

# Deposition Testimony of:

## **Mark Sogge**

Date: September 19, 2012

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Page 345:05 to 348:02

00345:05 This is the continuation of the  
06 deposition of Mark Sogge. Today is September  
07 19th, 2012. The time is 8:32 a.m. We're on the  
08 record, beginning Tape 8.  
09 MARK KENNETH SOGGE,  
10 having been previously duly sworn, continued to  
11 testify upon his oath as follows:  
12 DIRECT EXAMINATION (Continued)  
13 QUESTIONS BY MR. ROMAN:  
14 Q. Good morning, Mr. Sogge. Good to see you  
15 again.  
16 A. Good morning.  
17 Q. I understand from your Counsel that you  
18 want to correct one of your answers from  
19 yesterday?  
20 A. Yes. Yeah.  
21 Q. Why don't you go ahead and do so?  
22 A. I realized later in the evening -- you  
23 had asked me a question toward the end, I think,  
24 of yesterday about how long the peer review of  
25 the Flow Rate Technical Group Final Report took,  
00346:01 and I answered I thought it was between three  
02 and -- or two and five days.  
03 I realized that I had -- that was  
04 incorrect, that I had been thinking about what we  
05 call the Bureau Approving Official Step. Within  
06 USGS --  
07 Q. M-h'm.  
08 A. -- after you've had a product  
09 peer-reviewed, there is an Approving Official who  
10 looks over your review and makes sure that you  
11 took into account comments from the reviewers.  
12 That was the step that took, I think, about three  
13 days. The peer review itself took place over a  
14 period of a couple of weeks.  
15 Q. And what period of weeks was that?  
16 A. That was in February, still.  
17 Q. Okay. Thank you for that clarification.  
18 A. Thanks for the opportunity.  
19 (Exhibit No. 8848 marked.)  
20 Q. (By Mr. Roman) Mr. Sogge, I'm handing you  
21 what's been marked as Exhibit 8848, which can be  
22 found at Tab 64 in the notebooks. Have you seen  
23 this document before?  
24 A. Let me give it a quick scan. (Reviewing  
25 document.) Yes, I have.  
00347:01 Q. Exhibit 8848 is an E-mail exchange  
02 between you and Mr. Hines, correct?  
03 A. Correct.  
04 Q. And it looks like the E-mails were sent  
05 and received on July 11th of 2010, correct?  
06 A. Correct.  
07 Q. Okay. Starting with Mister -- oh, I'm

08 sorry. Starting with your E-mail at 11:56 a.m.,  
 09 you write to Mr. Hines: "The large range" --  
 10 I'm sorry. This is about two-thirds of  
 11 the way down the -- the E-mail. It reads: "The  
 12 large range in the estimates (up to a 75,000"  
 13 barrel per day "between minimum and maximum) is a  
 14 result of using a variety of modeling scenarios  
 15 due to uncertainties about how the well structure  
 16 actually failed and the fluid...path into and  
 17 within the well."

18 And then just to complete the -- the --  
 19 the chain, at the top, Mr. Hines responds to you:  
 20 "Mark -- I think it's clearer, but as you pointed  
 21 out the other day it's a huge range and that's  
 22 difficult to understand."

23 Do you see all that?

24 A. I do.

25 Q. Now, it was a fact, was it not, that as  
 00348:01 of July 11th, 2010, there was a huge range of  
 02 estimates that the FRTG was considering?

Page 348:05 to 348:21

00348:05 A. In the context of what Vic Hines and I  
 06 were E-mailing back and forth, in this particular  
 07 case, it was the Nodal -- you'll notice it's the  
 08 Nodal Analysis Team. And there was a large range  
 09 of different estimates from that Team, because as  
 10 you recall, each Subteam looked at it with  
 11 different assumptions and different approaches.

12 Q. (By Mr. Roman) So the huge range of -- of  
 13 estimates was within -- was within the -- within  
 14 the Nodal Team?

15 A. Right.

16 Q. Okay. And that was because of  
 17 uncertainties among oth -- in -- in the -- as to  
 18 how the well structure actually failed and the  
 19 fluid flow path and -- and as to the fluid flow  
 20 path into and within the well, correct?

21 A. Correct.

Page 348:24 to 349:02

00348:24 Q. (By Mr. Roman) Now, one of the  
 25 uncertainties about the fluid flow path into and  
 00349:01 within the well was the timing and extent of  
 02 erosion within the BOP, correct?

Page 349:06 to 349:08

00349:06 A. My personal understanding is that erosion  
 07 was one of the factors that the Nodal Team, in  
 08 particular, was very interested in.

Page 351:05 to 351:12

00351:05 Q. (By Mr. Roman) Did you have an  
06 understanding as to whether anyone at the FRTG or  
07 anyone -- strike that.  
08 Do you know whether anyone as -- at the  
09 FRTG knew, as of July 11th, 2010, the extent of  
10 erosion of any component or element of the flow  
11 path?  
12 A. No.

Page 351:14 to 351:21

00351:14 Q. (By Mr. Roman) You don't know, or no one  
15 knew?  
16 A. I'm not aware of anyone knowing.  
17 Q. And do you know -- well, would you agree  
18 that because of the uncertainties to which you  
19 refer in Exhibit 8848, that during this period,  
20 July of 2010, mid July 2010, a wide range of flow  
21 rate estimates was acceptable and reasonable?

Page 351:23 to 352:06

00351:23 A. My understanding was that the estimates  
24 that were produced by the Teams, you know, which  
25 were peer-reviewed, et cetera, by others, all of  
00352:01 those estimates would have been reasonable, given  
02 whatever assumptions and information they had at  
03 the time.  
04 Q. (By Mr. Roman) It was tough to be  
05 definitive, given the number of ob --  
06 uncertainties, correct?

Page 352:08 to 352:13

00352:08 A. My understanding, it was -- it was -- it  
09 wasn't possible at that time to -- to know all of  
10 the variables and factors they want in their  
11 model, so that led to some uncertainties, yeah.  
12 Q. (By Mr. Roman) And one of those factors  
13 was degree of erosion, correct?

Page 352:15 to 353:01

00352:15 A. That was my impression from the questions  
16 that I received from -- I believe it was the  
17 Nodal Team, Dr. Guthrie.  
18 (Exhibit No. 8849 marked.)  
19 A. It may be worth noting that of the  
20 techniques used, the Mass Balance Team, for  
21 example, wouldn't have dealt with erosion, nor

22 would the plume video necessarily dealt with  
23 erosion. So the FRTG Teams -- I guess it would  
24 be the Nodal Analysis Team and the -- perhaps the  
25 Reservoir Team -- would be the primary ones  
00353:01 interested in the issue of erosion.

Page 353:04 to 353:14

00353:04 Q. (By Mr. Roman) I'm handing you what's  
05 been marked as 8849, which is Tab 65 in the  
06 notebook.  
07 A. (Reviewing document.)  
08 Q. Have you seen what's been marked as  
09 Exhibit 8849 before?  
10 A. I believe I have.  
11 Q. Exhibit 8849 is an E-mail exchange  
12 between Dr. McNutt and Tom Hunsaker on which you  
13 and Mr. Ratzel are copied, correct?  
14 A. Correct.

Page 354:02 to 355:07

00354:02 Q. Okay. Directing your attention first to  
03 the bottom E-mail from Dr. McNutt to  
04 Mr. Hunsaker, at the -- in the  
05 second-to-the-la -- in the penultimate paragraph,  
06 she writes: "So here is my question to you" --  
07 and this is addressed to both Mr. Hunsaker and  
08 Mr. Ratzel -- "is there any evidence from the  
09 post-mortem on the BOP that there could have been  
10 significant changes in the resistance to flow in  
11 the BOP caused perhaps by flow of mud and junk  
12 through the BOP during Top Kill that changed the  
13 flow rate by 45,000...to 57,000 barrels per day,  
14 a jump of some 25%? Note that this would be  
15 BEFORE" -- all caps -- "the riser was cut."  
16 And then Mr. Hunsaker responds: "The  
17 only" -- and this is the fourth sentence, I  
18 believe, of the E-mail, fourth line: "The only  
19 thing that would be an influence by the BOP would  
20 be if its impedance changed over time, perhaps by  
21 erosion." Do you see that?  
22 A. I do.  
23 Q. Now, I believe yesterday you testified  
24 about the possibility of erosion being caused by  
25 top kill or -- or the junk shot. Do you recall  
00355:01 that testimony?  
02 A. Yeah, I recall testimony that my  
03 understanding was there were questions about  
04 whether or not erosion may have occurred from  
05 those.  
06 Q. And what do you recall of -- of those  
07 discussions?

Page 355:09 to 355:20

00355:09 A. Yeah. I mean, virtually nothing of the  
10 outcome, just that the question was raised.  
11 Q. (By Mr. Roman) That there was a  
12 possibility of erosion caused by top kill and  
13 junk shot?  
14 A. Or a question of whether it might have,  
15 yeah.  
16 Q. And you don't know whether the FRTG ever  
17 decided one way or the other whether top kill or  
18 the junk shot did, in fact, erode any components  
19 of the BOP or the riser and re -- re -- resulted  
20 in a lessened obstructions of flow?

Page 355:22 to 357:04

00355:22 A. Well, in -- in terms of the way you  
23 phrased that, you know, "Did the FRTG make a  
24 determination," erosion was really outside the  
25 scope of the -- of the FRTG. That wasn't  
00356:01 something that we investigated as part of the --  
02 the Flow Rate Technical Report.  
03 As I mentioned earlier, that wouldn't  
04 have come into play. There -- there weren't  
05 any -- there wasn't really any -- any need to  
06 know that or any interest in that within the  
07 Teams that were basing their measurements on the  
08 AVIRIS or on the plume analysis, so --  
09 Q. (By Mr. Roman) Well, I'm referring to the  
10 other two Teams right now.  
11 A. Right. And -- and even there, I would --  
12 I would say that my understanding is that  
13 their -- the charter for those Teams was not to  
14 make a determination about erosion, but was to,  
15 you know, come up with the flow rates.  
16 Q. Well, to the extent that erosion affected  
17 flow rate, weren't they supposed to look at  
18 erosion?  
19 A. Based on my understanding, they were  
20 trying to take that into account as part of the  
21 model. I --  
22 Q. Okay.  
23 A. But I see that as different than them  
24 being responsible for making a determination  
25 about erosion.  
00357:01 Q. Well, do you know whether any -- whether  
02 they adjusted any flow rates -- any flow rate  
03 estimates, I'm sorry -- based on any conclusions,  
04 assumptions, about erosion?

