

# Deposition Testimony of:

## **Charles Henry**

Date: October 03, 2012

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Page 8:20 to 9:05

00008:20 Will you please state your full  
21 name for the record.  
22 A. Charles Bender Henry, Jr.  
23 Q. And, Mr. Henry, what is your  
24 current work address?  
25 A. 7344 Zeigler Boulevard.  
00009:01 Q. What city is that located in?  
02 A. Mobile, Alabama.  
03 Q. And, Mr. Henry, where do you  
04 currently reside? In what city?  
05 A. Mobile, Alabama.

Page 10:06 to 10:09

00010:06 Q. Do you understand in this  
07 particular case you've been designated as  
08 what's called a Rule 30(b)(6) designee?  
09 A. Yes.

Page 12:22 to 15:05

00012:22 Q. You have been handed a binder  
23 which has various documents that we'll be  
24 using in the deposition today and I'd like to  
25 focus on Tab No. 1 and we'll mark Tab No. 1  
00013:01 as Exhibit 8880 in this -- in this matter.  
02 Exhibit 8880 is a copy of an agreed 30(b)(6)  
03 deposition notice of the United States; do  
04 you see that?  
05 A. Yes.  
06 Q. And prior to the deposition  
07 today have you had an opportunity to review a  
08 copy of Exhibit 8880?  
09 A. Yes.  
10 Q. And I want to specifically focus  
11 on two topics in Exhibit -- that are listed  
12 in Exhibit 8880. Those topics are Topics 34  
13 and Topic 35. Topic 34 is Your efforts  
14 (including all communications, modeling,  
15 calculations and analysis of any kind)  
16 leading to the flow rate estimate of a  
17 thousand barrels per day -- sorry, thousand  
18 bopd announced by Admiral Landry on April 24,  
19 2010, correct?  
20 A. Yes.  
21 Q. Okay. And are you prepared to  
22 testify as a representative of -- of the  
23 United States on Topic No. 34?  
24 A. Yes.  
25 Q. Topic No. 35 is "Your efforts  
00014:01 (including all communications, modeling,  
02 calculations and analysis of any kind)

03 leading to the flow rate estimate of 5,000  
 04 bopd announced by Admiral Landry on April 28,  
 05 2010," correct?  
 06 A. Yes.  
 07 Q. And you understand that you have  
 08 been designated as a representative of the  
 09 United States to testify on Topic 35?  
 10 A. Yes.  
 11 Q. And you are prepared to testify  
 12 as a representative of the United States on  
 13 Topic No. 35?  
 14 A. Yes.  
 15 Q. With respect to the -- there is  
 16 a B -- both of those topics list bopd. Do  
 17 you see that?  
 18 A. Yes.  
 19 Q. And is it your understanding  
 20 that bopd stands for barrels of oil per day?  
 21 A. You've defined that, yes.  
 22 Q. Okay.  
 23 A. Yes, I understood it prior to  
 24 that, too, sir.  
 25 MS. HANKEY: Counsel, just as a point  
 00015:01 of clarification, Admiral Landry is  
 02 designated with respect to the public  
 03 announcement of the --  
 04 MR. FIELDS: We're going to get to  
 05 that. I understand. Thank you.

Page 16:11 to 16:25

00016:11 Q. With respect to the public  
 12 announcement that was made of the 1,000  
 13 barrel per day announcement as well as the  
 14 5,000 barrel per day announcement, that  
 15 will -- the announcement itself, that will be  
 16 dealt with by Admiral Mary Landry?  
 17 A. I'm not -- that's nothing I am  
 18 involved with any decisions on, sorry.  
 19 Q. Okay. With respect to your  
 20 getting ready to be -- to testify as a  
 21 representative of the United States on  
 22 Topics 34 and 35, what did you do to prepare  
 23 yourself to testify?  
 24 A. I met with counsel, reviewed  
 25 documents, and spoke to individuals.

Page 21:20 to 22:04

00021:20 Q. (BY MR. FIELDS) And who were  
 21 the three individuals that you talked with in  
 22 preparation for your testimony here today?  
 23 A. Admiral -- retired Admiral Mary  
 24 Landry, retired Captain James Hanslik, and

25 Bill Lehr.  
00022:01 Q. When did you talk with  
02 Admiral Landry?  
03 A. I believe it was the 26th of  
04 September. It was within the last week.

Page 24:23 to 25:10

00024:23 Q. And what was your -- the purpose  
24 of talking with Admiral Hanzlik last Friday?  
25 A. As follow-up from the  
00025:01 discussions with Admiral Landry on  
02 recollections related to the 1,000 barrel per  
03 day.  
04 Q. With respect to Admiral Landry,  
05 what information did Admiral Landry tell you  
06 with respect to the 1,000 barrel per day  
07 estimate?  
08 A. Are you asking that I just  
09 recount the whole conference call, or are you  
10 asking --

Page 25:13 to 27:11

00025:13 Q. Whatever information that  
14 Admiral Landry told you about what she  
15 recalled on the 1,000 barrel per day  
16 estimate.  
17 A. She -- her recollection was  
18 that -- as she stated, that her recollection  
19 was that she used information -- or, you  
20 know, centered on 1,000 barrel number from  
21 information she received from then Captain  
22 James Hanzlik.  
23 Q. When you -- was your purpose of  
24 talking with Admiral Hanzlik to determine the  
25 source of his information for the 1,000  
00026:01 barrel per day estimate?  
02 A. Yes, to follow up after the  
03 discussion, yes.  
04 Q. What did Admiral Hanzlik tell  
05 you about the 1,000 barrel per day estimate?  
06 A. Captain Hanzlik --  
07 Q. Oh, I'm sorry, Captain.  
08 A. No problem. Captain Hanzlik  
09 said his recollection was that that in- --  
10 that information had been passed from BP to  
11 him, and he had provided it to Admiral Landry  
12 in conversation and discussion.  
13 Q. Did he indicate to you on what  
14 date he passed this information from BP to  
15 Admiral Landry?  
16 A. He stated that he wasn't sure if  
17 it was that Friday night or that Saturday

18 morning, but it was during that time frame.  
19 Q. The Friday night or Saturday  
20 morning prior to the announcement?  
21 A. That would be the 23rd -- yeah,  
22 well, the 23rd, early on the 24th, so during  
23 that time frame. But he didn't recall  
24 specifically when he had that talk with --  
25 you know, or -- or provided that information  
00027:01 to Admiral Landry in discussion. They worked  
02 off and on in pretty close communication, so  
03 it was during that time period was all he  
04 could recall.  
05 Q. Did Captain Hanzlik indicate  
06 from whom at BP he believed he received the  
07 information in support of the 1,000 per day  
08 estimate?  
09 A. He stated to me that he did not  
10 recall specifically who gave him that  
11 information.

Page 34:14 to 34:19

00034:14 During your conversation with  
15 Dr. Lehr did he indicate that in developing  
16 the analysis in support of the 5,000 barrel  
17 per day estimate, that he used information  
18 from satellites?  
19 A. Yes.

Page 36:13 to 37:04

00036:13 Q. You also indicated that you  
14 discussed with Dr. Lehr some of the  
15 observations that he was getting from field  
16 observers. What did he tell you about that?  
17 A. He -- he said that -- he stated  
18 that -- well, what did he tell me? He -- he  
19 basically told me that he had talked to  
20 Debbie about -- I'm sorry, Debra on what she  
21 had flown, what she had seen. And they had  
22 worked together -- she had provided some  
23 information as for how much percentage might  
24 be sheen, what percentage might be heavier  
25 oil, how -- you know, what might be  
00037:01 emulsified and not, to give him the  
02 granularity. And then from his discussions,  
03 he took from that and developed the numbers  
04 he used.

Page 38:19 to 40:18

00038:19 Q. Okay. Did he indicate that  
20 there were certain values that he used that

21 were tied to guidelines from either the Bonn  
22 agreement or the ASTM guidelines?  
23 A. That was one of the discussion  
24 points, yes, sir.  
25 Q. Okay. And what did he tell you  
00039:01 about that?  
02 A. He stated that he had used --  
03 for the thicker oil, he had used thicknesses  
04 more in line with the ASTM method and not  
05 those in the Bonn agreement, and he had  
06 his -- well, in fact, I think one key point  
07 you -- actually, since we're specifically  
08 talking about the discussion last week and  
09 not --  
10 Q. Correct.  
11 A. You will bring up the other  
12 things later on. We did not talk about the  
13 differences between the ASTM method and Bonn  
14 and the way he set it up. We really  
15 specifically talked only on what values he  
16 had chosen.  
17 Q. Okay. During the conversation  
18 that you had with him last week where he  
19 stated that he had used the ASTM method for  
20 the thicker oil, did he indicate why he chose  
21 to use the ASTM versus the Bonn agreement?  
22 A. Some clarification would be  
23 needed. I -- he did not apply directly, you  
24 know, in complete scale either method because  
25 the information richness that he had as far  
00040:01 as the observations in the field were not  
02 detailed, and that's what I was alluding to  
03 prior to that. Both of those methods, if you  
04 follow them, as they're developed have  
05 several layers of gra- -- of gradation. And  
06 in his simplified conservative estimate, he  
07 had broke it down to two values, the sheens,  
08 you know, and an average value for sheens and  
09 an average value for the heavier oil and  
10 providing some justifications how you would  
11 achieve those judgment values.  
12 Q. With respect to the two  
13 categories, we'll just talk about the sheens  
14 and the heavier oils, did you have any  
15 conversations with him about which particular  
16 method that he used, either ASTM or Bonn  
17 agreement or for the values for the sheens?  
18 A. Specifically, no.

Page 45:24 to 46:12

00045:24 Q. All right. Mr. Henry, can you  
25 provide us with an overview of your  
00046:01 educational background?  
02 A. Sure. I have a Master's of

03 Science degree from Louisiana State  
04 University and a Bachelor of Science degree  
05 from Louisiana State University. My Master's  
06 degrees in marine science, you know, focusing  
07 primarily on more the environmental -- not so  
08 much the physical science of marine science,  
09 but the biological and chemical side of the  
10 marine science world.  
11 And, I apologize, but how much  
12 detail do you want me to give?

