

Deposition Testimony of:

John LeBleu

Date: April 4, 2011

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Page 17:13 to 17:16

00017:13 JOHN B. LEBLEU,
14 after having been first duly sworn by the
15 above-mentioned court reporter, did testify
16 as follows:

Page 17:18 to 18:07

00017:18 Q. Good morning, sir. My name is
19 Joseph Bruno.
20 A. Good morning.
21 Q. Would you for the record,
22 please, give us your name and address.
23 A. [REDACTED]
24 [REDACTED]
25 [REDACTED].
00018:01 Q. Okay. By whom are you currently
02 employed, sir?
03 A. BP.
04 Q. And what is your job title
05 today?
06 A. Job title is drilling fluids
07 engineer.

Page 20:14 to 21:24

00020:14 Q. Okay. Would you tell us what a
15 drilling -- drilling fluids engineer does?
16 A. I'm a drilling fluids
17 specialist. I -- I advise the operations
18 and engineering teams concerning --
19 COURT REPORTER:
20 I'm sorry?
21 THE WITNESS:
22 I advise the drilling fluids and
23 operations team from the drilling fluids
24 perspective.
25 BY MR. BRUNO:
00021:01 Q. Okay. When you say drilling
02 fluids perspective, can you give us some
03 understanding of what that would encompass?
04 A. If they have questions or
05 concerns, they -- they come to me with them
06 and I, you know, I help to advise them
07 concerning drilling fluids, the shape the
08 drilling fluid is in -- drilling fluids is
09 in. Properties, hydraulics, the drilling
10 fluid vendors' calculations and whatnot,
11 you know, if they seem to have a need for
12 help with that. That's basically it.
13 Q. All right. You're in an
14 advisory role?
15 A. Yes.

16 Q. Okay. Would lost circulation
17 pills fall within the ambit of drilling
18 fluids?

19 A. Yes.

20 Q. Would it be true that any
21 material that was pumped into the well
22 would be within the ambit of a drilling
23 fluid?

24 A. For the most part, yes.

Page 22:13 to 22:19

00022:13 Q. And to be specific, I was
14 referring to those fluids that you
15 indicated were outside of the ambit of the
16 drilling fluid and I think you identified
17 completion fluids and seawater. So --

18 A. Seawater is not a drilling
19 fluid, to be clear.

Page 23:11 to 25:13

00023:11 Q. Exactly. And what I'm trying to
12 understand is: Are you the go-to guy with
13 regard to questions that someone might have
14 about pumping seawater into a well or is
15 there some other person to whom the
16 operations folks or engineering folks might
17 go?

18 A. Well, seawater is a simple
19 fluid. They don't need to go to
20 somebody --

21 Q. Okay.

22 A. -- to ask about pumping seawater
23 in a well. The drilling engineers and
24 operations people make that decision,
25 whether they are going to do it or not.

00024:01 Q. Okay. What is your connection
02 with SWACO?

03 A. I worked for M-I SWACO. I hired
04 on with Magcobar in 1980 and --

05 Q. I'm sorry. Mag -- I can hardly
06 hear you.

07 A. Magcobar, M-A-G-C-O-B-A-R. That
08 was the predecessor of M-I Drilling Fluids
09 and M-I SWACO --

10 Q. Okay.

11 A. -- one of the predecessors. The
12 other one in the M-I was a drilling fluids
13 company named Imco. That became the M-I,
14 Magcobar-Imco, somewhere around 1986 or '7.

15 So I worked for them from 1980
16 to 1986 as a drilling fluids engineer. I
17 was laid off by them during the downturn in

18 the industry, and they called me back a
19 year, a little over a year later to work
20 for them again.
21 The first part of that was a
22 consultant --
23 Q. Right.
24 A. -- drilling fluids consultant.
25 And then after that as an employee.
00025:01 Q. At some point did you leave that
02 employment or are you still employed by
03 SWACO?
04 A. No. I hired on with BP in 2009.
05 Q. When did you leave SWACO?
06 A. March 16th, 2009.
07 Q. Okay. And why did you leave?
08 A. Because I found the interest
09 -- I found that working for an operator
10 would be interesting and wanted to do that
11 and I had a lot of respect for BP, having
12 worked for them some nine years in their
13 office.

Page 26:16 to 32:22

00026:16 Q. All right. If you would open
17 the book for me there and go to this
18 document. It's going to be before, right
19 before the tab four, the last item before
20 tab four. That's it. You got it. All
21 right.
22 I am -- we're referring now to
23 BP-HZN-2140 -- I'm sorry -- 2179MDL00768549
24 in seriatim to 561.
25 Have you ever seen this document
00027:01 before?
02 A. Yes, I have.
03 Q. All right. Could you tell us
04 what it is?
05 A. This presentation was, to the
06 best of my recollection, started by someone
07 else and -- and the two drilling fluids
08 engineers that were hired from M-I SWACO
09 were Andres Diaz and I, and the completion
10 fluids engineer worked on this document
11 with our manager and the outgoing drilling
12 fluids engineer for BP, Mr. Juan Carlos
13 Rojas.
14 Q. Okay. What was the purpose of
15 preparing this -- I guess would you call it
16 a slide presentation?
17 A. It was a slide presentation.
18 Q. What was its purpose?
19 A. The purpose was to inform the
20 operations and engineering teams for the
21 Gulf of Mexico of our -- of a new roll and

22 a new function in the Gulf of Mexico,
23 slightly different than Mr. Juan Carlos
24 Rojas's function. He was in the technology
25 group. He was based in the technology
00028:01 group, and we were hired by the Gulf of
02 Mexico -- Gulf of Mexico region. I don't
03 remember the proper term for it.

04 Q. All right. You'll forgive me
05 first for the record and for the folks in
06 the room, I have neglected to indicate that
07 we have marked this as Exhibit Number 690.
08 (Exhibit 690 was marked for
09 identification.)

10 Just to better orient me, if you
11 don't mind --

12 A. Sure.

13 Q. -- the technology group, what
14 company was that a component of, which BP
15 company, if you know?

16 A. It's BP. I don't -- I could
17 say, they serve BP -- my understanding is
18 they serve BP worldwide. But Mr. Rojas,
19 while he did have some worldwide function,
20 he assisted heavily in the Gulf of Mexico
21 in the office in Houston.

22 Q. Do you know where Mr. Rojas's
23 office was located before this transition?

24 A. His office was in Westlake One.

25 Q. In Houston, Texas?

00029:01 A. In Houston, Texas.

02 Q. All right. And your
03 understanding is that he was in a support
04 role worldwide to BP, correct?

05 A. That's my understanding.

06 Q. Right. And would his role have
07 been to support operators and engineers
08 with regard to drilling fluids issues?

09 A. That's correct.

10 Q. Okay. And so am I understanding
11 it correctly that what was changing was,
12 where there was one person serving in this
13 role worldwide, there would now be two
14 persons?

15 A. No. That's -- there are many
16 people -- there were many people in the
17 fluids network with Juan Carlos Rojas, some
18 based all over the world. So there's
19 fluids guys all over the world. When we
20 came aboard, Juan Carlos was moving to
21 another part of the world, Azerbaijan, and
22 we were going to backfill for the Gulf of
23 Mexico fluids capability.

24 Q. All right. Well, then let me
25 understand then. Who was providing support
00030:01 in the Gulf of Mexico under -- let's call

02 it the Juan Carlos regime -- with regard to
03 fluids engineering issues?
04 A. Juan Carlos Rojas.
05 Q. There were no other people?
06 A. Before us, there was Juan Carlos
07 Rojas.
08 Q. Did he have some people
09 supporting him in the Gulf of Mexico?
10 A. No.
11 Q. It was just him?
12 A. Yes.
13 Q. So if I'm in the Gulf on a rig
14 and I need support with regard to fluids, I
15 call Juan Carlos on the phone; that's
16 correct?
17 A. Well, yes, that's the way it
18 could happen.
19 Q. Now, the bottom line is that now
20 after this change we have two persons in
21 the Gulf of Mexico, right?
22 A. Two, two. Juan Carlos Rojas
23 also handled completion fluids calls,
24 support; completion fluids support; whereas
25 now we have a dedicated completion fluids
00031:01 person and two dedicated drilling fluids
02 people.
03 Q. Who was the completion fluids
04 expert to which you just alluded?
05 A. A gentleman by the name of Daryl
06 Patterson.
07 Q. D-A-R-Y-L, if you know?
08 A. I don't know.
09 Q. Patterson, P-A-T-T-E-R-S-O-N?
10 A. I think so.
11 Q. Is he still employed with the
12 company, if you know?
13 A. Yes.
14 Q. And is he still in the role of
15 supporting completion fluids?
16 A. Yes.
17 Q. Okay. All right. So now we
18 have three gentlemen; two for fluids and
19 one for completion fluids, right?
20 A. Correct.
21 Q. Now, did your group have a name
22 or some kind of a designation?
23 A. No -- well, the two drilling
24 fluids people, myself and Mr. Andres Diaz,
25 worked for drilling -- worked in the
00032:01 drilling excellence group. We were
02 assigned to the drilling excellence group
03 which is a group that contains many people
04 with special skills, special drilling
05 skills.
06 Q. Okay.

07 A. And Mr. Daryl Patterson worked
08 in the completions excellence group.
09 Q. I understand. It sounds to
10 me -- please tell me if I'm wrong, but it
11 sounds like this was a group of gentlemen
12 who -- and ladies whose focus was
13 engineering support?
14 A. Correct.
15 Q. Would that be a correct
16 description?
17 A. Yeah, advice and support, that's
18 correct.
19 Q. Advice and support. So you're
20 available --
21 A. From the drilling fluids
22 perspective, yes.

Page 33:05 to 34:21

00033:05 Q. All right. Now, do I gather
06 that it was necessary to do the slide show
07 to alert the operations folks and
08 engineering folks on the rigs as to your
09 availability; is that correct?
10 A. That's a small part of it. It
11 was -- it was more about the change of
12 roles from Juan Carlos being in the
13 technology group and we being in the
14 drilling excellence group and also getting
15 their feedback on what they thought they
16 needed as far as support and what they
17 thought, you know -- my manager and
18 Mr. Juan Carlos Rojas had an idea about,
19 about how this role should work, how we
20 should interface with the -- with the
21 operations and engineering teams.
22 And we wanted to get the
23 feedback from the engineering and
24 operations teams and their managers on what
25 they thought of -- the -- the -- the
00034:01 product, what they thought of the roles and
02 responsibilities, if they agreed or if they
03 wanted to modify anything.
04 And we modified the presentation
05 more -- more than one time, incorporating
06 their thoughts.
07 Q. It's my understanding that
08 sometime between '09 and the date of the
09 casualty, there was also some change in the
10 structure as between the operations and
11 engineering groups on the rigs themselves.
12 Are you aware of that at all?
13 A. I had very little awareness of
14 what was going on concerning that change in
15 structure because it didn't involve me. It

16 didn't --
17 Q. Okay. Let's go to page 554 of
18 the same exhibit and you'll see at the top
19 there is a title, Current Fluids Engineer
20 Project Allocation.
21 A. Yes.

Page 35:25 to 36:08

00035:25 Q. Projects. Okay. So we know
00036:01 that you had two rigs within your ambit of
02 responsibility?
03 A. When I started I had four rigs;
04 I had the HORIZON; the one doing the Deep
05 Gas, which I can't remember the name of it
06 the -- the jack-up rig; the HOLSTEIN and
07 MARIANIS. HOLSTEIN and MAD DOG, but MAD
08 DOG was doing anything at the time.

Page 37:11 to 37:13

00037:11 For the record, it is Bates
12 number BP-HZN-2179MDL00469804, and we're
13 going to mark it as Exhibit 691.

Page 37:20 to 41:01

00037:20 Q. My first question, Mr. LeBleu,
21 is: Have you ever seen this particular
22 document before?
23 A. Well, it seems to be a document
24 I created and it seems to not have been
25 modified by anyone as best I can tell.
00038:01 Q. To orient us then from that
02 document, tell us first, when was the
03 document prepared?
04 A. That document was -- to the best
05 of my knowledge, best of my recollection --
06 Q. Sure.
07 A. -- that document was prepared
08 when we were preparing to drill the relief
09 wells.
10 Q. Okay. Now, why was the document
11 prepared?
12 A. My intention for preparing the
13 document was to have the drilling engineers
14 and operations people who were going to be
15 drilling the relief wells to be as well
16 informed as possible of mud-loss events or
17 possible mud-loss events mud-loss events
18 that happened on the original Macondo well
19 so that we could drill the relief wells as
20 safely and efficiently as possible.

21 Q. Now, what information on that
22 document do you believe might have
23 assisted -- assisted the drillers of the
24 relief wells?

25 A. Well, it has a summary of the
00039:01 depth and the losses that occurred and
02 where the losses occurred; the amount of
03 barrels for different situations. It shows
04 the division between MARIANAS and Baroid
05 part of the well, and the HORIZON/M-I SWACO
06 part of the well.

07 It just basically gives them
08 good information as to where the mud losses
09 occurred all in one document and what the
10 totals were.

11 Q. Again, certainly you're far more
12 knowledgeable than I, but am I surmising
13 that the depth at which there were loss of
14 mud events, was that the kind of
15 information that you thought might assist
16 the drillers of the relief wells so they
17 can get a sense of -- that that depth may
18 be a problem area?

19 A. Yes. I have to clarify that
20 this document is a -- it's a snapshot per
21 day. So the depths are a snapshot from the
22 morning reports. I used the drilling --
23 the mud -- the drilling fluid reports and
24 the DIMS reports to get the data to
25 generate this. So where the depths are,
00040:01 they may be -- may not be exactly perfect,
02 but --

03 Q. I understand.

04 A. -- it's a morning snapshot of
05 what the depth was, what the losses were in
06 a 24-hour period.

07 Q. Now, I understand that on this
08 well there were some kicks that occurred?

09 A. All I recall is one kick.

10 Q. Did you reflect on the chart the
11 kick?

12 A. I'm not sure.

13 Q. Wouldn't that be a piece of
14 information that would be as helpful as the
15 mud-loss events?

16 A. I would think that would be
17 helpful, yes, but it's not my area of
18 specialty, so I did not include it.

19 Q. Would you be able to help us
20 know when the kick occurred by reviewing
21 the mud-loss events?

22 A. No.

23 Q. So as you sit here, you don't
24 have any recollection of when that kick
25 occurred?

00041:01 A. That's correct.

Page 41:06 to 41:17

00041:06 Q. Well -- okay. And why would
07 that not be something that an expert in
08 your field might be interested in knowing
09 about?
10 A. I am interested in knowing about
11 it, but I am not -- because it's not my
12 area of specialty, I don't think it's
13 prudent for me to instruct the drilling
14 engineers on kicks because that's their
15 area of specialty. It's their area of
16 specialty knowledge, the operations and the
17 drilling engineers.

Page 42:01 to 42:22

00042:01 Q. Advise. Okay. You know where I
02 was going. I was trying to get an
03 understanding of hierarchy. So you are
04 there to provide support?
05 A. That's correct.
06 Q. Someone has a question to which
07 they do not know the answer, they will call
08 you?
09 A. A drilling fluids question,
10 something that borders in the realm of
11 drilling fluid that they don't understand,
12 that they don't have --
13 Q. If you don't know the answer,
14 you are going to tell them: I don't know
15 the answer?
16 A. That's correct.
17 Q. And if it's a question in a
18 field that you don't feel that you have the
19 appropriate expertise, you will also tell
20 them: I don't have that expertise, go
21 someplace else, correct?
22 A. That's correct.

Page 44:10 to 44:18

00044:10 Q. Can you recall whether or not
11 this presentation was a presentation you
12 might have given to the engineering and
13 operations folks who were drilling the
14 Macondo well when they first started
15 drilling it?
16 A. This took place in March and
17 April, best of my recollection, March and
18 April of '09, and Macondo happened later.

Page 44:20 to 45:03

00044:20 A. Some months later, so -- so it
21 was, best of my knowledge this presentation
22 was presented to all of the drilling
23 operations -- drilling engineering and
24 operations teams.
25 Q. Okay. Does that mean that
00045:01 Mr. Guide would have seen this
02 presentation?
03 A. Yes.

Page 45:15 to 45:18

00045:15 Who gave the presentation?
16 A. I gave the presentation several
17 times and Andres Diaz gave the presentation
18 several times.

Page 48:19 to 49:08

00048:19 Q. That's okay. All I'm trying to
20 do is orient us a little bit. Okay.
21 Because one thing that is crystal clear is
22 that you, Mr. LeBleu, you were there to
23 help; isn't that accurate?
24 A. That's correct.
25 Q. You weren't there to cause
00049:01 difficulty, right?
02 A. That's correct.
03 Q. You were there to provide
04 support, right?
05 A. That's correct.
06 Q. All right. And you had, I would
07 hope, some degree of expertise?
08 A. That's correct.

Page 49:12 to 50:10

00049:12 Q. Okay. So what I'm trying to
13 understand is whether the folks on a well
14 like Macondo had some understanding of what
15 your role was supposed to be. That's
16 where -- that's generally where I am. I
17 know it's a vague question. So I want to
18 be more specific if I may.
19 A. I'm -- I'm --
20 Q. Go ahead. Go ahead. Comment.
21 A. I worked nine years in the
22 office as a drilling fluids specialist for
23 the vendor and I worked, you know, in this
24 role. They knew me. Everybody knows me
25 and they know what my specialty is. So

00050:01 I -- I don't think they had any difficulty
 02 knowing who to go to when they needed to.
 03 And it didn't have to just be
 04 me. It could have been the other fluids
 05 expert that wasn't assigned to the rig. It
 06 could have been the M-I SWACO personnel,
 07 you know, which they -- traditionally they
 08 were used to interfacing with. So
 09 there's -- they have many resources they
 10 could draw on for drilling fluids advice.

Page 50:18 to 51:10

00050:18 Q. The opportunity for any employee
 19 to have access to engineering information,
 20 expertise, it's a good -- it's a good
 21 thing, it's not a bad thing?
 22 A. It is good.
 23 Q. It's a good thing?
 24 A. Yes.
 25 Q. All right. And employees ought
 00051:01 to be encouraged to access this expertise
 02 when they need it; wouldn't you agree?
 03 A. I agree.
 04 Q. And certainly when you were
 05 giving these presentations you told these
 06 folks, here I am. I have got this
 07 expertise, call me if you need me, didn't
 08 you?
 09 A. That's basically it. That's a
 10 fair description.

Page 55:09 to 55:13

00055:09 Q. No, I understand. Yeah. Is it
 10 correct for me to say that based upon your
 11 interactions with Mr. John Guide, that you
 12 felt like he respected your ability?
 13 A. Yes.

Page 56:17 to 57:25

00056:17 qualified. My point, again, is that if
 18 Mr. John -- Mr. John Guide has a lot of
 19 responsibility, doesn't he?
 20 A. Yes, he does.
 21 Q. Okay. And the decisions that he
 22 makes or the decisions that he fails to
 23 make could have extreme consequences to the
 24 safety and health of employees; isn't that
 25 true?
 00057:01 A. That's reasonable to say.
 02 Q. Okay. So all I'm saying is

03 quite logically, do you agree with me that
04 if he thinks somebody that he's working
05 with is incompetent, he ought to say
06 something about it?