Page 357:06 to 358:02

00357:06 A. My understanding is that they had to take  
 07 into account as an assumption, something  
 08 involving whether erosion had occurred or not.  
 09 At the time that the Final Reports for the Nodal  
 10 Team and the Reservoir Team came in, which would  
 11 have been about, I think, somewhere in the middle  
 12 of July, I don't know that there would have been  
 13 any definitive information from that model from  
 14 them for erosion.  
 15 Q. (By Mr. Roman) Do you know whether the  
 16 Nodal or Reservoir Teams changed their estimates  
 17 after July of 2011?  
 18 A. No. I -- I -- I believe we used the data  
 19 that -- and the estimates that were in their  
 20 Reports that were turned in in mid July. I know  
 21 you'll have a -- an opportunity to talk to  
 22 Mr. Maclay and Dr. Guthrie. They probably can  
 23 provide more information on that.  
 24 Q. It's fair to say, is it not, that as  
 25 of -- well, at least as of October 18, 2010, the  
 00358:01 FRTG was not sure when erosion took place and  
 02 what the effect of erosion was on flow rate?

Page 358:05 to 361:10

00358:05 A. I -- I can't speak for the full FRTG.  
 06 It -- yeah. I mean, based on this E-mail, it  
 07 looks as if Dr. McNutt still had some questions  
 08 about it.  
 09 Q. (By Mr. Roman) Did you know anybody who  
 10 had answers as of October 18, 2010?  
 11 A. No. I -- I would not be aware of that.  
 12 (Exhibit No. 8850 marked.)  
 13 Q. (By Mr. Roman) Handing you now what's  
 14 been marked as Exhibit 8850, which can be found  
 15 at Tab 66 of the notebooks, and ask if you've  
 16 seen this document before.  
 17 A. (Reviewing document.) I -- I have --  
 18 probably have seen it, yes.  
 19 Q. Exhibit 8850 is an E-mail exchange  
 20 between Dr. McNutt and Mr. Camilli at Woods Hole,  
 21 correct?  
 22 A. Correct.  
 23 Q. And you and, I guess, Mr. Bowen --  
 24 A. Correct.  
 25 Q. -- at Woods Hole are also copied,  
 00359:01 correct?  
 02 A. Correct.  
 03 Q. And the E-mail is dated -- or at least  
 04 the last E-mail is dated September 3 of 2010,  
 05 correct?  
 06 A. Yes.  
 07 Q. I'd like to direct your attention to the  
 08 third page of the document, Dr. McNutt's  
 09 9:53 a.m. E-mail to Mr. Camilli, and, in

10 particular, to the first sentence of the third  
 11 paragraph, where Dr. McNutt writes: "But where  
 12 I'm hearing some disagreement is in the" -- "is  
 13 in the interpretation of flow rate" -- in all  
 14 caps -- "BEFORE the riser was cut."

15 And then going down one paragraph, there  
 16 is a sentence after the number (1) which says --  
 17 well, actually, let me read the -- the paragraph:  
 18 "However, the Plume team does not like this  
 19 interpretation, because you recall that their  
 20 estimates during the period when the riser was on  
 21 were significantly lower. They prefer the  
 22 following explanation."

23 And No. (1) was: "the riser was a major  
 24 restriction to flow."

25 Do you see that?

00360:01 A. I do.

02 Q. Do you recall debate within the FRTG over  
 03 the effect of the kink in the riser on flow?

04 A. I remember discussions about the kink in  
 05 the riser and questions about to what degree --  
 06 we -- we spoke about that earlier yesterday, I  
 07 believe -- to what degree the flow might increase  
 08 if they -- if they cut off, you know, the riser.

09 There was also a lot of E-mail and  
 10 conversations about a recognition that having  
 11 that kink in the riser and having the flow coming  
 12 out from multiple points made for a more  
 13 challenging estimate, because it wasn't all  
 14 coming out of a single source.

15 Q. Do you recall anything else about those  
 16 conversations?

17 A. There was discussion about whether or not  
 18 the -- the kink was significantly, you know, I  
 19 guess changing the flow, slowing it down.

20 Q. And do you recall who held that view?

21 A. Oh. No, I don't recall specifically who  
 22 felt each particular way.

23 Q. Do you recall when those discussions took  
 24 place?

25 A. Well, certainly some of the discussions  
 00361:01 took place before the riser was cut, because  
 02 there were concerns about the increased flow.

03 Q. And the riser was cut in early June,  
 04 correct?

05 A. Correct, that would be June 3rd.

06 And even here, clearly at this point,  
 07 there was still some -- some questions about how  
 08 much might it have affected flow.

09 Q. And this point is September of 2010?

10 A. I'm sorry. Yes, September.

Page 361:14 to 361:17

00361:14 Q. (By Mr. Roman) And one view that was



15 being expressed even as late as September of 2010  
 16 is that there was significant resistance at the  
 17 riser, correct?

Page 361:20 to 361:23

00361:20 A. Based on that document that's  
 21 characterizing it, yes.  
 22 Q. (By Mr. Roman) And that that significant  
 23 restriction at the riser would have reduced flow?

Page 362:01 to 362:03

00362:01 A. That would be my understanding, if it was  
 02 a significant restriction, it would have reduced  
 03 flow.

Page 362:05 to 362:05

00362:05 (Exhibit No. 8851 marked.)

Page 363:07 to 363:08

00363:07 Q. Do you know what the significance of the  
 08 well producing sand is?

Page 363:11 to 363:17

00363:11 A. I do not.  
 12 Q. (By Mr. Roman) Do you know if FRTG  
 13 Members were aware that sand production could  
 14 lead to erosion of -- of BOP and riser  
 15 components?  
 16 A. No, I don't recall anything about sand  
 17 erosion.

Page 363:21 to 365:03

00363:21 (Exhibit No. 8852 marked.)  
 22 Q. (By Mr. Roman) Mr. Sogge, I'm handing you  
 23 what's been marked as Exhibit 8852, which can be  
 24 found at Tab 59 of the notebook.  
 25 (Tendering.)  
 00364:01 Have you seen this document before?  
 02 A. Let me take a quick look.  
 03 (Reviewing document.)  
 04 Yes, I have.  
 05 Q. Exhibit 8852 is an E-mail exchange from  
 06 Dr. McNutt and Martha Garcia on which you are  
 07 copied, correct?  
 08 A. Correct.  
 09 Q. And it's dated June 8th of 2010, correct?

10 A. Yes.  
 11 Q. And Ms. Garcia was the National Incident  
 12 Command's liaison for the FRTG, correct?  
 13 A. Yes. She was there for the first month.  
 14 Q. She was a colleague of yours at the USGS?  
 15 A. Correct.  
 16 Q. Looking at the top E-mail, Dr. McNu --  
 17 McNutt's E-mail, she writes at the beginning:  
 18 "Here is the problem. The flow rate is highly  
 19 dependent on the well completion, the flow path  
 20 you assume through the system of failed core  
 21 liners and annuli" -- and "annuli"  
 22 is a-n-n-u-l-i -- "and through the restrictions  
 23 in the BOP."  
 24 Do you see that?  
 25 A. I do.  
 00365:01 Q. So it's true, is it not, that as of June  
 02 8th of 2010, the FRTG was aware that BOP  
 03 components were restricting flow?

Page 365:06 to 365:12

00365:06 A. I don't know what she had in mind when  
 07 she said "restrictions in the BOP," if that was  
 08 particular components or -- or not.  
 09 Q. (By Mr. Roman) Well, without putting too  
 10 fine a point on which components, she was aware  
 11 and the FRT was -- FRTG was aware that there were  
 12 components of the BOP that were restricting flow?

Page 365:14 to 365:16

00365:14 A. Or -- yeah, I guess, or that in some way  
 15 the BOP constricted flow, certainly. That's my  
 16 understanding.

Page 365:19 to 365:24

00365:19 (Exhibit No. 8853 marked.)  
 20 Q. (By Mr. Roman) Dr. Sogge, I'm handing you  
 21 what's been marked as Exhibit 8853, which can be  
 22 found at Tab 61 of the notebook.  
 23 (Tendering.)  
 24 A. Thank you.

Page 366:06 to 368:10

00366:06 Q. Mr. Sogge, have you seen what's been  
 07 marked as Exhibit 8853 before?  
 08 A. Yes.  
 09 Q. What is Exhibit 8853?  
 10 A. These are, I believe, what the Department  
 11 of Energy called viewgraphs that summarized -- or

12 that were -- they're used in the -- in the  
13 meeting on July 31st, the joint meeting between  
14 the Flow Rate Technical Group and DOE.  
15 Q. And this is the meeting, July 31st, 2010?  
16 A. Yes.  
17 Q. Do you know who prepared Exhibit 61 --  
18 I'm sorry, Exhibit 8853?  
19 A. Boy, it was someone within the Department  
20 of Energy. It might have been Art Ratzel, I seem  
21 to be recalling.  
22 Q. Is it possible that different persons  
23 prepared different parts of the exhibit?  
24 A. Oh, yes. I'm sorry. I interpreted your  
25 question to mean who compiled this particular  
00367:01 collection.  
02 Q. I'd like to direct your attention to  
03 Page 16, and maybe to determine who prepared --  
04 or, I'm sorry, Page 15; I'm sorry, Page 15 -- and  
05 maybe to determine who prepared exhibit -- Page  
06 15, look at Page 14, and does that indicate that  
07 that was prepared by Mr. Ratzel?  
08 A. Yes, it does.  
09 Q. Okay. And if you look at Page 15,  
10 there's a chart in the upper left-hand corner, or  
11 the upper left-hand quadrant. Do you see that?  
12 A. I do.  
13 Q. And do you see at the top there's an  
14 arrow that says: "Decrease in Flow due to  
15 Reservoir Depletion," and it's a gradually  
16 sloping downward arrow? Do you see that?  
17 A. Yes.  
18 Q. And then you have on the -- on either  
19 side of the line, which presumably refers to the  
20 day of the incident, do you see -- actually, do  
21 you see the X axis?  
22 A. Along the bottom line, yes --  
23 Q. Thank you.  
24 A. -- from 1 through 87, yes.  
25 Q. Right. Those -- those relate to the  
00368:01 days -- refer to the days of the -- where the  
02 well was uncontrolled, correct?  
03 A. Correct.  
04 Q. Okay. If you look at Day 37, where it  
05 says "Top Kill."  
06 A. Yes.  
07 Q. Okay. Do you see where there's a  
08 downward our -- arrow saying "Junk"?  
09 A. Yes.  
10 Q. What does that signify to you?

