said, "If I think -- if I believe what I'm seeing, I

think that may be cancer," and he asked me to take some photographs of it.

Q. And how old were you at the time?

A. I was 57.

Q. All right. Let's go back to how you got to that point at that doctor's office. When did you enlist in the Marines?

A. July 1982.

Q. And tell Judge Boyle why you decided to enlist in the Marines.

A. I had family members that served in the military, mostly Navy. So I didn't want to do what they did, so I joined the Marine Corps.

Q. What was it about the armed services that attracted you?

A. Well, about the Marine Corps, it was about the uniform first, and then it was about the opportunity to serve my country.

Q. And did you serve one enlistment or two?

A. Two.

Q. Okay. And where'd you go to boot camp?

A. I went to boot camp in Parris Island, South Carolina.

Q. How long was that?

A. Thirteen weeks.

Q. That's about 90 days or so?

A. Yes.

Q. Where did you go from Parris island?

A. From Parris Island, I went to 2nd Marine Division, Camp Pendle- -- Camp Lejeune, North Carolina.
Q. And the parties have agreed that you were stationed at Camp Lejeune starting on October 18th, 1982; is that correct?
A. Correct.
Q. And what was the duration of your being stationed there? When did your time there end?
A. I believe it was somewhere in September 1986.
Q. What was your military occupational specialty?
A. I was an 0811 field artillery man.
Q. And tell Judge Boyle, just very generally, what kinds of tasks and duties you had as a field artillery man.
A. We were part of the Combat Arms, and we were direct fire support for the infantry of the United States Marine Corps, and we operated big howitzers. At one time, they were called 155. The little smaller ones with the silver tube would call -- be called a pig, and then the ones we eventually ended up on were the one-niner-eights, and they were 155 millimeters, and the rounds were 98 pounds, and so you had to be proficient in handling those weapons.
Q. Are you a combat veteran?
A. I am.
Q. What war zones did you deploy to?
A. I went to Operation Urgent Fury in Grenada, and then right after that, directly after that, Beirut, Lebanon.

04:10:47 Q. And generally speaking, what was the purpose of Urgent
04:10:50 Fury?
04:10:53 A. Ronald Reagan had sent the Marines in to help rescue 250
04:10:59 medical students that were being held hostage there.
04:11:01 Q. And when did this happen? When were you deployed, I
04:11:04 should say?
04:11:07 A. I believe it was October 25th. It was a couple of days
04:11:10 after the barracks were bombed in Lebanon.
04:11:13 Q. And so from Grenada, did you get back on the ship and go
04:11:16 to Beirut?
04:11:17 A. Directly to Beirut, Lebanon, yes, sir.
04:11:23 Q. Let's talk about your time at Camp Lejeune, so when you
04:11:26 were actually physically on the base, sir. Where did you live
04:11:31 when you were stationed at Camp Lejeune?
04:11:35 A. I lived in what was called the squad base, a bunch of beds
04:11:40 on each side of, like, a Quonset hut-type thing, the barracks
04:11:45 at French Creek.
04:11:46 Q. Okay. And generally speaking, where were those barracks
04:11:49 located? What broader area were those barracks located?
04:11:51 A. Hadnot Point, French Creek area.
04:11:53 Q. Okay. And is that sometimes referred to as Mainside?
04:11:57 A. Yes.
04:11:59 Q. And when you were living at the barracks, tell Judge Boyle
04:12:01 about how you consumed water.
04:12:06 A. We drank it. It came out of the faucets there at the --

at the barracks.
Q. What about did y'all have any of these?
A. No, no bottled water. No bottled water.
Q. No bottled water? So how would you store water for drinking?
A. Well, we put them in our canteens, and our canteen was about a quart apiece, and each Marine carried two on a cargo belt.
Q. And what was your habit of practice related to keeping your canteen filled?
A. Every day you filled it up.
Q. Where did you eat your meals at Camp Lejeune?
A. I ate them at -- our meals were eaten at what's called a chow hall located directly behind our barracks.
Q. And how far was the chow hall from the barracks?
A. Oh, I could see it. So it was probably less than 300 yards to the chow hall.
Q. Was it in Hadnot Point?
A. Yes, sir.
Q. Okay. And so did you ever drink water at the chow hall?
A. I did.
Q. Tell us about that.
A. Well, we drank Kool-Aid back then, and so we drank a lot of Kool-Aid and lemonade made with water, drank coffee.
Q. How many meals a day would you eat at the chow hall when

you were at Lejeune?
A. Three.
Q. Did you shower at the barracks?
A. I did.
Q. Tell us what the shower setup was like.
A. Well, the barracks were set up -- you had floors, and I was on the top floor. But I'd walk into the shower, and there would be sinks in the middle and then toilets to the right, and the showers would be directly to the left as you walked into the swinging doors.
Q. And so these are communal showers?
A. Yes.
Q. What was the ventilation like, based on your observation in those showers?
A. There wasn't any.
Q. Why do you say that?
A. Well, it gets steamy. Directly after taking a shower, you'd go shave, and so you were constantly wiping the mirror off, condensation. There were six spigots, two on each wall in the shower, and you'd have all these Marines in there blasting the hot water as hot as it can get, so it would get pretty steamy.
Q. What were your showering habits generally when you were stationed there?
A. I tried to shower a couple of times a day. On PT days,

though, which is Monday, Wednesday and Friday, we showered three times. We'd go on runs in the morning, and so you would shower right before you had formation, which is just another word for gathering before you went off to your workstation. So you would -- you would shower. And then you would -- if you got dirty at work, you'd shower in the afternoon because usually you had a -- you know, a couple-hour lunch break, and then you'd shower at night before you go to bed.

Q. What's mess duty?

A. Mess duty, Marines have to do mess duty in the chow hall, and so basically you would go and cook, help the cooks that were assigned there, stationed there. You would do what they asked you to, mostly wash dishes and help with the line and get things prepared for the Marines who came in to eat.

Q. So you would prepare the food. Would you also be responsible for dishwashing?

A. Yeah, that was the main -- main thing. They'd put you in, like, a little room that was attached to the kitchen and just a separate area where they'd have little pipes, you know, for runoff in the floor. But you had a -- you had these -- you had these deals that came out of the roof, kind of, you know, you squeeze the handle, you know, with big spigots on them, and then you would just, you know, wash the tray and then move it on to the next Marine, and he'd do the same thing until they were clean.