07 A. Yes, I think he would say that.

08 Q. Now, turning to this first
09 e-mail. And it is Bates number
10 BP-HZN-2179MDL00235667 and I'm going to
11 mark this as 692.

12 (Exhibit 692 was marked for
13 identification.)

14 And if we could orient ourselves
15 looking at our chart again, this is going
16 to 691, just -- just to kind of take a
17 quick peek. This is January 5. I was just
18 curious to know what well or wells you're
19 talking about in this e-mail.

20 A. Well, I think this is Macondo.

21 Q. Macondo didn't start up again,
22 at least according to this chart, until
23 January 31.

24 A. Right, but before you start
25 drilling you have to work the plan.

Page 59:25 to 60:12

00059:25 Q. All right. And what vendor were
00060:01 you-all using when the MARIANIS was -- was
02 drilling?

03 A. We were using Baroid.

04 Q. And then it was a switch to
05 SWACO?

06 A. That's correct.

07 Q. Why was there a switch?

08 A. The common practice is to use
09 the vendors who are assigned to a rig who
10 have been on a rig because of the synergy
11 of those crews having worked with each
12 other before.

Page 61:06 to 61:16

00061:06 Q. Right. So that's what I'm
07 trying to understand. Where -- I mean,
08 loss of mud is something that happens when
09 you are drilling a well, right?

10 A. Not every well, but it does
11 happen.

12 Q. Okay. Certainly something you
13 have to plan for?

14 A. Well, let me rephrase that. It
15 does -- it may happen. It generally
16 happens, most wells.

Page 61:24 to 65:08

00061:24 Q. Well, so -- and again, you
25 helped me understand. So the operations
00062:01 guys, the engineering guys who are in
02 charge of the rig, do they not or do they
03 consider having LCM available to them in
04 the case of a -- of a loss of mud?
05 A. Yes. It's -- it's common
06 practice to have LCM on the rig and be
07 prepared with the contingencies for mud
08 losses.
09 Q. All right. So tell us what
10 you're doing here. I mean, obviously you
11 know they thought about it a little bit.
12 You are writing this memo for some purpose.
13 Help me understand what it is that you are
14 trying to convey in this memo.
15 A. I'm trying to convey the high
16 points of things not to -- things to think
17 about when you're doing the drilling fluid
18 program. It seems to be, you know, this --
19 this e-mail, as best I recall.
20 Q. All right. Well, it sounds to
21 me like you are saying I have got some
22 really good ideas here about LCM and you
23 are making some specific recommendations
24 about some products.
25 A. I'm not -- their normal lost
00063:01 circulation recommendations quite often
02 include Form-A-Set, Form-A-Squeeze --
03 Q. Uh-huh.
04 A. And we as -- we routinely run
05 background LCM. So I'm just restating what
06 we normally do when we're working with M-I
07 SWACO.
08 Q. All right. Help me understand,
09 please, what do you mean by, "As usual,
10 plan on running the stacked sieve and PPT
11 daily"?
12 A. I'm asking them to run the
13 stacked sieve test, which is a test that
14 has some sieve screens that tell you what
15 the -- what the particle size distribution
16 of the LCM in the background that's --
17 that's being kept in the background of the
18 mud is. And the PPT is the particle
19 plugging test. That is a specialized test
20 that's run across a lock site disk, which
21 is made to mimic sand pores, and so you can
22 verify the particle plugging capability of
23 the drilling fluid.
24 Q. All right. So this has to do
25 with the material that's onboard, mixed and
00064:01 ready to go into the well, correct?

02 A. There is sometimes material
03 mixed into the drilling fluid system
04 beforehand --
05 Q. Uh-huh.
06 A. -- and other times it's -- it's
07 put into the drilling fluid on the rig.
08 And there are also times where there's,
09 part of it is in the fluid that came out of
10 the rig and the rest of it is added on the
11 rig.
12 Q. So why are you doing these
13 tests?
14 A. I routinely do these tests
15 because it's -- I consider it good
16 engineering practice to do these tests.
17 Q. All right.
18 A. I routinely ask for them on
19 every well.
20 Q. Did the employees on Macondo
21 agree?
22 A. Yes. They -- they had no
23 problem doing the test.
24 Q. All right. So again, with
25 regard to this whole business of where you
00065:01 are in the organizational structure, you
02 make the request. They can decide to
03 agree, but apparently they can also decide
04 not to agree; isn't that true?
05 A. They can -- yes, they can push
06 back on my recommendations and they
07 can -- they can bring -- bring the -- you
08 know, bring the issue up --

Page 65:10 to 67:06

00065:10 A. -- with the drilling engineers
11 and the operations folks and myself. And
12 what we want to do is do what we think is
13 the best course of action. So we quite
14 often encourage the vendors to be proactive
15 and if they think something is not -- not
16 right or if they think they have a better
17 idea, then to present it.
18 Q. Well, again, I don't mean to
19 press it. I'm just having a hard time
20 understanding the hierarchy component.
21 Mr. John Guide, obviously he can veto a
22 request that you make, right? We have seen
23 that in the documents.
24 A. Mr. John Guide is in control of
25 operations and --
00066:01 Q. Who else can veto a -- a request
02 by you?
03 A. The drilling engineers can.
04 Q. All of them?

05 A. Yes.
06 Q. Any one of them?
07 A. Yes.
08 Q. How about on the operations
09 side, can those guys veto your request as
10 well?
11 A. Out on the rig?
12 Q. Yes.
13 A. Yes.
14 Q. How about on the beach, in
15 those -- anybody can veto a request of
16 yours?
17 A. It would -- it would be the
18 engineers and the operations guy that
19 you've -- that we have already talked about
20 who are assigned to the Macondo well.
21 Q. Right. Well, I have
22 to -- forgive me. I'm just curious. But
23 here you are in an engineering support role
24 with fair to high degree of expertise
25 offering support.
00067:01 I'm just wondering in your own
02 mind, Mr. LeBleu, if you're not a little
03 bit frustrated that when you make
04 recommendations, there's always the
05 possibility that someone can simply veto
06 your recommendation?

Page 67:09 to 67:13

00067:09 BY MR. BRUNO:
10 Q. Does that not bother you at all?
11 A. No, it doesn't bother me at all.
12 I mean, it's -- they -- the people who are
13 in control of the well should have control.

Page 68:02 to 70:11

00068:02 BY MR. BRUNO:
03 Q. Okay, let's go to the next
04 e-mail which is dated Monday, January 11,
05 2010. Do you see that?
06 A. Yes. Bates number
07 2179MDL00235906.
08 Q. And 7?
09 A. And 7.
10 Q. We're going to mark that as
11 693.
12 (Exhibit 693 was marked for
13 identification.)
14 Again, you were in the planning
15 stages of having the HORIZON take over the
16 drilling of the well, right?
17 A. I think so.

18 Q. And you are in communication
19 with Mr. Hafle. Do you know who he was?
20 A. I -- I see Mr. Hafle mentioned
21 in the lower e-mail portion of this e-mail
22 chain. And the second one, the last one
23 was to Brian Morel.
24 Q. Right.
25 A. I just wanted to be --
00069:01 Q. Sure. But the point is that
02 you're communicating with Mr. Hafle?
03 A. Okay. Yes.
04 Q. I mean, you wrote it to him as
05 well as Cocalas?
06 A. Mr. Brian Morel and copied to
07 Mr. John Guide.
08 Q. All right. Now, who are these
09 folks?
10 A. These are the drilling well --
11 Mr. Hafle from my understanding and
12 Mr. Brian Morel were drilling engineers
13 from Macondo. Mr. Brett Cocalas was for
14 part of the Macondo, serving in the
15 operations engineer role. And Mr. John
16 Guide is the operations team leader --
17 Q. Okay.
18 A. -- throughout Macondo.
19 Q. Now, I think you told us a
20 little bit ago that not every well
21 experiences extreme mud losses, correct?
22 A. That's correct.
23 Q. It happens from time to time?
24 A. It happens in almost every well,
25 it happens from time to time.
00070:01 Q. Well, help me understand this.
02 When you are drilling a well do you plan
03 for extreme mud loss?
04 A. We do, yeah. We do plan for
05 what we will do in case of extreme mud loss
06 because it's always a possibility.
07 Q. Is there anything about the well
08 itself which will assist you in determining
09 the potential for mud loss?
10 A. The pore pressure and frac.
11 gradient regime would -- would help.

Page 70:14 to 71:25

00070:14 Q. Did you evaluate the pore
15 pressure and frac. gradient regime as
16 encountered by the MARIANIS team?
17 A. The -- it's not within my realm
18 of special knowledge to -- to evaluate pore
19 pressure and frac. gradient. The -- we
20 have a team called the Tiger Team that
21 generate the estimations of pore pressure

22 and frac. gradient and we have people on
 23 the rig who daily keep track of pore
 24 pressure and frac. gradient estimates.
 25 They estimate the pore pressure and
 00071:01 frac. gradient and they interface with the
 02 people on -- on the bank in the office
 03 concerning pore pressure and frac.
 04 gradient, and they advise the drilling
 05 engineers and the operations team
 06 concerning the pore pressure and frac.
 07 gradient --
 08 Q. Uh-huh.
 09 A. -- both for planning purposes
 10 and while we're drilling the well.
 11 Q. On this exhibit you write, "If
 12 our background LCM does not work and our 84
 13 parts per barrel mixed LCM (containing
 14 fiber) does not seem to cure our losses, we
 15 have several options." And then you go on
 16 to describe the options.
 17 A. Uh-huh.
 18 Q. Why did you write that?
 19 A. Because in the -- well, let me
 20 read it first before --
 21 Q. Sure.
 22 A. I wrote that to give the
 23 drilling and operations drilling engineers
 24 and operations team my -- my suggestions as
 25 far as how we should handle loss events.

Page 72:10 to 73:17

00072:10 Q. Okay. That's where I'm
 11 confused. Because here you are giving
 12 advice about a variety of products and it
 13 would seem to me logical to first ascertain
 14 what the guys on the rig were planning to
 15 use in order to --
 16 A. That's not --
 17 Q. -- give intelligent advice.
 18 A. That's not the way the -- this
 19 is pre-planning --
 20 Q. Okay.
 21 A. -- before drilling a well and
 22 the pre-planning doesn't take place on the
 23 rig.
 24 Q. All right.
 25 A. Pre-planning takes place in the
 00073:01 office. And the plans are given to the rig
 02 to execute.
 03 Q. "My recommendation would be to
 04 plan to have both Form-A-Squeeze and
 05 Form-A-Set on the rig (as we normally do)."
 06 A. That's correct. On the HORIZON,
 07 that's correct.

08 Q. So because the HORIZON works
09 with the vendor SWACO --
10 A. Uh-huh.
11 Q. -- we know that the HORIZON is
12 likely to have SWACO products, right?
13 A. Uh-huh, that's correct.
14 Q. And then, of course, the
15 Form-A-Set and Form-A-Squeeze are SWACO
16 products?
17 A. That's correct.

Page 74:03 to 75:12

00074:03 Q. What is background LCM?
04 A. Background LCM is -- is
05 particles that are carried in the drilling
06 fluid to seal sands.
07 Q. Okay. And what is the 84 parts
08 per barrel mixed LCM?
09 A. 84 pounds per barrel mixed LCM
10 is a contingency pill that we keep ready in
11 case we have losses while drilling and we
12 pump it around and it has -- it serves
13 several purposes. Two that I can think of
14 is potential to seal the losses. It also
15 serves as an identifier for where the
16 losses are occurring as you sweep it
17 through the wellbore when -- when it seems
18 to even partially affect a -- a cure --
19 Q. Uh-huh.
20 A. -- or mitigate the losses. You
21 can tell where the loss event is occurring
22 in a wellbore.
23 Q. So do I gather then that it's
24 part of the drilling process to have some
25 LCM already prepared and on deck and ready
00075:01 to pump?
02 A. In a pit, yes.
03 Q. In a pit. So what about the
04 Form-A-Set and Form-A-Squeeze, are those
05 also in a pit?
06 A. No, the Form-A-Set and
07 Form-A-Squeeze are generally mixed as --
08 when you need them, generally speaking.
09 Other -- there -- different people do
10 different things with that. But generally
11 speaking, they are prepared when you need
12 them.

Page 75:23 to 76:13

00075:23 Q. Well, in other words, if it's a
24 product that can be mixed, what is the need
25 to premix the product? Are there certain

00076:01 situations, conditions in the well that
 02 would require that the -- these two types
 03 of pills be prepared --
 04 A. No.
 05 Q. -- and ready to be pumped into
 06 the well?
 07 A. No.
 08 Q. So there's no need to have a
 09 Form-A-Set or a Form-A-Squeeze pill
 10 pre-made in the pits ready to go?
 11 A. No.
 12 Q. Right?
 13 A. That's correct.

Page 77:12 to 77:20

00077:12 Q. How much of this material is
 13 customarily kept in the pit for the
 14 situations might -- which might call
 15 upon --
 16 A. My recollection, best of my
 17 recollection is we generally kept 200
 18 barrels of it ready on the HORIZON.
 19 Q. Now --
 20 A. Sometimes it was more.

Page 78:06 to 80:02

00078:06 Q. All right. If you look at the
 07 next e-mail in this line from Brian Morel
 08 back to you, it says, "This is going to be
 09 a different animal than we saw on Kodiak if
 10 the sands are depleted even partially. I
 11 think we should review the options in more
 12 detail, as well as the decision trees we
 13 already created for this interval and come
 14 up with a plan that works for the HORIZON.
 15 Other teams have had good luck with Frac
 16 Attack too, which isn't as difficult to
 17 prepare as EZ Squeeze."
 18 What is he saying here?
 19 A. What he's saying -- at the risk
 20 of -- I think it's pretty plain what he's
 21 saying, you know.
 22 Q. Well, why is it going to be a
 23 different animal than Kodiak?
 24 A. He said -- well, I don't know.
 25 Q. What was Kodiak about?
 00079:01 A. I can't answer that. Kodiak was
 02 a well just previous. Kodiak --
 03 Q. Okay.
 04 A. -- appraisal well was a well
 05 just previous to this well and we used
 06 Form-A-Squeeze to effect a cure of that

07 lost-circulation event.

08 Q. Uh-huh. Explain "if the sands
09 are depleted even partially," what does
10 that phrase mean?

11 A. He's making a statement about
12 depleted sands. And it's an engineering
13 detail that I would -- I would be guessing
14 to -- it's coming from his discipline.

15 Q. Uh-huh.

16 A. And I would have to guess to
17 make an association.

18 Q. It has to do with the potential
19 for loss of fluids?

20 A. Yes, it does.

21 Q. In other words, if the sands are
22 depleted, there's a higher likelihood of
23 the loss of drilling fluids?

24 A. Yes, generally speaking there is
25 a higher likelihood, although the bigger
00080:01 concern in my opinion is fractured shales
02 and marls.

Page 80:10 to 80:24

00080:10 A. In my opinion and my experience,
11 depleted sands are generally -- they are
12 more forgiving, unless they are very
13 severely depleted, they are more forgiving
14 and easier to effect a cure. And that's
15 why we carry the background LCM, is to
16 handle the -- the sands.

17 Q. Mr. LeBleu, in the planning
18 phase of this phase of the drilling, did
19 you have any concerns about the potential
20 for massive loss of drilling fluids during
21 the --

22 A. There's always a potential for
23 losses and there's always a potential of
24 losses to be high --

Page 81:01 to 81:10

00081:01 A. -- you know, on any well,
02 especially exploration wells.

03 Q. Is there anything about this
04 particular well which allowed you to
05 quantify the level of risk for the loss of
06 fluids?

07 A. There's -- other than the
08 directions or the concerns by the drilling
09 engineers, there was nothing about this
10 well that stood out to me.

Page 82:16 to 83:05

00082:16 Q. Let's turn to the next blue
17 page. I think you'll see that this is an
18 e-mail dated January 26.
19 A. So -- I don't want to pass
20 up -- is it the very next one?
21 Q. No. It's in the -- we're
22 skipping through.
23 A. Okay. So how do I find it?
24 Q. It -- it's chronological. The
25 Bates number is 270159. Are you with me?
00083:01 A. Yes.
02 Q. I'm going to mark this as
03 Exhibit Number 694.
04 (Exhibit 694 was marked for
05 identification.)

Page 90:14 to 92:14

00090:14 Q. Okay. All right. So in any
15 case, there's -- you encounter some sands
16 that are depleted or for whatever reason
17 you're losing some fluid. As I understand
18 it, there is a pill that's made up or
19 there's the pill that's already made up
20 that gets pumped into the well.
21 A. Uh-huh.
22 Q. And it's the driller who pumps
23 the material into the well, correct?
24 A. Yes.
25 Q. Does SWACO have any role in how
00091:01 the material is pumped, the gradient, the
02 amount, et cetera?
03 A. They quite often have
04 recommendations, yes.
05 Q. Well, again, I'm just --
06 A. Depend -- depending on the type
07 of LCM solution that's being pumped.
08 Q. Well, do they choose the
09 solution?
10 A. It's -- well, it's particular
11 84-pound per barrel is a BP recommended
12 practice.
13 Q. All right. I'm just trying to
14 get a handle on what it is that the
15 drilling fluids vendor does to earn his
16 bonus. What exactly are they doing, if you
17 know?
18 A. I don't know.
19 Q. You don't know?
20 A. I mean, I -- you know, I --
21 there is nothing specific that they do
22 other than try to do their job to avoid
23 losses and cure losses as quick as

24 possible.
25 Q. I hear you. So the bottom line
00092:01 is that there is nothing other than doing
02 what it is they are expected to do?
03 A. That's correct.
04 Q. Which is to provide the fluids,
05 make recommendations with regard to the --
06 to the volumes and the -- and the -- and
07 the pumping rates?
08 A. That's correct.
09 Q. Which they would do anyway?
10 A. That's correct. And the
11 bonus -- the bonus -- the bonus structure
12 was based on historical wells to be fair to
13 the vendors, people who -- who designed the
14 bonus structure to add consideration.

Page 92:19 to 92:19

00092:19 (Exhibit 695 was marked for

Page 92:24 to 93:10

00092:24 Q. All right. What details are
25 they asking about regarding Macondo?
00093:01 A. My understanding is that Mark
02 Heironimus is currently designing
03 documents. I may not be correct on this.
04 But this is my understanding. He's
05 concerning -- he's currently designing
06 documents to capture lessons learned and to
07 be shared with all drilling engineers in
08 the Gulf of Mexico. I didn't get that from
09 this, but I got that from another meeting I
10 was a part of.

Page 93:23 to 94:12

00093:23 Q. So why did you have some
24 concerns about sharing this information
25 without getting BP legal's approval?
00094:01 A. Because it concerns the Macondo
02 well and Macondo well information needs to
03 be cleared through legal before sharing.
04 And we're not -- we're not planning on
05 drilling for a -- for a few months yet, so
06 there's no immediate concern about him and
07 the data. And he also has the recourse
08 of -- of elevating the request to
09 management or to legal to get the data. So
10 there's time. There's no drilling going on
11 right now. So there's time for him to get
12 the data he needs.