Page 368:14 to 368:21

00368:14 A. You know, I honestly am not sure. I  
15 assume that would mean the day that the junk shot  
16 occurred, if that's the right -- right

17 terminology.  
18 Q. (By Mr. Roman) And does that suggest to  
19 you that -- was it your understanding at the  
20 time, that as a result of the junk shot, flow  
21 decreased?

Page 368:23 to 369:08

00368:23 A. Yeah. I don't recall ever actually  
24 dealing with that myself or -- or -- I mean,  
25 thinking about that in terms of the actual junk  
00369:01 shot event.  
02 Q. (By Mr. Roman) Okay. Then next to that,  
03 there's a -- on the other side of the line,  
04 there's the word "Erosion" with an  
05 upward-pointing arrow.  
06 A. Yes.  
07 Q. And does that indicate to you that as a  
08 result of erosion flow rate increased?

Page 369:11 to 369:13

00369:11 A. I honestly don't know.  
12 Q. (By Mr. Roman) Are you aware of any other  
13 interpretation of this graph?

Page 369:15 to 369:23

00369:15 A. No. I'm not aware of -- of any  
16 interpretation of the graph.  
17 Q. (By Mr. Roman) Of any interpretation or  
18 any other interpretation?  
19 A. Any -- any other interpretation.  
20 Q. It's fair to say, is it not, that the  
21 FRTG was aware from the beginning of restrictions  
22 to flow caused by BOP components and the kink in  
23 the riser?

Page 370:02 to 370:12

00370:02 A. In my review of documents and in  
03 conversations with people, it -- it's clear that  
04 they recognize that the blowout preventer, having  
05 that there was different than if it was just an  
06 open pipe spilling into the ocean and that the  
07 kink had the potential, at least, for -- for  
08 affecting the flow.  
09 Q. (By Mr. Roman) Now, it's also fair to  
10 say, is it not, that the FRTG was aware from the  
11 beginning of the potential effect on flow rate of  
12 the erosion of those restrictions?

Page 370:14 to 370:24

00370:14           A. Yeah. I can't speak to whether they knew  
 15       from -- from the beginning about erosion. It  
 16       clearly came up in -- in some, you know, queries  
 17       by the Nodal Analysis Team.  
 18       Q. (By Mr. Roman) And when was that? When  
 19       was the earliest you can put your finger on that?  
 20       A. Again, I do not recall specifically.  
 21       I -- I would imagine -- I seem to recall it may  
 22       be -- have been in June.  
 23       Q. June of 2010?  
 24       A. Yes. Sorry.

Page 371:03 to 371:03

00371:03 (Exhibit Nos. 8854 and 8855 marked.)

Page 396:14 to 397:07

00396:14           Q. Okay. Did EPA ever attempt to quantify  
 15       or estimate flow rate at any time?  
 16       A. No, they did not.  
 17       Q. Its primary role was to consult on the  
 18       use of dispersants in the oil spill response,  
 19       correct?  
 20       A. That's the context in which I was  
 21       familiar with their role.  
 22       Q. And the EPA Scientists were a part of the  
 23       Joint Analysis Group, correct, which was formed  
 24       following the spill?  
 25       A. Yes. I'm sorry. It took me a moment  
 00397:01       to -- to remember what particular group that was.  
 02       Yes. I believe there were EPA Scientists  
 03       on that Team.  
 04       Q. But that -- that Group did not calculate  
 05       flow rate or analyze or critique flow rate  
 06       estimates, correct?  
 07       A. Correct.

Page 409:17 to 410:21

00409:17           Q. First question for you is: During your  
 18       work with the FRTG, did you ha -- ever have any  
 19       communications with Transocean employees?  
 20       A. No, not that I'm aware of.  
 21       Q. Okay. Are you aware of any Member of the  
 22       FRTG having had communications with Transocean  
 23       employees?  
 24       A. No.  
 25       Q. Okay. As far as you know, Transocean  
 00410:01       played no role in any of the FRTG's flow rate  
 02       analysis. Is that right?

03           A. That's correct.  
 04           Q. Okay. And the FRTG did not share the  
 05 data that it used to estimate the flow rates with  
 06 Transocean, other than what it shared with the  
 07 public generally. Is that correct?  
 08           A. Correct.  
 09           Q. The FRTG did not send to Transocean its  
 10 flow rate estimates before they were released to  
 11 the public. Is that correct?  
 12           A. Correct.  
 13           Q. Okay. In fact, the FRTG did not  
 14 specifically transmit its flow rate estimates to  
 15 Transocean at all. Is that right?  
 16           A. Correct.  
 17           Q. Okay. You testified yesterday, and then  
 18 I think again today, that you spent a fair amount  
 19 of time, quite a bit of time at the Houston  
 20 Incident Command Post. Is that correct?  
 21           A. Yes.

Page 412:23 to 413:02

00412:23           Q. So I take it you have no knowledge of  
 24 Transocean having any involvement in the  
 25 selection or approval of source control efforts.  
 00413:01 Is that correct?  
 02           A. Correct.

Page 413:04 to 413:04

00413:04 (Exhibit No. 8863 marked.)

Page 415:19 to 416:05

00415:19           Q. Okay. When did it became clear to the  
 20 FRTG that the 5,000 barrel per day number was  
 21 low?  
 22           A. I think it became clear in general  
 23 when -- excuse me -- certainly we began to  
 24 collect dat -- or, excuse me, collect  
 25 hydrocarbons through the RITT, and the rate of  
 00416:01 data collect -- excuse me. "Data collection."  
 02 The rate of hydrocarbon collection was -- would  
 03 have exceeded 5,000 there alone. And that would  
 04 have probably been in early May, somewhere around  
 05 May 10th or 11th.

Page 417:16 to 417:24

00417:16           Q. Okay. Did the 5,000 barrel per day  
 17 number remain the op -- what you call the  
 18 "operational number" until the National Incident  
 19 Command issued its press release on May 27th?

20 MR. BENSON: Objection, scope.  
 21 A. That -- the -- the 5,000 barrel per day  
 22 number is the only number that I'm aware of until  
 23 the Flow Rate Technical Group issued its -- its  
 24 up -- or its first estimate on the 27th.

Page 421:09 to 421:22

00421:09 Q. Okay. Do you know whether BP ever shared  
 10 any doubts its employees had about the 5,000  
 11 barrel per day estimate with the FRTG?  
 12 A. No, I ren -- I know of no conversations  
 13 about flow rate with the -- with the general FRTG  
 14 Members or -- or with me.  
 15 Q. Okay. And so during the entire time that  
 16 you were stationed in Houston, the -- the BP  
 17 Houston Incident Command Post, no one from BP  
 18 ever came in and told you, "Our employees have  
 19 had doubts about the 5,000 barrel per day  
 20 number." Is that correct?  
 21 MR. ROMAN: Object to the form.  
 22 A. That's correct, in my experience, yes.

Page 422:25 to 424:04

00422:25 Q. (By Mr. Davis-Denny) Please look at the  
 00423:01 E-mail at the bottom of Exhibit 3220. Do you see  
 02 three sentences in, the sentence that begins:  
 03 "We should be very cautious..."?  
 04 A. I do.  
 05 Q. And that reads: "We should be very  
 06 cautious standing behind a 5,000 bopd figure as  
 07 our modelling shows that this well could be  
 08 making anything up to ~100,000 bopd depending on  
 09 a number of unknown variables..." End quote.  
 10 Is that correct?  
 11 A. Yes, for that portion of the sentence.  
 12 Q. And the E-mail is from someone named Mike  
 13 Mason. Are you familiar with Mike Mason?  
 14 A. No, I'm not.  
 15 Q. Are you familiar with Andy Inglis, the  
 16 recipient of the E-mail?  
 17 A. I seem to recall having heard that name  
 18 in the course of my time at BP.  
 19 Q. Okay.  
 20 A. Yeah.  
 21 Q. I'll represent to you that these are BP  
 22 employees. Did BP ever send you this E-mail?  
 23 A. No.  
 24 Q. Did BP ever send the FRTG this E-mail?  
 25 A. No.  
 00424:01 Q. Did ever BP inform the FR -- FRTG, or  
 02 you, that one its employees had determined that  
 03 BP should be very cautious standing behind a

04 5,000 barrel per day figure?

Page 424:06 to 424:12

00424:06 A. No, I -- I don't recall any conversations  
07 like that.  
08 Q. (By Mr. Davis-Denny) Did BP ever inform  
09 FRTG or you personally that its modeling had  
10 showed that the "...well could be making anything  
11 up to" about "100,000" barrels per day "depending  
12 on a number of unknown variables..."?

Page 424:14 to 424:23

00424:14 A. Yeah, could you restate the -- the first  
15 part of your question?  
16 Q. (By Mr. Davis-Denny) Sure.  
17 A. So I understand the scope.  
18 Q. Did BP ever inform you or the FRTG that  
19 one of its employees had concluded that its  
20 "...modelling shows that this well could be  
21 making anything up to" about "100,000" barrels  
22 per day "depending on a number of unknown  
23 variables..."?