04:15:48 Q. Were you washing them with cold water?
04:15:50 A. No, sir.
04:15:51 Q. What kind of water were you washing with?
04:15:52 A. It was very hot water.
04:15:56 Q. Explain to Judge Boyle what field training is.
04:16:00 A. Field training is when you go to the field. It's kind of
04:16:03 like camping, only on a bigger -- on a bigger scale, and you
04:16:07 would go to apply what you had learned in the classroom
04:16:11 setting, working on your guns.
04:16:14 Q. Yeah, what does that mean, apply what you learned in a
04:16:17 classroom setting?
04:16:17 A. Well, being in -- being in artillery, you couldn't shoot
04:16:20 blanks in artillery, and everything was a live-fire exercise,
04:16:23 so they were very on edge about, you know, putting too much
04:16:28 powder in the chamber or firing a type of, you know, round that
04:16:33 didn't -- you know, wasn't supposed to be fired or, you know,
04:16:36 you would have safety parameters that you'd have to go through.
04:16:41 And every Marine knew what their role was, but you had to
04:16:43 practice that, you know, in the barracks-type setting at the
04:16:48 gun park, and then you'd go to the field to apply it.
04:16:54 Q. And where was the field, generally speaking, in relation
04:16:57 to your barracks, the field --
04:16:59 A. It'd be about 20, 30 minutes away --
04:17:01 Q. Okay. Where was it --
04:17:02 A. -- on Camp Lejeune.

Q. Where was it in relation to Hadnot Point? Was it generally the area kind of adjacent to it?
A. Yeah, you would go -- you would leave Hadnot Point, usually make a right, and I wasn't -- I wasn't paying too much attention to what -- if that was a west or east direction.
Q. Describe for Judge Boyle sort of the process when your unit would -- would be ready to go out into the field, what they would need to do and what they would need to bring with them.
A. Well, each -- each howitzer was a certain -- had a certain number to it. We had eight guns in our battery, so we were an eight-gun battery. And so I was assigned to different types of guns, ones, two or three. And each gun had a different -- well, they would have the same equipment list. You had to make sure you had everything that you needed to be able to operate that weapon day or night.
And so we would go down to the gun park, load up the trucks with what we needed. Then when we got back to the barracks, we had a list of things that we needed, making sure our canteens were full, making sure that we had -- you go to the armory, get your M-16 checked out, go to the radio shack, check out all the things we needed to operate in the field as a Marine Corps unit.
Q. And on this map on Plaintiff's Exhibit 4 here, is it fair to say you'd do field training exercises in this sort of

yellowish area over here to the east of Hadnot Point?
A. Yeah, looking at that, I would say it was mostly in the yellow area.
Q. And how would you bring water if you would bring water to the field?
A. Well, individual Marines had two canteens that were a quart apiece issued to them, so those were filled. But a battery, we had what's called water buffaloes and they're about 400 gallons, and so these water buffaloes would be driven to a point in the Hadnot Point area to be filled, and that was our source of water once we ran out of water from our canteens, and there was four of those.
Q. And you said you recall the water buffaloes were typically filled up at Hadnot Point?
A. I've never seen a water buffalo get filled up, but I knew they were filled up in that general location.
Q. So when you're out in the field, is it fair to say you're camping out there for some period of time?
A. It depends on basically -- you know, when we were getting ready to deploy, field excursions got a little longer, but when we were just doing basic work-up from what we had learned in the classroom environment, those interactions in the field would be 72 hours normally.
Q. Would you ever make food out in the field?
A. Yes. We were issued what's called MREs, and that stands

for meal ready to eat, and they have -- one of those I remember fondly because it was -- it looked like a sponge and it was a pork patty, and you would pour the water into it and seal the pouch up, and this pork patty would balloon up to about an inch. It was about a quarter of an inch before you put the water in it. But there were several meals that way.

Q. And you'd use the water from the water buffaloes to do that?

A. If I didn't have any water in my canteen, I would use the water from the water buffaloes.

Q. Tell me about how your laundry was done when you were at Camp Lejeune.

A. Oh, we had laundry bags with a laundry number on it. Mine was 43. We put the laundry, our cammies, our camouflage uniforms, in a big netting bag, and they'd come pick it up. And if they weren't around, you would wash clothes on your own. There was washers and dryers provided for you in the squad bay.

Q. Okay. Did you ever visit any places other than Hadnot Point when you were stationed at Camp Lejeune?

A. Yeah, we went to Tarawa Terrace from time to time. We had enlisted Marines that were married, and so we would -- we would go there, you know, for a barbecue or watch a ball game, you know, something a little different when we weren't deployed.

Q. What other kinds of activities were there at Hadnot Point itself?

A. We had a PX you'd go to and buy all the gear that you needed, tooth -- any type of toothbrushes or anything that you needed for your health. And they had Burger King down there and they had -- the parade deck was down there, and so you would -- you know, if you wanted to go eat Burger King, you would -- you know, or some type of little restaurant, you would go there.

Q. What about movies or entertainment?

A. There may have been. I've never -- I never was much into that.

Q. Okay. I want to shift gears to after your time in the Marines. When did you say you left the Marine Corps?

A. Well, I left Camp Lejeune in 1986. I left the Marine Corps in January of 1988.

Q. Okay. What did you do for your job after the Marine Corps?

A. Well, I got into the car business, and so that was my main profession.

Q. And what kinds of roles have you had in the car business?

A. I was a service advisor. I sold cars. I was finance manager, became a finance director. From there, I became a general sales manager, and then I made the general manager, and so that's what I did.

Q. Were you in the car business your entire career?

A. Yes, sir.

Q. And when did your career come to an end? What year?
A. October 2023.
Q. Do you enjoy the car business?
A. I loved the car business.
Q. What did you like about it?
A. I loved meet- -- I loved dealing with people and making them happy, you know, coming to a -- working a car deal and working numbers and the customer is happy, we're happy. And it was just something different every day. You know, every aspect of the car business was something different. You have the service department, sales department, all these departments working together for a common goal.
Q. And we know from the prior witness that you're married; is that correct?
A. Yes.
Q. How long have you been married to Heather?
A. Thirty-three years.
Q. What kinds of things -- after you got out of the Marines, what kinds of things did you like to do other than work?
A. I liked to hang out with my family, go fishing. I liked to go bird hunting, bowling. We'd go to the movies. We'd hang out, go to family reunions, just normal, everyday things that Americans do.
Q. Just generally speaking, before you were diagnosed with kidney cancer, how would you describe your life?