Page 96:09 to 96:19

00096:09 Q. So my question was: Do you
10 recall having experiences with Form-A-Set
11 failing?
12 A. No. I had no direct experiences
13 with Form-A-Set to my knowledge -- best of
14 my knowledge I had no direct experience of
15 Form-A-Set failing until the one pill that
16 was mixed in Macondo. But I have a general
17 knowledge that -- of what happened in the
18 Gulf of Mexico. I was working in the Gulf
19 of Mexico at the time.

Page 96:23 to 96:23

00096:23 (Exhibit 696 was marked for

Page 96:25 to 97:04

00096:25 All right. I'm confused. Did
00097:01 you have experience with this failing or
02 not?
03 A. I had experience -- I knew of
04 Form-A-Set not working in some cases.

Page 97:06 to 100:11

00097:06 A. Which is common for LCM
07 solutions. It's common for them to work
08 sometimes and it's common for them to fail
09 sometimes.
10 Q. I understand. And I thought
11 then you said it failed on Macondo or did I
12 miss that?
13 A. It was mixed incorrectly on
14 Macondo and had no chance of working.
15 Q. All right. How did you find
16 that out?
17 A. From the drilling fluid engineer
18 on the rig. He mentioned that he had a
19 concern about -- about how it was mixed.
20 Q. What's his name?
21 A. Mr. Leo Lindner.
22 Q. So he's an employee of SWACO?
23 A. M-I SWACO, that's correct.
24 Q. SWACO. Was that -- did that
25 concern you that the -- the SWACO drilling
00098:01 engineer wasn't able to properly mix his
02 own product?
03 A. Yes, it did. It was -- it was a
04 concern. The -- the Form-A-Set pill is a
05 very engineering intensive pill. And M-I

06 SWACO has created software solutions which
07 they feel if followed, if directions are
08 followed, it's, you know, somewhat
09 foolproof. But the -- the wording in the
10 documentation -- the wording in the
11 documentation did say mix half of the bio
12 polymer and then put other products in and
13 then at the end put the other half of the
14 bio polymer and the very last -- to be
15 clear, the very last thing added is the
16 cross-linking agent before you pump it.
17 But Mr. Lindner followed the --
18 the instructions of the -- of the software
19 and put all of the bio polymer in it, and
20 in his opinion it was thick --
21 Q. Uh-huh.
22 A. -- which I found out from -- I
23 had discussions with M-I SWACO about the
24 instructions and the -- and the suggested
25 concentration of bio polymer in the pill,
00099:01 and what I learned from M-I SWACO was that
02 the pill is designed to be thick because
03 thick pills work better for lost
04 circulation. And so he had a concern
05 about --
06 Q. This is a -- these pills are a
07 thick, viscous kind of material, right?
08 A. They are -- they are designed to
09 be viscous, yes.
10 Q. And their whole reason for being
11 is to plug holes?
12 A. Plug fractures and -- and find
13 holes in sand matrixes, yes.
14 Q. What's the largest hole that
15 they might be able to plug?
16 A. I have no idea.
17 Q. Three inches be too big a hole
18 for material like that to plug or do you
19 know?
20 A. It's very hard to say.
21 Q. Don't know one way or the other?
22 A. I -- I think they would effect a
23 solution in the -- the only -- the only
24 time they would have three inches to plug
25 is in a fracture and they would effect the
00100:01 solution further back in the fracture where
02 it's smaller.
03 Q. Uh-huh.
04 A. I don't think it's really
05 possible that they could plug a three-inch
06 hole.
07 Q. Let's look at the next document.
08 I think it's 3310. And there's an
09 attachment, there's a draft, Form-A-Set
10 Mixing and Spotting Procedure for a

11 Weighted Pill, 697.

Page 100:15 to 101:06

00100:15 Q. Look at the last page under
16 safety considerations.
17 A. Yes.
18 Q. Why, if you know, is there a
19 need to flush the tank and the associated
20 mixing pump lines with as much fresh water
21 as possible to send it to the reserve pit?
22 A. I would have to assume to answer
23 this question.
24 Q. Okay.
25 A. And I assume it's because of the
00101:01 cross-linker hasn't been added.
02 Q. Okay.
03 A. And so the cross-linking process
04 is -- is taking place and could possibly
05 leave a rubbery -- a Jello-type consistency
06 in the pit.

Page 101:15 to 104:09

00101:15 Q. It says "flush both the tank and
16 the associated mixing/pump lines." So it
17 could obviously clog the pump lines, too,
18 couldn't it?
19 A. Well, they went through the pump
20 lines, yeah.
21 Q. Sure. So the concern here is
22 that after it's been cross-linked, it's
23 going to set up inside these lines
24 potentially, and so you better flush it out
25 with as much water as you possibly can,
00102:01 right?
02 A. I think that's it. That's it.
03 Q. All right. And this business of
04 cross-linking, explain that to us, please.
05 A. I -- I don't know the process
06 exactly. I'm not a chemist, but --
07 Q. Okay.
08 A. It's a polymer that -- the
09 chains of the polymer becomes cross-linked
10 because of the introduction of some -- some
11 product that causes them to do so.
12 Q. Uh-huh. Okay. So that
13 cross-linking, whatever it may be, is what
14 causes the material to become this rubbery
15 material; and only after it becomes the
16 rubbery material can it do its job of
17 plugging the hole?
18 A. Yeah. I wouldn't call it
19 rubbery material. I would call it more

20 like Jello consistency.
 21 Q. Viscous, Jello-y. But, again,
 22 the point is, it's the cross-linking that
 23 causes this process to occur --
 24 A. Uh-huh.
 25 Q. And once the process occurs,
 00103:01 it's that process which allows it to do
 02 what it's intended to do, which is to block
 03 the hole --
 04 A. Correct.
 05 Q. -- right?
 06 Now, the next line says, "Do not
 07 allow pill to mix with the mud in the
 08 active pits as this may cross-link the
 09 surface volume." See that?
 10 A. Yes, I do see that.
 11 Q. You see that. And this is
 12 something that you -- you obviously knew
 13 about and you read about it because you
 14 sent it out, right?
 15 A. Yes, that's correct.
 16 Q. All right. So can I -- can I --
 17 I mean, this is an accurate document, isn't
 18 it?
 19 A. I think that last statement is a
 20 bit farfetched.
 21 Q. Well, so it's an inaccurate
 22 document?
 23 A. Well, that statement is -- I --
 24 I would not agree with that statement.
 25 Q. Okay. Well, but if we take it
 00104:01 for what it says, if you mix this material
 02 with the mud, it might cross-link and start
 03 this rubbery business?
 04 A. According to M-I SWACO, that is
 05 one of their concerns listed here.
 06 Q. All right. Let's -- to be clear
 07 about it, the mud is causing the
 08 cross-link, at least that's what's been
 09 reported here?

Page 104:12 to 104:14

00104:12 THE WITNESS:
 13 I can't -- I can't -- I
 14 can't speak to that.

Page 104:17 to 104:23

00104:17 A. I'm not the person to speak to
 18 that.
 19 Q. You're not the person to speak
 20 to that. So who would be the person to --
 21 for us to speak to in order to find out?

22 A. It would be the company, M-I
23 SWACO.

Page 105:13 to 108:15

00105:13 Q. So is it logical for me to
14 conclude that if I wanted to find out about
15 the cross-linking potential of this
16 material, this Form-A-Squeeze or
17 Form-A-Set, as it relates to its coming
18 into contact with drilling fluids, I need
19 to talk to a chemist at SWACO; isn't that
20 accurate?
21 A. If that's your specific
22 concern --
23 Q. Yes.
24 A. -- probably would. I mean, or
25 the tech service people. Tech service
00106:01 people would have that capability because
02 their -- that's their job; and also other
03 experts who are experts in the pill -- with
04 the pill.
05 Q. When you are pumping a pill into
06 the -- into the well is there a -- is a
07 spacer used?
08 A. Some pills require spacers and
09 some pills do not.
10 Q. All right. Let's talk about
11 these two. Let's talk about Form-A-Squeeze
12 and Form-A-Set. Squeeze goes first, right?
13 A. You can pump Form-A-Squeeze by
14 itself.
15 Q. Uh-huh.
16 A. You can pump Form-A-Set by
17 itself or you can pump them in concert in
18 what was typically called a tandem
19 configuration. The Form-A-Set is a
20 water-based product and so when you -- when
21 you use that solution with oil base or
22 synthetic-based mud you quite often need
23 spacers before and after it to keep the
24 contamination from occurring.
25 Q. When you "say keep the
00107:01 contamination, "help me understand what
02 that means.
03 A. Well, I don't exactly -- I
04 think -- I think what it means is that if
05 it's contaminated, it won't work correctly.
06 Q. Okay. Where do you get in your
07 mind the -- the word contamination? Is
08 that something that you heard? Is that
09 something you read? Is it something you
10 researched?
11 A. Contamination is a general term
12 used when -- when two dissimilar fluids

13 come together.

14 Q. All right. Is that generally
15 true any time you mix water-based materials
16 with -- with oil-based materials or
17 synthetic -- synthetic oil-based materials?

18 A. Generally speaking, yes, they --
19 generally speaking, there are spacers for
20 different types of water-based products
21 that are used in oil-based drilling fluids,
22 when -- when the fluid in the wellbore is
23 oil based or synthetic.

24 Q. All right. The fluid in the
25 Macondo well was oil based, right?

00108:01 A. Yes, it was synthetic.

02 Q. Synthetic. Form-A-Squeeze, is
03 that a water-based or is that a oil-based
04 or synthetic or --

05 A. It could be done either way. It
06 can be pumped -- it can be mixed -- it's an
07 LCM that can be mixed in water base or base
08 oil.

09 Q. Do you know, sir, how the
10 Form-A-Squeeze was used on the HORIZON?
11 Was it used with water or was it used with
12 a synthetic oil or oil?

13 A. I know one instance, the first
14 instance we tried it, I think it was mixed
15 in oil.

Page 109:04 to 119:06

00109:04 Q. If you were going to use
05 Form-A-Set and Form-A-Squeeze, would that
06 indicate the need to mix them both with
07 water or could you mix the Form-A-Squeeze
08 with the synthetics and the Form-A-Set with
09 water and then combine them together?

10 A. I would think you would have to
11 mix it with water if you're going to use it
12 together, because that's the advantage of
13 the -- using the Form-A-Squeeze with the
14 Form-A-Set. There's two advantages in my
15 mind.

16 Q. Uh-huh.

17 A. One advantage is you don't have
18 to mix the surfactant spacers for the
19 Form-A-Set or whatever spacers to -- for
20 the Form-A-Set. You -- you can use the
21 Form-A-Squeeze on the front end and not
22 only does it -- and use a smaller amount of
23 it on the back end of the Form-A-Set. And
24 the -- the Form-A-Squeeze on the front end
25 has a -- an opportunity to effect a

00110:01 solution via its mechanism. And the

02 Form-A-Set has an opportunity to effect a

03 solution with the combination of the first
04 pill, Form-A-Squeeze's potential partial
05 solution and its own, which is a different
06 mechanism of cross-linking.

07 Q. All right. When you -- so if
08 you're pumping the materials made with
09 water, do you need to use a spacer between
10 those materials and the drilling fluid?

11 A. Not to my knowledge.

12 Q. So you just pump them right in?

13 A. To my knowledge, just pump
14 straight in.

15 Q. Pump straight in. And if
16 there's any cross-linking, it certainly
17 doesn't make any difference because the
18 whole purpose is for the material to become
19 viscous and rubbery and patch the holes,
20 right?

21 A. Well, you're -- you're confusing
22 mechanisms.

23 Q. Uh-huh.

24 A. The cross-linking wouldn't occur
25 in the Form-A-Squeeze because it's not a --
00111:01 a cross-linking type pill. It's a
02 de-fluidizing-type pill. And that is where
03 the mud and pill interface would occur --

04 Q. Okay. But it would be the
05 case --

06 A. -- with that particular pill.
07 And that's the reason for having it in
08 front of and behind the Form-A-Set.

09 Q. All right.

10 A. And the reason the Form-A-Set is
11 not allowed to come in contact with the
12 fluid, my understanding is, is that the
13 Form-A-Set won't have much chance of
14 working if it's contaminated with drilling
15 fluid, not as the concern was in the bottom
16 of the other document.

17 Q. I hear you. Okay.

18 Now, when do you add the
19 cross-linker?

20 A. My understanding is that it's
21 added last because the Form-A-Set product
22 is a time-and-temperature-dependent pill.
23 So once you add the cross-linker, the
24 process of cross-linking begins, and the
25 higher the temperature, the quicker that
00112:01 occurs, but there are -- there is a certain
02 amount of retarder added on the front end
03 of the product also so that it can be
04 tailored to not work until it's out of the
05 pipe.

06 Q. Uh-huh.

07 A. And have a formation after a

08 certain period of time.
09 Q. Okay. Now, the Form-A-Set AK is
10 a large rubbery mass that can fill large
11 fractures; isn't that right?
12 A. Well, I have seen pictures where
13 it -- it was a large, fairly large
14 Jello-type mass.
15 Q. How large?
16 A. Pictures I saw from -- from
17 earlier it was -- it was a foot or so.
18 Q. A foot of gelatinous material?
19 A. About three or four inches
20 thick.
21 Q. Okay. All right. And again,
22 that's the stuff that you mix with water?
23 A. Yes.
24 Q. And that's the stuff, if it's
25 exposed to the drilling mud, can be
00113:01 cross-linked?
02 A. According to M-I SWACO's last
03 sentence there, yes.
04 Q. Okay.
05 A. You know, the product is used
06 with oil base and water base, so I'm not
07 sure where that cross-linking could
08 possibly occur.
09 Q. We need to talk to somebody at
10 SWACO, don't we?
11 A. We do.
12 Q. And we certainly better talk to
13 somebody at SWACO before we give advice to
14 anybody about what the product will and
15 won't do under certain circumstances; don't
16 you agree?
17 A. I -- it's M-I SWACO's product.
18 Q. Okay. Now, when you pumped
19 the -- the pill into the well, do you know
20 the path it takes?
21 A. Generally speaking, it goes down
22 the drill pipe.
23 Q. Down the drill pipe into the
24 hole and stays there?
25 A. Goes down the drill pipe, goes
00114:01 through the bottom hole assembly equipment,
02 which has different size of ID's. Some of
03 them are somewhat restricted, and then it
04 goes through the bit jets generally, which
05 is very restrictive and out to -- into the
06 open hole.
07 Q. Have you ever run it through the
08 kill line or the choke lines?
09 A. I can't recall ever running it
10 through there.
11 Q. What's the difference in size
12 between the kill line and the anterior

13 diameter of a drill pipe, if you know?
14 A. Depends on the drill pipe. I
15 mean, kill line, I -- I don't remember the
16 exact dimension of the kill line, but I --
17 I do recall that the tail pipe was slightly
18 smaller than the choke and kill line size.
19 I have calculated the kill line volume from
20 time to time when I was working for M-I
21 SWACO --
22 Q. Uh-huh.
23 A. -- with the HORIZON. And to do
24 that, I would have to refer to the ID of
25 the choke and kill line.
00115:01 Q. And that was the same choke and
02 kill lines that were in place --
03 A. Yes.
04 Q. -- at the time of the event,
05 right?
06 A. That's correct.
07 Q. So you had some sense of the
08 interior diameter?
09 A. Some sense of it, yes.
10 Q. About three inches, weren't
11 they?
12 A. I'm not sure. That sounds --
13 that sounds close. Sounds reasonable.
14 Q. Okay.
15 A. But I'm not sure.
16 Q. Did you lose confidence in
17 Mr. Lindner's ability to mix the SWACO
18 pills?
19 A. No, I didn't lose confidence in
20 his ability to mix the pills. I lost
21 confidence in the -- the younger drilling
22 fluid engineer's ability to mix the pills,
23 because the younger drilling engineer
24 misunderstood another sentence in the --
25 the output of the software which is, if I'm
00116:01 not mistaken, the document we were
02 referring to earlier.
03 Q. Uh-huh.
04 A. In that it says missed -- mixed
05 the cross-linker directly to the pill, and
06 he misunderstood that to mean cutting the
07 sacks -- I think it was sacks -- cutting
08 the sack product right on top of the -- the
09 pill rather than mixing it through the
10 hopper.
11 Q. Well, where was Lindner in all
12 this?
13 A. Lindner was off when the other
14 drilling fluid engineer made that mistake.
15 Q. Okay. "Off" meaning he was --
16 A. He was off tour.
17 Q. He's off the tour. He's still

18 on the rig?
19 A. Still on the rig.
20 Q. But he's not on that shift?
21 A. Right.
22 Q. And what was that gentleman's
23 name, if you can recall?
24 A. I -- I think his last name was
25 Smith, but I'm not sure.
00117:01 Q. Okay. Did you make a request to
02 SWACO to bring in some different drilling
03 engineers because of this?
04 A. Drilling fluid engineers?
05 Q. Yes.
06 A. I was -- I made several requests
07 of M-I SWACO. I -- I requested that they
08 review the -- the wording of the procedure.
09 Q. Uh-huh.
10 A. So that the wording would be
11 clearer, that it wouldn't be mixed -- if
12 it's mixed directly through -- the pill
13 through the hopper, some type of -- some
14 type of wording in that fashion, so that it
15 would be clear to anyone that it -- the
16 product should be mixed through the mixing
17 hopper to add to the other pill.
18 I also asked them to consider
19 the concentrations of bio polymer that the
20 software was recommending, and that's where
21 we got to, if I was -- you know, after
22 several discussions with them, I talked to
23 some very knowledgeable people in their
24 technical service department that said the
25 -- the bio polymer helps the pill work,
00118:01 having -- having a -- a level of bio
02 polymer that makes the pill viscous helps
03 it to effect a cure downhole. And that
04 satisfied me.
05 And they also said, and it's
06 rightfully so that, that their instructions
07 say put half of the bio polymer in first
08 and then -- then consider about putting the
09 half -- the second half in later.
10 Q. Well, the bottom line is, did
11 you request that they send another drilling
12 fluids guy out there?
13 A. Yes. We -- I discussed with the
14 engineering and operations team and they
15 felt -- they felt it was ideal that it
16 would be best to have someone who has a lot
17 of experience mixing Form-A-Set to be on
18 the rig. The pushback from M-I SWACO was
19 that they felt their engineers could do it.
20 Q. I'm just curious. Where are
21 the -- where are the BP engineers on the
22 rig with regard to these issues? I mean,

23 you're supposed to be in an advisory role
24 where you're answering questions, and it
25 sounds like you're being a whole lot more
00119:01 proactive than an advisory person.
02 Wouldn't you have expected
03 the BP personnel on the rig to have
04 ascertained there was some difficulty with
05 this SWACO employee and his ability to mix
06 the pills?