Page 424:25 to 425:04

00424:25 A. No, nothing -- nothing that I recall  
00425:01 coming through those channels.  
02 Q. (By Mr. Davis-Denny) Do you recall  
03 receiving that information through other  
04 channels?

Page 425:06 to 425:13

00425:06 A. I recall something on the news that at --  
07 at some point during the spill, where I believe a  
08 commentator was talking about a worst case  
09 scenario based on a, you know, an earlier  
10 analysis of the potential flow from the  
11 reservoir.  
12 Q. (By Mr. Davis-Denny) Do you recall when  
13 you saw that number on the news?

Page 425:15 to 426:18

00425:15 A. No, I do not.  
16 Q. (By Mr. Davis-Denny) Okay. I'd like to  
17 show you now what's at Tab 144. We've marked it  
18 as Exhibit 8865.  
19 (Exhibit No. 8865 marked.)  
20 Q. (By Mr. Davis-Denny) I'd like to focus



21 your attention on the E-mail that's in the middle  
 22 of Page 1. This is an E-mail that purports to  
 23 have been sent by Tim Lockett to Trevor Hill, on  
 24 May 17th of 2010.  
 25 Do you know Mr. Lockett or Mr. Hill?  
 00426:01 A. I do not.  
 02 Q. Okay. I'll represent that they are BP  
 03 employees. I'd like you to look at the point in  
 04 Mr. Lockett's E-mail, point 1), where it reads:  
 05 "The apparent reliance in Ole's E-mail on the 5  
 06 mbd number, which has little if no origin, is  
 07 concerning. From all the different ways we have  
 08 looked at flowrate, 5 mbd would appear to err on  
 09 the low side," unquote.  
 10 Did I read that correctly?  
 11 A. Yes.  
 12 Q. Okay. Did BP ever send this E-mail to  
 13 you or the FRTG?  
 14 A. No.  
 15 Q. Okay. Did BP ever inform you that one of  
 16 its employees had concluded that reliance on a  
 17 5,000 barrel per day number had little, if no,  
 18 origin?

Page 426:20 to 426:23

00426:20 Q. (By Mr. Davis-Denny) Let me -- let me  
 21 rephrase that. Did BP ever inform you that one  
 22 of its employees had concluded that the 5,000  
 23 barrel per day number had little, if no, origin?

Page 426:25 to 427:02

00426:25 A. No. I don't recall any.  
 00427:01 Q. (By Mr. Davis-Denny) Did BP ever inform  
 02 the FRTG of that fact?

Page 427:04 to 427:08

00427:04 A. Not to my knowledge.  
 05 Q. (By Mr. Davis-Denny) Did BP ever inform  
 06 you that one of its employees had concluded that  
 07 reliance on the 5,000 barrel per day number would  
 08 be concerning?

Page 427:10 to 427:12

00427:10 A. Yeah, again, not to my knowledge.  
 11 Q. (By Mr. Davis-Denny) Did BP ever inform  
 12 the FRTG of that fact?

Page 427:14 to 428:20

00427:14 A. Not that I'm aware of.  
 15 (Exhibit No. 8866 marked.)  
 16 Q. (By Mr. Davis-Denny) I'll show you  
 17 Tab 149, what's been marked as Exhibit 8866. I  
 18 want to focus you on the E-mail at the top of the  
 19 page. It purports to be an E-mail from Ole Rygg,  
 20 sent on May 10th to Kurt Mix with a "cc" to  
 21 Jonathan Sprague, and someone with the E-mail  
 22 address of "wburch@wildwell.com."  
 23 Do you know any of the individuals who  
 24 sent or received this E-mail?  
 25 A. I do not.

00428:01 Q. Okay. I'll represent to you that Ole  
 02 Rygg was a Contractor of BP, and that Kurt Mix  
 03 and -- and Jonathan Sprague were BP employees.  
 04 The first line of the E-mail reads,  
 05 quote: "Kurt, based on the observation from the  
 06 video you..." show -- I think that word is  
 07 "showed" -- "me Yesterday I did some rough  
 08 estimations. I do not think it can be ruled out  
 09 that the flow out at seabed is in the order of  
 10 40,000" barrels per day.  
 11 My question to you, sir, is: Did BP ever  
 12 send this E-mail to you?  
 13 A. No.  
 14 Q. Did BP ever send this E-mail to the FRTG?  
 15 A. Not to my knowledge.  
 16 Q. Did BP ever inform you that one of its  
 17 contractors had concluded that he could not rule  
 18 out, based on video that he had seen, that the  
 19 flow out at seabed is in the order of 40,000  
 20 barrels per day?

Page 428:22 to 428:24

00428:22 A. Not to my knowledge.  
 23 Q. (By Mr. Davis-Denny) Did BP ever inform  
 24 the FRTG of that fact?

Page 429:01 to 430:08

00429:01 A. Not that I know of.  
 02 MR. DAVIS-DENNY: I'd like to mark  
 03 Tab 140 as our next exhibit.  
 04 (Exhibit No. 8867 marked.)  
 05 Q. (By Mr. Davis-Denny) This is  
 06 Exhibit 8867. (Tendering.)  
 07 A. Excuse me.  
 08 Q. Exhibit 8 -- 8867 appears to be a letter  
 09 from Doug Suttles with BP, to Mary Landry, sent  
 10 on May 10th of 2010. Mary Landry was the Federal  
 11 On-Scene Coordinator; is that correct?  
 12 A. I'm not familiar with -- with her role,

13 or -- of Miss Landry.

14 Q. Okay. If you'll look at the last page of  
15 this exhibit. Do you see that there's -- it's  
16 entitled "Macondo Reservoir Model"?

17 A. The graph, yes.

18 Q. Yeah. And it has a logo in the top  
19 right-hand corner of "bp."

20 Is that correct?

21 A. Yes.

22 Q. And there's a line running near the  
23 bottom of the graph at about the point of 5,000  
24 barrels per day.

25 Do you see that line?

00430:01 A. I do.

02 Q. And directly above it, it reads in a box:  
03 "Most Likely Model."

04 Did I get that correct?

05 A. Yes, within that text box.

06 Q. Okay. Did you -- have you seen this  
07 document before today?

08 A. I have not.

Page 431:07 to 431:10

00431:07 Q. (By Mr. Davis-Denny) Okay. Did BP inform  
08 the FRTG that by May 21st, 2010, Halliburton had  
09 told BP that it thought the flow rate was at  
10 least 30,000 barrels per day?

Page 431:12 to 431:16

00431:12 A. I'm not aware of -- no, I'm not aware of  
13 that happening.

14 Q. (By Mr. Davis-Denny) Okay. All right.  
15 Had you ever heard that fact before?

16 A. No.

Page 431:18 to 432:20

00431:18 Q. (By Mr. Davis-Denny) Now, you said you  
19 worked at BP's Houston Incident Command Post  
20 beginning in early June; is that correct?

21 A. I worked in the -- the building, the BP  
22 Headquarters in Houston, starting -- I believe I  
23 arrived on -- or I think I started duty there on  
24 June 1st, I believe.

25 Q. Okay. And you were there on a daily  
00432:01 basis until when?

02 A. More or less daily basis, until, it would  
03 be early August.

04 Q. Okay. And during that entire time you  
05 were there, did BP ever come in and say, "We've  
06 calculated flow rate estimates, let" -- "we'll

07 share with you what we've done"?  
 08 A. To me? No.  
 09 Q. Did they do that to anyone in the FRTG,  
 10 to the best of your knowledge?  
 11 A. Not to my knowledge, no.  
 12 Q. I think you said yesterday that the FRTG  
 13 was chartered to come up with a flow rate  
 14 estimate as soon as possible; is that correct?  
 15 A. An initial flow rate estimate as soon as  
 16 possible.  
 17 Q. And that's because the flow rate number  
 18 was needed to assist with the response efforts;  
 19 is that correct?  
 20 A. That --

Page 432:22 to 433:02

00432:22 A. That was the purpose that -- yeah,  
 23 Admiral Allen chartered the FRTG, or the ISG  
 24 chartered the FRTG.  
 25 Q. (By Mr. Davis-Denny) Okay. Knowing the  
 00433:01 flow rate was important for aiding in source  
 02 control efforts, do you agree with that?

Page 433:04 to 433:11

00433:04 A. I'm sorry, knowing? Whom -- whom knowing  
 05 or --  
 06 Q. (By Mr. Davis-Denny) That --  
 07 A. Sorry.  
 08 Q. -- the decision-makers who were working  
 09 on source control, they needed to know the flow  
 10 rate in order to plan for source control efforts;  
 11 is that correct?

Page 433:13 to 433:17

00433:13 A. As Admiral Allen stated, yes.  
 14 Q. (By Mr. Davis-Denny) Okay. The FRTG was  
 15 well aware, in May and June of 2010, of the  
 16 importance of flow rate to source control  
 17 efforts; is that right?

Page 433:19 to 434:05

00433:19 A. Yeah. The -- the interest and importance  
 20 was -- was made clear to the Flow Rate Technical  
 21 Group Members, yes.  
 22 Q. (By Mr. Davis-Denny) Okay. Did you  
 23 liaison with BP employees who were working on  
 24 source control efforts at all?  
 25 A. I -- I wouldn't say I formally liaised  
 00434:01 with them. I occasionally sat in on one of the

02 morning or evening meetings when Dr. McNutt was  
03 not present, and it included BP and MMS and  
04 some -- and sometimes source control was  
05 discussed.

Page 434:13 to 434:17

00434:13 Q. (By Mr. Davis-Denny) Now, the White House  
14 also made clear early on its view that  
15 understanding the flow rate as soon as possible  
16 was important to source control efforts; is that  
17 correct?

Page 434:20 to 435:05

00434:20 A. Yeah. As -- as I've testified earlier,  
21 Kate Moran, and others, relayed the importance of  
22 and the value of coming up with a -- an estimate  
23 of the flow.  
24 Q. (By Mr. Davis-Denny) What exactly did  
25 Kate Moran say on that point, as best you can --  
00435:01 A. I -- I don't recall, off the top of my  
02 head. It's in the -- the record, in E-mails.  
03 Q. Okay. You also mentioned that, I  
04 believe, Carol Browner had made that point to the  
05 FRTG, as well; is that correct?