A. I didn't have anything to worry about. I would -- my wife was -- she understood what I had to do at work, and she kept a lot of that off of me, you know, and so she was the one who disciplined the kids more than I did. I was always gone working so much that, you know, I just wanted to spend good time with my family while I had those hours away from the dealership.

Q. Would you say you had a happy life before kidney cancer?

A. Oh, yeah.

Q. Let's shift gears a little bit. Do you have any family history of cancer?

A. No.

Q. So you don't have a history of kidney cancer?

A. No.

Q. Did you have any serious health issues or chronic health issues when you were a child?

A. No.

Q. And you've never been diagnosed with chronic inflammation syndrome?

A. No.

Q. Let's fast-forward a little bit to 2020. What was going on healthwise with you that caused you to seek medical treatment in the summer of 2020?

A. I was urinating blood. I had flank pain, had some things that started to pop up that I had seen before, but just they --

they were -- they were intermittent, but it was getting a little bit more ramped up then, and what I mean by that, it was a little bit more frequent.

Q. And at some point, did you have a CT scan done at the Kerrville VA that revealed a mass?

A. I did.

Q. And was that the mass that you were talking about at the beginning of your testimony?

A. Yes, sir.

Q. Okay. So we're back to where we started. Tell the judge how you felt when -- well, which doctor was it that told you he thought he might have cancer -- you might have cancer?

A. Dr. Rockwood in the urology department at the VA.

Q. And just tell us what that conversation was like and how you reacted.

A. I was pretty stunned by it. I didn't really -- I mean, my -- my direct reaction to things like that is just to kind of chuckle, you know, and have a -- try to just -- try to have some levity, you know, just try to -- but I just -- what I was staring at, I just couldn't believe that was -- but then -- but blood in my urine and things of that nature, you know, of course I read some things that -- you know, symptom wise, you know, that pointed to that, but that was just clarity that I had -- and he told me it was a golf ball-sized tumor in my right kidney.

Q. And did you tell your family after that appointment what happened?
A. Well, luckily, I had a few minutes to think about what I was going to say before I drove home. And so my wife was in the kitchen, and I remember telling her the seriousness of it all, though it really didn't hit me until my son walked in and I had to tell my son, you know, what we're going to deal with.
Q. What was that conversation like with your son?
A. My son is a good -- a good dude, man. He's -- he's got good heart. And so, yeah, that conversation was tough.
Q. Is it safe to say throughout this time period, you were scared?
A. It's safe to say I've been scared every day since.
Q. What were you scared of, sir?
A. Just the uncertain -- the uncertainty of what's going to happen to me as far as not being in the best shape, you know, with my remaining kidney and things of that nature. Of course, at that time, I didn't know I had CKD 3, stage 3, but...
Q. Did you have a procedure to try to biopsy the mass at some point in time, a catheterization procedure?
A. I did.
Q. Describe physically how that felt.
A. That was the most horrific pain I think I've ever been in in my life when they went up through the ureter to try to biopsy the kidney with whatever they had to use to be able to

clip pieces of the kidney to get it, a tissue sample. And then after going through all that, saying that they may have gotten it or they may have not, you know, I may have to go through it again, and the amount of urine and the blood in my urine that I urinated for ten days was the most painful thing I've ever been in.

Q. What happened after that in October of 2020?

A. After telling my family members that I had cancer, I proceeded to come back because I came here to tell my family.

Q. When you say here, you mean --

A. North Carolina.

Q. -- the state of North Carolina?

A. North Carolina.

Q. You have some family in North Carolina?

A. Yes, sir.

Q. And what was that like telling them?

A. That was rough.

Q. Did you have a procedure to remove your kidney in October of 2020?

A. Yes, sir, I did.

Q. Was the kidney biopsied or the tumor biopsied after that procedure?

A. Yes.

Q. And what did they tell you the mass was?

A. They told me it was upper tract urothelial cancer.

04:30:48 Q. Were you scared when they told you that?
04:30:50 A. Of course I was scared. I didn't know -- I mean, all I
04:30:54 know and heard was cancer.
04:30:58 Q. Let's talk about after October of 2020 and your recovery
04:31:04 and kind of what you had to do in the immediate aftermath. How
04:31:07 long were you in the hospital?
04:31:09 A. About a week.
04:31:10 Q. How were you feeling emotionally during that time period?
04:31:16 A. Not well. It was during the height of COVID. I didn't
04:31:18 have anybody, any visitors, nobody to visit, nobody to call.
04:31:22 It was -- I mean, it was the most lonely feeling. There's
04:31:33 times I felt lonely in my life, but I never felt more lonely
04:31:35 than when they put me on a gurney and they wheeled me away down
04:31:37 the hallway to go have my kidney removed, and they told me that
04:31:40 I had to sign off on a piece of paper saying I could die from
04:31:43 the surgery.
04:31:46 Q. Was your recovery physically painful?
04:31:49 A. Yes, sir.
04:31:51 Q. How would you rate the pain?
04:31:55 A. Well, they had me on a bunch of pain medications, so, you
04:31:59 know, that -- that helped. But it was painful enough because I
04:32:00 had to have a catheter in. That's a new experience, have to
04:32:05 walk around with one of those. And so but just the way that
04:32:12 your inside of your body would feel was very painful.
04:32:17 Q. So moving forward a little bit, you've had your right

kidney removed in October of 2020. Did there come a time when you had any other medical issues diagnosed with respect to your other kidney?

A. They told me I'd have to be on what's -- I just call them cystos for short. Cystoscopies, I believe is what they're called, so I just call them cystos. But they told me I'd have to have cystos for 90 days until they said that we -- you can stop having them. And so they were basically for follow-up because they told me that I was at a -- had a higher rate for bladder cancer because of where the kidney cancer was, and since I urinated out of that kidney that was diseased, that's what they were worried about.

Q. And the cystoscopy procedure, explain to Judge Boyle what that involves.

THE WITNESS: Oh, it's very humiliating, Judge.

A. But you go in and you're undressed and they put numbing gel on your penis, and then they run a tube up it with a camera on it till it gets into your bladder. And that procedure can last 10 to 15 minutes, longer if they see something.