Page 119:10 to 119:13

00119:10 My understanding is
11 that -- that the drilling foreman did take
12 an active -- the drilling -- the well site
13 leader.

Page 119:15 to 121:09

00119:15 Q. Who was it?
16 A. I don't know. -- did take an
17 active role in watching the pills mixed
18 subsequently, or at least in one instance.
19 Q. Uh-huh.
20 A. And that was one of the things
21 BP did to assure that future use of the
22 pills and future use of the pills in the
23 well would go well. Also, I initiated a
24 conversation with -- with John Guide and
25 with Mr. Doyle Maxie with M-I SWACO about a
00120:01 particular young drilling fluid engineer.
02 Q. You did that?
03 A. Who was -- I initiated it, yes.
04 Q. Right. They didn't?
05 A. But that decision, the decision
06 to replace him --
07 Q. Right.
08 A. -- with a more senior
09 experienced drilling fluid engineer who had
10 experience with -- with these types of
11 pills and basically had more experience as
12 a drilling fluid engineer, that decision,
13 to my knowledge, to the best of my
14 knowledge, was -- was carried out by -- was
15 -- that idea was carried forward by the
16 drilling -- well site leaders.
17 Q. The point I'm making, sir, is
18 that you were the one that brought it to
19 Guide's attention; isn't that true?
20 A. Well, Mr. Guide was well aware
21 that there was a problem. I had made
22 Mr. Guide aware. As soon as Mr. Lindner
23 forthrightly informed me that he was
24 concerned that the pill was thick, I passed

25 that on, and as soon as Mr. Maxie -- I
00121:01 think that's the way I got the information.
02 As soon as Mr. Maxie informed me that the
03 -- the cross-link was in fact mixed on top
04 of the pill rather than through the mixing
05 hopper, I informed the team. I -- I do
06 that routinely.
07 Q. Why is Lindner talking to you as
08 opposed to talking to the folks on the rig?
09 That's where I'm having the disconnect.

Page 121:13 to 122:01

00121:13 Q. Do you know?
14 A. I have no idea -- I have no -- I
15 don't recall what the reasons were that
16 Mr. Lindner and I were having a
17 conversation.
18 Q. Okay. Obviously Mr. Lindner
19 regarded you as someone knowledgeable, with
20 experience, who could intelligently answer
21 his questions and deal with his problems,
22 correct?
23 A. Well, he knew I was the drilling
24 fluid advisor and I worked with the team,
25 so he thought it prudent -- I assume he
00122:01 thought it prudent to inform me.

Page 122:14 to 123:23

00122:14 Q. On the break I was asked to
15 identify the timing of this issue with the
16 young drilling engineer at SWACO. When did
17 that occur?
18 A. Well, if we would --
19 Q. Yeah, we can use our Exhibit --
20 A. Use this.
21 Q. 640 -- 691.
22 A. The -- the first event with the
23 MARIANIS happened here. It was a mild
24 event. The more serious event happened --
25 occurred here. So it was during the --
00123:01 somewhere early in that event.
02 Q. All right. And for the record,
03 the dates of those events are -- the first
04 event came when?
05 A. Looks like the start of it,
06 according to the drilling fluid reports
07 and -- and the DIMS report was the 17th of
08 February. And the end of that event was
09 the 23rd of February.
10 Q. All right. And the first event
11 was when?
12 A. Looks like the 23rd of October

13 to the 30th of October.
14 Q. All right. And there's one more
15 event?
16 A. Yes, one more event. Yes. And
17 the events I'm talking about are while
18 drilling. We lost some mud also while
19 cementing around casing, but the events
20 were -- the three events or three major
21 events were while -- while drilling. And
22 it looks like the last event was April 3rd
23 to April 6th.

Page 127:05 to 127:08

00127:05 Q. Okay. Fair enough. All right.
06 In any case, let's go to the SWACO document
07 which has been marked as 698. It is Bates
08 numbered 11316.

Page 129:07 to 131:06

00129:07 So this has February 23,
08 but in 2010. And you are saying it's
09 February 22 of 2009.
10 BY MR. BRUNO:
11 Q. Uh-huh.
12 A. So they really aren't in
13 chronological order. Okay.
14 Q. Got it? Just curious here. It
15 says -- what is this document?
16 A. This seems to be a tandem
17 procedure form for pumping the Form-A-Set
18 and Form-A-Squeeze in tandem.
19 Q. It says they can be mixed at the
20 same time in separate pits. Do you know
21 why they need to be mixed in separate pits?
22 A. Well, if you don't mix them in
23 separate pits you -- you -- you lessen the
24 possibility of either one working in the
25 ways it's designed to work.
00130:01 Q. Uh-huh. All right. We just
02 don't really know what will happen if we
03 mix them together, do we?
04 MR. LANCASTER:
05 Object to form.
06 THE WITNESS:
07 Well, I'm familiar
08 with -- with, you know -- in my experience
09 I have mixed many different pills --
10 BY MR. BRUNO:
11 Q. Uh-huh.
12 A. -- in many different ways and
13 spacers. I have experience with the
14 products. I have experience with water,

15 seawater, drill water. I have experience
16 with bio polymers. I have experience with
17 LCMs of all types, mixing all types of
18 pills, and I have no concern about mixing
19 the two together from that experience.
20 Q. I didn't ask you that. I asked
21 you what happens when you mix them
22 together.
23 A. I don't know.
24 Q. You don't know.
25 A. I don't know.
00131:01 Q. So if you don't know what
02 happens when you mix them together, how can
03 you tell me you don't have any concerns?
04 A. Well, I can tell you I have no
05 concerns due to my experience with the
06 materials, as I stated previously.

Page 131:19 to 133:02

00131:19 Q. If you have one pit, as counsel
20 has correctly suggested, as opposed to two
21 pits and you mix them all together, do we
22 know what happens?
23 A. No.
24 Q. You don't know?
25 A. No.
00132:01 Q. So we don't know if we have
02 concerns or not?
03 A. I don't know with assurance what
04 will happen.
05 Q. All right. So we don't know
06 what the end product of mixing these two
07 things together will be, right?
08 A. I don't know.
09 Q. Okay. It says, "Ensure mixing
10 hoppers do not contain synthetic fluid.
11 Any synthetic fluid would contaminate the
12 Form-A-Set AK pill." We have talked about
13 that already.
14 A. Uh-huh.
15 Q. Do we know if synthetic fluid
16 will contaminate the Form-A-Squeeze pill?
17 A. I would think, yes, it would
18 hinder the Squeeze's ability to do its
19 function.
20 Q. All right. And then once again,
21 if we go to the back page, we'd find the
22 same cautionary sentence, "Do not allow
23 pill to mix with the mud in the active pits
24 as this may cross-link the surface volume,"
25 right?
00133:01 A. Yes, that sentence is still
02 there.

Page 134:17 to 135:01

00134:17 Q. According to 691, it says
18 February 23rd is the last day of that
19 event. It says you opened up the annular
20 after waiting on the Form-A-Set and the
21 well is static.
22 So apparently you have just put
23 the material down. The well is holding?
24 A. It says if well is static. It's
25 a -- you know, it's a plan of certain
00135:01 events; if this, do that, whatnot.

Page 138:19 to 144:16

00138:19 Q. Okay. Next document is 48717.
20 Mark that as 1002.
21 (Exhibit 1002 was marked for
22 identification.)
23 Apparently you had a
24 conversation with Mr. Alberty, Mark W.,
25 Randall Sant and Zhang, Jianguo?
00139:01 A. Uh-huh.
02 Q. You say, "I recommend that BP
03 give specialized Lost Circulation Master
04 Class Training to the drilling foremen.
05 Perhaps it does not have to be as technical
06 or involved. My reasoning is, quite often
07 the drilling foremen are working with the
08 office team in the decision-making process
09 concerning the site and characterization of
10 the mud losses and in the recommendation of
11 the solution that will be applied. As
12 such, I think it would be very beneficial
13 for them to have some training and be
14 allowed to ask questions until they are
15 comfortable with our approach and
16 solutions."
17 Now, it sounds to me like, with
18 regard to the issue of lost-circulation
19 materials, before this point in time, they
20 are referring to you for your expert advice
21 and there's nobody on the rig floor who can
22 give the same kind of advice. Is that what
23 I'm gathering from this --
24 A. No. The drilling foremen have
25 their -- have a lot of experience with mud
00140:01 losses and mud losses -- loss solutions --
02 the well site leaders I should say. And --
03 but I thought that it would be beneficial
04 for them to have some type of low level
05 training on what the BP recommended
06 practice was -- is -- was.
07 Q. Now, when you are talking about

08 the training, who are we giving the
09 training to?
10 A. Well, I recommended the training
11 be given to the well site leaders.
12 Q. BP employees?
13 A. Correct.
14 Q. What kind of training were you
15 recommending?
16 A. There's a Lost Circulation
17 Master Class that -- that these
18 gentlemen -- that I sent the e-mail to
19 teach -- Mark Alberty in particular --
20 Q. Right.
21 A. -- teach concerning the lost
22 circulation, the current lost circulation
23 recommended practice within BP and why it
24 is a recommended practice and -- I just
25 thought it would be of benefit if the
00141:01 drilling foremen were -- were also trained
02 in -- in some -- you know, maybe not the
03 way the drilling engineers are trained, but
04 some way, shape or form on the recommended
05 practice rather than just reading the
06 practice from the page.
07 Q. Who onboard the HORIZON do you
08 believe would have been a resource for LCM
09 issues during this point in time, February,
10 March and April of 2010?
11 A. M-I SWACO.
12 Q. M-I SWACO. How about at BP?
13 Anybody?
14 A. Not on the rig.
15 Q. Not on the rig.
16 A. That I know of.
17 Q. How about on the beach?
18 A. On the beach it would be myself
19 and M-I SWACO.
20 Q. Okay. So when it comes to LCM
21 issues --
22 A. And -- and Mr. -- and also
23 Mr. Alberty.
24 Q. Okay. Comes to LCM issues,
25 you're the man?
00142:01 A. I'm one of the people, yes.
02 Q. Well, you're the one who you
03 instructed them to contact with an issue
04 when you gave that presentation in February
05 of '09?
06 A. Ask the question again.
07 Q. I said when you gave that slide
08 presentation, you told those folks that you
09 were the guy they should call with
10 lost-circulation materials issues?
11 A. I don't think so. That's -- you
12 know.

13 Q. What did you tell them?
14 A. Well, I told them I am
15 available.
16 Q. All right.
17 A. Call me if you think you need to
18 call me.
19 Q. What else --
20 A. I -- I can advise. I can help
21 advise.
22 Q. Okay.
23 A. If you feel the need and if
24 you're concerned and you feel that I can
25 help, call.

00143:01 Q. Okay. Let's see if I understand
02 this. First you're telling them that you
03 are the resource, you're the person that
04 they can call. Then you're suggesting that
05 these guys need to take a class because in
06 your view they really don't have enough
07 experience --
08 A. I don't have a lot of
09 interaction with the drilling foremen or
10 the well site leaders. I don't have -- you
11 know, I have mentioned this before in my
12 testimony, that I deal with the engineers
13 in the office and the operations people;
14 and the operations people deal with the
15 drilling foremen on the rig.
16 The drilling foremen can use me
17 as a resource if they want to, but
18 my -- it's not part of my role and
19 responsibility to -- and when you look at
20 the role and responsibility in this
21 presentation, you will see a dotted line
22 from me to the well site leaders and it
23 says: Build relationships as appropriate.
24 So --
25 Q. All right. So with whom did you
00144:01 build a relationship on the Macondo well?
02 A. I didn't build a relationship, a
03 direct relationship with anybody.
04 Q. Nobody. Okay. Well, you just
05 told me --
06 A. With no -- with any well site
07 leaders.
08 Q. Well, but you said there was --
09 you usually dealt with the operations guys.
10 So who on the operations side on the
11 HORIZON for BP did you interact with?
12 A. With John Guide and --
13 Q. John Guide.
14 A. -- Brett Cocalles when he was in
15 that role and also with the drilling
16 engineers.

Page 148:08 to 148:09

00148:08 Q. And we're going to mark it as
09 Exhibit 1005.

Page 148:12 to 150:06

00148:12 A. Okay.
13 Q. It says here -- this is from
14 Jose Ortiz. He's at Halliburton, right?
15 A. Yes.
16 Q. And he's saying -- sending this
17 to Joseph Keith at Sperry, Cat Willis at
18 Halliburton. "Items needed once daily
19 while drilling the last Macondo interval.
20 The drilling fluids engineer John LeBleu is
21 requesting an ASCII" expert -- "export file
22 every morning for the remaining of Macondo
23 well. So, for tomorrow morning, the ASCII
24 file needs to include all data from the
25 beginning of Run 1400 up to the time when
00149:01 you generate the file. After tomorrow,
02 generate the file every 24 hours. It needs
03 to be time based and include every data
04 point (I think data is available every five
05 seconds). The variables to
06 explore are:" -- and he goes through it.
07 Okay.
08 Explain to us why you felt
09 you needed this data?
10 A. I wanted to be more proactive on
11 the final interval because we had losses
12 previously in the well. And when we had
13 losses, typical when we had a loss event,
14 that the technical gentlemen asked for this
15 information. And so I wanted to be more
16 proactive, take a step proactively to try
17 to get this information to these gentlemen
18 so that they could try to help us avoid
19 losses.
20 Q. When you say "get this
21 information to these gentlemen," who are
22 you describing?
23 A. The -- the technical people with
24 BP.
25 Q. All right. And specifically
00150:01 who?
02 A. Mark Alberty and Randall Sant
03 and Jianguo Zhang.
04 Q. All right. How did you know
05 what information to request?
06 A. They -- they told me.

Page 153:03 to 153:17

00153:03 Q. All you're doing is you're
04 acting as the person who has had experience
05 in the past. This information was
06 requested, and your feeling is that this
07 information would help BP avoid or at least
08 be better able to contain --
09 A. It could possibly, yes,
10 possibly --
11 Q. -- another event, right?
12 A. Help to avoid or contain or
13 mitigate another event.
14 Q. Did you call John Guide and tell
15 him you wanted this information?
16 A. I don't recall calling
17 Mr. Guide, no.

Page 154:14 to 155:19

00154:14 Q. Well, would this in your view
15 cause some problems to the drillers?
16 A. Well, as I recall, there is --
17 there was some protocol with giving the
18 data -- I think the -- I think the process
19 of giving all of the data in one file after
20 the fact was -- didn't breach some protocol
21 for security of data of an exploration
22 well.
23 But my request, because of my
24 lack of knowledge of that protocol, you
25 know, I had visited with Mr. -- the ops
00155:01 geologist. I can't remember his name, but
02 -- and -- and got permission previously.
03 But I didn't -- didn't clearly understand
04 the protocol, and for some reason e-mailing
05 the data daily breached some protocol --
06 Q. Uh-huh.
07 A. -- that Mr. Ortiz didn't -- did
08 not -- Mr. Ortiz didn't pick up on a
09 problem and neither did the two Sperry Sun
10 personnel that were on the rig. So I got
11 the data and I forwarded the data daily to
12 the technical people.
13 Q. All right.
14 A. Until later when, as I recall,
15 best of -- best of my knowledge and best of
16 my recollection, some other person arrived
17 on the rig for Sperry Sun who had a problem
18 with breach of protocol in e-mailing data
19 daily.

Page 155:23 to 156:04

00155:23 Q. That's April the 1st that you

24 make this request?
25 A. Yes.
00156:01 Q. And on April the 11th, which is
02 a few pages down, document number 39500,
03 which I'm going to mark as 1006.
04 (Exhibit 1006 was marked for

Page 156:12 to 158:08

00156:12 Q. You got it? This starts with
13 a -- an e-mail from Kelly Steven Gray:
14 All, Mr. LeBleu made the request -- and in
15 fact you had been receiving the data for
16 some 10 days?
17 A. Yes.
18 Q. No issues, no difficulties,
19 right?
20 A. No issues, no difficulties with
21 the people who were sending it to me,
22 that's correct.
23 Q. All right. Mr. Gray comes along
24 and he says he wants approval -- he says,
25 "We have no problems sending this file to
00157:01 Mr. LeBleu, but I think that before any
02 data is ever released to someone that we
03 don't normally send data to on a regular
04 basis, it should be discussed with you
05 gentlemen first. You guys can then make
06 the request from us and we will know that
07 it has gone through the proper channels and
08 we have express permission to release said
09 data."
10 A. Uh-huh.
11 Q. So apparently there's a --
12 there's some kind of confidentiality issue
13 that you're aware of?
14 A. Well, I became aware of the --
15 of the breach of protocol when this came
16 out.
17 Q. So that this data needs to be
18 confidential from your own technical people
19 at BP Oil, is that -- is that what's being
20 suggested here?
21 A. No, I don't think so. I think,
22 as I recall, the technical people from my
23 previous experience with mud losses on --
24 Q. Uh-huh.
25 A. -- exploration wells, the
00158:01 technical people had clearance.
02 Q. Okay. All right. So seems to
03 me that once they figured out that it was
04 you and once they figured out that you were
05 giving it to your own technical people,
06 that then obviously no one would have any
07 trouble in giving you this data; isn't that

08 right?

Page 158:12 to 158:13

00158:12 I -- I can't speak for
13 them.

Page 158:22 to 160:12

00158:22 Q. Well --
23 A. But it was a non-issue because I
24 received the data. This occurred after the
25 drilling was pretty much finished.
00159:01 Q. Uh-huh.
02 A. And I received the data and I
03 had already sent the data to the technical
04 people. So it was kind of a moot point
05 after the fact.
06 Q. Right. Well, Mr. Morel says,
07 "Overstepping boundaries again." Again.
08 "Why does he need this?"
09 So I'm just curious, Mr. LeBleu,
10 had you -- had you overstepped your
11 boundaries in the past?
12 A. I can't say. I don't know.
13 Q. Did anybody tell you that you
14 had overstepped your boundaries?
15 A. No. I was unaware of it.
16 Q. Did Mr. Guide tell you you
17 overstepped your boundaries?
18 A. No.
19 Q. Mr. Morel?
20 A. No.
21 Q. Mr. Hafle?
22 A. No. All -- all Mr. Hafle ever
23 did was ask questions as to why I was doing
24 whatever and I would answer him and he was
25 satisfied.
00160:01 Q. Well, would you agree with me
02 that this kind of response would suggest
03 that there's some tension between Mr. Morel
04 and you?
05 A. I never felt any tension between
06 he and I and -- he's entitled to his
07 opinion.
08 Q. Sure.
09 A. And my opinion is I was being
10 proactive and -- and conscientious.
11 Q. Trying to do something good?
12 A. That's my opinion.

Page 161:04 to 161:07

00161:04 Q. Well, if we go to the next
05 e-mail which is 45083, we have Mr. Guide's
06 response. It's dated Monday, April the
07 12th. Next day. Mark that as 1007.

Page 161:10 to 161:12

00161:10 Mr. Guide says just, "Don't send
11 the data." See that?
12 A. Yes.