Page 46:16 to 47:08

00046:16 Q. So with respect to your Master's  
17 of Science degree, did you receive that from  
18 LSU in Baton Rouge?  
19 A. Yes, sir, in 1995 I received my  
20 Master's of Science degree.  
21 Q. And with respect to your  
22 Bachelor's of Science degree, from which  
23 institution did you receive that?  
24 A. Louisiana State University,  
25 1985.  
00047:01 Q. Also in Baton Rouge?  
02 A. Yes.  
03 Q. And what was your major in for  
04 your Bachelor of Science degree from LSU?  
05 A. It was specifically listed as  
06 environmental health, but that was the early  
07 formation of the environmental science degree  
08 at LSU, so...

Page 50:09 to 50:20

00050:09 Q. You suggested in your earlier  
10 answer that you had some expertise or might  
11 consider yourself an expert in spill  
12 preparedness or response preparedness. Do  
13 you consider yourself an est- -- an expert in  
14 estimating the size of oil or gas spills?  
15 A. I understand the principles very  
16 well. I understand some of the limitations  
17 very well. I've taught training classes on  
18 how to do that procedure. So I guess that  
19 would mean that I have some expertise in that  
20 area, yes.

Page 51:01 to 51:14

00051:01 Q. Based on some of the reading  
02 that I've done, it appears that you're  
03 currently director of something called the  
04 Gulf of Mexico Disaster Response Center?

05           A.       Yes, sir.  
06           Q.       Okay. And the Gulf of Mexico  
07 DRC, we'll call it, is a relatively new  
08 organization within the NOAA family?  
09           A.       Yes, sir, it's -- it's an --  
10 it's a result of Congressional appropriation,  
11 and starting in 19- -- I'm sorry, 2008 funds  
12 were appropriated. The building is just now  
13 being complete. So we are just kind of  
14 transitioning to be a -- a new program.

Page 55:06 to 55:11

00055:06       Q.       And before becoming director of  
07 the direct -- Disaster Response Center, what  
08 was your position at NOAA?  
09           A.       I was the scientific support  
10 coordinator based out of New Orleans,  
11 Louisiana.

Page 56:01 to 56:10

00056:01       Q.       And at the time of the Deepwater  
02 Horizon incident, you were a NOAA scientific  
03 support coordinator or SSC?  
04           A.       Yes.  
05           Q.       How many years had you been --  
06 how many years did you serve as a NOAA SSC?  
07           A.       It would have been 12 to 13  
08 years at the time. Yeah. I think I took the  
09 job in 1998, so it would have been roughly 12  
10 years when this incident happened.

Page 57:24 to 58:01

00057:24       Q.       And you were a NOAA SSC for  
25 Coast Guard District 8?  
00058:01       A.       Yes.

Page 59:19 to 59:22

00059:19       Q.       And where did you work before  
20 joining NOAA as an employee?  
21           A.       At Louisiana State University in  
22 Baton Rouge.

Page 62:23 to 63:24

00062:23       Q.       (BY MR. FIELDS) All right.  
24 Mr. Henry, I forgot to ask you some questions  
25 actually about your experiences at LSU.  
00063:01       Based on my reading of some of your



02 materials, you were a research associate at  
03 LSU?

04 A. Yes, sir.

05 Q. And what specifically -- what  
06 department or what unit at LSU did you serve  
07 as a research associate?

08 A. At the Institute For  
09 Environmental Studies.

10 Q. And while you were a research  
11 associate at LSU you were under contract with  
12 NOAA?

13 A. For -- well, my direct  
14 supervising boss, the director of the  
15 program, Ed Overton, had a contract with NOAA  
16 that the University provided support,  
17 chemical support for emergency response, and  
18 starting -- well, yes, so I would say I was  
19 not under contract, but the university was  
20 and I was a member of that team and I was  
21 very active in that role, yes.

22 Q. Okay. And how many years did  
23 you serve as a research associate at LSU?

24 A. 13 years.

Page 75:13 to 75:16

00075:13 Q. Has -- prior to the Deepwater  
14 Horizon incident are you aware of NOAA being  
15 involved in calculating or analyzing the flow  
16 rate out of a subsea wellhead spill?

Page 75:19 to 76:12

00075:19 A. From, you know, what's coming  
20 out of a pipe deepwater, shallow water, I  
21 don't recall. I -- I really don't. I mean,  
22 I -- and I'm not trying to be evasive at all.  
23 I'm just trying to think through all the  
24 different spills I was involved with because,  
25 I didn't kind of think through this, but  
00076:01 al- -- in almost every case we rely on -- on  
02 what information that the responsible party  
03 provides. And often, you know, that's what  
04 we have to work with, but that's not our area  
05 of expertise, is that piece -- is when the  
06 oil is released in the environment is our  
07 area of expertise. So specifically  
08 wellheads, I think they're a little -- if you  
09 had said what might come out of the side of a  
10 tanker at a rate, we have some models to look  
11 at that. But that's not within the realm of  
12 what you're talking about.

Page 77:12 to 77:17

00077:12 Q. To your knowledge, has the  
13 emergency response division prior to the  
14 Deepwater Horizon incident ever been involved  
15 in estimating either the flow rate or the  
16 total quantity of oil spilled from a subsea  
17 wellhead?

Page 77:20 to 78:06

00077:20 A. Yeah, and -- again my answer is  
21 still that I don't recall us ever looking  
22 at -- I don't recall. I mean, I -- there has  
23 been so many spills and to say that we  
24 were -- I know that we had no responsibility  
25 to create any value that was ever used in  
00078:01 that, and I don't believe that we ever looked  
02 at subsurface wellheads to estimate that, but  
03 I -- I'm kind of hedging my bet that I don't  
04 know what some of the team members did when  
05 you ask. You're asking my knowledge, and  
06 it's outside the scope.

Page 78:20 to 79:01

00078:20 Q. At the time of the Deepwater  
21 Horizon incident did you work in the  
22 emergency response division?  
23 A. Yes, sir.  
24 Q. And that was part of NOAA's  
25 office of response and restoration?  
00079:01 A. Yes, sir.

Page 79:21 to 80:09

00079:21 Q. And with respect to an oil  
22 spill, if there is an oil spill, can the  
23 federal on-scene coordinator request  
24 scientific support from the ERD?  
25 A. Yes. That was the primary role  
00080:01 that the SSC and the emergency response  
02 division serves, is to provide support to  
03 other federal agencies.  
04 Q. And is one of the  
05 responsibilities of the ERD to provide the  
06 federal on-scene coordinator or other  
07 governmental official with estimates of  
08 volume of oil spill?  
09 A. No.

Page 84:15 to 85:03

00084:15 Q. Sure. Okay. Let's talk about  
16 when you first became involved in the  
17 Deepwater Horizon incident. You learned  
18 about the Deepwater Horizon fire during the  
19 early hours of April 21st?  
20 A. Yes, sir.  
21 Q. And you -- you were --  
22 A. Wednesday morning, yes, sir.  
23 Q. And you were notified of the  
24 incident by the Morgan City MSU?  
25 A. Yes, sir.  
00085:01 Q. And MSU stands for the marine  
02 safety unit?  
03 A. Yes, sir.

Page 86:16 to 86:21

00086:16 Q. And once you arrived in  
17 Morgan City did you work as the SSC for the  
18 federal on-scene coordinator?  
19 A. I believe I picked up that role  
20 when they called me in the middle of the  
21 night, yes, sir.

Page 87:25 to 88:04

00087:25 Q. Okay. And your -- what was your  
00088:01 role as scientific support coordinator once  
02 you arrived in -- in Morgan City?  
03 A. To assist the Coast Guard in the  
04 response. You know, then again, if you

Page 89:12 to 89:21

00089:12 Q. At some point in time within the  
13 next day or so, an Incident Command Post was  
14 set up in Houma?  
15 A. Yes, sir, I believe that that  
16 opened up as far as officially Friday  
17 morning, which would have been the 23rd.  
18 Q. And at that point in time, did  
19 you move over from Morgan City to Houma to  
20 serve as SSC for that post?  
21 A. Yes, sir.

Page 91:18 to 92:21

00091:18 Q. At some point in time, the  
19 Unified Area Command was set up in Robert,  
20 Louisiana?  
21 A. Yes.  
22 Q. And did you move to Robert to  
23 serve as the NOAA SSC to the Unified Area

24 Command?  
 25 A. Yes.  
 00092:01 Q. And the FOSC, the federal on  
 02 scene coordinator, at Unified Command was  
 03 Admiral Mary Landry?  
 04 A. Yes.  
 05 Q. Do you recall when you moved  
 06 from Houma to Robert, to Unified Command?  
 07 A. On the morning of the 20 -- that  
 08 Saturday morning, which I believe is the  
 09 24th, right? It was Saturday, that Saturday  
 10 morning.  
 11 Q. And how long did you remain NOAA  
 12 SSC for Unified Command?  
 13 A. Well, to provide a little  
 14 clarity, I was the lead NOAA SSC. We also  
 15 brought another team member, Steve Lehman, on  
 16 scene to be my deputy or when I wasn't there,  
 17 to be the SSC. I probably wore that hat, you  
 18 know, except for the times I was gone, until  
 19 early September.  
 20 Q. Of 2010?  
 21 A. 2010.

Page 94:13 to 95:24

00094:13 Q. Were there any other NOAA  
 14 scientific support coordinators during the  
 15 incident who came down to the Gulf Coast to  
 16 provide assistance to you or to the federal  
 17 on scene coordinator?  
 18 A. Yes, sir.  
 19 Q. Who -- who were they?  
 20 A. I believe at one time or another  
 21 all the SSCs were fully engaged. So that  
 22 would include John Whitney from Alaska; it  
 23 would include Jordan Stout from California;  
 24 Ruth Yender, who had the Pacific Northwest  
 25 and Oceana; Liz Jones, who had the Great  
 00095:01 Lakes area; we mentioned Steve Lehman; we've  
 02 mentioned Ed Levine; Frank Csulak that had  
 03 the mid-Atlantic; Jen -- Jim Jeansonne who  
 04 was based out of Tampa; and Brad Benggio who  
 05 was based out of Miami, but Brad primarily  
 06 worked the Florida issues. I don't remember  
 07 if he -- if he was -- if he came on scene to  
 08 the western part of the Gulf, it was very  
 09 short term, but he primarily worked the  
 10 preparation and response issues out of the  
 11 Miami office.  
 12 And I think there was also --  
 13 those -- does that add up to ten people,  
 14 total? I have to make sure I didn't miss  
 15 any.  
 16 Q. With you, ten.