Page 435:07 to 435:20

00435:07 A. Yeah. I believe Carol Browner had  
08 expressed that directly or indirectly to  
09 Dr. McNutt.  
10 Q. (By Mr. Davis-Denny) Okay. So the  
11 purpose of the FRTG's initial estimates that were  
12 released on May 27th was to assist in source  
13 control efforts; is that correct?  
14 A. They were to assist in source control  
15 efforts, but they were also in response to the  
16 public interest in -- in the -- the flow rate and  
17 what was happening.  
18 Q. Okay. One of the purposes of the  
19 May 27th FRTG estimates was to assist in source  
20 control; is that correct?

Page 435:22 to 435:22

00435:22 A. That's my understanding, yes.

Page 441:04 to 441:04

00441:04 (Exhibit No. 8868 marked.)

Page 441:06 to 442:05

00441:06 Q. (By Mr. Davis-Denny) If you can turn to  
 07 the second page, I want to focus your attention  
 08 on the E-mail from Peter Cornillon. Am I  
 09 pronouncing his last name correctly, sir?  
 10 A. I believe so.  
 11 Q. Okay. Who was Peter Cornillon?  
 12 A. He was initially one of the Members of  
 13 the Plume Team.  
 14 Q. Okay. And this is an E-mail that he sent  
 15 on May 23rd of 2010. Is that correct?  
 16 A. This is the one at 1:55 p.m.?  
 17 Q. Yes.  
 18 A. Yes, that's correct.  
 19 Q. Okay. And it's sent to Bill Lehr with a  
 20 "cc" to a number of other Plume Team Members. Is  
 21 that correct?  
 22 A. That's correct.  
 23 Q. Okay. Now, if you look at the third line  
 24 down in Mr. Cornillon's E-mail, there's a  
 25 sentence toward the end of that line begins: "It  
 00442:01 sounds to me like everyone agrees that a lower  
 02 bound is 5,000 bbl/d and an upper bound is 80,000  
 03 bbl/d..."  
 04 Did I get that correctly?  
 05 A. Yes, that's the sentence.

Page 451:19 to 451:24

00451:19 Q. Is it accurate to say that as of May  
 20 27th, the FRTG understood that the flow rate  
 21 could be 25,000 barrels per day or higher?  
 22 A. I'm sorry. Which date?  
 23 Q. As of May 27th.  
 24 A. Yes.

Page 452:02 to 452:02

00452:02 (Exhibit No. 8869 marked.)

Page 452:18 to 452:21

00452:18 Q. (By Mr. Davis-Denny) Okay. You've been  
 19 handed Exhibit 8869. This is an E-mail that  
 20 Marcia McNutt sent on May 29th of 2010; is that  
 21 correct?

Page 452:23 to 452:23

00452:23 A. Correct.

Page 460:17 to 460:22

00460:17 Q. And you understood that -- I think you  
18 expressed this earlier, but one of the reasons  
19 why the FRTG's initial estimates were important  
20 was because they could be used in the design of  
21 the collection systems that BP was deploying in  
22 June of 2010?

Page 460:24 to 461:04

00460:24 A. "The collection systems," do you mean  
25 the --  
00461:01 Q. (By Mr. Davis-Denny) The --  
02 A. -- the containment on the vessels?  
03 Q. That's correct.  
04 A. Yes, that's my understanding.

Page 462:01 to 462:04

00462:01 Q. (By Mr. Davis-Denny) The question was:  
02 Did you suspect based on the FRTG's May 27th  
03 estimates that the flow rate could be greater  
04 than 15,000 barrels per day?

Page 462:07 to 462:10

00462:07 A. Yeah. Given -- given the Plume Modeling  
08 Team's results, some of those would have  
09 suggested that the flow was higher than 15,000  
10 barrels per day.

Page 470:22 to 471:21

00470:22 Q. (By Mr. Davis-Denny) Okay. I'm going to  
23 hand you what's been marked as Exhibit 8873.  
24 (Exhibit No. 8873 marked.)  
25 Q. (By Mr. Davis-Denny) It's Tab 175.  
00471:01 A. (Reviewing document.)  
02 Q. And does this appear to you to be a -- an  
03 E-mail between -- an E-mail exchange between  
04 William Conner at NOAA and Bill Lehr at NOAA?  
05 A. Yes.  
06 Q. And I want to focus your attention on the  
07 E-mail that Bill Lehr wrote, the second one from  
08 the top. And he states in the -- I'm going to  
09 start with the second sentence, quote: "BP will  
10 let people go and only look at the video in the  
11 command post. The scientists that I have lined  
12 up need to step through the video frame by frame  
13 to get an accurate estimate of flow rate. BP  
14 refuses to provide the video length necessary  
15 (10-15 minutes)."

16 Did I read that correctly?  
17 A. Yes.  
18 Q. Is it your understanding that, as of  
19 May 18th, 2010, BP was refusing to provide video  
20 of the length necessary for the Plume Team's  
21 analysis?

Page 471:23 to 472:02

00471:23 A. Yeah. I can't speak from that  
24 personally, but that's how it's characterized by  
25 Dr. Lehr.  
00472:01 Q. (By Mr. Davis-Denny) That's how you  
02 understand this E-mail; is that correct?

Page 472:04 to 472:10

00472:04 A. That would be my understanding of it,  
05 yes.  
06 Q. (By Mr. Davis-Denny) Okay. Your  
07 understanding of this E-mail is that as of  
08 May 18th, 2010, BP would only let Plume Team  
09 Members go and view the video in the Command  
10 Post; is that right?

Page 472:12 to 473:15

00472:12 A. As I say, that's my understanding of --  
13 of what he has written.  
14 (Exhibit No. 8874 marked.)  
15 Q. (By Mr. Davis-Denny) Okay. I'm going to  
16 hand you what's been marked as 8874. It's  
17 Tab 178, and is this an E-mail exchange between  
18 Bill Lehr of the Plume Team, and various Members  
19 of the Plume Team?  
20 A. Yes.  
21 Q. And it occurs on May 20th and 21st of  
22 2010?  
23 A. Yep.  
24 Q. Okay. If you'll turn to the second page  
25 of the E-mail, this is an E-mail from Bill Lehr  
00473:01 to the Plume Team Members on May 20th of 2010; is  
02 that correct?  
03 A. Correct. At 4:15?  
04 Q. Right.  
05 A. Yes.  
06 Q. And he says -- do you see, under  
07 "BREAKING NEWS," where he says: "NOAA has just  
08 acquired a hard drive with three days worth of  
09 video of the release and will put it up on an ftp  
10 site, soon"?  
11 A. Yes.  
12 Q. Okay. Your understanding of that is that



13 NOAA had, as of May 20th, just acquired a hard  
14 drive with three days of video from BP; is that  
15 correct?

Page 473:17 to 474:14

00473:17 A. That's my understanding, yes.  
18 Q. (By Mr. Davis-Denny) Okay. If you'll  
19 turn to Page 1, if you'll look at the bottom  
20 E-mail, this appears to be an E-mail that Juan  
21 Lasheras sent on May 21st of 2010. Is  
22 Mr. Lasheras a Member of the -- was he a Member  
23 of the Plume Team?  
24 A. Yes, he was.  
25 Q. Okay. And he writes -- do you see where  
00474:01 he writes, in the third line of his E-mail:  
02 "These are not original videos and the quality  
03 has been sharply downgraded. They seem to be  
04 videotaped from a computer screen where they're  
05 downloaded from some webpage. Correspondingly  
06 the quality is atrocious. They are even worse  
07 than the previous videos you have shared with us.  
08 They are pretty much useless!"  
09 Did I read that right?  
10 A. Yes, you did.  
11 Q. Okay. Is it fair to say that BP's  
12 efforts or lack of efforts to provide video  
13 delayed the Plume Team's ability to release an  
14 initial estimate?

Page 474:16 to 474:23

00474:16 A. I think -- I think it's fair to say that  
17 the -- the Plume Team Members were very  
18 frustrated at the quality of video they were able  
19 to get at this point.  
20 Q. (By Mr. Davis-Denny) Was the Plume Team's  
21 initial estimates, were they delayed by the video  
22 issues that they had with the video that BP had  
23 provided?

Page 474:25 to 474:25

00474:25 A. My understanding is, yes.

Page 477:21 to 477:25

00477:21 Q. Okay. Sir, were you ever informed that a  
22 BP Contractor had determined as of May 18th,  
23 2010, that the top kill could not succeed if the  
24 flow rate was greater than 15,000 barrels per  
25 day?

Page 478:02 to 478:04

00478:02 A. No.  
 03 Q. (By Mr. Davis-Denny) Is this the first  
 04 time you're learning of that fact?

Page 478:06 to 478:06

00478:06 A. It's the first time I can recall of.

Page 479:02 to 480:02

00479:02 Mr. Sogge, I just have a few questions  
 03 for you. First of all, let me ask you: Do you  
 04 have any knowledge about any conduct on the part  
 05 of Halliburton occurring between April 22nd,  
 06 2010, through September 19, 2010, relating to the  
 07 attempt to stop the flow of oil from the Macondo  
 08 Well?  
 09 A. No, I do not.  
 10 Q. Do you have any other information or  
 11 knowledge about Halliburton's involvement in any  
 12 of the relief efforts?  
 13 A. No, I do not.  
 14 Q. Did you ever hear of anyone having any  
 15 criticism about any of Halliburton's conduct  
 16 relating to any of the relief efforts?  
 17 A. No.  
 18 Q. Are you aware of any Halliburton  
 19 Representative who was a Member of the Unified  
 20 Area Command Team?  
 21 A. No.  
 22 Q. Are you aware of any involvement that  
 23 Halliburton had with respect to any  
 24 decision-making process of which you were  
 25 involved related to the Flow Rate Technical  
 00480:01 Group?  
 02 A. No.

Page 481:09 to 481:11

00481:09 Q. (By Mr. Fleming) Was the gas/oil ratio  
 10 important in determining what the ultimate rate  
 11 of flow was coming out of the Macondo No. 1 Well?