Page 162:05 to 162:13

00162:05 Q. In reviewing these e-mails, do
06 you feel comfortable knowing that
07 you -- that there was a free flow of
08 information between you and the -- and the
09 BP employees on the rig?
10 A. Yes. I mean, it's a daily
11 snapshot of what is going on and it's
12 forwarded to the people who have the
13 expertise to use the data.

Page 162:21 to 163:08

00162:21 Q. I said, Do you believe that
22 these e-mails are evidence of a healthy,
23 open and communicative work environment
24 that you worked in with guys like John
25 Guide, Mark Hafle and Brian Morel?
00163:01 A. I -- I don't see a problem with
02 the e-mails --
03 Q. Okay.
04 A. -- as far as communication in
05 the work environment.
06 Q. All right.
07 A. Seems like they are
08 communicating.

Page 163:15 to 163:19

00163:15 Q. All right. But the fact is that
16 they never communicated with you about any
17 problems that they had with you, did they?
18 A. That's correct. I assume it's
19 because they had no problems with me.

Page 163:24 to 164:03

00163:24 Q. All right. Let's go to
25 April 15. This is from you -- mark this --
00164:01 this is document number 8035. I'm going to

02 mark it 1008.
03 (Exhibit 1008 was marked for

Page 164:07 to 165:03

00164:07 Q. Yes, sir. All right. This --
08 in this you say, "The M-I SWACO Form-A-Set
09 pill is a complicated,
10 time-ad-temperature-dependent
11 lost-circulation pill that requires close
12 attention to details to mix and apply
13 correctly." You talk about the software.
14 Then you say on the third
15 paragraph, "This caused the senior mud
16 engineer (Leo Lindner) to (by his own
17 admission to me the next morning) add too
18 much bio polymer to the pill, making the
19 pill too thick."
20 So even Lindner himself had
21 trouble making the pill?
22 A. Well, he, you know, the -- yes.
23 It -- he had trouble in that instance, yes.
24 Q. All right. So obviously, the
25 way that you mix this stuff has an impact
00165:01 on how thick or viscous it is, right?
02 A. Yes, because the bio polymer is
03 a viscosifier.

Page 165:06 to 166:20

00165:06 Q. All right. Let's go to the one
07 dated April 16th. It's Friday. It's
08 129286. Mark it as 1009.
09 (Exhibit 1009 was marked for
10 identification.)
11 All right. "We need to have a
12 conversation about these pills." What
13 pills is he talking about?
14 A. The rig built a Form-A-Set and
15 Form-A-Squeeze pill after the -- we -- we
16 built the Form-A-Set/Form-A-Squeeze pill,
17 and I was part of that decision process
18 for -- to effect a cure of the last
19 lost-circulation event.
20 After pumping that pill, best of
21 my recollection, while waiting to see --
22 there's sometime you wait on the pill with
23 cross-link polymer to activate, cross-link.
24 While waiting, my understanding is, correct
25 or not, but my understanding is the rig
00166:01 decided to build some more pills in case
02 they were needed.
03 Q. When you say "the rig," BP?
04 A. I don't know.

05 Q. Did they consult with you?
06 A. No.
07 Q. Well, they had been consulting
08 with you pretty regularly in the past,
09 hadn't they?
10 A. The rig rarely consults with me.
11 The -- you know, the -- the instructions
12 come from -- through me,
13 through the -- from me to the drilling
14 engineers and the ops team and then the
15 drilling engineers and the ops team have
16 contact and communication with the rig.
17 Q. All right. So they went ahead
18 and mixed these pills really not knowing if
19 they were going to need them, right?
20 A. I think that's accurate.

Page 167:04 to 169:10

00167:04 Q. But they could have mixed them
05 as needed?
06 A. Yes.
07 Q. There was no need to pre-mix
08 these two pills, right?
09 A. Not in my opinion.
10 Q. But they did it anyway without
11 consulting you? All right. So when did
12 you first become aware of the fact that
13 they had mixed these two extra batches?
14 A. I think Doyle Maxie made me
15 aware the following morning that the pills
16 had been re -- had been remixed.
17 Q. And was that a telephone
18 conversation or was it by e-mail?
19 A. It was face to face.
20 Q. Oh, okay. You saw him?
21 A. Yeah.
22 Q. And this e-mail came after that
23 conversation you think?
24 A. Yes, it came two weeks after
25 that conversation, some two weeks after
00168:01 that conversation.
02 Q. So the pills had been sitting
03 around for two solid weeks?
04 A. Something -- somewhere around
05 that period of time.
06 Q. All right. So they would have
07 had to have been mixed -- if this is April
08 the 16th -- well, if two weeks before would
09 have been before --
10 A. The lost-circulation event.
11 Q. The lost-circulation event.
12 Take a look at it and be sure, as sure as
13 you can be.
14 A. Maybe it wasn't. My -- my

15 recollection is two weeks, but my
16 recollection also is that those pills were
17 mixed after we pumped the first pill.
18 Q. Okay.
19 A. So I cannot resolve the date
20 issue.
21 Q. All right. But just for the
22 record, though, so the record is clear,
23 according to this Exhibit 691, the first
24 loss-of-mud event during drilling was
25 April 3, lost 214 barrels of material. And
00169:01 then on April the 4th, lost 639; on April
02 5, 1263; on April 6, 1104.
03 A. Yeah, those -- you know, those
04 are coming from the drilling fluid reports
05 and the DIMS reports which are cut off at
06 midnight and the data -- you know, I put
07 the date that's on --
08 Q. Sure.
09 A. I think I put the date that was
10 on the top of the report.

Page 169:20 to 170:16

00169:20 There is an emergency pill
21 already made up. Do you think that would
22 have been pumped in first as a matter of
23 course?
24 A. No. Because the emergency pill,
25 it's usually used when you have a new
00170:01 lost-circulation event and you want to try
02 to identify where the lost-circulation
03 problem is. In this case we had
04 already -- I don't know if -- I can't
05 recall if that pill was used before the
06 first pumping of Form-A-Set/Form-A-Squeeze,
07 but we effected a cure on the previous
08 Macondo lost-circulation event, the one
09 that was more severe --
10 Q. Uh-huh. The one before that.
11 A. -- with the Form-A-Set for --
12 with Frac Attack and then followed by
13 Form-A-Set/Form-A-Squeeze. So we saw some
14 success, and then further down in the well
15 they pumped the tandem pill and -- and I
16 lost track of the question. I'm sorry.

Page 172:10 to 173:12

00172:10 Q. Okay. We know that we normally
11 have an emergency pill made, right?
12 A. A different type of pill.
13 Q. I understand.
14 A. Yes.

15 Q. We know that we can't dump it
 16 overboard, right?
 17 A. That pill, the
 18 84-pound-per-barrel standard LCM pill
 19 cannot be dumped overboard.
 20 Q. So either they ran it through
 21 the wellbore or they didn't have any?
 22 A. No, it doesn't have to be run
 23 through the wellbore. It can be blended
 24 with the existing fluid, the existing mud
 25 volume on the rig and it can be sent in
 00173:01 back in the top and it can be either run
 02 over the shale shakers to remove some of
 03 the LCM or just dilute it with the rest of
 04 the mud to send it in. But you
 05 don't -- you cannot, to my knowledge, you
 06 cannot dump oil-based mud. And this pill
 07 was made with oil-based mud, which is
 08 different than the other two pills, the
 09 Form-A-Set and the Squeeze that are made
 10 with water-based mud.
 11 Q. All right. So --
 12 A. It's a different situation.

Page 173:19 to 174:07

00173:19 Q. Okay. But that's not the case
 20 with the Form-A-Set/Form-A-Squeeze?
 21 A. I was asked the question in a
 22 series of e-mails about re-use of the
 23 pills, because I had a concern about those
 24 because they are water based and bacteria
 25 can grow in water-based pills, that, you
 00174:01 know, don't have a high enough pH,
 02 alkalinity --
 03 Q. Uh-huh.
 04 A. -- to suppress bacteria. And
 05 bacteria are prone to eating, attacking the
 06 bio polymer, and so I had a concern about
 07 that.

Page 174:20 to 174:24

00174:20 Q. All right. So then we have this
 21 new issue. We've got the
 22 Form-A-Set/Form-A-Squeeze which are water
 23 based, right?
 24 A. Correct.

Page 175:05 to 176:14

00175:05 Q. Okay. So we know we have got
 06 two containers with water-based pills; one

07 is Form-A-Set and one is Form-A-Squeeze?
 08 A. Correct.
 09 Q. And we know they are about 200
 10 barrels each?
 11 A. Well, I -- I would have to
 12 assume what's on the rig. You know, I
 13 don't -- I know the pills were built --
 14 Q. Uh-huh.
 15 A. And I -- Doyle Maxie told me the
 16 pills were rebuilt. So it's an
 17 assumption -- it would be an assumption on
 18 my part that it's the exact
 19 Form-A-Set/Form-A-Squeeze pills. It's an
 20 assumption. It would be an assumption that
 21 they remained that way throughout the time
 22 from when they were built to when they were
 23 used or whatnot.
 24 Q. All right. Well, he's asking
 25 you, though, about these pills.
 00176:01 A. Yes, he is.
 02 Q. Okay. And so your testimony is
 03 he didn't give you a whole lot of
 04 information about those pills in order for
 05 you to get an answer to the question?
 06 A. No. I had enough information to
 07 help him with the environmental decision of
 08 what we should do with the pills.
 09 Q. All right. Well, what -- since
 10 you didn't know how long they had been
 11 there, you didn't know how they were made
 12 up. I mean, are you suggesting to me that
 13 the only thing you needed to know was that
 14 they were water based?

Page 177:21 to 183:15

00177:21 THE WITNESS:
 22 For my decision as to
 23 whether we could -- what we would do with
 24 the pills environmentally, that's all I
 25 needed to know, which was the question I
 00178:01 was being asked, the context of the -- of
 02 the e-mail chain.
 03 BY MR. BRUNO:
 04 Q. Let's talk about that. Let's go
 05 to 129279.
 06 A. Okay.
 07 Q. And it's marked as 1010.
 08 (Exhibit 1010 was marked for
 09 identification.)
 10 "John, we need to have a
 11 conversation about these pills. They are
 12 water based and they have dumped them on
 13 Enterprise but need clarification from BP
 14 as to what we can and should do with them."

15 All right.
16 Your response is that you
17 contacted James -- is it Hoggan?
18 A. Hoggan.
19 Q. Who is Mr. Hoggan?
20 A. He's an environmental specialist
21 with BP.
22 Q. And where is he physically
23 located?
24 A. In West Lake 4.
25 Q. All right. He's in Houston?
00179:01 A. Correct.
02 Q. And what is the group name or --
03 to which he's associated or is there a
04 group name?
05 A. We generally call it the
06 environmental group, but I don't know the
07 formal --
08 Q. Uh-huh. Who is in charge of the
09 environmental group, if you know?
10 A. I don't know.
11 Q. Where is Mr. Hoggan in the -- in
12 the hierarchy of that group?
13 A. Mr. Hoggan is the person who
14 answers these types of questions with
15 drilling-related waste issues as far
16 as -- he's -- he's the go-to guy between
17 drilling fluids engineers and -- BP
18 drilling fluids engineers and environmental
19 type guys.
20 Q. All right. You are not
21 knowledgeable about what can be disposed of
22 and what can be disposed of overboard,
23 right?
24 A. It's not my -- it's not within
25 my purview.
00180:01 Q. Right.
02 A. But I have some knowledge about
03 it, about the rules and regulations.
04 Q. But in response to Mr. Maxie's
05 request, you directed the inquiry to
06 someone that you felt had more knowledge
07 and expertise on the subject; isn't that
08 correct?
09 A. That's correct.
10 Q. And that person you chose was
11 Mr. James Hoggan?
12 A. Correct.
13 Q. And you also left a voice
14 message with Tracy Dyer?
15 A. I suppose so. I didn't remember
16 doing that, but I suppose I did.
17 Q. All right. Who is Tracy Dyer?
18 A. She's the waste specialist.
19 When we send material -- she's part of the

20 environmental team.
21 Q. Right.
22 A. And when we send -- when the rig
23 sends in waste to be disposed of, she asks
24 the proper questions so she can
25 characterize the waste correctly as per the
00181:01 environmental regulations and send it to
02 the proper disposal facility.
03 Q. All right. What is your
04 understanding, Mr. LeBleu, of what can and
05 what can't be disposed of overboard from
06 the rig?
07 A. That's not my area of expertise.
08 Q. Okay. All right. So you didn't
09 pretend to have expertise with regard to
10 what could be disposed of overboard or what
11 had to be sent for disposal through some
12 other process, right?
13 A. That's correct.
14 Q. Wasn't your job; you made that
15 clear to everybody that wasn't your job,
16 right? And nor were you answering any
17 questions about that, right?
18 A. I don't think -- well, I -- I
19 didn't have to make it clear to everybody
20 that it wasn't my job because everybody
21 understands what's my job and what's not my
22 job.
23 Q. Okay. All right. Do you know
24 whether or not Mr. Guide was consulted on
25 this issue?
00182:01 A. I don't know.
02 Q. Should he have been?
03 A. No, not necessarily.
04 Q. All right. And why not?
05 A. Because this is common --
06 commonly something that is handled on the
07 level of the environmental and -- and
08 myself and the drilling engineers. I mean,
09 the drilling engineers have some say in it,
10 but --
11 Q. Well, what normally occurs with
12 regard to decisions about whether or not
13 you can dump overboard on the rig, if you
14 know?
15 A. Decisions as to whether you can
16 -- what you can dump overboard and what way
17 you can dump overboard are handled by -- by
18 M-I SWACO compliance engineer who is on the
19 rig and his whole job is compliance and
20 also by BP environmental.
21 Q. To your knowledge is there
22 anybody who works for BP on the rig who has
23 any responsibility with regard to how or
24 what can be or when materials can be

25 disposed of by tossing them overboard?
00183:01 A. Not normally.
02 Q. Who on the beach to your
03 knowledge other than Mr. Hoggan and Ms.
04 Dyer has any role in determining what can
05 be disposed of from the rig?
06 A. It would be mainly those people
07 in the environmental group.
08 Q. Okay. Hoggan and Dyer?
09 A. Well, they have their -- at the
10 time they had other people who had other
11 specialties within that group, special
12 skills within that group. There was
13 someone who was a specialist in water.
14 Mr. Hoggan was the specialist concerning
15 drilling -- drilling fluid waste, I think.

Page 183:21 to 188:02

00183:21 Q. In any case, you got a response
22 from Mr. Hoggan, right?
23 A. Yes. I called him on the phone
24 and he informed me that -- his first
25 question was, has the -- have the pills
00184:01 been through the wellbore?
02 Q. Uh-huh.
03 A. And which, frankly, caused me to
04 remember an environmental regulation about
05 exempt oil field waste and whatnot; that
06 it, you know, it becomes exempt oil field
07 waste when it's in the -- when it's gone
08 through the wellbore.
09 Q. Okay. Since you recollect it
10 then, can you recollect it now, that
11 exemption?
12 A. No. No. I just knew -- I just
13 knew that what Mr. Hoggan was saying was
14 correct, that from -- from previous
15 training I have had on -- previous training
16 sessions on waste and whatnot, that it's --
17 unless it goes through the wellbore, it has
18 to be sent in for disposal at a disposal
19 facility is my general knowledge.
20 Q. Now, you say you will have to
21 contact Tracy to answer her questions about
22 what is in the pill and --
23 A. Correct.
24 Q. -- she will have to send you the
25 paperwork that must follow the waste to the
00185:01 disposal facility, right?
02 A. That's correct.
03 Q. So at this point in time, is it
04 your assumption that the two pills are
05 going to be disposed of?
06 A. Yes.

07 Q. Okay. And some paperwork needs
08 to be filled out in order to accomplish
09 that, right?

10 A. Some environmental specialists
11 need to get, you know, need their questions
12 answered and become engaged to make sure
13 the process follows through correctly.

14 Q. All right. Let's go to the next
15 one, which is 129273.

16 I think this is the same thing,
17 but let me ask you this question anyway.
18 It says, "You will need to contact Tracy to
19 answer her questions about what is in the
20 pill." Do you know why that's necessary
21 information?

22 A. She -- she has certain
23 types of -- I -- I don't know what
24 questions she -- she asked. But she
25 has -- she has certain questions she needs
00186:01 to ask to determine which type of disposal
02 facility is the correct facility to send
03 the -- the waste product to.

04 Q. All right. So let's go to the
05 next one, 129268, April 16, at about 1:48
06 in the afternoon. We will mark this as
07 1011.

08 (Exhibit 1011 was marked
09 for identification.)

10 A. 129268?

11 Q. Yes, sir. So here you write
12 back, you say, "You're welcome. If you
13 need anything else, let me know," right?

14 A. Uh-huh.

15 Q. So you have communicated to
16 Doyle Maxie what he needs to know about
17 whether or not he can dispose of these
18 pills overboard, right?

19 A. Yes.

20 Q. He knows he cannot dispose of
21 these pills overboard unless he runs them
22 through the wellbore, right?

23 A. That's correct.

24 Q. And he knows that if he doesn't
25 run them through the wellbore, there has to
00187:01 be some paperwork filled out which will
02 necessitate understanding what's in the
03 materials in the pill for them to be
04 disposed of onshore, right?

05 A. That's correct.

06 Q. So the question has been
07 answered, right?

08 A. Yes.

09 Q. Okay. Now, I have just been
10 asked to ask you this question: The
11 business about the regulation, is that

12 something that you would -- that you
13 learned through training at BP; that is,
14 that you could dispose of -- I'm sorry --
15 that the exemption for oil field waste that
16 has gone through the wellbore?
17 A. It's some training, as I recall,
18 I have had some training when I was with
19 M-I SWACO --
20 Q. Right.
21 A. -- in the employment with M-I
22 SWACO with, if I remember correctly, with
23 M-I SWACO personnel, environmental
24 personnel, and I have also sat under with
25 some other training by a BP person. It was
00188:01 a few years back. I don't -- can't recall
02 exactly; 2004, 2005.

Page 188:09 to 189:21

00188:09 Q. I hear you. Okay. Just one
10 other point on this e-mail before we leave
11 it. When you responded to Doyle, you
12 copied Brett Cocalles, Brian Morel, James
13 Hoggan, Tracy Dyer, right, bottom of the
14 page?
15 A. Are you talking about 129268?
16 Q. Yes, sir. From John LeBleu --
17 A. Yes.
18 Q. -- to Doyle Maxie, copies to --
19 A. Right.
20 Q. Brett Cocalles, Brian Morel?
21 A. Yes.
22 Q. Why did you copy them?
23 A. I was basically copying -- I
24 don't know. You know, I'm guessing right
25 here. But I -- what I recall is I would
00189:01 basically copy whoever was on the original
02 e-mail sent to me. And, you know, or
03 adding more people to the e-mail.
04 Generally that's what I was doing, make
05 sure everyone is informed.
06 Q. Uh-huh. Well, if we go back to
07 the original one from Doyle we see that he
08 copied Brett Cocalles and Brian Morel as
09 well.
10 A. Okay.
11 Q. And the project engineer of
12 Houston is in fact Doyle Maxie, right?
13 A. That's correct. The M-I SWACO
14 project engineer who supervised the mud
15 engineers on the rig is Doyle Maxie.
16 Q. And Cocalles and Morel, they are
17 on the operations side?
18 A. Cocalles and Morel are drilling
19 engineers --

20 Q. Okay.
21 A. -- for BP.

Page 191:04 to 191:05

00191:04 Q. All right. Let's go to the next
05 one, 129265, which we'll mark as 1013.