Q. Just rough estimate, do you know how many cystoscopies you've had since you were diagnosed with kidney cancer?

A. Over a dozen.

Q. And are these physically painful?

A. Yes, sir.

Q. Is it painful in the aftermath? Explain how it's --

A. Well, I mean, it's painful in the aftermath because, you know, if you ever had to go to the bathroom or felt the urgency to urinate and you can't, that's the exact feeling that you have for hours after this procedure. And then when you do urinate finally, all the numbing gel that they used to insert the tool with burns completely all the way down through your urethra until it exits into the toilet.

Q. Did there come a time when your remaining kidney was diagnosed with chronic kidney disease?

A. I didn't find out about that particular diagnosis until six months after my right kidney was removed.

Q. And tell us about how you found that out and how you received that news.

A. Well, Heather and I went to the VA at Audie Murphy and they said, "Come," you know, "for your follow-up." Well, we're going there thinking that we're going to have, you know, a good follow-up, thinking everything was going to be good, you know, I'm finally out of the woods.

And we go in there and they told us to sit down, and they just came out and said it, "By the way, Mr. Mousser, you're in stage 3b chronic kidney disease." Of course, my wife starts crying. I just chuckled and said, "You got to be kidding me," although I don't think those were the exact words I used.

But it -- I just -- I just asked, "Lord, you know, when are you going to let me off the mat a little bit here?" It

04:35:17 just seems like, man, we're going, everything was good, and --
04:35:20 and then we -- then we got that diagnosis.
04:35:24 Q. Did the doctors at any point in time tell you what might
04:35:28 happen to the remaining kidney in the future?
04:35:36 A. They told me they could put me on a drug to stop the
04:35:38 regression of the kidney, but they didn't feel like I needed to
04:35:41 have that yet, just yet, but they told me that I was a
04:35:44 candidate for dialysis or a transplant.
04:35:51 Q. How would you describe your health since your kidney was
04:35:54 removed? What health issues have you had since it was removed?
04:36:10 A. I've had to deal as a consequence of the surgery with high
04:36:14 blood pressure from day one after my kidney was removed because
04:36:18 it's a consequence of having your kidney removed. And so with
04:36:22 the constant tinkering with medications and things of that
04:36:25 nature, you just -- you can't get a -- you can't get -- you
04:36:30 can't get balanced.
04:36:32 Some days, you know, you don't feel good at all because
04:36:36 the blood pressure is up and you're kind of feeling lightheaded
04:36:38 and dizzy. Other days you just feel so lethargic because I had
04:36:43 insomnia. I developed that. I developed major depression,
04:36:48 severe.
04:36:48 The nocturia probably bothers me the worst because I'm up
04:36:56 four or five times a night going to the bathroom, and I can't
04:36:58 get any sleep and I get tired. Then I get grumpy and then --
04:37:02 you know, so it's been -- but there's been a host of things

that have -- that have come because of this.

MR. GARAND: Objection, Your Honor. It's impermissible expert testimony. We also filed a motion in limine on this issue. There's no expert testimony. Dr. Del Pizzo did not testify as to the cause of these secondary conditions, and these also are not listed on their Short-Form Complaint.

THE COURT: Overruled.

Q. Were you diagnosed with depression before your kidney was removed?

A. No.

Q. Were you diagnosed with any of -- did you have any of these other secondary issues that you've talked about before your kidney was removed?

A. No.

Q. You've described your sleep has been interrupted as a result of this?

A. Yes, sir.

Q. How has the removal of your kidney affected your intimacy with your wife?

A. There isn't any.

Q. Is that something that causes you anguish?

A. When you sleep with your wife at night, that's what a family man does. You get married; that's what you do. So, yes. Yes sir, it has.

Q. And you haven't been sleeping with her for what reason?
A. Because she's had to carry the weight. She had to go to work.
Q. So you don't want to interrupt her sleep because she's going to work in the morning?
A. Yes. Yeah, I don't want to walk in there at 3:30 in the morning when I'm still up, staring at the ceiling, interrupt her sleep.
Q. Why are you up at 3:30 in the morning?
A. I can't shut my mind off.
Q. What are you thinking about?
A. I'm thinking about, you know, when you got older, it's supposed to be your golden years, right? It's supposed to be everything was good and your family was moved on, and now was the time that you had a little bit of money in the bank and you had some things going, and you're going to travel and go do things like everybody else does, and that's all been interrupted. Now I'm umbilical to the VA hospital because of my condition.
Q. And you said your cancer recurred in 2024; is that right?
A. After doing one of those exploratory cystos, they found a -- they found a tumor in there, and he said -- the urologist said they wanted to keep an eye on it. He didn't think at that time it looked like anything. And then so we came back again and had it, and then he looked at it some more and said, "You

know, just let's just err on the side of cautious here and let's set you up for surgery to get that out," which they did.

Q. And you've actually been treated for depression by the VA; is that right?

A. I was diagnosed and treated by -- for depression by the VA, but the treatment is not --

Q. Okay. I want to talk about the effect that this has had on your work life, sir. You said you were last employed at Mercer Motors; is that right?

A. That's correct.

Q. And when did you leave that job?

A. In October of 2023.

Q. Why did you leave that job?

A. I could no longer do that job --

Q. Why not?

A. -- and I've --

Q. I'm sorry, I didn't -- I didn't mean to interrupt you. Why couldn't you do the job?

A. Well, Richie, for context here, is my best friend. And I tried working for three years after my original surgery, and I moved up to Seguin to help my buddy because we had a friend of ours die, and I told Richie, "You know what, I'll come up here and help you."

My plan was to go up there and help him replace the friend who had passed away, and as a bonus to that, my wife would come

along and run the office, and so that was a good setup. So I didn't ever have any plans of leaving. I have a home in Kerrville. I didn't drop everything there to move up to Seguin just to quit six months later.

But after a couple of months of talking to Richie about things that were happening to me -- and he was very gracious about me going back and forth to the doctor. You couldn't ask for a better guy. I told him I didn't know how much longer I could be able to hang on, and he would always talk to me, "Oh, you can do it, you can do it, you can do it." He was my best friend.

Q. Did you try -- did you try to make it work?

A. Oh, yeah, I tried to make it work.

Q. I want to refer you to Plaintiff's Exhibit 110 in that exhibit binder, the fourth page. Is this a document --

A. 110 you said?

Q. The last page of Plaintiff's Exhibit 110.

MR. DOWLING: May I approach, Your Honor?

THE COURT: Yeah.