17 A. That's -- that's all of us, yes.  
18 Q. Okay. With respect to the other  
19 NOAA SSCs who played some role in the  
20 response to the Deepwater Horizon incident,  
21 did any of those SSCs have any involvement in  
22 estimating the flow of oil from the Macondo  
23 well?  
24 A. No, sir.

Page 100:09 to 101:18

00100:09 Q. Okay. Why don't you turn to  
10 Tab No. 5 in your binder, and that will be  
11 marked as Exhibit 8882. And this is actually  
12 a number of documents. This is the way it  
13 was produced and so I want to specifically --  
14 on 8882 I want to specifically focus on the  
15 situation report that is actually on  
16 Page 133640 and 133641. Do you see that?  
17 A. It's in the back, correct?  
18 Q. Right.  
19 A. Yes, sir.  
20 Q. Okay.  
21 A. I haven't --  
22 Q. Sure, if you want to take a  
23 minute to read that.  
24 Okay. So in Exhibit 8882, this  
25 is a situation report, at least part of it is  
00101:01 a situation report that you prepared on  
02 April 21st, 2010?  
03 A. That's what it states, yes, sir.  
04 Q. Okay. And it indicates that --  
05 as SSC did you routinely prepare these  
06 situation reports?  
07 A. Most and -- yeah, usually we  
08 would prepare what we call an evening report,  
09 which is a situation report that we put in  
10 ResponseLINK, which is primarily available to  
11 our team members and -- and some of the other  
12 groups that have access to it. It's a  
13 limited access type report, so it's kind of a  
14 report to our team members. And so normally  
15 we would. I would say on this event, if  
16 you'd notice, that eventually you don't see  
17 any from me because I don't have to write  
18 them.

Page 104:05 to 104:15

00104:05 Q. With respect to these particular  
06 reports, I know this version, Exhibit 1882 --  
07 or, sorry, 8882, was forwarded by e-mail, but  
08 as a general rule, these are -- these are  
09 situation reports that are just accessed

10 through some type of web browser?  
11 A. Yes. Yeah, I -- I -- that's how  
12 they were primarily used. I noticed, also,  
13 that it had been from an e-mail, but it's  
14 part of a -- you know, it's a website that we  
15 maintain.

Page 104:24 to 105:04

00104:24 Q. (BY MR. FIELDS) Sure. Do  
25 you -- do you recall submitting any situation  
00105:01 reports to ResponseLINK in which you describe  
02 the process that NOAA was going to use to  
03 estimate the flow of oil from the Macondo  
04 well?

Page 105:06 to 105:15

00105:06 A. I don't believe I submitted any.  
07 I also was not checking that record to see if  
08 someone else -- but are you asking did I  
09 submit anything?  
10 Q. (BY MR. FIELDS) Right.  
11 A. No.  
12 Q. At the time, according to this  
13 situation report, the United States Coast  
14 Guard had requested the best guess estimate  
15 from the RP. Do you see that?

Page 105:17 to 106:20

00105:17 A. On what page?  
18 Q. (BY MR. FIELDS) On Page 641.  
19 A. On 641? And that's the second  
20 sentence and the third sentence in the full  
21 paragraph?  
22 Q. Correct.  
23 A. Coast guard's --  
24 Q. Do you see that?  
25 A. Yes, I sure do.  
00106:01 Q. When -- when you use the word  
02 "RP," that's -- that means responsible party?  
03 A. Yes, sir, it sets --  
04 unfortunately, part of our vernacular, but we  
05 often use that for the responsible party, so,  
06 yes, sir.  
07 Q. Okay. And which -- when you use  
08 the term "RP" or "responsible party" here, to  
09 whom were you referring?  
10 A. This is what I was going to  
11 follow up. It's kind of associated how  
12 "Openinee" used it. It doesn't necessarily  
13 mean they are ultimately the responsible

14 party.  
15 Q. Oh, I understand.  
16 A. But they have the responsibility  
17 to step up. In this case it would be BP, I  
18 think was the primary party that would -- the  
19 Coast Guard was in discussions with, yes,  
20 sir.

Page 110:18 to 110:20

00110:18 Q. (BY MR. FIELDS) At this point  
19 in time, as of April 21st, 2010, had NOAA  
20 prepared any estimates of the flow rate?

Page 110:22 to 110:22

00110:22 A. No.

Page 112:13 to 113:19

00112:13 Q. You used the phrase "an order of  
14 magnitude type analysis." What do you --  
15 what do you mean by that?

16 A. Generally, in emergency  
17 response, we tend to think of things --  
18 because there's always a lot of uncertainty,  
19 we tend to think -- think of things by orders  
20 of magnitude.  
21 You know, it's not important  
22 often whether -- whether it's 650 or, you  
23 know, 750. It's -- it's a -- it's in the  
24 high hundreds. So we think about spills  
25 often as -- as ten barrels, as a hundred  
00113:01 barrels, as a thousand barrels. Thinking is  
02 it 10 to a hundred, a hundred to a thousand,  
03 thousand to 10,000. Those orders of  
04 magnitude tend to provide changes in size and  
05 scope.

06 So uncertainty being as it is,  
07 we often think about things as breaking it  
08 down by orders of magnitude. Someone says  
09 something -- you know, a certain number, I  
10 rarely even remember the specific number.  
11 Like, if you told me it was 7,000 -- or you  
12 say 9,852, I'm going -- I'm thinking 10,000.  
13 So that kind of thing.

14 Q. And when you talk about an order  
15 of magnitude, is that a -- when you -- are  
16 you using that to indicate a factor of 10?

17 A. I'm sorry, yes, sir. An order  
18 of magnitude from a science perspective is  
19 normally a base 10, factor of 10, yes, sir.

Page 115:16 to 115:21

00115:16 Q. (BY MR. FIELDS) And you made  
17 clear when you were writing the situation  
18 report the volume or rate of the release was  
19 unknown?  
20 A. I hope so, because I know I  
21 didn't know it. So, yeah.

Page 116:16 to 116:19

00116:16 Q. So a portion of Exhibit 8883 is  
17 a situation report that you submitted to  
18 ResponseLINK on April 22nd, 2010?  
19 A. I'm sorry, April 22nd, yes.

Page 125:01 to 126:17

00125:01 Q. The worst case release  
02 estimation that you're referring to in  
03 Exhibit 8883 is different than the true rate  
04 of release?  
05 A. I don't -- what -- I don't --  
06 what do you mean by true rate of release?  
07 Q. Well, I'm looking at a phrase  
08 that you used. You said it's impossible to  
09 term -- to truly determine the true rate of  
10 release.  
11 A. Oh, I'm sorry.  
12 Q. So what did you mean by the  
13 phrase "true rate of release"?  
14 A. And it's in this document here?  
15 Q. Yes. Second -- third sentence  
16 after what we were just focusing on.  
17 A. Okay. Okay. I think my  
18 recollection is is what I'm referring to is  
19 that even though the FOSC was asking for such  
20 information on how much oil is coming up,  
21 there was enough information that was being  
22 expressed in those conference calls as far as  
23 not even knowing what truly is going on down  
24 in the reservoir or down -- down well, not  
25 knowing what the true situation would be with  
00126:01 the BOP, not knowing the true situation with  
02 the pipe, not knowing -- there were so many  
03 unknowns that you could not do some simple  
04 calculations based on -- on what  
05 information -- this is what was relayed, that  
06 they could not provide a specific number of  
07 how much oil might be coming up.  
08 Q. Right. So what I'm asking is  
09 when you use the phrase "true rate of  
10 release" you're talking about the actual  
11 amount of oil that was being released?



12           A.       I'm sorry. Yes, sir. I don't  
13 think -- no one could put an exact number.  
14           Q.       And there was a difference in  
15 your view between a worst case release  
16 estimation and the true rate of release?  
17           A.       Yes.

Page 130:12 to 131:01

00130:12           Q.       When you say "it is impossible  
13 to truly determine the true flow rate," what  
14 did you mean by that?  
15           A.       That was the sense I got from  
16 the conference call why they could not  
17 provide Captain Paradis a specific number.  
18           Q.       Because it was impossible at  
19 that point in time to determine the true rate  
20 of release?  
21           A.       That's the sense I got from the  
22 discussion of the conference call of why they  
23 couldn't provide Captain Paradis with  
24 specific numbers. As incident commander he  
25 was asking how much, and that was my sense of  
00131:01 why they couldn't provide them.

Page 131:14 to 132:09

00131:14           Q.       You say, "It is impossible to  
15 truly determine the true rate of release, so  
16 we plan to work from a worst case  
17 perspective." Do you see that?  
18           A.       Yes.  
19           Q.       Okay. What did you mean that  
20 "we plan to work from a worst case  
21 perspective"?  
22           A.       Well, in that case it's the  
23 incident command, the -- the response  
24 organization that's growing up, the posture  
25 that the Coast Guard and BP working together  
00132:01 in their response was taking the attitude it  
02 could be a worst case type of issue. And  
03 that's the posture that occurred, you know,  
04 continued throughout the response, was --  
05 was -- and the Coast Guard summarizes it many  
06 way, especially in situations like this where  
07 there is a lot of unknowns. It's go big  
08 early; you can always back. So it was a  
09 response that it was a worst case.

Page 137:08 to 138:14

00137:08           Q.       Can you ever think of a time  
09 during the response that the incident

10 commander requested resources from NOAA's ERD  
11 divi- -- ERD when ERD did not provide that  
12 resource?

13 A. There were times that we had no  
14 manpower to provide additional folks. As the  
15 response grew and additional command posts  
16 were opened up, we did not have staff to fill  
17 all the roles.

18 Q. So with respect to those  
19 instances where you weren't able to provide  
20 resources, it wasn't a situation as if people  
21 existed back at ERD, but they weren't  
22 assigned; it was simply you -- you were  
23 basically using the resources that you had  
24 available?

25 A. We exhausted our personnel  
00138:01 fairly quickly. I mean, not exhausted them  
02 from -- well, probably did from working too  
03 hard, but there is -- the emergency response  
04 division is actually a very small division,  
05 and so, you know, just kind of provide  
06 clarity to that for my -- for my group, there  
07 is not that many people in our division. So  
08 we also didn't start at the -- actually  
09 pulling in people that used to be in the  
10 division, had gone to other offices, and  
11 brought them back in to help augment. But we  
12 never -- there were oftentimes that we were  
13 short of people to fill the requests that we  
14 had.