Page 191:08 to 191:18

00191:08 Here's Tracy now responding to
09 Doyle whose contact information she just
10 got from Doyle at your suggestion. She
11 says, "Doyle, I will need the following
12 information to determine how to
13 characterize the waste, see where it will
14 go for disposal. And she asked a variety
15 of questions. And then she -- last
16 question is: "Is there any chance this
17 pill can be held for later use or used at
18 another rig site?"

Page 191:21 to 191:23

00191:21 A. This skips my response --
22 Q. It does?
23 A. -- to that e-mail.

Page 192:13 to 192:18

00192:13 Q. I apologize. Tell us about your
14 response.
15 A. My response was that -- that I
16 had a concern about the bacterial
17 degradation of the bio polymer and I didn't
18 think the pills could be reused.

Page 193:11 to 193:13

00193:11 All right. Yeah, we found it at 129254.
12 And let's see. We're going to mark that as
13 1014.

Page 193:16 to 194:13

00193:16 And there you write: I don't
17 think the pill can be held and re-used
18 because of bacterial degradation and the
19 bio polymer.
20 A. Of the bio polymer.
21 Q. All right. What does that mean?
22 A. That means when -- when you have

23 these pills mixed -- when you have the pill
 24 that uses the bio polymer for barite
 25 suspension, bacteria like the bio polymer,
 00194:01 and when they eat the bio polymer, for want
 02 of a better term, it causes the fluid to
 03 thin out.
 04 Q. And what happens to the barite?
 05 A. Barite gets sent to the bottom
 06 of the pit.
 07 Q. It settles. I see. All right.
 08 Let's go backward, maybe go backwards, if
 09 you will.
 10 A. Another -- another part of that
 11 answer is she was asking about another rig.
 12 There was no other rig that I knew of that
 13 the pills could be sent to and used.

Page 194:21 to 197:23

00194:21 Q. Okay. I don't know if -- let's
 22 go backwards because I see now from Doyle
 23 Maxie on Friday, April the 16th, at 3:00 in
 24 the afternoon, which is before your
 25 Saturday 17th response that we just
 00195:01 referred to, it is 129261.
 02 A. I have got it.
 03 Q. You got it?
 04 A. Uh-huh.
 05 Q. I'm going to mark this as 1015.
 06 (Exhibit 1015 was marked
 07 for identification.)
 08 All right. It says, "There are
 09 no environmental restrictions for dumping
 10 these pills other than they have not been
 11 circulated through the wellbore. With this
 12 in mind, we cannot go straight overboard,"
 13 which is entirely consistent with what the
 14 e-mails say, right?
 15 A. That's correct.
 16 Q. All right. "I have talked with
 17 Armand." Do we know who that is?
 18 A. That's Mr. Doyle Maxie's
 19 manager.
 20 Q. Okay. Wilde, who is he?
 21 A. Wilde.
 22 Q. Wilde.
 23 A. Andrew Wilde, Andrew Wilde is
 24 the most senior of the four mentioned
 25 there. Andrew Wilde has been a project
 00196:01 engineer at -- in BP's office for M-I
 02 SWACO. He became the manager of all the
 03 project engineers at BP. Before -- he was
 04 the manager before Mr. Armand. And then he
 05 became the manager of all the project
 06 engineers for M-I SWACO in the

07 Houston -- in Houston. And not long before
 08 this, he became part of the worldwide deep
 09 water drilling group within M-I SWACO.
 10 Q. All right. So he's a SWACO
 11 employee?
 12 A. Yes.
 13 Q. All right. Mr. Manuel?
 14 A. Mr. Manuel I assume is the
 15 brother of the deceased. It's Jamie
 16 Manuel, I think, that Mr. Doyle Maxie is
 17 referring to. His brother was on the rig,
 18 Blair Manuel.
 19 Q. Uh-huh.
 20 A. And Mr. Smith I assume is J.R.
 21 I assume at the time, and still think is --
 22 I haven't asked -- I haven't confirmed any
 23 of this, but J. R. Smith who is a project
 24 engineer working inside BP's office, he's a
 25 M-I SWACO employee, also.
 00197:01 Q. So the only BP person on this
 02 e-mail -- persons are you --
 03 A. Yes.
 04 Q. -- Cocalles, Morel, Hafle?
 05 A. That's correct.
 06 Q. Okay. And he says: I have
 07 talked with them about the possibility of
 08 using the pills as the final displacement
 09 spacer prior to cleaning the riser for
 10 N-I-L-E.
 11 A. For NILE.
 12 Q. What is NILE?
 13 A. NILE was the well that we were
 14 going to go to after Macondo to permanently
 15 abandon it.
 16 Q. All right. Now, the final
 17 displacement spacer, what's your
 18 understanding of what he's talking about
 19 here?
 20 A. He's talking about displacing
 21 the -- my understanding is he's talking
 22 about the displacement to seawater at the
 23 end of the sequence of operations.

Page 198:16 to 198:18

00198:16 I'm not, you know -- I'm
 17 not -- it's not part of my specialty as far
 18 as an order of operations --

Page 198:21 to 200:17

00198:21 A. -- positive negative test,
 22 cement plug. I do know something about
 23 displacements --

24 Q. Right.
25 A. -- but I'm not really certain.
00199:01 Q. Okay.
02 A. There may be some -- there may
03 be some circumstances that I don't know of.
04 Q. Well, let me ask you this: When
05 you received this e-mail, did you read it?
06 A. Yes, I did.
07 Q. Okay. And when he -- when you
08 read this phrase "the possibility of using
09 the pills as the final displacement spacer
10 prior to cleaning the riser for the NILE,"
11 what did you think he meant?
12 A. I think he meant that -- I
13 thought he meant that the displacement
14 would be the final thing to -- in the
15 sequence of operations.
16 Q. All right. Now, what did you
17 understand the spacer would be separating,
18 with that understanding of -- of the -- of
19 what this was supposed to be used for?
20 A. It would be separating the
21 drilling fluid that was in the wellbore
22 from the seawater, that was pushing the
23 drilling fluid out of the wellbore.
24 Q. Okay.
25 A. Or displacing would be -- is the
00200:01 proper term rather than pushing.
02 Q. So there's drilling fluid. You
03 would pump the -- now we're going to call
04 it spacer?
05 A. Spacer.
06 Q. And then you would follow it
07 with seawater?
08 A. Correct.
09 Q. Okay. So we know that the
10 drilling fluid would come in contact with
11 the spacer?
12 A. Yes.
13 Q. And we know if the SWACO
14 documents are correct that that might
15 induce the cross -- I'm sorry, what did you
16 call it, the cross --
17 A. Cross-linking?

Page 200:20 to 200:23

00200:20 Q. I understand. You don't buy
21 it --
22 A. But that's what the document
23 does say.

Page 201:01 to 202:07

00201:01 Now, our next sentence, "We have
02 to clear all operational issues before
03 doing so, such as BHA for final
04 displacement." Do you know what BHA refers
05 to?
06 A. Bottom hole assemblies, and
07 he -- he's speaking to the drilling
08 engineers about wanting to know what he's
09 going to be pumping through. And it's good
10 for him to be -- I think it's positive that
11 he is being prudent, but these -- these
12 pills are normally pumped through bit and
13 bit jets which are very fine, very -- much
14 smaller holes than this stinger --
15 Q. Right.
16 A. -- open-ended stinger. But it's
17 good that he asked the question.
18 Q. All right. But we're getting a
19 little bit ahead of ourselves.
20 A. Okay.
21 Q. Because what I want to ask you
22 is, I mean, I'm gathering that you sort of
23 answered, but let's make the record a
24 little clearer. He's concerned about the
25 size of the hole through which this
00202:01 material may have to pass; isn't that
02 correct?
03 A. It could be the size of the hole
04 or it could be what tortuous path --
05 Q. Uh-huh.
06 A. -- it would have to travel. It
07 -- you know, it could be several things.

Page 202:18 to 207:08

00202:18 Q. Well, but you just answered the
19 question as if you did understand by
20 telling us it was prudent of him to inquire
21 about the type of equipment that was going
22 to be used because of the tortured pass and
23 because of the size of the hole and
24 et cetera --
25 A. Not --
00203:01 Q. So I was gathering --
02 A. I thought he was being prudent
03 to ask the question, but I --
04 Q. Okay. But the prudence comes
05 from --
06 A. Frankly, I -- I didn't have the
07 same concern, but I can't fault him for
08 asking the question.
09 Q. I'm not asking if you had the
10 same concern. I'm asking if you understood
11 the logic of his concern. And you did
12 understand it. The logic of his concern

13 was that this Form-A-Set/Form-A-Squeeze
14 might become too viscous, might become too
15 rubbery, if you will, to pass through a
16 certain size hole, dependent upon a type of
17 equipment that was being used at the bottom
18 of the hole?

19 A. No, that's incorrect. The --
20 the use of the pill as a spacer would not
21 have included the cross-link polymer to
22 make it cross-link, so there's no
23 possibility that it would become Jello-like
24 substance. So --

25 Q. Well, let's read his next
00204:01 sentence. He says, "With that tool in hole
02 we do not feel there would be any
03 restriction that would cause the
04 Form-A-Squeeze to set up, and without the
05 XI in the FAS AK, there is no cross-linking
06 agent to cause it to set up. I do not know
07 the exact tool that will be used, but if
08 there are any small restrictions in the
09 assembly, this would be a risk."

10 That's what he's telling you,
11 right?

12 A. Yes.

13 Q. So what's the risk he's talking
14 about?

15 A. Well, he's talking about the
16 risk of the -- of the LCM that's in the
17 pills plugging very small, very small
18 restrictions.

19 Q. The LCM in the pill being what,
20 the barite?

21 A. No. I would assume --

22 Q. Uh-huh.

23 A. -- he's -- I would assume his
24 concern is the LCM that's in the
25 Form-A-Squeeze, possibly the LCM that's in
00205:01 the Form-A-Set.

02 Q. What would those materials be
03 exactly?

04 A. I don't know.

05 Q. They are polymers? They are
06 hard -- are they hard materials? What are
07 they?

08 A. I'm not --

09 Q. Rocks, fibers?

10 A. The -- the Form-A-Squeeze is a
11 very fine powdery-looking substance. And I
12 don't know what the LCM in the Form-A-Set
13 AK is. I think it's cellulose, but I don't
14 know for sure.

15 Q. All right.

16 A. It's a proprietary M-I SWACO
17 product.

18 Q. Bottom line is that Mr. Doyle
 19 Maxie is obviously concerned that the type
 20 of tool may be relevant to whether or not
 21 we use the Form-A-Squeeze/Form-A-Set as a
 22 spacer, correct?
 23 A. I don't think that's correct. I
 24 think he's wanting to make sure he -- he
 25 clears concerns about the possibility of
 00206:01 pumping it through very small openings.
 02 Q. Okay. One thing we do know,
 03 though, for an absolute fact is that the
 04 environmental issues have been cleared up.
 05 We know at this point in the game all we
 06 need to know about the environmental
 07 questions, right?
 08 A. I have to think about that a
 09 minute.
 10 Q. Okay.
 11 A. What's the -- what's the
 12 question again?
 13 Q. Well --
 14 A. Can you break the question up?
 15 Q. I don't know how I can. I mean,
 16 I'll try. I'll do what I can. But the
 17 point is that we already have answered the
 18 environmental question. What's left now is
 19 the operational question. We know we can't
 20 dump it overboard unless we go through the
 21 well.
 22 A. Well, Mr. Maxie has already
 23 answered the environmental question.
 24 Q. All right.
 25 A. I mean, we -- we -- we gave some
 00207:01 environmental guidance and then Mr. Maxie
 02 mentioned that there's no other -- there's
 03 no other environmental restrictions for
 04 dumping the pills and --
 05 Q. Right.
 06 A. Yes, I -- I assume that's
 07 correct, that we have pretty well covered
 08 the environmental issues.

Page 207:12 to 207:15

00207:12 Forgive me for changing the
 13 subject for just a moment. But rather than
 14 lose it, let me just grab it while we can.
 15 Look at 29162.

Page 207:20 to 210:01

00207:20 Q. Marking it as 1016.
 21 (Exhibit 1016 was marked
 22 for identification.)

23 It says, "Brent Cocalles and Mark
24 Hafle who are my sponsors in this effort
25 have asked me to discontinue pursuing this
00208:01 investigation due to John Guide's
02 objection. If things change we will inform
03 you." Will you just give us a quick
04 thumbnail as to what this is all about with
05 Mr. Guide.
06 A. That is concerning -- best I can
07 remember, that is concerning adding
08 different types of shakers to the HORIZON.
09 Q. Right. And when you say your
10 sponsors, does that mean that Cocalles and
11 Hafle asked you to do this?
12 A. That's correct. They -- that
13 they -- well, I don't exactly remember. I
14 think I initiated the conversation with
15 Mr. Hafle and Brent Cocalles concerning the
16 possible advantages of having the LCM
17 recovery shaker on the HORIZON.
18 And I think that after having a
19 discussion with them, they asked me
20 to -- to -- but anyway, they asked me to
21 stop pursuing it. What I did was I -- I
22 talked to the Axiom guys and I initiated a
23 conversation with the Transocean --
24 Q. Right.
25 A. -- person, that rig manager to
00209:01 gather some information.
02 Q. Well, the fact is, you proposed
03 the change-out of the shakers one year from
04 the date. Cocalles and Hafle said look into
05 it. You started looking into it, including
06 setting up a site visit, and Mr. Guide
07 vetoed you, right --
08 A. Well --
09 Q. -- again?
10 A. I didn't arrange a site visit.
11 What happened was when the shaker people
12 caught wind that we had some interest, they
13 became very proactive at trying to get
14 their shakers on the rig.
15 Q. Of course. The point is, you
16 were doing what you thought was necessary
17 and appropriate to continue the
18 investigation?
19 A. Yeah, tried to look into it --
20 Q. Right.
21 A. -- into --
22 Q. And the bottom line is that
23 Guide shut you down --
24 A. Possibility.
25 Q. Right?
00210:01 A. Which is his -- his purview.

Page 210:11 to 210:13

00210:11 Q. Apologize for that. Let's go
12 back to the pill issue. All right. Let's
13 go to 129251.

Page 213:22 to 219:02

00213:22 Q. 129251. From John LeBleu, sent
23 Saturday, April 17th, 2250 hours, to Doyle
24 Maxie, et cetera.
25 A. Yes. And that's all part of the
00214:01 same e-mail chain that flows to 129252 --
02 Q. Right.
03 A. -- and 129253.
04 Q. The point is, your e-mail is
05 dated April the 17th, which is the day
06 after Doyle Maxie's e-mail describing the
07 use of the pill as a spacer. That's all
08 I'm trying to establish.
09 A. Okay. That's correct.
10 Q. It came after?
11 A. That's correct.
12 Q. All right. And we have already
13 established that the environmental issues
14 are resolved. What's left is the
15 operational issues. And you say, "From
16 what I know of the make-up of the pills and
17 what I know of the regulations, this is
18 doable. But I will defer to James for the
19 definitive answer."
20 I'm going to mark that as 1017.
21 (Exhibit 1017 was marked
22 for identification.)
23 And the one below that is Doyle
24 Maxie to James, "After some discussion, can
25 we use the pills in question on the HORIZON
00215:01 (water-based pills) as a spacer for the
02 displacement to seawater. The pills would
03 be used a water" -- I am missing the word
04 "as" -- "based buffer between the Rheliant
05 system and seawater and be discharged
06 overboard once they have been circulated
07 through the wellbore."
08 A. Yeah, the pills would be used as
09 a water-based buffer --
10 Q. Right.
11 A. -- between the Rheliant system
12 and seawater.
13 Q. Okay. You say okay and you are
14 deferring to James, right?
15 A. I'm deferring to James because
16 it's an environmental question and I want
17 to make sure the environmental person gives
18 the definitive go-ahead or answers to that.

19 Q. Well, it's an environmental
20 question and an operational question
21 according to Mr. Maxie, though, right?
22 A. Well --
23 Q. That's what he said in his
24 e-mail the day before.
25 A. But he picked up a different
00216:01 e-mail this time and I can't say why he
02 did. And when he picked up this e-mail, he
03 included for the first time to my knowledge
04 Mr. Leo Lindner, the mud engineer on the
05 rig --
06 Q. Uh-huh.
07 A. And so in my response, I
08 responded to everyone as I was -- as I
09 remember, as I recall doing each time I
10 responded. And so he's addressing James
11 Hoggan and he's asking a similar question
12 to the day before --
13 Q. Uh-huh.
14 A. -- about the spacers.
15 Q. Exactly. All right. And your
16 testimony today is that your response was
17 not intended to be a response to the
18 operational side --
19 A. That's correct.
20 Q. -- of the question, right?
21 A. That's correct.
22 Q. Your testimony today is that you
23 were responding as if you were an
24 environmental guy?
25 A. I'm -- I'm responding with the
00217:01 environmental guy. I am engaged with the
02 environmental guy because quite often the
03 environmental guy needs my specialty or my
04 special knowledge to help make his
05 decisions.
06 Q. Uh-huh.
07 A. And that's what I am doing. I'm
08 giving my special knowledge to give him
09 some confidence in what he would need from
10 me and that is what makes up the pills. I
11 know of no products that make up those
12 pills that would disallow their discharge.
13 And from the regulations,
14 what I know of the regulations, using them
15 as the spacer and then pumping them
16 overboard would not only fulfill the letter
17 of the law, but it would also -- I mean, it
18 would also fulfill the spirit of the law.
19 But I still deferred to him
20 because -- because it was an environmental
21 question I was trying to help answer.
22 Q. Right. Do you know that
23 Mr. Lindner testified in the Coast Guard

24 hearings that he interpreted your e-mail to
25 mean that it was safe for use in this
00218:01 application?
02 A. Yes, I am familiar with that.
03 Q. You are familiar. So you have
04 read that testimony. So is Mr. Lindner
05 mistaken?
06 A. Mr. Lindner is mistaken.
07 Q. He's mistaken.
08 A. He's a very honest fellow, but
09 he's mistaken.
10 Q. All right. So let me ask you
11 this then: You're a fluids guy and you're
12 being told that somebody wants to take LCM
13 pills and they want to use it as a spacer.
14 A. Uh-huh.
15 Q. Does it cross your mind to
16 evaluate whether that's a safe thing to do?
17 A. I would say that -- that it does
18 and it did, and I had no concerns.
19 Q. All right. Fair enough. But
20 simple question, one at a time. Did you
21 think about it when the issue came up? Did
22 you say to yourself: Is this a safe thing
23 for us to do, for BP to do, to use
24 Form-A-Set/Form-A-Squeeze, mix them
25 together --
00219:01 A. I had -- I had no concerns and I
02 trusted M-I SWACO's expertise in that area.