Q. Do you recognize that document?

A. I do.

Q. Okay. And is this from the -- your second to last employer, right?

A. That's when Heather and I both worked at Cecil's.

Q. That's before Mercer Motors?

A. Correct.
Q. And what does it say under the "Reason for Separation" on that document?
A. "Leaving to take care of my health."
Q. So were you having some health issues around this time as well?
A. I was.
Q. Okay. And what's the date of this document?
A. 12/21/2022.
Q. Now, how old were you when you stopped working, sir?
A. I was 60.
Q. How long did you intend to work?
A. Sixty-five, longer.
Q. Are you receiving any sources of income right now from the VA?
A. I am.
Q. Okay. And do you know how much you're receiving roughly?
A. Yes, sir. It's 4,600 a month.
Q. Okay. And has the VA found you to be unemployable?
A. Yes, they found me to be unemployable individual -- it's called TDIU, is what that program is called.
Q. Okay. I want to refer you to Plaintiff's Exhibit 120. Is this an official government record from the Department of Veterans Affairs?
A. It is.

Q. Okay. And this relates to your VA benefits?
A. It does.
Q. And on page 4 of 5, under paragraph 4 -- I'm sorry. On page 3 of 5, under paragraph 2, does it say, "Entitlement to individual unemployability is granted from October 21, 2023, because you are unable to secure or follow a substantially gainful occupation as a result of your service-connected neoplasm of kidney (urothelial cancer) status post right kidney removal and ureter removal with left kidney chronic kidney disease," and then it goes on; is that what it says in that document?
A. It does.
Q. So this is actually the Government was finding you were unemployable?
A. Correct.
Q. And that you couldn't go back to work?
A. Correct.

MR. DOWLING: Your Honor, we move to introduce Plaintiff's Exhibit 110 and 120.

THE COURT: It's received.

(Plaintiff's Exhibit Numbers 110 and 120 received.)

Q. There's testimony in this case, sir, about your need for a transplant and the dialysis in the future. If you had the choice, would you have a transplant at the VA or at a private hospital?

A. Oh, private hospital.
Q. Why is that?
A. Well, the continuity care at the VA, although at the beginning, was very good -- I think I even made a statement about that. I loved it. I mean, they were very good. But after a while of going through there, you just had -- you're just another number.

When I was going back to have my follow-up with the kidney department, I would never see the same doctor twice within a three-month, six-month, never. And so what happens is, is you can't develop a relationship with a medical personnel to tell them -- they don't know about you. They don't put their hands on you. They don't even put a stethoscope on you, you know. And so you have to explain your medical history over and over again.

Q. Who is Dr. Flood, sir?
A. He's the guy who runs the -- he's what's called the main provider, and so you have -- it's kind of like a law firm, I guess. You have the main people and the partners. Then you have people that work below them. That's what -- that's what Dr. Flood is. He would be like a partner.

But he's -- I think I've said this before. He's kind of like Charlie from *Charlie's Angels*, right? You never see that guy. You just -- you know, they all go running to him with anything that they may have found, but you never see him. And

then the other people come back and they tell you, "Well, you know, we're going to be doing this, we're going to be doing that."

Q. And Dr. Flood, it's anticipated, he was deposed and he testified that you're doing well.

A. What?

Q. Do you think Dr. Flood's in a position to testify to that effect?

A. You know, I don't -- I don't think so.

Q. Why not?

A. I've never even seen that -- the last time I saw was in Kerrville not that long ago, and I didn't see -- I drove longer to get there than what the appointment was. If that -- and so -- and the reason I was there was because my lab had a different deal that needed to be looked at, and he just kind of blew it off and said, "Well, you know, you're holding good. You know, you still have 53 percent of your kidney left, and, you know, it may go up, and if you go in and get a lab done here or there, I'll be checking on it." Well, it doesn't give you a warm and fuzzy feeling.

And I didn't -- I didn't have that because prior to all this, before my cancer was -- my kidney was removed, I had a doctor who called me on the phone who told me that I didn't have cancer from the VA.

And so to answer your question, I guess, in the short

form, is I'd rather be seen by medical doctors that are in the private community.

Q. I just want to ask you, in sort of summation and in your own words, how has kidney cancer affected you, sir?

THE WITNESS: Judge, I'm -- I'm scared. I never felt like that. I'm scared because I don't know -- I don't know what's going through me or what may happen five years from now. The VA's famous for finding that this did that, but my whole life has been flipped upside down on its -- on its head, from the job that I loved going to every single day, that I spent the majority of my life at, going to the NADA Academy, learning how to be good at it, to being diagnosed with major depressive disorder because of the kidney cancer, with that, the host of everything else, but I just can't -- I can't seem to get a handle on it.

And I'm not -- I'm isolated. I've become the guy now that basically nobody really wants to ask how you are because they don't want a 30-minute conversation about how you're not, and so it's a -- I think the thing that bothers me the most is seeing how much it's affected my family, and I think that's the things that keep me up at night. And I don't know why this has happened to me. I wish it wasn't so, but it is. And it's hard to tell you-all. I was a Marine. Marines, we don't get scared.

Q. Has kidney cancer destroyed your life?

A. Yes.

MR. DOWLING: No further questions, Your Honor.

THE COURT: Do you have any cross?

MR. GARAND: Yes, Your Honor. If I may approach with our exhibit binder, please.

CROSS-EXAMINATION BY MR. GARAND:

Q. Mr. Mousser, I have a handful of topics that I want to discuss with you. I know some of these may be sensitive, so I'm going to try to get through these as quickly as possible, okay?

A. Okay.

Q. I'm going to ask you a few questions here to start. You've seen various medical providers for your medical conditions, correct?

A. I have.

Q. And when you've seen those providers, you've told them the truth, right?

A. Yes.

Q. You filed various applications for benefits with Social Security and VA, correct?

A. Correct.

Q. And when you filed those applications, you told the truth on those applications, correct?

A. Yes.

Q. And finally, when you discussed your medical issues with

your experts in this litigation, you told them the truth, correct?
A. Yes.
Q. Mr. Mousser, let me first ask you about your urinary tract issues that are the subject of this litigation. You experienced visible blood in your urine for the first time in 1983, correct?
A. Correct.
Q. And you experienced microscopic, i.e., not visible, blood in your urine at various times from 1984 to 2013, correct?
A. I didn't see it, so I -- I couldn't answer that question.
Q. Mr. Mousser, you went to clinics in that time and had tests done that resulted in a showing of microscopic hematuria, correct?
A. There may have been an occasion or two.
Q. And you experienced visible blood in urine again in 2013, right?
A. Yes.
Q. And again in 2017?
A. Yes.
Q. And you were not diagnosed with the malignancy through 2017, correct?
A. Yes.
Q. And you were diagnosed with upper tract urothelial carcinoma, or UTUC, in August of 2020, right?