Page 481:13 to 481:21

00481:13 A. From -- from my understanding, yes.  
 14 Q. (By Mr. Fleming) Okay. And what is your  
 15 understanding of that?  
 16 A. Gas/oil ratio was used as -- in some sort  
 17 of a conversion by the -- by the Plume Analysis

18 Team, by the Woods Hole Team -- which wasn't  
19 technically FRTG, but -- but we -- we folded the  
20 numbers -- and I believe it was also involved for  
21 the Reservoir Nodal Analysis Teams.

Page 482:23 to 483:07

00482:23 Q. Okay. So you didn't have any involvement  
24 on the technical side of the gas/oil ratio?  
25 A. No.  
00483:01 Q. Okay. Mr. Sogge, do you know whether the  
02 FRTG had access to any data from an entity known  
03 as Pencor, P-e-n-c-o-r?  
04 A. I'm not familiar with that term, no.  
05 Q. So you're not aware of whether they had  
06 access to Pencor's data?  
07 A. No, I'm not personally aware.

Page 485:12 to 487:16

00485:12 Q. Okay. Mr. Sogge, could you turn with me  
13 to Exhibit 8804. This was the Final Report from  
14 the FRTG. This was Tab 4 in the BP CD.  
15 A. I have it.  
16 Q. Could you turn with me to Page 15,  
17 please.  
18 A. (Complying.)  
19 Q. Mr. Sogge, On Page 15, there's a section  
20 here entitled "Convergence of Gas-Oil Ratio (GOR)  
21 from Surface Collection to Deep-Sea Value: 48,000  
22 to 66,000 BPD."  
23 Do you see that, sir?  
24 A. I do.  
25 Q. Did you have any involvement with this  
00486:01 section whatsoever?  
02 A. Whatsoever in a literal sense, yes.  
03 Q. What specifically?  
04 A. I would have reviewed several earlier  
05 versions of this as part of my job of bringing  
06 all this material together into the Final Report.  
07 Q. What were you reviewing it for?  
08 A. Essentially for clarity, to see if it  
09 made sense.  
10 Q. Did it make sense to you?  
11 A. Eventually it did.  
12 Q. Okay. When you say "eventually," does  
13 that mean that it did not make sense to you when  
14 you first read it?  
15 A. This section deals with, you know,  
16 technical aspects that were outside of my  
17 expertise. I consider it a -- a somewhat -- for  
18 me, a somewhat complex topic, so I believe it  
19 took me a couple of readings to get a sense for  
20 what it was they were saying. And so in my role,

21 in assembling this document, I wasn't a Technical  
 22 Lead, so much as trying to make sure that  
 23 whatever appears in here, a general, but  
 24 educated, reader might be able to understand.  
 25 Q. Okay.  
 00487:01 A. So, hence, my interest in, you know, kind  
 02 of clarity.  
 03 Q. Do you feel that you have a good  
 04 understanding of this section now?  
 05 A. I feel I have a general workable  
 06 understanding of -- of what this is.  
 07 Q. Okay. If you turn the page to Page 16,  
 08 you see this graph on Figure 8?  
 09 A. I do.  
 10 Q. Did you review this graph when you were  
 11 looking at this initially?  
 12 A. Yes. This would have been part of the  
 13 material.  
 14 Q. Okay. And do you feel that you have a  
 15 good understanding about what this graph is  
 16 actually showing?

Page 487:19 to 488:16

00487:19 A. From my personal capacity, I understand  
 20 the general principle they're talking about.  
 21 Q. (By Mr. Fleming) Okay. I believe in  
 22 response to some questions that the lawyer from  
 23 BP asked you yesterday, you testified that you  
 24 believe that the peer-review process is  
 25 important; is that correct?  
 00488:01 A. Yes.  
 02 Q. Okay. Explain to me, in your  
 03 understanding of that, what is the peer-review  
 04 process. Just walk me through your understanding  
 05 of that, please.  
 06 A. Well, I think the details of a  
 07 peer-review process can vary, depending on  
 08 whether you're doing a scientific article,  
 09 whether you're -- you're doing an agency report,  
 10 something like this. But, in general, it's  
 11 looking for Experts in that arena to look at,  
 12 comment on the work that you've done.  
 13 Q. Okay. Are you aware, sir, that this  
 14 particular section of the FRTG report was  
 15 reviewed by a gentleman named Samuel Arey. Do  
 16 you know him?

Page 488:19 to 488:23

00488:19 Q. (By Mr. Fleming) A-r-e-y, do you know  
 20 that name?  
 21 A. I don't recall that name at all.  
 22 Q. And are you aware that Mr. Arey

23 criticized this model heavily?

Page 488:25 to 490:13

00488:25 A. No, I'm not aware of that.  
 00489:01 Q. (By Mr. Fleming) Let me show you what  
 02 we've marked as Exhibits 8876 and 8877. Ask you  
 03 to take a look at those, please?  
 04 (Exhibit Nos. 8876 and 8877 marked.)  
 05 MR. BENSON: Do you have copies?  
 06 MS. MITCHELL: M-h'm.  
 07 Q. (By Mr. Fleming) Let's start with 8876.  
 08 You see this?  
 09 A. I do.  
 10 Q. This is an E-mail from Sam Arey to  
 11 C. Reddy at the Woods Hole Institute. Is that  
 12 correct?  
 13 A. Yes.  
 14 Q. And C. Reddy is Chris Reddy?  
 15 A. Yes.  
 16 Q. Are you familiar with Chris Reddy?  
 17 A. Only by name, on occasional E-mails.  
 18 Q. Okay. If you'll turn with me to the  
 19 second page of this E-mail string.  
 20 A. And we're on 8876, correct?  
 21 Q. Correct.  
 22 A. Thank you.  
 23 Q. Turn to the second page. Do you see the  
 24 paragraph marked sub b down there beginning with  
 25 "The extrapolated line..." Do you see that?  
 00490:01 A. Two B?  
 02 Q. M-h'm.  
 03 A. Yes.  
 04 Q. That reads: "The extrapolated line goes  
 05 far outside...the cloud of data points. Given  
 06 that the only support for this relationship is a  
 07 very weak statistical correlation, we really do  
 08 not have the basis to assume a linear  
 09 relationship." Let me stop right there.  
 10 You understand what he's saying, sir?  
 11 And I'll represent to you that the graph that  
 12 he's talking about is the graph that we just  
 13 looked at on Figure 8.

Page 490:19 to 492:20

00490:19 A. Related to your question, in my -- in my  
 20 personal understanding of looking at this  
 21 sentence or two and comparing with this graph, is  
 22 that what you're asking?  
 23 Q. (By Mr. Fleming) Correct.  
 24 A. Yes, I understand, I believe, the point  
 25 he's trying to make.  
 00491:01 Q. You understand that he's saying that the

02 cloud of dots showing up on Figure 8 do not, in  
 03 fact, support the linear graph that shows up on  
 04 Figure 8, you understand that's what he's saying?  
 05 A. The first statement is saying: "The  
 06 extrapolated line goes far outside...the cloud of  
 07 data points." I understand what he's saying with  
 08 regard to that.  
 09 Q. Okay.  
 10 A. You -- you can see that illustrated in  
 11 the figure.  
 12 Q. Okay. My question to you, sir, is: Is  
 13 this information that was brought to either your  
 14 or the FRTG's attention before the FRTG issued  
 15 its Final Report?  
 16 A. This is not something I remember seeing  
 17 before the Final Report was issued, no.  
 18 Q. Is this something that you would have  
 19 liked to have seen?  
 20 A. In my role, because the -- the technical  
 21 aspects -- aspects are far outside of -- of my  
 22 expertise, I did not get engaged in the  
 23 scientific conversations that go back and forth  
 24 any time you get a Team of -- of Scientists like  
 25 this together, the -- the back and forth. So  
 00492:01 this would probably not have been something I  
 02 engaged in --  
 03 Q. Okay.  
 04 A. -- at that time.  
 05 Q. Let me ask you to take a look at the  
 06 second paragraph of the first page there. The  
 07 one that begins "I do not have strong  
 08 feelings..." Do you see that?  
 09 A. I do.  
 10 Q. You see he says -- Mr. Arey is saying:  
 11 "I do not have strong feelings about it but  
 12 simply feel that it is a bad decision and would  
 13 be bad science. I can't stand behind it."  
 14 You see that, sir?  
 15 A. I do.  
 16 Q. Again, does this give you any cause for  
 17 concern as a Member of the -- as the Deputy Lead  
 18 of the Flow Rate Technical Group to see something  
 19 like this pertaining to Figure 8 that showed up  
 20 in the final Technical Report?

Page 492:23 to 493:07

00492:23 A. From -- from a personal capacity, without  
 24 knowing how this ultimately played out in any of  
 25 the conversations that might have occurred after  
 00493:01 this, no, I put my faith in the Team Leads to  
 02 provide the information.  
 03 Q. (By Mr. Fleming) Who would have been  
 04 given this information? You just mentioned the  
 05 Team Leads. Who would be responsible for

06 information like this?  
07 A. Each of the flow rates --

Page 493:10 to 494:04

00493:10 A. I'm sorry. Each of the Flow Rate  
11 Technical Groups had a Team Lead, as did the  
12 Woods Hole -- the Woods Hole Team, they -- they  
13 had a -- a Team Lead.  
14 Q. (By Mr. Fleming) Okay. And who was the  
15 Team Lead for coordinating with the Woods Hole  
16 Group?  
17 A. From a scientific lead standpoint, I  
18 believe it was -- I can't remember, Rich -- Rich  
19 Camilli, I guess, would be the -- the lead on  
20 that. The person I interfaced with on that.  
21 Q. And was he with Woods Hole?  
22 A. Yes.  
23 Q. Okay. And Mr. Camilli never brought this  
24 to your attention?  
25 A. No. Not to -- not to my --  
00494:01 Q. Okay. If you would turn with me to --  
02 sorry.  
03 MR. FLEMING: Sir, that's all I  
04 have.