Page 141:19 to 141:23

00141:19 Q. If you turn to Tab No. 24 in  
20 your binder, and that will be Exhibit 8884.  
21 And Exhibit 8884 is an e-mail from you to an  
22 individual named Regis Walter?

23 A. Yes.

Page 146:03 to 146:12

00146:03 Q. Right. I'm asking you -- I'm  
04 not talking about in the future. I'm just  
05 focused -- focusing on right now when you  
06 wrote this e-mail when you said "without any  
07 estimates from BP." It appears to me that  
08 you're saying at this point in time you have  
09 not received or heard any actual estimates of  
10 the release way -- rate from the Macondo  
11 well. Is that correct?

12 A. Yes.

Page 149:21 to 150:17

00149:21 Q. With respect to the numbers that  
22 you were using for planning, in general, you  
23 knew that this was a large spill?  
24 A. Had the potential to be a large  
25 spill.

00150:01 Q. Okay. You indicate that the --  
02 the spiller had not provided -- had given  
03 nothing official. Is it general at this  
04 point in time in the life of a release or a  
05 spill that the spiller, as you use that term,  
06 provides an estimate of the actual release?  
07 A. Yes, sir.

08 Q. Okay. Is that true for deep-sea  
09 spills?  
10 A. My understanding is that -- that  
11 the, quote, responsible party has the  
12 obligation -- and I'm not a lawyer, so I  
13 don't know the legal piece on it -- to  
14 provide the Coast Guard, if they're the  
15 federal agency responding, information as to  
16 what the release is and even what the  
17 potential release is. So...

Page 151:22 to 152:05

00151:22 Q. Right. But with respect to a  
23 deep-sea spill, you don't have any experience  
24 to understand when those types of estimates  
25 are generally provided by the responsible  
00152:01 party?  
02 A. Sorry.  
03 Q. That's okay.  
04 A. There is no basis for me to base  
05 that on, so, no.

Page 153:06 to 153:15

00153:06 Q. Okay. Are you aware of any work  
07 that had been undertaken by BP before  
08 April 24th, 2010, to estimate the actual  
09 amount of oil being discharged from the well?  
10 A. The date is -- I know it says  
11 Saturday. Any particular time, or before  
12 Saturday, period, is what you're asking for?  
13 Q. Yeah, April 24th.  
14 A. No, I mean, not that I was aware  
15 of.

Page 153:22 to 154:01

00153:22 Q. Prior to April 24th, 2010, are  
23 you aware of any what you would consider to  
24 be official flow rate estimates provided --

25 being provided by BP?  
00154:01 A. I was not aware of any, no.

Page 157:02 to 159:15

00157:02 Q. (BY MR. FIELDS) At any point on  
03 or prior to April 24th had the federal  
04 on-scene coordinator requested that NOAA work  
05 to determine the release rate of oil from the  
06 Macondo well?

07 A. No.

08 Q. In one of your -- one of your  
09 documents, I seem to recall a distinction  
10 that you drew between modeling and  
11 estimating. In your view, is there a  
12 difference between modeling and estimating  
13 for a spill?

14 A. Well, yes. I -- and I'm kind of  
15 a very --

16 Q. Yeah, you can tell me the  
17 difference in your view, if you would.

18 A. In a very general sense, an  
19 estimation is based on maybe a visual  
20 observation or something that there is not a  
21 lot of quantitative information that you can  
22 put into some type of algorithm that may have  
23 been valid to make a more specific  
24 estimation.

25 Where modeling is basically  
00158:01 where you're using a -- you know, an  
02 algorithm or a more specific information to  
03 drive that algorithm to make, you know, an  
04 estimation. So the end result is what -- you  
05 know, from a model is the more uncertainty  
06 goes in, you get uncertainty out. The more  
07 specific the data is, the better guess you  
08 get out, if the model is good.

09 But an estimation could be like  
10 my wild guess. I make -- I'm looking at  
11 something. I'm basing it on best  
12 professional judgment. I may be looking at  
13 something and doing some simple math to make  
14 an estimate, but it wouldn't be in the  
15 context of towards a model. So more simple  
16 math to come up with an estimation.

17 Q. Okay. In late April 2010, are  
18 you aware of NOAA performing any modeling to  
19 estimate the amount of oil that was being  
20 spilled or released from the Macondo well?

21 A. And can you give the date again?  
22 I'm sorry.

23 Q. Yeah, late April 2010.

24 A. I would say that there were  
25 people that were trying to develop --  
00159:01 actually, you know, there may have been --

02 I -- my -- I recall that there may have been  
03 an e-mail that one of his team members may be  
04 looking at it. I am not sure what they are  
05 using for a model. Right now that's not  
06 jumping in my head. Whether that would fit  
07 the modeling.

08 But I think at the same time,  
09 there was a lot of non -- not a lot of  
10 information to drive a model, kind of when I  
11 put it in context that you got to have good  
12 information in to get good information out  
13 from a model. So some people were attempting  
14 it. I think we had incomplete knowledge to  
15 be able to model a spill at that time.

Page 162:09 to 162:24

00162:09 Q. At -- at any point in time in  
10 late -- I want to put aside estimating.  
11 We'll talk about modeling and using the term  
12 that you had used. In late April 2010, did  
13 the federal on-scene coordinator request that  
14 NOAA model the amount of oil that was being  
15 spilled or released from the Macondo well?

16 A. I -- I don't recall ever being  
17 tasked to do that.

18 Q. Are you aware of anyone from the  
19 federal government asking the NOAA or NOAA's  
20 ERD group to model the amount of oil that was  
21 being released or spilled from the Macondo  
22 well?

23 A. In using the terms -- the  
24 stronger term "modeling," no.

Page 173:25 to 175:13

00173:25 Q. (BY MR. FIELDS) Sure. Prior to  
00174:01 this call occurring on April 24th in -- in  
02 the morning did you come to learn that  
03 there -- the flow rate estimate that was  
04 being suggested was approximately 1,000  
05 barrels of oil per day?

06 A. My recollection is the first  
07 time I heard a thousand barrels per day was  
08 during this call.

09 Q. Okay. And in this call it's  
10 reported that Rear Admiral Mary Landry  
11 provided a -- a brief -- the status. Do you  
12 see that?

13 A. Yes.

14 Q. And one of the things that she  
15 says -- or at least this call **summary**  
16 prepared by Dr. Conner says is that, quote --  
17 it talks about on the second bullet point,

18 "New observations indicate that crude oil  
 19 continues to leak from the pipe connected to  
 20 the blow out preventer." Do you see that?  
 21 A. Yes.  
 22 Q. That's the riser?  
 23 A. That -- I -- I read as she's  
 24 stating here, but the riser -- are you asking  
 25 me to state is she implying that it's the  
 00175:01 riser? I'm not sure what you're asking.  
 02 Q. Okay. Let's do this: **This**  
 03 continues on, "This represents more than just  
 04 residual oil in the riser pipe" --  
 05 A. Okay.  
 06 Q. -- "and is estimated to flow at  
 07 a rate of 1000 barrels per day (42000 gallons  
 08 per day)." Do you see that?  
 09 A. Yes.  
 10 Q. So is your recollection that the  
 11 first time that you had heard of the thousand  
 12 barrels per day estimate was on this call?  
 13 A. Yes, as stated.

Page 177:03 to 178:24

00177:03 Q. -- Mr. Henry, as Charlie Henry,  
 04 prior to April 24th, this call occurring, had  
 05 you heard anybody suggest that the flow rate  
 06 out of the Macondo well was approximately  
 07 1,000 barrels of oil per day?  
 08 A. No.  
 09 Q. The next thing that it says here  
 10 is that the "NOAA SSC agrees that this is a  
 11 reasonable representation of the flow rate."  
 12 Do you see that?  
 13 A. Yes.  
 14 Q. And you're the NOAA SSC?  
 15 A. Yes.  
 16 Q. And on this call -- strike that.  
 17 And as of this point in time did  
 18 you agree that 1,000 barrels per day was a  
 19 reasonable representation of the flow rate?  
 20 A. I didn't know what the flow rate  
 21 was at the time. So would I say it's  
 22 reasonable? I wouldn't -- with that -- well,  
 23 it's kind of a catch-22 in that I didn't know  
 24 how much oil was flowing out of the -- of the  
 25 well at the time. We -- there has been some  
 00178:01 discussion. To say it was reasonable, I  
 02 think that I -- okay, it's reasonable with  
 03 the information that was being provided to us  
 04 to kind of characterize the condition  
 05 situation. So that -- you haven't asked why  
 06 would I think that. But I -- I felt on this  
 07 particular point -- I'm not trying to be  
 08 defensive at all, but, you know, it was -- it

09 was mentioned and the SSC -- you know,  
10 Admiral Landry basically said the SSC, well,  
11 Charlie, do you agree this is reasonable?  
12 And I said, yeah. It was that kind of a  
13 deal.  
14 Q. Okay. So did Admiral Landry ask  
15 you on the call, this NRT call whether you  
16 agreed that it was a reasonable  
17 representation of the flow rate?  
18 A. I don't remember the exact words  
19 she used and how open-ended the question was,  
20 as she stated, but she did look to me and  
21 say, you know -- you know, do you believe  
22 this is also reasonable and -- so there was  
23 some discussion in that -- in that nature,  
24 yes.

Page 179:07 to 180:07

00179:07 Q. And just so that I understand,  
08 did, in fact, Admiral Landry tell the NRT  
09 that you agreed that the 1,000 barrel per day  
10 estimate was a reasonable representation of  
11 the flow rate? Did she say that during the  
12 call?  
13 A. She did not -- I -- my  
14 recollection is she did not say the NOAA SSC  
15 agrees this is a reasonable rate; this is how  
16 Bill Conner's captured it. My recollection  
17 was was she was making her report in around  
18 the thousand barrel number. She said, well  
19 Charlie, do you agree? And I felt kind of on  
20 the spot and I had -- that's -- I think what  
21 I -- so and I'm not trying to be defensive  
22 because I didn't jump up and down and say,  
23 no, I disagree; but I think Bill captured it  
24 from his vantage point, who was not there in  
25 the room, but was listening somewhere else.  
00180:01 And that's how it was captured and I don't  
02 disagree that I didn't object, and I may have  
03 said re- -- maybe or it's reasonable or  
04 something along the line that would -- that  
05 Bill would -- didn't write it this way. So I  
06 don't disagree that whatever I stated was  
07 communicated that way.