A. Correct.
Q. And you had surgery to remove your right kidney, ureter and bladder cuff in October of 2020, correct?
A. Right.
Q. After which point you were diagnosed with chronic kidney disease, right?
A. Six months later, right.
Q. Plaintiff's counsel showed Mrs. Mousser, your wife, various treatment records from 2021. Do you recall that?
A. I do.
Q. You're currently diagnosed with chronic kidney disease, stage 3a, right?
A. Yes.
Q. And you've been diagnosed with that for years, right?
A. No. I don't know -- I don't know what the stage is because I'm not going down there -- you know, they're not telling me, you know, what that is. I have to request that, and so I don't know exactly what stage it's in today.
Q. Mr. Mousser, you're aware that one of your VA providers concluded that you had a low probability of any significantly advanced chronic kidney disease, right?
A. I haven't heard that.
Q. Mr. Mousser, let's flip to your witness binder, and we're going to look at tab 6, please. Please let me know when you're there, Mr. Mousser.

04:54:12 A. I'm here.
04:54:16 Q. The title of this note is a "Nephrology Note." Do you see that at the top?
04:54:19
04:54:22 A. I do.
04:54:24 Q. And about halfway down the page, you see your name, Mousser, Frank Wayne, correct?
04:54:26
04:54:28 A. Yes. It's on page 18, right?
04:54:34 Q. Correct. If you flip to Bates in the -- or the -- let's see, the second to last page here in this record, and we're looking at this -- the second to the last paragraph on this page. Please let me know when you're there.
04:54:41
04:54:51
04:54:54
04:54:59 A. I'm there.
04:55:00 Q. This provider wrote that, "Discussed long term increased risk for hypertension, proteinuria with low probability of any significant advanced chronic kidney disease progression, providing he does not have intrinsic renal disease in his remaining kidney," correct?
04:55:03
04:55:08
04:55:11
04:55:13
04:55:14 A. That's what it says.
04:55:18 Q. You mentioned Dr. Andrew Rockwood previously, correct?
04:55:22 A. I did.
04:55:22 Q. And he's the provider who first discovered the mass on your right kidney, correct?
04:55:25
04:55:26 A. Right.
04:55:28 Q. You're aware that he wrote in your report -- in your records that your lab results show excellent and preserved
04:55:33

renal function, correct?
A. I'm not aware of that. They don't give me copies of my lab reports.
Q. All right. Mr. Mousser, let's look at tab 7, please. Do you see that this is a urology telephone encounter note?
A. It's a telephone, you said?
Q. The standard title is "Urology Telephone Encounter Note." Do you see that?
A. Yes.
Q. And the date there is April 18, 2022, correct?
A. Yes.
Q. And the author is Dr. Rockwood?
A. Correct.
Q. Do you see the "Assessment" tab -- or heading towards the bottom of the page?
A. And we're on page 416?
Q. Sorry, Mr. Mousser, we're on tab 7.
A. Okay.
Q. Okay. And we're looking at --
A. I see the assessment.
Q. -- where it says, "History of transitional cell carcinoma right kidney with current renal function studies showing excellent and preserved renal function," correct?
A. Correct.
MR. GARAND: And for the record, this is United

States Exhibit 353, and, Your Honor, I'd ask to move that -- this record -- or this exhibit into the record, please. Your Honor, I ask that Exhibit -- United States Exhibit 353 be moved into the record.

THE COURT: Be what?

MR. GARAND: Be moved into the record.

THE COURT: Be moved into the record?

MR. GARAND: Admitted into evidence.

THE COURT: Yeah, it'll be allowed.

MR. GARAND: Thank you, Your Honor.

(Defendant's Exhibit Number 353 received.)

Q. Mr. Mousser, you're claiming significant emotional distress in this litigation, correct?

A. Yes.

Q. So, Mr. Mousser, there are a handful of questions I need to ask you. I apologize these are sensitive, and I'll try to get through these as quickly as possible, okay?

You testified in your deposition that you grew up in a broken home, correct?

A. I did.

Q. And you recall meeting with a Dr. Roger Moore in this litigation, correct?

A. Yes.

Q. And he interviewed you, right?

A. He did.

04:57:55 Q. And you reported to Dr. Moore that your biological father
04:57:57 became estranged almost from the time of your birth, right?
04:58:01 A. Correct.
04:58:02 Q. You weren't particularly close to your biological father
04:58:05 while he was alive, correct?
04:58:07 A. No.
04:58:08 Q. And you're not particularly close with your biological
04:58:10 mother, correct?
04:58:10 A. No.
04:58:11 Q. You're not particularly close with any of your half
04:58:14 siblings, right?
04:58:19 A. Correct.
04:58:21 Q. One of your half siblings is Tammy, right?
04:58:28 A. I guess.
04:58:30 Q. You testified in your deposition that your sister, Tammy,
04:58:33 was severely injured as a pedestrian in a hit-and-run accident
04:58:37 when she was a kid, correct?
04:58:39 A. That's correct.
04:58:40 Q. And you were a child when this happened as well, right?
04:58:43 A. I was.
04:58:45 Q. And you reported to Dr. Moore that this incident left her
04:58:49 with significant brain injuries, right?
04:58:51 A. It did.
04:58:54 Q. You also told Dr. Moore that this incident had a profound
04:58:57 negative impact on the family, right?