Page 219:05 to 226:10

00219:05 Q. I appreciate that.
06 A. M-I SWACO prepares the
07 displacement procedures and executes the
08 displacement procedures with the other
09 personnel on the rig and usually without my
10 assistance. I can't recall where they have
11 ever asked for or needed my assistance. I
12 hadn't any concerns about it and they
13 didn't express any concerns about it. They
14 expressed confidence and they had an array
15 of very experienced people that I have
16 worked with personally -- I know
17 personally and I respect.
18 And that array of very
19 experienced M-I SWACO people had no problem
20 with the operational part of it, so I had
21 no problem. I trusted them. I had no
22 problem. And I trusted that the people who
23 normally plan and execute the displacements
24 on the rig, if they had a concern, would
25 ask me, just as they did ask me about the
00220:01 environmental aspects.
02 Q. Right. I appreciate your strong

03 feelings about this subject. But please
04 allow me just to ask my questions, which
05 fortunately or unfortunately is my right.
06 I appreciate that you relied on
07 them. The question is this: Did you at
08 that point in time ask yourself the
09 question: Is this a safe thing to do? Yes
10 or no?
11 A. No. I had no concerns.
12 Q. All right. So it didn't cross
13 your mind?
14 A. I had no concerns.
15 Q. All right.
16 A. I had no concerns that it would
17 be a problem.
18 Q. You're familiar with something
19 called management of change?
20 A. Yes.
21 Q. Would not this implicate
22 management of change considerations?
23 A. It's possible, yes.
24 Q. Because you're doing something
25 that you don't normally do?
00221:01 A. Uh-huh.
02 Q. And a good management of change
03 analysis would require if someone was going
04 to take something that was not intended to
05 be used in a certain way and then use it in
06 a different way, then management of change
07 analysis would require that you evaluate
08 whether or not there were any hazards
09 associated with the new purpose to which
10 this combination thing which we are calling
11 it a spacer would be put, right?
12 MR. LANCASTER:
13 Objection to form.
14 THE WITNESS:
15 I don't -- you know, I
16 can't really say what triggers a management
17 of change, what level triggers a management
18 of change. I know that change of personnel
19 is a trigger for management of change and
20 that's -- I think that's stipulated in the
21 contract with the drilling fluid vendors.
22 BY MR. BRUNO:
23 Q. All right.
24 A. But other than that, I don't
25 know what would trigger management of
00222:01 change.
02 Q. Okay. Well, given how proactive
03 you have been during your employment, do
04 you believe that somebody at BP should have
05 looked at this issue and approved it before
06 letting it go forward; maybe not you, but
07 just somebody?

08 A. I can't really say. But -- I
09 wasn't involved in the planning of the --
10 of the displacement. I wasn't -- you know,
11 so I can't really say what they should have
12 done.

13 Q. All we know is that there are
14 certain names on this e-mail string, fair
15 enough?

16 A. Yes.

17 Q. Okay. We know that Cocalles was
18 on the e-mail string, right? And we
19 know -- well, at least on yours. We know
20 Morel. Those two BP guys are on this
21 e-mail string. So they had knowledge of
22 what was going on, correct?

23 A. Yes.

24 Q. All right. Did you have any
25 discussions with Mr. Cocalles about this at
00223:01 all?

02 A. No.

03 Q. Did you have any discussions
04 with Mr. Morel about this at all?

05 A. No.

06 Q. Did you have any discussions
07 with anybody at BP about this issue at all?

08 A. Are you talking about at the
09 time?

10 Q. Yeah.

11 A. No.

12 Q. No, I know there have been a
13 great number of conversations since then,
14 but not at that time.

15 A. No. Everything -- everything
16 that I know that happened is contained in
17 the e-mail string that I received.

18 Q. Now, as I understand the way
19 this material works, if it's allowed to
20 sit -- it does have to sit for a while for
21 it to do what it's supposed to do, right?

22 A. In the wellbore?

23 Q. Yeah. Or wherever it is.

24 A. Yes, in the wellbore it does
25 have to sit for a while for it to -- for it
00224:01 to have the cross-linking process take
02 place.

03 Q. Based upon what you know, would
04 it be advisable to have this material sit
05 in the -- any of the lines, discharge
06 lines, the -- or the kill line? Would that
07 be an advisable thing, just to let this
08 material, this -- the combination --

09 A. Well, we've already read an M-I
10 SWACO e-mail or M-I SWACO procedure that
11 advised against it. So from M-I SWACO's
12 perspective, I would say that, you know,

13 just to be cautious --
14 Q. Right.
15 A. -- you know, that as the
16 procedure said, flush the lines out
17 afterwards --
18 Q. Sure.
19 A. -- which is common with all
20 types of pills and -- that's a common
21 instruction to put --
22 Q. I hear you.
23 A. -- for whether they are
24 cross-linked, for whatever you are doing,
25 to flush the lines after you are finished
00225:01 to avoid future complications of many and
02 varied types.
03 Q. If you had known that this
04 material was going to sit in the kill line
05 or sit in the discharge line or any of the
06 lines going to the blowout preventer, would
07 you have advised against doing that?
08 A. If I would have known it would
09 have been sitting in those lines, yes, but
10 I don't think it ever was.
11 Q. What makes you say that?
12 A. If, in fact, like the Bly report
13 speculates, that mud seeped
14 through -- first -- first off, we would
15 have to -- we would have to be certain that
16 the -- the spacer was just above the
17 annular preventer. That's the first thing
18 we would have to clear. And I'm not sure
19 for certain whether that was the case or
20 not.
21 Second, they mentioned a number
22 of barrels that they think went through
23 the -- the annular preventer. That
24 material in my opinion would want to follow
25 gravity downward into the wellbore.
00226:01 Q. Uh-huh.
02 A. And it wouldn't want to go into
03 the choke or kill line.
04 Q. Let me see if I'm at a good
05 point to pass the baton. Is there ever a
06 time --
07 A. It's not very -- it's not very
08 common when gravity is involved for
09 material to want to make a right angle
10 turn.

Page 228:05 to 228:10

00228:05 BY MS. CHANG:
06 Q. Good afternoon, Mr. LeBleu. My
07 name is Deanna Chang and this is Michelle
08 Delemarie and we are both with the

09 Department of Justice representing the
10 United States here.

Page 230:20 to 232:09

00230:20 Q. Okay. Got you. Let's see.
21 Let's talk a little bit about the LCM and
22 spacer.
23 A. Okay.
24 Q. Whose decision is it to use the
25 LCM pills as a spacer in this instance?
00231:01 A. It was the M-I SWACO's
02 recommendation.
03 Q. They made the recommendation
04 initially?
05 A. Uh-huh.
06 Q. Was it Mr. Maxie --
07 A. To the best -- to the best of my
08 knowledge. All I have is the e-mail chain
09 to go by. And the best of my knowledge,
10 excuse me, Mr. Doyle Maxie made the
11 recommendation in the form of an e-mail.
12 Now, since then, watching testimony and
13 hearing testimony I have heard that -- that
14 it was discussed on the rig, but I wasn't
15 aware of that.
16 Q. So as far as you knew, it was
17 Mr. Maxie who made the recommendation?
18 A. At the time that's what I knew.
19 Q. Did Mr. Maxie approach you
20 directly about this recommendation to use
21 the LCM and spacer?
22 A. No.
23 Q. How were -- how did you learn
24 about it?
25 A. Through the e-mail. We -- every
00232:01 other Friday we take a day off from the
02 office and I was at home and he sent an
03 e-mail to everyone. It was an e-mail
04 conversation on an extended weekend.
05 Q. Do you recall whether
06 Mr. -- whether Mr. Maxie ever indicated
07 that LCM had been used as spacer
08 previously?
09 A. No. He didn't indicate that.

Page 233:10 to 233:19

00233:10 Q. And you don't recall any
11 internal BP conversations just amongst you
12 and other BP people regarding this
13 recommendation?
14 A. No. Just -- just -- well, just
15 what's in the e-mail, you know, James

16 Hoggan and the drilling fluids --
17 everything is in the e-mail. Everything is
18 contained in the e-mail to the best of my
19 recollection.

Page 234:13 to 234:17

00234:13 Q. Are you aware of any estimates
14 of the cost savings involved in disposing
15 of the LCM overboard rather than bringing
16 it back to shore?
17 A. No, I'm not.

Page 235:02 to 237:07

00235:02 Q. Are you aware of Form-A-Set or
03 Form-A-Squeeze being used for applications
04 other than LCM?
05 A. Just right offhand, I can't
06 think of any, just right offhand, but, you
07 know, quite -- quite often in drilling
08 fluid, products are similar. They have
09 similar properties and they can be used for
10 different -- different purposes than what
11 they were originally intended.
12 Q. And do the -- does the vendor
13 give you literature or something
14 identifying the other uses for the
15 material?
16 A. Not usually, no.
17 Q. So that's just something that --
18 that a drilling fluids specialist would
19 figure out on their own?
20 A. That's usually the case, from
21 experience with the different products.
22 That's usually the case.
23 Q. Can you give us an example of
24 what some of those products might be and
25 their different uses?
00236:01 A. Well, the -- the bio polymer and
02 the -- and the water and the barite make up
03 a basic spacer that can be used with water
04 based or oil based, because the bio polymer
05 is not effective the way clay would be in
06 a -- in a spacer. Clay -- clay would be
07 affected by the oil base more because of
08 the calcium chloride that's contained and
09 it's somewhat of a contaminant. The
10 calcium is a contaminant to the clay-based
11 type spacer. I personally have also mixed
12 with the previous Marathon experience for
13 working as a drilling fluids engineer on
14 the rigs for Marathon years ago, we would
15 build what I just described and add a

16 surfactant to it and use it as a cement
17 spacer for Marathon. Marathon directed us
18 to use a specific product and they used it
19 as a cement spacer. So I have -- I have
20 experienced using drilling fluid products
21 in a number of different ways.
22 Q. Now, did you say that Marathon
23 would tell you to do that --
24 A. Yes.
25 Q. -- to add the surfactant and use
00237:01 it as a cement spacer?
02 A. That's my understanding. And
03 this was years ago.
04 Q. Let's turn to tab number 1 which
05 is going to be Exhibit 1019.
06 (Exhibit 1019 was marked
07 for identification.)

Page 237:16 to 237:21

00237:16 Q. Sorry. Let me get the last
17 number on here. Through 98902.
18 A. I'm not sure whether I have seen
19 this or not. Again, if it was part
20 of -- if it was an appendix to the Bly
21 report, I may have seen it.

Page 237:23 to 239:17

00237:23 the Bly report investigation?
24 A. Yes, I was.
25 Q. By whom, if you recall?
00238:01 A. An engineer by the name of
02 Warren Winters and then another gentleman
03 that I can't recall what his name is.
04 Q. Was that one interview or
05 multiple?
06 A. One -- one interview.
07 Q. And werethere -- what did their
08 questions relate to?
09 A. They basically asked me to tell
10 them what happened, and after I told them
11 what I -- what I remembered and what I
12 knew, they asked me about -- I think they
13 asked me about the spacer. Don't know if
14 they asked me about the drilling fluid, but
15 I think they asked me about the spacer and
16 maybe something else, but I can't recall.
17 Q. Do you know who Jim Cowie is?
18 A. No, I don't. Doesn't -- doesn't
19 ring a bell.
20 Q. Were you aware that this project
21 spacer was being performed?
22 A. Right after the incident, I was

23 asked for a lot of information by different
24 people within BP that I assumed were
25 working with the Bly group and -- but I had
00239:01 no specific knowledge of what they were
02 doing with the spacer or whatnot.
03 What -- I didn't really know what all they
04 were doing.
05 Q. The -- you have mentioned a
06 couple of times an appendix to the Bly
07 report. You have looked at that?
08 A. I looked at the Bly report and I
09 looked at the appendix, especially as it
10 pertains to drilling fluids.
11 Q. Were there any conclusions in
12 that -- in the Bly report or the appendix
13 that you did not agree with?
14 A. Well, in the Bly report, I
15 didn't agree with -- with the -- the
16 assumption that the pill could plug the
17 choke or kill line.

Page 239:21 to 241:21

00239:21 Q. Were there any other conclusions
22 or assumptions in the Bly report that --
23 A. No. That's it. No. I have a
24 lot of respect for the guys that did that.
25 I think they did a decent job, a fine job.
00240:01 Q. Do you recall whether anyone
02 asked you whether you thought the spacer
03 would go horizontally across the choke or
04 kill lines?
05 A. No one asked me.
06 Q. And if they had, you would have
07 told them not likely?
08 A. You're talking about the
09 investigation?
10 Q. Yes.
11 A. Yes, I would have told them not
12 likely.
13 Q. Yeah. Did anybody ask you prior
14 to the investigation?
15 A. (Witness shakes head.)
16 Q. If you flip to page 2 of that
17 exhibit on the slide up there, the fourth
18 bullet reads, "The spacer was not in the
19 program. It is believed that it was a
20 change brought about by perceived
21 expediency."
22 Do you agree with that
23 statement?
24 A. I can't -- no, I don't -- I
25 don't really agree with -- with the
00241:01 statement, but I would have a hard
02 time -- I would have a hard time knowing

03 what anyone else was thinking, you know.
04 All I -- all I can speak to is what I was
05 thinking.
06 Q. Does the drilling plan specify
07 what type of spacer is to be used?
08 A. Rarely. The only -- as I
09 recall, the only spacers that are part of
10 the drilling program, the drilling fluid
11 program -- you said drilling program and --
12 and I'm thinking drilling fluid program.
13 The drilling program, if you
14 want to go there, normally does not. The
15 drilling fluid program normally does not
16 either, except for general, very general
17 information about the first displacement in
18 a well to synthetic -- very first you start
19 off with water-based mud and then at some
20 point you displace either water-based mud
21 or seawater with synthetic-based fluid.

Page 242:19 to 248:16

00242:19 Q. Is the drilling fluid program
20 always prepared for each well?
21 A. Yes.
22 Q. And who prepares that?
23 A. The drilling fluid vendor, M-I
24 SWACO in this case. Baroid for the first
25 portion of the well and M-I SWACO for the
00243:01 second portion of the well.
02 Q. And is that something that you
03 would review?
04 A. Yes.
05 Q. Do you have to sign off on it or
06 approve it?
07 A. Yes. Recent history, in the
08 last few years, we -- there's a number of
09 people that sign off on the front of it as
10 reviewers and -- and then there's a final
11 approval.
12 Q. Did you review the drilling
13 fluid program for the Macondo well?
14 A. Yes.
15 Q. Do you recall whether you
16 compared the drilling fluid program that
17 you approved or did you review it to see if
18 it specified what type of spacer was going
19 to be used?
20 A. I -- I don't generally review
21 for spacer types.
22 Q. Why is that?
23 A. Because the drilling fluid
24 engineers routinely take care of
25 the -- they do the planning and execution
00244:01 with the spacers and displacements on the

02 rig, but with the -- in conjunction with
03 the rig personnel. And there are many and
04 varied other reasons why.

05 Q. Do you know whether a risk
06 assessment was performed for the
07 substitution of the lost-circulation
08 materials as spacers?

09 A. Use them as spacers, not to my
10 knowledge.

11 Q. Who would have performed a risk
12 assessment if one was performed?

13 A. Oh, I should rephrase. The
14 answer to the last question is, I don't
15 know if a risk assessment was done or not.

16 Q. Do you know who would be
17 responsible for performing one?

18 A. There was a risk -- come to
19 think of it -- well, I don't know. All I
20 know is what the testimony says, so --

21 Q. Okay. What do you recall
22 sitting here, whether it's from
23 testimony --

24 A. Sitting here from testimony?

25 Q. Yes.

00245:01 A. What I recall from testimony is
02 that it was routine, according to
03 Mr. Lindner's testimony, that it was
04 routine for him to generate -- for the M-I
05 SWACO personnel to generate one and then
06 vet it by the other BP and Transocean rig
07 personnel.

08 Q. And it's -- it's your
09 recollection or your understanding as you
10 sit here today that that was done in this
11 case at the Macondo well?

12 A. That's what I heard in
13 testimony.

14 Q. Okay. If you go down to the
15 bottom paragraph on page 2, the final
16 sentence, could you read that aloud for me,
17 please, starting with "in reality."

18 A. Page 2. I'm not finding -- oh,
19 "In reality, this could be construed as
20 'sham recycling,' as the material was
21 pumped downhole for a purpose it was not
22 designed in order to change its status to
23 exempt waste."

24 Q. Do you agree with that
25 statement?

00246:01 A. No.

02 Q. Why not?

03 A. Because the -- the material is
04 valid in my opinion for use as a spacer and
05 in my opinion it was a beneficial use of a
06 product that was already -- already

07 available, already built; and also it
08 avoids some extra waste because not only
09 would this have to be -- would have been
10 sent in if it would not have been used as a
11 spacer, it would have been sent in for
12 disposal as waste which is a waste stream,
13 and it would have made more waste to make a
14 spacer to replace it.

15 Q. Do you agree with the statement
16 that the material was pumped downhole for a
17 purpose it was not designed?

18 A. No, I don't, because while it
19 was designed as a LCM spacer, originally
20 the drilling fluid engineers would have
21 made sure it was valid for a spacer -- I
22 mean, I -- I can't speak for them. But
23 they would have done, in my opinion would
24 have done what's necessary to assure that
25 it can be used as a spacer and that it did
00247:01 not contain the cross-linking agent, to the
02 best of my knowledge, didn't contain a
03 cross-linking agent so it
04 wasn't -- so -- so the -- the material
05 was -- for the purpose it was not designed
06 and it wasn't really -- it wasn't
07 really -- it wasn't really mixed for the
08 purpose it was designed either. It wasn't
09 finished or completed for that purpose.

10 Q. My understanding from your
11 earlier testimony was that it was mixed in
12 response to a lost-circulation event; is
13 that correct?

14 A. That's my understanding. I
15 don't -- you know, I didn't -- I
16 didn't -- I wasn't involved in the decision
17 so -- I don't -- I can't say for sure why
18 they --

19 Q. And isn't Form-A-Set and
20 Form-A-Squeeze, aren't they marketed as
21 lost-circulation materials?

22 A. Yes.

23 Q. Designed --

24 A. Lost-circulation pills, yes,
25 they are.

00248:01 Q. And they are designed and
02 marketed as LCM pills?

03 A. Yes, LCM pills. But they also
04 contain products that are used for building
05 a spacer. They contain extra products also
06 and -- but the -- the product that would
07 have been concerned, the most concern that
08 causes the cross-linking was not, to my
09 knowledge, was not added.

10 Q. But you're not aware of
11 Form-A-Set or Form-A-Squeeze being used as

12 spacers in any other instance?
13 A. Not to my knowledge, no.
14 There's a -- I hate to interrupt. But
15 there's a burnt paper smell in here. And I
16 don't know if that's a concern or not.