Page 180:15 to 182:14

00180:15 Q. Was the 1,000 barrel per day  
16 estimate that Admiral Landry stated in the  
17 NRT call on April 24th, was that a flow rate  
18 estimate provided by NOAA?  
19 A. No.  
20 Q. Was there any modeling or

21 estimation that NOAA used to validate whether  
 22 or not the 1,000 barrel per day number that  
 23 Admiral Landry mentioned in this call was a  
 24 reasonable representation of the flow rate?  
 25 A. I -- my -- what I -- and I'm  
 00181:01 speculating a little bit on this, but prior  
 02 to this call -- very early that morning --  
 03 and this call was only at 9:00, so it was  
 04 earlier that morning -- there had been a  
 05 discussion between different members,  
 06 Admiral Landry, Doug Suttles, there was  
 07 someone else there, and myself. In fact, I  
 08 just arrived to Robert.  
 09 And there was a discussion  
 10 occurring, and part of that discussion was  
 11 around, you know, just how much oil was out  
 12 there, you know, or could be leaking. I  
 13 think it was said more than one way. And --  
 14 and I said, you know, I don't know.  
 15 But I relayed to -- in that --  
 16 in that discussion an observation that one of  
 17 my field observers had made when I talked to  
 18 her the day before and got a debrief from  
 19 her, and I asked her, because it's kind of a  
 20 natural question, you know, well, how much  
 21 oil is out there?  
 22 And she said, I don't know,  
 23 could be a thousand, could be 10,000 barrels.  
 24 And, you know, she described  
 25 what she was seeing. It was good information  
 00182:01 for me to help put things in perspective.  
 02 And I provided -- when asked in  
 03 that meeting, kind of a short meeting, a  
 04 variety of things, well, Charlie, how much  
 05 oil do you think is out there, said just that  
 06 way, and I think it was even -- it may have  
 07 been Doug Suttles that asked it in that way,  
 08 but Admiral Landry was present.  
 09 I said -- that's when I told the  
 10 story in specifically those words, I don't  
 11 know, could be a thousand, could be 10,000.  
 12 So there is a discussion that  
 13 includes a thousand, in that range. That's  
 14 all I could --

Page 185:03 to 187:04

00185:03 Q. And do you recall specifically  
 04 who during this meeting asked you your  
 05 opinion about how much oil was flowing for  
 06 the Macondo well?  
 07 A. What I recall was Doug Suttles  
 08 asked me, well, how much oil do you think it  
 09 is, Charlie?  
 10 And I didn't give an answer that



11 had to do with rate coming from the well, but  
12 I relayed the overflight observation from the  
13 day before --  
14 Q. Okay.  
15 A. -- which would have been  
16 observing oil on the surface of the water and  
17 not a rate release.  
18 Q. During -- during this call --  
19 I'm sorry, during this meeting that you had  
20 on the morning of the 24th with  
21 Admiral Landry, Doug Suttles, and a fourth  
22 person, you don't recall who it was, did  
23 anyone else provide a suggested flow rate  
24 from the well?  
25 A. Are you asking based on my  
00186:01 knowledge or --  
02 Q. Based on what you recall hearing  
03 at that meeting.  
04 A. At that meeting. No.  
05 Q. And when Doug Suttles asked you  
06 how much oil was flowing from the Macondo  
07 well, your initial response was, I don't  
08 know?  
09 A. Yes.  
10 Q. And then after you told  
11 Admiral Landry, Doug Suttles, and the third  
12 person you didn't know, but said, but here's  
13 what I have heard from my field observer as  
14 far as what she has seen?  
15 A. Right. And I think, again, at  
16 the time she actually said, I don't know,  
17 too, and I relayed that as well.  
18 Q. Okay. And one of the things  
19 that the -- that you reported the field  
20 observer had said when you had asked her the  
21 question, I guess, the day before was, I  
22 don't know how much oil -- what the flow rate  
23 is, could be 1,000, could be 10,000?  
24 A. With the subtle differences I  
25 think we were talking about oil on the  
00187:01 surface and not putting it in context of flow  
02 rates. I mean, I kind of got confused later  
03 in the vernacular, but at that time, it was  
04 observation of oil on water.

Page 187:07 to 187:14

00187:07 Q. So when you reported to  
08 Admiral Landry, Doug Suttles, and the fourth  
09 person this conversation from the field  
10 observer when you said -- she said it could  
11 be 1,000, it could be 10,000, were you  
12 telling them 1,000 or 10,000 barrels of oil  
13 on the surface?  
14 A. Yes.

Page 189:14 to 190:09

00189:14 Q. And with respect -- you  
15 indicated that after this meeting with  
16 Admiral Landry, Doug Suttles, and the -- and  
17 the fourth person, you don't believe that  
18 there had been developed any consensus as to  
19 the flow rate from the Macondo well?  
20 A. Not that I'm aware of.  
21 Q. Okay. And so the first time  
22 that you are hearing a number as far as the  
23 flow rate from the Macondo well is when  
24 Admiral Landry mentioned the 1,000 per day  
25 estimate during the NRD -- NRT call on the  
00190:01 morning of Saturday, April 24th?  
02 A. I -- the first I remember  
03 someone saying a thousand barrel per day flow  
04 rate, yes, sir.  
05 Q. And do you know the source of  
06 Admiral Landry's belief that the estimated  
07 rate of flow from the Macondo well as of  
08 April 24th was a fair -- approximately 1,000  
09 barrels per day?

Page 190:14 to 191:09

00190:14 A. Okay. I essentially asked that  
15 question -- question to Admiral Landry. I  
16 asked, you know, where did this information  
17 come from that she stated at this call that  
18 first morning.  
19 And she stated to me that she  
20 had used the information of a thousand  
21 barrels per day that she had received from  
22 then Captain Hanzlik. So that -- she said  
23 that's what she was using still as her number  
24 since nothing had change -- I guess -- I'm  
25 going to speculate now, but nothing had  
00191:01 changed on anything else.  
02 But she said specifically -- my  
03 recollection is -- I think she said it from  
04 looking at notes -- that she got that  
05 information from Hanzlik.  
06 Q. (BY MR. FIELDS) During --  
07 during the -- you learned this information  
08 when you spoke with Admiral Landry last week?  
09 A. Yes, sir.

Page 195:24 to 196:13

00195:24 Q. (BY MR. FIELDS) How did you  
25 endorse her statement that a thousand -- the

00196:01 flow rate from the Macondo well was  
02 approximately 1,000 barrels of oil per day?  
03 A. My recollection is that was  
04 stated in the call, and Admiral Landry kind  
05 of turned to me and said, you know -- and I  
06 don't remember the exact words, but, you  
07 know, what -- you know, Charlie, do you think  
08 that -- are you in agreement that's  
09 reasonable or something like that, and I  
10 replied some -- some affirmation. I don't  
11 remember the exact wording at all, but I know  
12 that is kind of the -- the gist of it and  
13 kind of how it's reflected by Bill Conner.

Page 196:21 to 196:24

00196:21 Q. (BY MR. FIELDS) Prior to  
22 providing affirmation to Admiral Landry,  
23 what -- what type of flow rate analysis had  
24 you done?

Page 197:01 to 197:01

00197:01 A. None.

Page 197:10 to 197:15

00197:10 Q. (BY MR. FIELDS) With respect to  
11 your affirmation that the thousand barrels  
12 per day was a reasonable representation of  
13 the flow rate, was that based on your  
14 professional opinion looking at the data that  
15 existed at that point in time?

Page 197:17 to 197:18

00197:17 A. No, it's actually the opposite.  
18 I did not have any data.

Page 198:03 to 198:07

00198:03 Q. So you had no idea what was the  
04 possible range of flow rates from the Macondo  
05 well as of April 24th, 2010?  
06 A. As far as this morning on  
07 April 24th, that's correct.

Page 198:23 to 199:07

00198:23 Q. (BY MR. FIELDS) Okay. I'm  
24 sorry I confused you with the question. So  
25 my question is -- I'm using affirmation

00199:01 because you used affirmation before. So my  
02 question is how were you able to provide  
03 affirmation or endorsement of the 1,000  
04 barrel per day estimate that was suggested by  
05 Admiral Landry if you had not performed any  
06 analysis prior to the meeting?  
07 A. I --

Page 199:09 to 199:11

00199:09 A. (Continuing) I had no  
10 information to make a determination either  
11 way.

Page 203:05 to 203:23

00203:05 Q. If you'll turn to Tab No. 7 in  
06 your binder, which will be Exhibit 8887. And  
07 Exhibit 8887 is actually a couple of  
08 documents. One is just forwarding some call  
09 notes from a 4/24 NRT call. I actually want  
10 to focus on the notes from the NRT call in  
11 Exhibit 8887, okay. This particular  
12 document, Exhibit 8887, references that these  
13 are notes from an NRT call on April 24th at  
14 2:00 p.m., do you see that?  
15 A. Yes.  
16 Q. Was there a second call on  
17 April 24th --  
18 A. Yes.  
19 Q. -- of NRT?  
20 A. Yes.  
21 Q. Okay. And so this was the --  
22 the afternoon call that occurred of the NRT?  
23 A. Yes, sir.

Page 205:16 to 205:22

00205:16 Q. (BY MR. FIELDS) Are you aware  
17 of any modeling that had been performed by BP  
18 that would support the statement that the  
19 release rate from the Macondo well was  
20 approximately 1,000 barrels of crude oil per  
21 day?  
22 A. No.

Page 209:15 to 209:22

00209:15 Q. So when -- when Admiral Landry  
16 on the NRT call indicated that the estimated  
17 flow rate was a thousand barrels per day and  
18 also there was affirmation from you that that  
19 might be a reasonable representation of the

20 flow rate, were you aware that there was a  
21 plan or might be a plan to announce that flow  
22 rate to the public?

Page 209:24 to 210:06

00209:24 A. Specifically related to  
25 announcing a thousand barrels, I don't think  
00210:01 I had any knowledge of it. My role, even  
02 though it's related, asked Charlie to attend,  
03 is not uncommon. Usually it's to answer the  
04 environmental questions that come up from the  
05 press, and that's sort of what I was there to  
06 focus on.

Page 210:25 to 211:06

00210:25 Q. Okay. As the Rule 30(b)(6)  
00211:01 designee on behalf of the Unified Command are  
02 you aware of any scientific analysis that  
03 supports the 1,000 barrel per day estimate  
04 that was released by the Unified Command on  
05 April 24th?  
06 A. I'm not aware of any.