Page 494:25 to 495:05

00494:25 How long have you worked for the Federal  
00495:01 Government?  
02 A. About 28 years.  
03 Q. Okay. And do you consider yourself a  
04 Scientist?  
05 A. Yes, by training and by positions.

Page 495:09 to 496:07

00495:09 Q. And you've done science work for the  
10 Government?  
11 A. Yes.  
12 Q. And you've supervised other Government  
13 Scientists as part of your job at USGS; is that  
14 right?  
15 A. Yes, I have.  
16 Q. Roughly how long have you supervised  
17 other Government Scientists?  
18 A. H'm. Probably on the order of six or  
19 eight years.  
20 Q. Can you compare for me the level of  
21 effort put in by the Members of the FRTG to other  
22 Government science projects that you've been  
23 involved in?  
24 A. Wow. The -- the intensity of their

25 effort, I think, unprecedented in my experience,  
00496:01 in terms of working with Scientists. They put a  
02 huge amount time and energy and work into this in  
03 a real short period.  
04 Q. And how does the scientific process  
05 employed by the FRTG compare to the other  
06 Government science projects that you've worked  
07 on?

Page 496:09 to 496:20

00496:09 A. I think in general, it followed the  
10 standard process. It was accelerated to quite a  
11 degree. It was in the public eye, but it  
12 followed the -- the basics that we always do, and  
13 that's bringing together the best people who are  
14 available, you -- you turn them loose on the  
15 problem, have them collect the data, and present  
16 the results.  
17 Q. (By Mr. Benson) Are you comfortable with  
18 the scientific process that the Team employed in  
19 this instance?  
20 A. Oh, definitely.

Page 497:05 to 497:07

00497:05 Q. Now, in general, why was it important for  
06 the FRTG to get flow estimates quickly or by a  
07 given deadline?

Page 497:09 to 497:17

00497:09 A. Generally, I would say for two reasons:  
10 One, so that the information would be available  
11 for the -- the response; the second is that there  
12 was a tremendous amount of public interest in  
13 knowing what was going on.  
14 Q. (By Mr. Benson) If the FRGT Mem -- FRTG  
15 Members had ever felt that a given deadline could  
16 not be met, what would have happened in that  
17 case?

Page 497:19 to 497:24

00497:19 A. Well, based on -- on the experience that  
20 we saw, they would not have agreed to provide a  
21 number.  
22 Q. (By Mr. Benson) So the FRTG was able to  
23 sort of say a given deadline couldn't be met,  
24 based on the information that they had?

Page 498:01 to 499:11



00498:01           A. Definitely. In fact, several cases in  
02 the record indicate that there might have been an  
03 estimate needed or -- or desired by a particular  
04 day, and sometimes the Team was not ready to  
05 deliver until a few days after that.  
06           Q. (By Mr. Benson) Okay. Is there an  
07 example you're thinking of?  
08           A. I'm trying to remember which press  
09 release it was, where they were asked -- I -- I  
10 believe it was they were asked to have something  
11 done by Thursday. The Team was finally able to  
12 provide the information by the following Sunday  
13 or Monday.  
14           Q. And was there any difficulty with the  
15 Plume Team in sort of getting its initial  
16 estimate out? Was there an earlier deadline that  
17 the Plume Team said they couldn't meet based on  
18 the quality of the video?  
19           A. There was an initial request for the  
20 Plume Team to give an estimate based on the very  
21 first video that they received, and the quality  
22 of that video just wasn't sufficient for the  
23 analysis, and the Team relayed that information  
24 up and didn't present an estimate.  
25           Q. What was the problem with that video, if  
00499:01 you recall?  
02           A. The primary problem I'm aware of was the  
03 resolution was very poor. It didn't allow them  
04 to -- to be able to track the -- or to do the  
05 kind of calculations they need for the image  
06 analysis.  
07           Q. And I think this was in one of the  
08 E-mails, I think from maybe Mr. Lasheras, but was  
09 there any -- do you have an understanding of why  
10 the resolution was poor and where BP got that  
11 particular video from?

Page 499:13 to 499:19

00499:13           A. There were discussions at that time, and  
14 the feedback from the Scientists, when they were  
15 trying to use the video, was that it appeared  
16 almost as if someone had videotaped an image that  
17 was being played on the monitor, instead of the  
18 actual -- you know, the file, being the raw data,  
19 the higher resolution data.

Page 502:07 to 502:11

00502:07           Q. Based on your understanding and -- at the  
08 time, and your preparation to testify on behalf  
09 of the United States in this Deposition, was the  
10 FRTG -- or were the FRTG estimates developed for

11 use in litigation?

Page 502:13 to 502:19

00502:13 A. No, they were not.

14 Q. (By Mr. Benson) Now, independent of the  
15 notes that have been marked as an exhibit and  
16 that we talked about yesterday, do you have any  
17 recollection of people discussing the use of FRTG  
18 estimates for litigation purposes during the  
19 July 30th meeting?

Page 502:21 to 503:01

00502:21 A. No, I do not.

22 Q. (By Mr. Benson) Okay. And independent of  
23 your notes, do you have any recollection of  
24 people discussing the use of the FRTG estimates  
25 for litigation purposes at any time during the

00503:01 course of the FRTG's work from May to July --

Page 503:03 to 503:03

00503:03 Q. (By Mr. Benson) -- or May to August?

Page 503:06 to 503:22

00503:06 A. I have recollections of people discussing  
07 that in a general sense, as well as, you know,  
08 with the reinforcement, as I believe is in the  
09 record, a document saying "This is for the  
10 response, it's not for litigation."

11 Q. (By Mr. Benson) Okay. So to the extent  
12 it was discussed, what -- what was the nature of  
13 the discussion?

14 A. The nature of the discussion was that  
15 these numbers were not intended -- we were not  
16 develop -- developing them for use in -- in  
17 litigation.

18 Q. Okay. Now, if -- assume -- let's assume  
19 that Secretary Chu did, indeed, use the word  
20 "damages" in the July 30th meeting, if so, do you  
21 know what he meant by the word "damages"?

22 A. No, I do not.

Page 504:17 to 504:20

00504:17 Q. To your knowledge, did Dr. Lehr or anyone  
18 else ever say that they believed the 5,000 barrel  
19 per day estimate was accurate?

20 A. No.

Page 506:15 to 507:13

00506:15 QUESTIONS BY MR. ROMAN:

16 Q. You're almost done.

17 A. (Nodding.)

18 Q. Mr. Sogge, Counsel for Transocean showed  
19 you a number of documents from BP, including  
20 Exhibits 3220, 8865, 8866 and 8867.

21 THE COURT REPORTER: (Indicating.)

22 MR. ROMAN: Is that -- yes.

23 Q. (By Mr. Roman) Do you have those in front  
24 of you?

25 A. I do.

00507:01 Q. And do you recall that testimony -- those  
02 questions and the answers that you gave?

03 A. Generally, yes.

04 Q. Among other things, you were asked about  
05 whether or not these documents had ever been  
06 provided by BP to the FRTG. Do you recall that?

07 A. I do.

08 Q. And I believe that you testified that you  
09 were not aware that they had been. Correct?

10 A. Correct.

11 Q. Do you know whether or not the numbers  
12 reflected in these documents were flow rate  
13 estimates or worst-case discharge estimates?

Page 507:16 to 507:20

00507:16 A. No, I -- I don't know which they may have  
17 been.

18 Q. (By Mr. Roman) Do you know anything about  
19 the circumstances behind any of these documents,  
20 including any assumptions underlying them?

Page 507:22 to 507:25

00507:22 A. No, nothing more than what might be in  
23 the E-mails themselves.

24 Q. (By Mr. Roman) So you bring no knowledge  
25 whatsoever?

Page 508:02 to 508:02

00508:02 A. Correct.

Page 508:06 to 509:08

00508:06 (Exhibit No. 8878 marked.)

07 Q. (By Mr. Roman) Okay. I'd like to show  
08 you what's been marked as Exhibit 8878.

09 MR. ROMAN: And I -- have you handed  
10 this out to everybody?

11 MS. RODGERS: Yes.  
 12 MR. ROMAN: Okay. Good.  
 13 Actually, can I have a -- do you have  
 14 another copy of this?  
 15 MS. RODGERS: Sure. Here you go.  
 16 MR. ROMAN: Okay.  
 17 Q. (By Mr. Roman) Let me ask you if you've  
 18 seen this -- seen this document before?  
 19 A. Yes, I have.  
 20 Q. Exhibit 8878 is an E-mail chain, the last  
 21 of which is an E-mail from you to Dr. McNutt  
 22 dated October 26, 2010. Correct?  
 23 A. Correct.  
 24 Q. I'd like to direct your attention to the  
 25 third page of the exhibit, and -- and  
 00509:01 particularly to your E-mail to Bill Lehr of  
 02 October 15, 2010. Do you see that?  
 03 A. The one at 19:36?  
 04 Q. Exactly.  
 05 A. Yes.  
 06 Q. Do you recall the circumstances of this  
 07 E-mail that you wrote to Mr. Lehr on or about  
 08 October 15, 2010?

Page 509:10 to 510:01

00509:10 A. (Reviewing document.) In general, yes,  
 11 I -- I believe I do.  
 12 Q. (By Mr. Roman) What were those  
 13 circumstances?  
 14 A. We were starting to assemble what we  
 15 called Q and A's, which would go out as part of a  
 16 press release, what we might anticipate as  
 17 questions from -- from the media and others.  
 18 They would go out with the press release,  
 19 along -- that accompanied the Final -- the --  
 20 for -- excuse me, for the Plume Team Report.  
 21 Q. And so what you would try to do is  
 22 anticipate the questions that might be asked of  
 23 the Plume Team, and you were trying to come up  
 24 with the best and most accurate answers to those  
 25 questions?  
 00510:01 A. Yes.

Page 510:03 to 511:20

00510:03 Q. (By Mr. Roman) Okay. Directing your  
 04 attention to the second and third paragraphs of  
 05 that E-mail --  
 06 A. Of that same one?  
 07 Q. Yes.  
 08 A. From Friday, October 15th?  
 09 Q. Exactly. It says "TOUGH Q AND A #1."  
 10 Do you see that?