A. Well, of course.
Q. In fact, you told Dr. Moore that the accident and subsequent emotional distress shattered the family unit, right?
A. Well, I was a kid. I just was seeing what I was seeing.
THE COURT: What do you think this is accomplishing? You know, I'm the finder of fact in the case. Are you impeaching his credibility?
MR. GARAND: No, Your Honor.
THE COURT: What are you doing? This is one of the silliest things I've ever seen.
MR. GARAND: Your Honor, he's claiming significant emotional distress in this litigation, and there's --
THE COURT: You know, go ahead and work counterproductive. Go ahead.
MR. GARAND: Thank you, Your Honor.
THE COURT: See what that gets you. Gee.
Q. (By Mr. Garand) Mr. Mousser, let's talk about your health care with the VA. You've been treated at the VA for over six years now, right?
A. Yes.
Q. And you've been treated for your cancer and all related conditions at the VA, right?
A. Well, yeah, I have no private insurance, so I have no choice but to go to the VA.
Q. You did not and have not paid for any of the services that

you received at the VA, correct?
A. That's because when I filled out the form, it said Camp Lejeune was a priority one, and I didn't have to have any copay because of Camp Lejeune. I didn't write that. It was right there on the form.
Q. I understand, Mr. Mousser. So the answer is yes to my question?
A. I guess so.
Q. You don't currently have health care insurance, correct?
A. No.
Q. Your last employer was Mercer Motor Company, right?
A. Correct.
Q. And you declined accepting the health insurance offered by Mercer Motor Company while you were employed there because you had health coverage through the VA, right?
A. No, because it was way too expensive, and Richie and I talked about that. He said he was willing to pay that, and I said, "Richie, you don't need to. You don't need to have that big health expense. You know, just add it to my pay plan. I'll take it that way, and I'll just stay with the VA."
Q. So Mr. Mercer offered that health insurance and you declined it, correct?
A. Correct.
Q. Let me ask you about your service-connected disabilities. You receive veterans disability for various conditions, right?

05:01:13 A. I do.
05:01:14 Q. And you're currently service connected for insomnia at a
05:01:17 70 percent rating, right?
05:01:18 A. That's incorrect. Insomnia is not a standalone rating.
05:01:23 That rating would be wrapped up in the -- in the mental health
05:01:27 rating. Insomnia is -- it's not standalone. So if it's
05:01:31 70 percent, it's in there with a host of other. So there's
05:01:35 probably a paragraph of what's in there to get that rating.
05:01:37 Q. Mr. Mousser --
05:01:37 A. Insomnia just happens to be one of them.
05:01:41 Q. Thank you, Mr. Mousser. We're going to take a look at tab
05:01:43 15, please, and this is a subset of Exhibit -- United States
05:01:53 Exhibit 910. Mr. Mousser, please let me know when you're
05:01:58 there.
05:01:58 A. I'm here.
05:01:59 Q. Do you see that you are -- the subject, "Compensation"
05:02:02 heading, and the first one is, "Insomnia with depressive
05:02:05 disorder, chronic, ongoing," associated with your cancer,
05:02:09 correct?
05:02:10 A. Yeah. In the VA language, that's -- that's termed as a
05:02:13 secondary illness that's rated off the original illness, which
05:02:18 is cancer.
05:02:19 Q. Mr. Mousser, you see underneath there that this is
05:02:22 characterized by VA as a static disability?
05:02:25 A. I do see that.

05:02:26 Q. You're also service connected for cystitis of the bladder
05:02:29 with hematuria, now also claimed as overactive bladder with
05:02:34 nocturia, correct?
05:02:35 A. Correct.
05:02:38 Q. And that's at a 40 percent rating, correct?
05:02:40 A. Well, it was at 0 in 2019. And then somehow or another,
05:02:47 the VA, Your Honor, decided to honor me with that rating.
05:02:53 Q. So since 2022, it's been rated at a 40 percent rating,
05:02:56 correct?
05:02:56 A. Correct.
05:02:57 Q. And VA also characterized this condition as static, right?
05:03:04 A. You have to forgive -- this is the first time I've ever
05:03:05 seen these, so, yeah.
05:03:07 Q. I understand, Mr. Mousser. You're also service connected
05:03:10 for your cancer and chronic kidney disease at a 30 percent
05:03:14 rate, correct?
05:03:15 A. Yeah, they rate you at 30 percent when they remove one
05:03:17 kidney.
05:03:19 Q. And, Mr. Mousser, at the top of the second page of this
05:03:22 exhibit, it also -- VA also characterizes this condition as a
05:03:26 static disability, correct?
05:03:28 A. Correct.
05:03:29 Q. You're also service connected for tinnitus, right?
05:03:31 A. That's ringing in my ears, right.
05:03:34 Q. And that's also a static disability by VA, correct?

05:03:37 A. Correct.
05:03:37 Q. And then finally, you're service connected for surgical
05:03:40 scars associated with your cancer, right?
05:03:42 A. I don't get compensated for that. Zero.
05:03:45 Q. But you're service connected for that condition, correct?
05:03:47 A. I never knew that, but looking at it, yes.
05:03:50 Q. And, again, this -- VA characterizes this as a static
05:03:53 disability, correct?
05:03:55 A. Yes.
05:03:59 Q. Mr. Mousser, as a result of your service-connected
05:04:02 conditions, you understand that you're being compensated at a
05:04:07 100 percent rating because VA found you to be unemployable due
05:04:10 to your service-connected disabilities, right?
05:04:14 A. I mean, I have a 90 percent rating, but I'm being paid at
05:04:17 the 100 percent rating because the writing in the VA CF-34 Part
05:04:25 IV requires that if you're unemployable, they have to pay you
05:04:28 at the 100 percent rating if they determine that you are
05:04:34 unemployable. But that is correct, I do get paid at the
05:04:37 100 percent rating, although I have a 90 percent rating as
05:04:40 well.
05:04:41 Q. Thank you, Mr. Mousser. You're -- VA granted entitlement
05:04:46 to TDIU based on all five of your service-connected conditions,
05:04:50 correct?
05:04:51 A. That's cumulative, correct.
05:04:54 Q. And you understand that on top of the payments you receive

for your 100 percent disability, you receive an additional special monthly compensation, right?
A. Yes, sir. That's in with that 4,600, I believe.
Q. Thank you, Mr. Mousser. Let's talk about your employment history next. You're not currently employed, right?
A. No.
Q. Mercer Motor Company was your last employer, correct?
A. Correct.
Q. Mercer Motor Company was a small mom-and-pop operation, right?
A. Yes.
Q. And it was owned and operated by your good friend, Mr. Richard Mercer, right?
A. Correct.
Q. Mr. Mercer accommodated your medical conditions while you worked there, right?
A. He did.
Q. And he gave you time off to attend medical appointments, right?
A. He did.
Q. And you would have approximately two to four medical appointments a month, right?
A. Sometimes more.
Q. Let's discuss what you did while working at Mercer Motor Company. You worked eight to nine hours per day, right?