Page 212:08 to 212:18

00212:08 Q. Okay. So as the Rule 30(b)(6)  
09 representative of the United States on the --  
10 the science relating to the announcement of  
11 the 1,000 barrel per day estimate, you don't  
12 know what the scientific basis was for that  
13 particular estimate?  
14 A. I could not determine what the  
15 scientific basis of that -- that number was  
16 other than determined -- what was stated is  
17 how that information was provided, you know,  
18 through James -- you know, to Admiral Landry.

Page 214:12 to 215:03

00214:12 Q. So let me just go -- be back and  
13 be clear, because, obviously when you were  
14 serving as a scientific support coordinator,  
15 you weren't a 30(b)(6) witness; you were  
16 actually the SSC. So I'm asking whether  
17 you -- as you sit here, you recall any  
18 communication that you had with BP on or  
19 prior to April 24th in which BP suggested  
20 that the flow rate from the well was  
21 approximately 1,000 barrels per day?  
22 A. I don't recall any such  
23 discussion.

24 Q. Prior to the -- the April 24th  
25 press conference, are you aware of any data  
00215:01 or analysis that would have permitted NOAA  
02 to -- to be able to provide a range of flow  
03 rates from the Macondo well?

Page 215:05 to 216:16

00215:05 A. Well, I think this was -- I  
06 apologize, but I think it's a little vague,  
07 but we had -- I had already stated that we  
08 had a conversation earlier on this -- on that  
09 Saturday morning in which I relayed the  
10 overflight observations of oil on the  
11 surface, and that's the only thing that would  
12 contribute to that, but it was a observation  
13 of oil on the surface, and with the intent of  
14 specifically saying there is uncertainty, you  
15 know, I don't know, 1 to 10,000 barrels.  
16 Since that was roughly one day afterwards,  
17 you know, you could say, okay, that's per  
18 day.

19 But I don't -- I don't -- it was  
20 never inferred as that was any type of rate  
21 analysis. It was really always inferred it  
22 was a qualitative observation from field  
23 scientists, and I think the point I was  
24 trying to make always was we didn't know.

25 Q. (BY MR. FIELDS) Okay. So let  
00216:01 me just make sure I'm clear. So when you  
02 relayed the observations from overflight,  
03 your intent was not to suggest that that  
04 indicated the flow rate from the Macondo  
05 well?

06 A. That's correct.

07 Q. And your intent in providing  
08 Admiral Landry, Doug Suttles, and the third  
09 person, the additional person, you don't  
10 recall who it was, was to simply indicate to  
11 them that there was a great deal of  
12 uncertainty as to the flow rate and you  
13 simply did not know the flow rate?

14 A. And I wasn't -- yes, even though  
15 I don't think specifically I was talking flow  
16 rate, but I think the gist is the same.

Page 218:12 to 218:23

00218:12 Q. (BY MR. FIELDS) If you turn to  
13 Tab No. 40 and that will be marked as  
14 Exhibit 8888 and these are -- were produced  
15 by the government and purport to be notes  
16 from an interview that you had with the ISPR  
17 on October 30 -- 13th, 2010.

18                   Let me first ask you, do you  
19 recall giving an interview to the ISPR on or  
20 about October 13, 2010?  
21           A.       I did give an interview to them  
22 at one time. That seems reasonable. I  
23 believe that's the correct date.

Page 221:08 to 221:13

00221:08           Q.       Okay. So your recollection is  
09 that there was really only one meeting in  
10 which you were -- you conveyed that it might  
11 be 1,000 barrels or could be 10,000 barrels  
12 on that day?  
13           A.       That's correct.

Page 222:08 to 222:12

00222:08           Q.       So let me ask the question  
09 again. As of April 24th, did you have  
10 sufficient information to provide an estimate  
11 of the flow rate from the Macondo well?  
12           A.       On April 24th, no.

Page 225:02 to 225:04

00225:02           Q.       Well, as of April 24th, were you  
03 aware of anyone at the Unified Command who  
04 did know flow rate?

Page 225:06 to 225:07

00225:06           A.       Would -- not -- you know, not  
07 with -- you know, no.

Page 228:03 to 228:08

00228:03           Q.       When you were sort of conveying  
04 your views or the views of others about how  
05 much oil might be on the surface, were you  
06 relying upon any data that had been given to  
07 you by BP?  
08           A.       No.

Page 237:12 to 237:18

00237:12           Q.       Other than the work that you've  
13 seen that was being performed by Barker and  
14 Watabayashi, are you aware of any other type  
15 of modeling that was being -- that was being  
16 performed by ERD for the Macondo well  
17 release?

18           A.       In that same general time --

Page 237:20 to 237:25

00237:20           Q.       (BY MR. FIELDS) Yes.  
21           A.       -- time frame? I knew that  
22 Bill -- Bill Lehr had done some simpler  
23 calculations. I don't know if I would call  
24 that modeling, but he had done some  
25 calculations.

Page 253:10 to 253:21

00253:10           Q.       (BY MR. FIELDS) Okay. During  
11 the meeting that you had involving  
12 Admiral Landry and Doug Suttles and the  
13 additional person that you don't recall the  
14 name, did BP suggest during that meeting that  
15 it believed the flow rate was a thousand  
16 barrels of oil per day?  
17           A.       I don't recall -- I mean, I  
18 don't recall that at all. I mean, I would  
19 also say I didn't stay -- I wasn't there for  
20 all the conversations that would have  
21 occurred.

Page 254:01 to 254:08

00254:01           Q.       So during the meeting, did you  
02 hear BP state that it believed that the flow  
03 rate from the Macondo well was a thousand  
04 barrels per day?  
05           A.       When I would -- I have no -- I  
06 do recall -- I do not -- I have to say that  
07 in good English. I have no recollection of  
08 hearing that.

Page 255:05 to 255:12

00255:05           Q.       No. My question is, do you have  
06 any knowledge of BP providing the Unified  
07 Command with an estimate of the flow rate  
08 from the Macondo well?  
09           A.       Yes.  
10           Q.       Okay. And what specific  
11 estimates or information did BP provide to  
12 the government prior to May 17?

Page 255:14 to 255:17

00255:14           A.       Okay. And then when I -- what I  
15 would have to relate back to is some



16 information that Dave Raney might have been  
17 working on.

Page 255:19 to 256:15

00255:19 A. And I would say that parts of it  
20 I worked -- well, Dave Raney -- be totally  
21 clear. I had seen some information that BP  
22 had provided that had a range of flow rates  
23 for -- for -- that was being used as part of  
24 the area command.  
25 Q. And with respect to this  
00256:01 information -- who is Dave Raney?  
02 A. He works -- he's an engineer,  
03 works for British Petroleum. I don't know  
04 what his actual title was at the time.  
05 Q. And this is someone -- when was  
06 the first time you met Dave Raney?  
07 A. Probably that Saturday. I know  
08 I was working with him as early as that  
09 Sunday of that first weekend.  
10 Q. So either Saturday, the 24th, or  
11 Sunday, the 25th?  
12 A. Right.  
13 Q. And at some point in time, did  
14 you come to learn that Mr. Raney was working  
15 on some estimates of flow rate?

Page 256:17 to 259:21

00256:17 A. What I learned is that there was  
18 some tasking to assist on developing the 209  
19 form in the situation unit for the Unified  
20 Area Command, which is a joint BP/Coast  
21 Guard -- those were the incident commanders.  
22 And starting on Sunday, you  
23 know, there were some issues trying to -- to  
24 develop that and there was -- there was  
25 tasking to find numbers to -- to get this to  
00257:01 work. Basically, that's -- the form is an  
02 important part of the daily incident/action  
03 plan, this 209 form.  
04 And so Dave -- most of the other  
05 things Dave Raney was working on and myself,  
06 I know he was pulled into that discussion.  
07 Q. (BY MR. FIELDS) And what role  
08 did you have at around the time of April 25th  
09 or 26th in working with Dave Raney on these  
10 flow rate estimates?  
11 A. I had the role of -- well,  
12 first, the role that I had was -- can put it  
13 in perspective. I was asked to link up with  
14 the situation unit, going around, helping  
15 people there with the job. Situation unit,

16 because they were having -- they were filling  
17 out the 209 form, and, you know, there is  
18 elements of the "2049" form that includes,  
19 like, how much evaporated, how much is  
20 naturally dispersed, how much is recovered  
21 off the water, how much is -- you know,  
22 different activities from the field that  
23 accounts for taking volume away from what  
24 might still be on the surface of the water.  
25 So I was asked to help them fill out that  
00258:01 form. And that fate analysis, doing an  
02 analysis of fate is not an integral part that  
03 we do, what percentage evaporated, for  
04 example.

05 And so we first used some very  
06 typical numbers and the like, trying to get  
07 specific chemistry data so we could develop  
08 better names for the fate analysis.

09 Q. When you say "we," are you  
10 talking about the situation unit or Mr. Raney  
11 or you? Who are you talking about?

12 A. Well, I would say all of us.  
13 But I would think in this case, we, that they  
14 were relying on NOAA to have enough good  
15 information that we could potentially use a  
16 model that we have called ADIOS 2, which is a  
17 model that's designed to account for the fate  
18 of oil, as far as how much evaporates, how  
19 much naturally dispersed. So it's an oil  
20 fate model.

21 So that was the piece -- when I  
22 said "we," we were trying to get specific  
23 data so we could run the model with that  
24 specific oil. And since that wasn't  
25 available, we ran the model with similar  
00259:01 wells that were nearby, but they may not be  
02 exactly the same in composition.

03 So I was running into difficulty  
04 because it seems like the mass balance wasn't  
05 working out because of some operational  
06 activities.

07 And I'd say, hey, either just --  
08 you know, I figured I summarized it to some  
09 people I was talking to, say, "Well, look,  
10 either the dispersants aren't working or  
11 there's more oil out here, because I can't  
12 make these numbers work," to help them out.

13 And I don't know where all the  
14 discussions went, but I know that by Monday  
15 morning -- and I could have started out  
16 Sunday evening, but by Monday morning, Raney  
17 was tasked to work on that, and I was tasked  
18 to work with him and we were spending a  
19 little time on it. I think we both had lots  
20 of other things on our plate that morning,

21 but we spent some time on it.