11 A. Yes.  
 12 Q. And the question is: "The plume team  
 13 report makes clear that the scientists involved  
 14 were reliant on 'BP-provided (and BP selected)  
 15 data.' Why didn't the FRTG or the National  
 16 Incident Command require BP to supply all  
 17 available data sets, rather than simply the data  
 18 that BP chose to provide?"  
 19 Is that the question?  
 20 A. That is the question.  
 21 Q. And then the answer -- and this is the  
 22 answer you drafted?  
 23 A. I believe so, yes.  
 24 Q. And you tried to be accurate in this  
 25 answer, correct?  
 00511:01 A. I believe so.  
 02 Q. Okay. And your answer was: "When making  
 03 the request for video footage of the spill  
 04 flowing from the damaged riser, the Flow Rate  
 05 Technical Group specified the criteria for  
 06 acceptable video. These criteria were based on  
 07 getting video during the right period (e.g., when  
 08 flow conditions were simplest and most readily  
 09 captured) and the video quality requirements  
 10 necessary for a successful analysis via PIV" --  
 11 all caps, and then in parens -- (image  
 12 resolution -- "(image resolution, clear views,  
 13 correct distance). We have no indication that BP  
 14 did not give us all the video that met our"  
 15 cre -- "criteria."  
 16 Do you see that?  
 17 A. I do.  
 18 Q. And, in fact, BP did, as far as you know,  
 19 give the Flow -- Flow Rate Technical Group all  
 20 the video that met its criteria?

Page 511:22 to 512:10

00511:22 A. From what I recall, this -- this answer  
 23 was specifically in regard to the post riser cut,  
 24 and we did eventually get video that met our  
 25 criteria for that, yeah.  
 00512:01 Q. (By Mr. Roman) Do you recall when?  
 02 A. I believe it took a few days after the  
 03 riser cut, to get the video off the platform, and  
 04 then another day or two to actually have the  
 05 shipped to the Plume Team, so it would have been  
 06 within several -- several days to a week,  
 07 perhaps.  
 08 Q. Do you recall whether BP sent a  
 09 helicopter to retrieve the video for -- for the  
 10 FRTG and for the Plume Team?

Page 512:12 to 512:18

00512:12 A. Well, going -- going from memory, I  
 13 recall we had conversations about doing that.  
 14 I -- I can't recall if it ended up being able to  
 15 come off by a helicopter or by a ship. I don't  
 16 recall.  
 17 Q. If I represent to you that it was a  
 18 helicopter, would you disagree with that?

Page 512:21 to 514:22

00512:21 A. Yeah. I don't remember one way or  
 22 another.  
 23 Q. Okay.  
 24 (Exhibit No. 8879 marked.)  
 25 Q. (By Mr. Roman) I'm handing you what will  
 00513:01 be the final exhibit, 8879. (Tendering.)  
 02 A. Thank you.  
 03 Q. I'll ask if you've seen this document  
 04 before?  
 05 A. Yes, I have.  
 06 Q. This is another E-mail chain, and the  
 07 last E-mail is one from Mr. Lehr to you, on  
 08 October 7 of 2010, correct?  
 09 A. Yes.  
 10 Q. Directing your attention to Page -- well,  
 11 let's stay on Page 1 for right now.  
 12 Mr. Lehr is forwarding you an E-mail that  
 13 he sent to Mr. Borghei, B-o-r-g-h-e-i, from the  
 14 Oil Spill Commission, correct?  
 15 A. Yes.  
 16 Q. And -- and the formal name of the Oil  
 17 Spill Commission was the National Commission on  
 18 the BP Deepwater Horizon Oil Spill and Offshore  
 19 Drilling, correct?  
 20 A. Yeah, I believe so.  
 21 Q. And it's also known as the Presidential  
 22 Commission?  
 23 A. That's what I commonly heard it referred  
 24 to, yes.  
 25 Q. Directing your attention to the third  
 00514:01 page, the paragraph under paragraph -- or  
 02 Section 3), which is "Estimation of the flow  
 03 rate." Do you see that?  
 04 A. Yes.  
 05 Q. And the first sentence of Section 3)  
 06 reads: "None" of the --  
 07 I'm sorry. Well, I think it should be  
 08 "None of" -- would you agree?  
 09 A. Correct, yeah.  
 10 Q. Okay. "None" of "the Experts who used  
 11 variants of PIV could produce precise estimates  
 12 of the flow rate prior to severing the riser for  
 13 reasons that are detailed in the Plume Team final  
 14 report."

15 Do you see that?  
16 A. I do.  
17 Q. Now, the riser was cut on June 3rd or  
18 June 4th?  
19 A. I believe June 3rd.  
20 Q. So it's a fact, is it not, that until the  
21 riser was cut on June 3rd, the quality of the  
22 video was irrelevant?

Page 514:25 to 515:07

00514:25 A. Outside of my Technical Expertise, but  
00515:01 in -- in the E-mails and conversations I've had,  
02 the Team was expressing frustrations over the  
03 quality of the video prohibiting them to be able  
04 to get as good an answer as they would like, even  
05 given the complexities of the flow.  
06 Q. I'm not sure I understand that answer.  
07 A. Let me perhaps be more precise.

Page 515:09 to 515:21

00515:09 A. The Scientists on the Plume Team, they  
10 expressed frustrations over the quality of the  
11 video that they were given for the analysis.  
12 From that, I would infer that -- that it was an  
13 issue, it was a challenge for them.  
14 Q. And do you recall when these complaints  
15 were?  
16 A. No, I don't remember the exact dates.  
17 Q. Do you have an understanding as to why  
18 Mr. Lehr wrote that "None" of "the Experts who  
19 used variants of PIV could produce" preci --  
20 "precise estimates of the flow rate prior to  
21 severing the riser..."?

Page 515:24 to 516:12

00515:24 A. Okay. Again, I can't speak to why he  
25 uses the exact wording, but my understanding was  
00516:01 that there were several things involved in it.  
02 It was the quality of the video, itself, image  
03 resolution, there was a motion in the image -- in  
04 the images, there was also flow coming out from  
05 multiple points, all of which really complicated  
06 their ability to do the PIV.  
07 Q. Did you ever talk to Mr. Lehr about the  
08 Plume Team's need for quality video?  
09 A. Yes, yeah.  
10 Q. Okay. And he told you, did he not, that  
11 no accurate PIV analysis could be done, could be  
12 conducted until after the riser was cut, correct?

Page 516:16 to 516:22

00516:16           A. I don't remember him using those words,  
 17     be -- because I don't remember the -- any  
 18     conversation in that level of detail.  
 19           Q. (By Mr. Roman) Did he never -- did he  
 20     never discuss the benefits of awaiting the riser  
 21     cut, in terms of being able to have available  
 22     better quality video?

Page 516:25 to 517:04

00516:25           A. He talked -- in the interest in getting  
 00517:01     better video after the riser was cut, it would  
       02     give them both higher quality video and might  
       03     allow them to narrow the -- the bounds of their  
       04     estimates.

Page 517:06 to 517:12

00517:06           Q. (By Mr. Roman) Just one last question.  
       07           It was Mr. Lehr's view, regardless of  
       08     whether it was shared by you or not, but it was  
       09     Mr. Lehr's view, was it not, that it was not  
       10     until the riser was cut that there was the  
       11     opportunity to get good quality video that could  
       12     be used for the Plume Team's analysis?

Page 517:15 to 517:20

00517:15           A. Yeah. I -- I don't personally recall him  
       16     characterizing it that way, though I do know he  
       17     was -- he was much happier with the video that we  
       18     got after the riser was cut.  
       19           MR. ROMAN: Okay. Thank you very  
       20     much.

Page 521:01 to 521:01

00521:01     UNITED STATES DISTRICT COURT  
       01           EASTERN DISTRICT OF LOUISIANA

Page 521:03 to 521:05

00521:03     IN RE: OIL SPILL           ) MDL NO. 2179  
       03           BY THE OIL RIG           )  
       04     "DEEPWATER HORIZON" IN ) SECTION "J"  
       04     THE GULF OF MEXICO, ON )  
       05     APRIL 20, 2010           ) JUDGE BARBIER  
       05                                   ) MAG. JUDGE SHUSHAN



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00521:08 REPORTER'S CERTIFICATION  
 08 TO THE ORAL AND VIDEOTAPED DEPOSITION OF  
 09 MARK KENNETH SOGGE  
 09 UNITED STATES OF AMERICA 30(b)(6)  
 10 SEPTEMBER 19, 2012  
 10 VOLUME 2

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00521:13 I, Emanuel A. Fontana, Jr., Certified  
 13 Shorthand Reporter in and for the State of Texas,  
 14 hereby certify to the following:  
 15 That the witness, MARK KENNETH SOGGE, was  
 15 duly sworn by the officer and that the transcript  
 16 of the oral deposition is a true record of the  
 16 testimony given by the witness;

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00521:17 That the deposition transcript was submitted  
 18 on , 2012, to the witness or to  
 18 Attorney \_\_\_\_\_ for the witness to  
 19 examine, sign, and return to Worldwide Court  
 19 Reporters, Inc., by , 2012.

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00521:20 That the amount of time used by each party  
 21 at the deposition is as follows:  
 22 Mr. Roman - 1 Hour, 41 Minutes  
 22 Mr. Davis-Denny - 1 Hour, 12 Minutes  
 23 Mr. Fleming - 16 Minutes  
 23 Mr. Benson - 11 Minutes

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00522:01 I further certify that I am neither counsel  
 01 for, related to, nor employed by any of the  
 02 parties in the action in which this proceeding  
 02 was taken, and further that I am not financially  
 03 or otherwise interested in the outcome of the  
 03 action.

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00522:04 SUBSCRIBED AND SWORN to by me on this 19th  
 05 day of September, 2012.

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00522:08

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08 Emanuel A. Fontana, Jr., RPR  
09 Texas CSR No. 1232  
09 Expiration Date: 12/31/12  
10 Worldwide Court Reporters  
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