05:05:56 A. Yeah, nine to ten hours.
05:05:59 Q. And you were required to stand and walk approximately four
05:06:03 to six hours, right?
05:06:07 A. Well, we were -- there was -- a large percentage of that
05:06:11 dealing with customers was sitting in the seat, 20 percent on
05:06:15 your feet, 80 percent in the seat.
05:06:18 Q. Mr. Mouser, I'm happy to show you the record. This is
05:06:20 from your Social Security benefits application. Do you have
05:06:23 any reason to dispute that that's correct?
05:06:25 A. I'm familiar with it.
05:06:29 Q. You were required to sit approximately one hour per day,
05:06:32 right?
05:06:33 A. Required?
05:06:34 Q. You sat about one hour per day at Mercer Motor Company,
05:06:38 right?
05:06:38 A. Ah --
05:06:38 Q. Would you say more than one hour per day?
05:06:43 A. Yeah, I'm sure there was times where more than an hour.
05:06:46 Q. You were exposed to extreme heat, extreme cold, wetness
05:06:49 and humidity while working at Mercer Motor Company, correct?
05:06:54 A. Yes, sir.
05:06:56 Q. Regarding the extreme heat, this is because you were in
05:06:58 and out of vehicles in the Texas heat, right?
05:07:01 A. Correct.
05:07:03 Q. And being in the sun and in and out of cars would trigger

05:07:06 extreme headaches and back pain and you got dizzy with all the
05:07:10 up and down that the job required, right?
05:07:11 A. That's what I stated.
05:07:14 Q. Let me ask you about your job before Mercer Motor Company.
05:07:19 You worked at Cecil Atkission Motors or an affiliated
05:07:22 dealership for approximately 20 years before Mercer Motor
05:07:25 Company, correct?
05:07:26 A. Correct.
05:07:28 Q. You were a finance director at Cecil Del Rio Motors,
05:07:31 right?
05:07:31 A. I was the general manager.
05:07:33 Q. You became the general manager, correct?
05:07:34 A. Correct.
05:07:37 Q. Your responsibilities at Cecil Atkission Motors were
05:07:40 greater than those at Mercer Motor Company, right?
05:07:48 A. No, the workload was probably a little bit more at Mercer
05:07:50 Motors than it would have been at Cecil's.
05:07:53 Q. Mr. Mousser, I asked a slightly different question. Your
05:07:56 responsibilities at Cecil Atkission were greater than those at
05:07:59 Mercer Motor Company, correct?
05:08:02 A. No, they were even.
05:08:04 Q. So you were a general sales manager at Del Rio Motors?
05:08:06 A. Right. I was brought up to Mercer Motors to fill that
05:08:08 position as well.
05:08:10 Q. Mr. Mousser, the setup and your position at Mercer Motor

05:08:13 Company was not what you expected, was it?
05:08:16 A. Oh, it was good.
05:08:19 Q. Mr. Mousser, let's look at tab 22, please. Please let me
05:08:27 know when you're there, Mr. Mousser.
05:08:31 A. Yeah. Page 116?
05:08:31 Q. Correct. And you see this is a mental health outpatient
05:08:36 note at the top of the page?
05:08:40 A. I see that.
05:08:41 Q. And the author is Dr. Janet Mueller, right?
05:08:44 A. Yes, sir.
05:08:45 Q. And she's your treater at VA for your mental health
05:08:48 issues, right?
05:08:48 A. No.
05:08:49 Q. Sorry, Mr. Mousser?
05:08:51 A. No, she is not.
05:08:53 Q. Was she your treater back in December of 2023?
05:08:56 A. She treated me early on during this, back in 2020 when all
05:09:01 this got going. She was the original psychiatrist that I saw,
05:09:06 very infrequently, too. But what they do, again, on this is
05:09:11 they have different people that work in these departments, and
05:09:14 they have one provider and everything follows under their
05:09:17 purview, and so it's not uncommon to see a piece of paper with
05:09:20 somebody else's name on it, but you necessarily hadn't seen
05:09:22 that person.
05:09:24 Q. So it's your testimony today that you did not see

Dr. Janet Mueller in December of 2023?
A. Of December 2023? This says -- this paper says '24.
Q. Mr. Mousser -- oh, my apologies. No, Mr. Mousser. Yes, sorry. My apologies. We're looking at tab 22. I think you might have gone one too far. And, Mr. Mousser, the date of the note, which is the third line of the heading, says December 5, 2023. Do you see that? We're looking at tab 22, which has a big "United States Exhibit 270" at the bottom.
A. Right. I see that.
Q. And you see at the top of the page the date of the note is December 5, 2023?
A. I do see that.
Q. And the author there is Dr. Janet Meuller, right?
A. Correct.
THE COURT: How much more do you have?
MR. GARAND: Your Honor, I'm probably about halfway through.
THE COURT: Seriously?
MR. GARAND: Yes, Your Honor.
THE COURT: Okay. Well, is this your last witness?
MR. DOWLING: So, Judge, we have two sort of collateral witnesses, an economist and a life care planner. I think it'll take about 15 or 20 minutes. Then we also have this trial deposition you ordered us -- we couldn't get somebody here, so we took a trial deposition. But we have the

transcript, and we were just going to offer that for the Court to take it under advisement.

But our other two witnesses will be here tomorrow morning, and we can knock them out very quickly, subject to whatever they need to do, but, yeah, that's our case after that.

THE COURT: Okay. So you can come back tomorrow and finish this. How many witnesses do you have?

MR. BAIN: Your Honor, we have about -- I would say about eight witnesses, I think.

THE COURT: About eight?

MR. BAIN: Yeah. Yes.

THE COURT: Okay. So we'll finish tomorrow?

MR. BAIN: I think that we -- well, we have one witness --

THE COURT: Do you have witnesses coming Wednesday?

MR. BAIN: Well, Your Honor, I can explain if you give me a minute. We have one witness who had surgery last week. He's our specific causation expert. He had an embolism and he had to have surgery. He's been cleared by his doctor to fly here, but he cannot get here till Wednesday. He's been delayed because of the surgery event. He's the only witness who can't be here until Wednesday.

THE COURT: Okay. So we're not going to finish tomorrow?

05:12:06 MR. BAIN: No, Your Honor, if you allow us to call this witness on Wednesday.

05:12:08 THE COURT: Yeah, okay. All right. Let's close it up for the night. It's quarter after 5:00. We'll resume with the cross-examination of this witness when we reconvene tomorrow at 10:00. Court will be in recess.

05:12:10

05:12:15

05:12:23

05:12:26

05:12:56 (An overnight recess was taken at 5:12 p.m.)