Page 260:12 to 261:03

00260:12 Q. (BY MR. FIELDS) And during that  
13 time period -- we'll talk about this in more  
14 detail later. But during that time period,  
15 were you in regular communication with  
16 Mr. Raney about his analysis?  
17 A. I wouldn't call it regular  
18 communication, no. I mean, we were all in  
19 the same --  
20 Q. Right, room?  
21 A. Well, in the same building.  
22 There wasn't that many rooms in the building,  
23 but same small building, yeah.  
24 Q. Was he providing you with copies  
25 of his analysis?  
00261:01 A. No. No. I should -- you know,  
02 he provided a copy of some final numbers, but  
03 I think that's different than an analysis.

Page 261:06 to 261:19

00261:06 Q. And do you recall when he  
07 provided you with copies of final numbers?  
08 A. Well, he provided me a copy of  
09 numbers that ended up being used for the 209  
10 form on Monday, the 26th.  
11 Q. And was that just a one-page  
12 document, or was it a multipage document, do  
13 you recall?  
14 A. I believe it was one page.  
15 Q. And after the 26th, do you  
16 recall Mr. Raney providing you with any other  
17 documents re- -- regarding his attempted  
18 estimation of the flow rate?  
19 A. No.

Page 270:09 to 270:14

00270:09 Q. Do you recall prior to May 15  
10 seeing any written analysis performed by BP  
11 setting forth a potential estimate of the  
12 amount of oil flowing from the Macondo well  
13 other than what you've alluded to from  
14 Mr. Raney?

Page 270:16 to 271:02

00270:16 A. If we're talking about late  
17 April, early May time period, I think there  
18 was some work being done in a similar fashion

19 to -- more like trying to calculate oil in  
20 the water, look at those values. But as far  
21 as looking at flow rate from the well itself,  
22 I would have to say no. And I considered  
23 those kind of two different things, so...  
24 Q. (BY MR. FIELDS) With respect to  
25 the calculations of oil on the water, what  
00271:01 information did you see from -- from BP on  
02 that topic prior to May 15, 2010?

Page 271:04 to 271:16

00271:04 A. I know that within the room that  
05 I was working in Dave Raney had someone kind  
06 of reworking some of the observations,  
07 overflight type observations and the size of  
08 the slick, trying to look at what that might  
09 relate to as oil on the surface, and then if  
10 you divide by the number of days since that  
11 observation and making accounting for loss by  
12 evaporation, dissolution, et cetera, but  
13 potentially how that might rate -- how that  
14 relates to a flow rate, so there was some  
15 effort going on; but I was never given a  
16 product from that.

Page 272:02 to 272:13

00272:02 Q. And with respect to the work  
03 that Mr. Raney and Mr. Pankin were doing, did  
04 you ever see any written documentation of  
05 that work after April 26th, 2000 -- and I  
06 think it's Tony Parkin, sorry.  
07 A. Parkin. Tony is the part I  
08 remember.  
09 Q. Okay. Did you ever see any  
10 written analysis or memos or any sort of  
11 documentation generated by Mr. Raney or  
12 Mr. Parkin after the work you saw around  
13 April 26th?

Page 272:15 to 272:17

00272:15 A. Okay. The work that I saw on  
16 the 26th, I don't even know who -- you know,  
17 specifically who provided that information.

Page 272:19 to 275:17

00272:19 A. And then it was sometime later  
20 that Tony was working on his -- and I never  
21 got a copy of what they did as far as a  
22 product. I know he was working on that, but

23 I didn't know whatever was the outcome.  
24 Q. Right. You said you didn't  
25 receive a copy. Did he -- did anyone ever  
00273:01 show you the written analysis?  
02 A. Not the delayed analysis that we  
03 were doing. It was, I remember a point in  
04 time that I, kind of, leaned over, saw what  
05 Tony was working on, you know, I said hey,  
06 what you working on. He kind of showed me  
07 what he was looking at with different values,  
08 you know, within the ranges of what the  
09 realities might be, to see how the numbers  
10 might change, kind of what you might  
11 sometimes call sensitivity analysis. And he  
12 was working on that in a spreadsheet format,  
13 and so I looked at that. We chatted for, you  
14 know, a few minutes, and I went on doing  
15 other work. That's -- I know he continued to  
16 work on it for a day or two, maybe, but I  
17 don't -- I didn't see the final product.  
18 Q. Did you recall any of the  
19 numbers that were in the analysis?  
20 A. At the time that he was working  
21 on it, what he had at the time, I recall that  
22 the numbers were anywhere from a thousand  
23 to -- you know, they were in that same ball,  
24 order of magnitude range, kind of in the  
25 middle was maybe 5 to 6,000, depending if you  
00274:01 went low, medium, high on some of the numbers  
02 that he was using. So when I -- what I  
03 recall from looking over his shoulder and  
04 chatting with him -- not trying to look over  
05 his shoulder without interacting with him.  
06 It's just, you know, working -- working  
07 together, working environment. But what I  
08 saw as some of the numbers that he was coming  
09 up with on that sheet were not out of -- not  
10 out of the range of some of the other work  
11 that was done earlier.  
12 Q. Did you see any numbers that  
13 were being generated by Mr. Parkin where the  
14 range was substantially higher than the 1 to  
15 10,000 range?  
16 A. Not substantially. I think on  
17 the high end of the sheet -- and he -- he was  
18 changing numbers all the time. I mean, he --  
19 he was really exploring and doing his -- his  
20 job. But I think on the one sheet that I was  
21 looking on with him on, I think the high was  
22 in the 11 or 12, I mean, not substantially  
23 higher. But that is a -- you're asking what  
24 I saw on that day at that time. It was just  
25 a fragment of what he was doing.  
00275:01 Q. And at any point in time -- do  
02 you recall roughly when in late April or

03 early May that you -- you had a conversation  
04 with Mr. Parkin about this analysis he's --  
05 he was doing?  
06 A. With Tony?  
07 Q. Yeah.  
08 A. I'm guessing a little bit  
09 because things were really hectic at that  
10 time. I'm thinking it was probably -- it had  
11 to be late April, early May, but I don't  
12 recall the exact date. I remember the  
13 interaction with -- with Tony and I remember  
14 he, you know, was there and I remember he  
15 was -- they were working on it, but I think I  
16 was so busy with other things, it wasn't that  
17 high on my list.

Page 286:16 to 286:19

00286:16 Q. (BY MR. FIELDS) But what I'm  
17 asking you is did -- did you believe that  
18 there was a lot of pressure to get a flow  
19 rate number on the table?

Page 286:21 to 287:02

00286:21 A. Folks are always asking for  
22 numbers like that, yes.  
23 Q. (BY MR. FIELDS) Okay. So --  
24 A. But what I have a hard time  
25 answering is was there pressure, what you  
00287:01 mean by that, because I was not -- I don't  
02 know.

Page 288:19 to 288:25

00288:19 Q. My first question is, did you  
20 tell the interviewer who was conducting an  
21 interview as part of the ISPR process that  
22 there was a lot of pressure trying to get  
23 people to put a number on the table?  
24 A. I -- I -- it's written here, so  
25 I would -- I probably did, yes, sir.

Page 291:10 to 291:12

00291:10 Q. (BY MR. FIELDS) After  
11 April 24th, was there a lot of pressure to  
12 get people to put a number on the table?

Page 291:14 to 291:15

00291:14 A. There was probably an increased

15 pressure, but I -- you know, there -- yeah.

Page 300:15 to 300:25

00300:15 Q. (BY MR. FIELDS) Okay. At some  
16 point in time around the 25th and 26th, did  
17 you come to the conclusion that the amount of  
18 oil that was being observed on the surface  
19 suggested that the flow rate might be higher  
20 than 1,000 barrels per day?  
21 A. Yes.  
22 Q. Okay. Do you recall when in  
23 time you started to reach that conclusion?  
24 A. During the day on Sunday, the  
25 25th.

Page 311:01 to 311:06

00311:01 Q. (BY MR. FIELDS) Okay.  
02 Mr. Henry, as of April 26th did NOAA believe  
03 that there was sufficient data available to  
04 develop what it considered to be a reliable  
05 estimate of the flow from the Macondo well?  
06 A. No.

Page 311:17 to 313:05

00311:17 Q. And when did the work by ERD  
18 begin to estimate the amount of flow from the  
19 Macondo well?  
20 A. Okay. There is at least two  
21 activities I'm aware of, and I would think  
22 that one -- one activity, which I was not  
23 aware of until my preparation for this  
24 testimony, was some activities that were  
25 being done in Seattle, I believe, maybe on  
00312:01 the 25th, which would have been Sunday; and  
02 there was some work being done -- because we  
03 didn't say specifically modeling, you asked  
04 work, correct, work being done on the 26th.  
05 Q. And with respect to either the  
06 work being performed by NOAA on -- beginning  
07 on the 25th or 26th, was that work being  
08 performed at the request of the FOSC?  
09 A. No.  
10 Q. And with -- and with respect to  
11 the work that was being performed by NOAA  
12 beginning on the 25th or 26th to estimate the  
13 flow from the Macondo well, why did NOAA  
14 begin to undertake that work?  
15 A. In part because as scientists  
16 responding to an emergency or to an oil  
17 spill, one of our roles is to think about the

18 problem, better understand the problem so we  
19 can provide better guidance and information  
20 to the FOSC and to our responsibilities as  
21 NOAA. So we took it on independently. The  
22 group in Seattle took it on because they're  
23 inquisitive and they're asking the question  
24 and seeing if they can provide any  
25 information. They want to help. With  
00313:01 respect to Bill Lehr, that specifically came  
02 from me asking can we take an activity,  
03 because I wanted to try to reevaluate or  
04 provide some information to better understand  
05 the problem as well.

Page 314:12 to 315:01

00314:12 Q. And do you recall when you first  
13 decided you were going to contact Debbie  
14 Payton to begin a discussion about NOAA  
15 potentially developing a flow rate estimate?  
16 A. When? It would be on the --  
17 that -- I believe it would have been early on  
18 the 26th.  
19 Q. Okay. And did you have a  
20 conversation -- the conversation you  
21 described with Debbie Payton, did that  
22 conversation occur on the 26th?  
23 A. I believe so, but it could have  
24 occurred the evening before, but I'm thinking  
25 it was the 26th. It was early -- it could  
00315:01 have been the evening before.

Page 316:19 to 317:03

00316:19 Q. And this is providing insight to  
20 the federal on-scene coordinator?  
21 A. It's providing insight to the  
22 NOAA SSC at this time.  
23 Q. So the particular analysis that  
24 you were requesting would be providing  
25 support to you, and then you in turn could  
00317:01 decide how to best use it to support the  
02 federal on-scene coordinator?  
03 A. I believe that's fair, yes, sir.

Page 319:16 to 319:21

00319:16 Q. Okay. Well, what -- what is  
17 Dr. Lehr's expertise? Does he have expertise  
18 in oil spill modeling?  
19 A. Yes. I mean, he's not one of  
20 the teams that do modeling on a routine  
21 basis, but he has expertise in that, yes.



Page 320:18 to 320:23

00320:18 Q. And is Dr. Lehr an expert in the  
19 use of visual observations to estimate the  
20 amount of oil on the surface?  
21 A. He has a lot of experience in  
22 that as far as understanding the science and  
23 technology that goes into that, yes, sir.

Page 321:07 to 322:03

00321:07 Q. Is Dr. Lehr one of the NOAA's  
08 experts on estimating oil spills using the  
09 ASTM guidelines?  
10 A. To put it in perspective, he's  
11 one of our experts to understand the behavior  
12 of oil on the surface of the water, and he  
13 understands, you know, the perspec- -- you  
14 know, the ASTM guidelines for estimating  
15 those, yes.  
16 Q. And is he also one of NOAA's  
17 expert on estimating oil spills using the  
18 Bonn -- Bonn agreement guidelines?  
19 A. There again, I'd say, he's one  
20 of the experts at understanding how the oil  
21 behaves on the surface of the water, both  
22 physically interacting, forming emulsions,  
23 spreading, understands that very well. And  
24 we're very well aware of the different  
25 techniques that are available for using for  
00322:01 estimation. There is more than one. There  
02 is many systems that people have proposed and  
03 used over the years.

Page 323:10 to 323:14

00323:10 Q. So prior to Dr. Lehr submitting  
11 his analysis, did you have a conversation  
12 with him at all about what you were looking  
13 for in the way of analysis?  
14 A. No.

Page 327:03 to 327:23

00327:03 Q. Okay. Did you ask Mr. Parkin  
04 what -- what was the purpose of the analysis  
05 that he -- he was working on?  
06 A. Not in those words. I  
07 probably -- I probably assumed that he was  
08 kind of back-calculating Bill Lehr's work,  
09 because it was a very similar approach,  
10 similar information.  
11 Q. And did you have a discussion as

12 to why Mr. Parkin would have been -- and what  
13 do you mean by back-calculating?

14 A. Because I think he used the same  
15 day's worth of information that Bill Lehr had  
16 used in his analysis, and so I think it was,  
17 like, take that same information that Bill  
18 had worked from and work it different ways  
19 and see what the numbers would be. That's  
20 what I felt that Tony was doing, which I  
21 don't think was inappropriate. I think it  
22 was -- I might have done it myself, if I had  
23 time.

Page 328:07 to 328:13

00328:07 Q. Are you aware of anyone else at  
08 NOAA who was working with Mr. Parkin --  
09 strike that.  
10 Are you aware of anyone from  
11 NOAA who was working with Mr. Parkin on this  
12 analysis on the flow rate estimate around the  
13 April 26th and later time period?

Page 328:15 to 328:20

00328:15 A. No, I'm not sure if he was -- he  
16 was working, if he and Bill had ever  
17 interacted or anyone in the -- on the NOAA  
18 team. I have no recollection.  
19 And are we sure it is Parkins?  
20 It's Tony Parkins, not Parker?

Page 330:13 to 332:09

00330:13 Q. And during your discussions with  
14 Debbie Payton did you have any discussions  
15 about either Barker or Watabayashi working on  
16 providing an estimate of flow of oil from the  
17 Macondo well?

18 A. If you're asking in my  
19 discussions with Debbie Payton did she offer  
20 that they were working on a flow rate or  
21 release value or an estimation, no.

22 Q. When was the first time that you  
23 learned that Barker and Watabayashi might  
24 have been working on developing a flow rate  
25 or release rate from the Macondo well in the  
00331:01 April 2010 time period?

02 A. I think I learned more  
03 indirectly that they had been, working on, I  
04 think I heard sometime later, but we also  
05 took -- assumed so many unknowns that were  
06 factoring into their thing that it was just

07 an in-house -- they said it was an activity  
08 in-house by them, but it was never sent to  
09 me. In fact, it may have been just an e-mail  
10 I didn't read at the time, but -- because  
11 there were so many e-mails. It was so  
12 hectic. But I learned that sometime that  
13 they had done -- and I didn't know the depth  
14 or how -- what detail or even how they  
15 approached it, but I knew that there was at  
16 one time some issue with, I think it was  
17 related to some -- a press issue that -- that  
18 I heard that, well, we should have been doing  
19 some kind of thinking through the problem, I  
20 think is how it was described to me; and I  
21 think that's the level they were working at,  
22 because it never was released outside of them  
23 exploring the idea, so... But I, again,  
24 didn't have a lot of granularity of detail,  
25 so...

00332:01 Q. And as you sit here today, you  
02 don't recall receiving any -- a copy of any  
03 analysis from either Barker or Watabayashi in  
04 the April time period?

05 A. No, I don't recall, and I don't  
06 recall that being discussed -- I know I don't  
07 recall that being discussed with me directly,  
08 and I don't believe -- I don't recall being  
09 sent anything on their activity.

Page 334:11 to 335:13

00334:11 Q. Okay. And when you were -- when  
12 you talked with Mr. Parkin, when he was doing  
13 this analysis, did you get an understanding  
14 of the particular type of method or technique  
15 he was relying upon to develop the estimate?

16 A. My recollection when we were in  
17 Robert, I'll call the environmental room --  
18 the environmental room -- environmental unit  
19 room, he was using just different thickness  
20 values and -- and numbers as far as what  
21 percentage might be heavy or light. No, I  
22 didn't get a sense that what specific methods  
23 he was using, but I -- I'm assuming he was in  
24 the same context of -- I -- I -- I should say  
25 I cannot recall if he was using numbers from

00335:01 one of the specific inventions or not,  
02 whether it was ASTM or the Bonn agreement.  
03 What I looked at was primarily related to --  
04 I think it was more closer to the ASTM. I  
05 don't know what else he did. The Bonn  
06 agreement is not an uncommon technique. It's  
07 one that is now becoming more common, so...

08 Q. And with respect to -- in your  
09 experience as a scientific support

10 coordinator, is it -- have you seen  
11 techniques used by responders where they use  
12 some type of hybrid of ASTM and the Bonn  
13 method?

Page 335:15 to 335:17

00335:15 A. I believe that -- I believe that  
16 scientists often use their best judgment of  
17 what's most appropriate.

Page 337:08 to 337:14

00337:08 Q. (BY MR. FIELDS) And in your  
09 experience in -- in developing and providing  
10 estimates of the amount of oil on the  
11 surface, does the -- does the estimator have  
12 to use a professional judgment about how  
13 thick he or she believes the oil is on the  
14 surface?

Page 337:16 to 337:24

00337:16 A. Well, in fact, I think on this  
17 spill, you would have to, because on the  
18 weekend that happened during the -- that  
19 first weekend, it was on Saturday we had  
20 pretty nasty weather. We had a lot of  
21 emulsified oil, and in reality, neither one  
22 of those methods do a very good job with  
23 emulsified oil, so then you would have to use  
24 professional judgment to account for that.

Page 338:20 to 339:06

00338:20 Q. Sure. Let me ask you, first of  
21 all, as NOAA scientific support coordinator,  
22 were you provided with a copy of this e-mail  
23 discussing methodologies to calculate the  
24 amount of flow using a video clip?  
25 A. On this -- during this time  
00339:01 period, I was not provided this information.  
02 Might I also add, you know, this is what we  
03 referred to in my testimony earlier about the  
04 activities being done by Barker so -- and I  
05 had put it in this context, as I had  
06 previously.

Page 341:19 to 342:12

00341:19 Q. As NOAA SSC, would you have  
20 wanted to know that Chris Barker and

21 Watabayashi were performing these types of  
 22 leak rate analysis?  
 23 A. I might have been -- I might  
 24 have -- I would have been curious, yes. I  
 25 would -- to be -- to answer your question  
 00342:01 more simply, it would have been interesting  
 02 if I had known at the time. The fact that I  
 03 didn't know probably lent to the fact that --  
 04 that there was so much uncertainty they were  
 05 working for that they were still just  
 06 preliminary or, you know, initially down  
 07 there. I think that's what's reflected in  
 08 some of the other e-mails with this, is that,  
 09 you know, it's kind of a start. You know,  
 10 there's more information so better estimates  
 11 can be made, I think I remember reading at  
 12 one point sometime.

Page 345:20 to 346:04

00345:20 First of all, this particular  
 21 **document** is Dr. Lehr providing his insight  
 22 into Barker and Watabayashi's work, his  
 23 critique. My question is, did you as part of  
 24 your role as NOAA SSC ask Dr. Lehr to  
 25 evaluate Barker and Watabayashi's work?  
 00346:01 A. No.  
 02 Q. Were you aware that he was even  
 03 evaluating or -- or analyzing their work?  
 04 A. As the SSC, no.

Page 351:04 to 351:08

00351:04 Q. So with respect to the  
 05 estimation that he provided you on April 26th  
 06 that that was work that he developed separate  
 07 and apart from Barker and Watabayashi?  
 08 A. That's my understanding.

Page 357:18 to 357:21

00357:18 Q. Did you ask Mr. Levine to  
 19 provide an oil estimate of the oil spill  
 20 surface volume around April 25th?  
 21 A. No.

Page 359:23 to 360:03

00359:23 Q. So on April 25th were you made  
 24 aware by Dr. Lehr that he had looked at  
 25 Mr. Levine's **analysis** and he had concluded  
 00360:01 that the volume on -- of oil on the surface  
 02 could range anywhere from 56,000 barrels to

03 5600 barrels?

Page 360:05 to 360:05

00360:05           A.       I was not aware of that.

Page 360:13 to 360:18

00360:13           Q.       Okay. On April -- on April 25th  
14 were you made aware of any statement by  
15 Mr. -- Dr. Lehr that he believed that you  
16 might have approximately 20,000 barrels of  
17 oil on the water as of that date?  
18           A.       No.