Page 249:13 to 254:01

00249:13 Q. Are you aware of Form-A-Set or
14 Form-A-Squeeze being marketed or advertised
15 by SWACO as a spacer?
16 A. No, I'm not aware of that.
17 Q. Are you aware of Form-A-Set or
18 Form-A-Squeeze being marketed by SWACO as
19 anything other than an LCM pill?
20 A. No, I'm not aware of them
21 marketing it as anything else but an LCM
22 pill.
23 Q. Do you recall any discussion
24 regarding what would happen to the pill
25 over time as it sat?
00250:01 A. No, I don't recall.
02 Q. So prior to being pumped
03 downhole as the spacer, do you -- would you
04 have expected the consistency or the
05 viscosity of it to change while it was --
06 A. It could.
07 Q. -- waiting in the pits?
08 A. It could have changed.
09 Q. Okay. How -- how would it
10 likely have changed?
11 A. Well, that would be speculation
12 on my part, but if the -- if bacteria
13 degradation had started on the pill that
14 had the bio polymer, it could have thinned
15 out. Other than that I -- I can't think of
16 anything. That's the only thing I can
17 think of.
18 Q. You can't think of any reason
19 why it would have thickened while it sat
20 there?
21 A. No. No. It would have -- it
22 would have done the opposite in my opinion.
23 Q. And you don't recall any
24 discussion or consideration of what would
25 happen to the pill downhole if it just sat
00251:01 there?
02 A. We didn't have any discussion,
03 no. But it's common when the pill is used
04 as intended, M-I SWACO's recommendations
05 are that you should wait on it four hours
06 after it's already pumped downhole so you
07 have, you know, you have some time with it
08 in the pit. And you have some time pumping
09 it into, down into the location, to the

10 place where you want it to work and then
11 you have to wait four hours after that
12 before trying to do -- trying to test it or
13 trying to do anything else operationally.
14 Q. Was there any consideration
15 given to whether the pill was compatible
16 with either seawater or the oil-based mud?
17 A. The pills have been pumped
18 with -- with oil-based mud routinely in the
19 tandem configuration. That's the way they
20 are pumped, and there is some interfacing
21 between the two pills on two ends of the
22 Form-A-Set and there is some interfacing
23 with the oil-based mud in the
24 Form-A-Squeeze on -- on both ends, the
25 leading end and the trailing end of the
00252:01 tandem configuration. So it's common that,
02 you know, any time you pump pills and
03 there's a -- there's also going to be some
04 interface mixing, interfacial mixing.
05 Q. Now, do you know whether the two
06 pills were mixed together or were they
07 pumped consecutively?
08 A. I heard testimony they were
09 mixed together. But before I heard the
10 testimony, I didn't know.
11 Q. So if they were mixed together,
12 would that affect the compatibility with
13 either the oil or the water afterwards?
14 A. I don't think so
15 because it -- like I said, in the previous
16 statement, when you pump in tandem
17 configuration, there is some mixing with
18 the two types of pills when they are used
19 in the wellbore that way.
20 Q. But when they are pumped in
21 tandem, they are not mixed together,
22 correct?
23 A. If they are not purposefully
24 mixed together, but you pump a certain
25 amount of Form-A-Squeeze followed by a
00253:01 certain amount of Form-A-Set followed by a
02 certain amount of Form-A-Squeeze and in
03 between each of those is a synthetic-based
04 mud and between that whole package is
05 synthetic-based mud -- so your question,
06 between the two pills, well, the leading
07 edge of the Form-A-Set and the trailing
08 edge of the Form-A-Set is seeping and
09 mixing with the Form-A-Squeeze as they go
10 down the hole. Not -- to some degree.
11 Q. But the Form-A-Squeeze is not
12 mixing with either the mud or the seawater;
13 is that correct?
14 A. No, the mud -- the

15 Form-A-Squeeze is mixing with the drilling
16 fluid somewhat because there's an interface
17 there also. Any time you put two -- two
18 fluids together and you try to pump them
19 through the wellbore, there's going to be
20 some blending at the interface, some mixing
21 that goes on. It has to go down the drill
22 pipe and then it has to make the turn
23 around the drill pipe and come up the hole.
24 And there's different upsets and those are
25 all places where some interfacial mixing
00254:01 can take place.

Page 255:12 to 256:12

00255:12 Q. If you flip to page 9 of that
13 document, last four Bates are 8883, if you
14 look at the -- the paragraph underneath the
15 slide, if you could take a minute or two to
16 read that yourself, familiarize yourself
17 with it.
18 Do you agree that only 352
19 barrels of seawater was pumped?
20 A. I -- I don't know how much was
21 pumped.
22 Q. Okay. If that -- if it was 352
23 barrels, would that leave the pill
24 straddled across the BOPE?
25 A. I don't know. I haven't done
00256:01 the calculations.
02 Q. If 352 barrels of seawater was
03 pumped, would that change your mind about
04 the conclusion in the Bly report that
05 spacer was across the choke and kill lines?
06 A. I haven't done the calculations
07 to -- to verify what -- what the Bly report
08 is saying. I'm sorry. I haven't. So I
09 can't say. I would really have to try
10 myself to calculate and -- and verify what
11 it is they're -- what point they are trying
12 to make.

Page 257:13 to 258:09

00257:13 Q. Do you have an opinion whether
14 the seawater could swap with the spacer
15 when pumped?
16 A. It's common -- one of the
17 concerns about displacing a heavy, thicker
18 fluid with a lighter, thinner fluid
19 is -- is that you leave -- quite often can
20 leave some of the thicker fluid in the
21 wellbore and have the lighter, thinner
22 fluid bypass it in some way and there's

23 some extra mixing and extra interface.
 24 That's one of the concerns and that's why a
 25 spacer is used.
 00258:01 And that's why the spacer is
 02 made thick, so it's much thicker than the
 03 fluid it is trying to push out of it, and
 04 it does -- so that hopefully it doesn't
 05 affect the job and pushing it out before
 06 the thinner fluid comes behind it. So it
 07 is possible. The thicker the spacer
 08 the -- I would say the less potential for
 09 mixing between the spacer and the seawater.

Page 263:03 to 263:07

00263:03 Q. And as a drilling fluids
 04 engineer, do you look at the pore pressure
 05 and the fracture gradient as part of your
 06 daily work?
 07 A. No.

Page 264:18 to 265:18

00264:18 Q. Do you -- I mean, what are you
 19 looking for when you -- when you're
 20 reviewing the mud program?
 21 A. When I'm reviewing the mud
 22 program I'm looking for the drilling fluid
 23 properties. I'm -- I'm looking at the hole
 24 sizes and the -- focusing on hole cleaning
 25 and drilling fluid properties for drilling
 00265:01 fluid stability. I'm looking at the
 02 hydraulics modeling which includes hole
 03 cleaning. I'm reviewing the hydraulics
 04 modeling output.
 05 I'm reviewing the procedures for
 06 lost circulation. The -- the calculations
 07 -- not the calculations, but the plans and
 08 contingency plans for logistics for
 09 drilling fluid, number of barrels needed to
 10 drill the well and drilling fluid logistics
 11 that are being planned.
 12 Q. When you talk about drilling
 13 fluid properties, what does that mean?
 14 A. There are a number of drilling
 15 fluid properties, chemical and physical
 16 properties, that are tested daily, or
 17 several times daily that we monitor as
 18 drilling fluid engineers.

Page 267:10 to 267:13

00267:10 Q. All right. Let's turn to tab 2

11 and mark that 1020.
12 (Exhibit 1020 was marked
13 for identification.)

Page 267:17 to 268:14

00267:17 Q. Have you seen this document
18 before?
19 A. Yes, I think I generated it.
20 Q. And what is it?
21 A. This is an NPT Review which
22 stands for nonproductive time. There is
23 a -- there is some type of threshold. I
24 wasn't aware of what the threshold was or
25 wasn't aware that there was a threshold
00268:01 before I was instructed or asked to undergo
02 this exercise. But there is a threshold
03 where when you reach a certain amount of
04 nonproductive time where you're not -- you
05 know, I guess that's self-explanatory. I
06 don't want to try to -- well, I see the
07 amount is there so -- the amount of what
08 the event cost, but not the amount of the
09 threshold.
10 But anyway, Dave Sims asked me
11 to do a -- a review, NPT review of the --
12 the largest mud-loss event on Macondo
13 because it -- it rose to a level of dollars
14 that triggers a review.

Page 268:17 to 269:24

00268:17 Q. Can you have a loss of returns
18 without exceeding the fracture gradient?
19 A. I'm trying to think of an
20 example. Basically I don't think so
21 because even in the case of a hole in the
22 casing, the mud would only go so far. When
23 it hit the formation it would stop. So it
24 has to be the -- the hydrostatic pressure
25 of the mud has to overcome the fracture
00269:01 gradient for you to have losses, so I would
02 say no.
03 Q. So it's your understanding that
04 this mud-loss event was a result of the
05 fracture gradient being exceeded?
06 A. Yes.
07 Q. And that resulted in a cost to
08 BP of \$5.4 million?
09 A. That's what I have there.
10 Q. If you look down at the
11 objective and scope, did you identify all
12 facts and possible immediate and system
13 causes from the well operations that

14 contributed to the NPT event?
15 A. Unfortunately, no, because the
16 people I needed to do the investigation,
17 Mark -- Mr. Mark Hafle and Mr. Mark
18 Alberty, who were very busy and I was very
19 busy so we -- we didn't complete this. I
20 just -- I built the terms of reference and
21 I had a deadline, but before the deadline
22 came we had the incident, so we had much
23 more important things to work on after
24 that -- after that.

Page 272:17 to 272:25

00272:17 Q. Do you ever get involved in
18 looking at the causes of kicks?
19 A. No.
20 Q. Why is that?
21 A. Because it's not my area of
22 expertise, especially it's not my
23 area of -- it's not a part of
24 my -- it's -- it's a -- that's -- I'm not
25 qualified.

Page 297:08 to 297:11

00297:08 Q. Good afternoon. My name is
09 Henry Dart. I'm special counsel to the
10 Louisiana Attorney General's Office and I
11 represent the State of Louisiana.

Page 299:12 to 299:22

00299:12 Q. All right. Are you familiar
13 with the drilling fluids program that was
14 created by M-I SWACO for the Macondo well?
15 A. I reviewed it.
16 Q. All right. We're going to show
17 you a document that we're going to
18 mark -- let me mark it first. Put a
19 sticker on there. We're going to mark this
20 as Exhibit 1026.
21 (Exhibit 1026 was marked
22 for identification.)

Page 300:06 to 303:05

00300:06 Q. Does that document look
07 familiar?
08 A. Yes, it does.
09 Q. All right. And it shows some,
10 on the front page some reviews -- well,
11 first of all, it was prepared by Doyle

12 Maxie; is that right?
13 A. That's correct.
14 Q. And that's the Doyle Maxie we
15 have been hearing about throughout your
16 deposition?
17 A. Yes. Yes, it is.
18 Q. All right. And it -- it says
19 that it was reviewed by you?
20 A. Uh-huh.
21 Q. Is that right?
22 A. That's correct.
23 Q. And it was reviewed by Mark
24 Hafle?
25 A. I think so, yes.
00301:01 Q. All right. And by Brian Morel.
02 A. I'm -- I'm pretty sure Brian
03 reviewed it.
04 Q. Okay. And after all of these
05 reviews it was approved by John Guide; is
06 that right?
07 A. That's what's here. And I --
08 that's what normally happens.
09 Q. Okay. And at the bottom of all
10 of those blocks there's a comment. It
11 says, "Approve if program is consistent
12 with BP Drilling Fluids guidelines and M-I
13 P -- PFM guidelines, and that any
14 deviations are clearly stated and are
15 technically sound."
16 Are you familiar with BP's
17 drilling fluids guidelines?
18 A. Yes.
19 Q. Are there documents? Is there a
20 group practice such as we saw with the well
21 control manual dealing with drilling
22 fluids?
23 A. No. But there's a section in
24 the DWOP manual on drilling fluids.
25 Q. Okay. And is that the only
00302:01 source of --
02 A. BP.
03 Q. -- BP's drilling fluids
04 guidelines?
05 A. That's the only one I know of.
06 Q. All right. And did you, when
07 you reviewed this drilling fluids program
08 submitted by SWACO, did you compare it to
09 the section on drilling fluids in the DWOP?
10 A. I can't say that I did.
11 Q. Did anybody do that?
12 A. I'm not sure.
13 Q. Okay.
14 A. I don't know.
15 Q. How carefully did you review
16 this drilling fluids program when you first

17 got it?
18 A. If I remember correct -- if I
19 remember correctly, what my standard
20 practice was to -- and Doyle Maxie's
21 standard practice was to send the document
22 out as a PDF, a WPDF. And my standard
23 practice was to -- to make comments in a
24 PDF that I would rename as "LeBleu
25 reviewed." And so yes, I -- I reviewed the
00303:01 mud program and I did make some comments
02 and suggestions that made it into the
03 final, final document.
04 Q. You do recall having done that?
05 A. I -- as I recall, yes.

Page 304:06 to 305:01

00304:06 Let's look at the second page of
07 this document. If you look at the second
08 sentence of the first paragraph it says,
09 "Optimizing drilling performance,
10 minimizing drilling fluids waste and
11 providing a system to minimize
12 discharges/waste generation will be areas
13 where proper fluid practices will
14 contribute to the success of the project."
15 Do you agree with that
16 statement?
17 A. It's -- it's a common statement
18 added to the M-I SWACO's mud programs.
19 They are trying to say they are proactive
20 concerning waste and whatnot.
21 Q. I understand. Do you agree with
22 it?
23 A. I -- I don't see where waste
24 management specifically contributes to the
25 success of a project. But it is one of the
00305:01 values M-I SWACO tries to provide.

Page 305:09 to 305:15

00305:09 Q. I see -- I see BP's name up at
10 the letterhead at the top.
11 A. Yeah, it's common for them to
12 add BP's logo to the document.
13 Q. Sure. And you reviewed this
14 document and approved it, right?
15 A. Yes, I did.

Page 306:22 to 307:05

00306:22 Q. Okay. Do you agree that
23 minimizing drilling fluids waste will

24 contribute to the success of a project?
 25 A. No, I don't.
 00307:01 Q. You don't. Do you agree --
 02 A. I -- I agree that in minimizing
 03 drilling fluid waste is added value by the
 04 contractor, but I don't agree that it -- it
 05 contributes to the success of a project.

Page 313:21 to 314:08

00313:21 Q. All right. And I have seen lots
 22 of e-mails between you and Mr. Maxie. Was
 23 he your primary contact at SWACO?
 24 A. He was my primary contact for
 25 the HORIZON and HORIZON issues, but there
 00314:01 are times when I would have some
 02 communication with his boss, with his
 03 manager, Tim Armand. And there's also
 04 times when I had communication with the
 05 manager of the cuttings drying people,
 06 Mr. Cliff Schexnayder. But usually I would
 07 go through Mr. Maxie, even to talk to those
 08 guys.

Page 320:01 to 321:09

00320:01 I'm going to show you a document
 02 that has already been marked as Exhibit
 03 967. Have you ever seen that document
 04 before?
 05 A. I'm not sure. I need to review
 06 it.
 07 Q. Sure.
 08 A. Yes. Section -- number 3 under
 09 displacement refreshed my memory about what
 10 this particular document is about.
 11 Q. Number 3 under the -- the second
 12 set of numbers, right?
 13 A. Yes.
 14 Q. The one that says pumped 425
 15 barrels WPM spacer from pit 5?
 16 A. Yes.
 17 Q. All right.
 18 A. That makes me think that this
 19 document concerns the final displacement.
 20 Q. All right. There's no date on
 21 it. Do you recall when you might have
 22 received this document?
 23 A. I know exactly when I received
 24 it.
 25 Q. When?
 00321:01 A. I received it a day or two after
 02 the event.
 03 Q. You had never seen this before

04 the event?
05 A. No.
06 Q. Do you know who prepared it?
07 A. I have no firsthand knowledge of
08 who prepared it. I heard in testimony that
09 Mr. Leo Lindner said that he prepared it.

Page 321:21 to 321:25

00321:21 Q. All right. Have you had a
22 chance to review this document before
23 today?
24 A. Yes, I looked at it when he
25 first sent it to me --

Page 322:06 to 322:12

00322:06 Q. What's the purpose of this
07 displacement to seawater? Why -- why were
08 they doing this?
09 A. You have to remove the drilling
10 fluid from the riser before you can
11 disconnect the BOPs on the riser to move
12 off the well.

Page 323:06 to 323:10

00323:06 Q. When performing a negative
07 pressure test, don't -- doesn't the
08 operator of the well attempt to approximate
09 the condition of the well after the well is
10 temporarily abandoned?

Page 323:14 to 323:18

00323:14 I -- it's beyond my
15 knowledge. I mean, negative tests
16 are -- are not my area of specialty and
17 when or when they are not performed, I ---
18 I can't speak to.

Page 323:20 to 325:04

00323:20 Q. Well, you must -- you must have
21 done many, many, many displacements of mud
22 by seawater in anticipation of a temporary
23 abandonment in your career?
24 A. When I -- when I was working the
25 rigs, I never was involved in any type
00324:01 of -- I mean, I -- I didn't even hear about
02 positive or negative testing as far as I
03 recall.

04 So my involvement when I was
05 working with the rigs was to build a spacer
06 that I thought would make a good division
07 between the two dissimilar fluids to get an
08 effective removal of the fluid that was
09 being removed.

10 Q. You were told to make that
11 design and to displace the fluid, drilling
12 fluid with seawater?

13 A. I -- when I was on the rigs I --
14 there were -- when I was -- when I worked
15 the rigs, which was 15 years ago or more,
16 we just -- when the drilling foreman would
17 ask me to build a spacer for the
18 displacement, I would build a spacer and
19 all the other overhead was done by other
20 people, how many strokes or whatnot.

21 I may have calculated strokes
22 for the displacement, also, but other --
23 the drilling -- the driller was calculating
24 strokes. The driller foreman was probably
25 calculating strokes and how they would line
00325:01 up and how things were done. I just built
02 the spacer. As a fluids engineer, I built
03 the spacer and watched for it to come back
04 at the shakers.

Page 325:20 to 326:13

00325:20 Q. Okay. And you designed and
21 built the spacer to put between the
22 seawater and the mud, right? You did that
23 many, many, many times?

24 A. I did it a number of times.

25 Q. Okay. And you would monitor the
00326:01 movement of that spacer, as you said, up
02 through the riser?

03 A. I would watch for -- for the
04 returns, the return of the spacer and make
05 the call as to when we were finished
06 with -- with synthetic that we would want
07 to keep. And when there -- there's no
08 synthetic and we're allowed to discharge
09 overboard.

10 Q. Okay. Would you ever let the
11 spacer sit in the riser at any time, say,
12 to perform a negative pressure test?

13 A. I can't recall ever doing so.

Page 329:25 to 333:05

00329:25 Q. I have shown you a document that
00330:01 is number 22 on the -- on the CD. It's a
02 string of e-mails that I have marked as

03 Exhibit 1027 regarding the use of the LCM
04 pills as spacer.
05 (Exhibit 1027 was marked
06 for identification.)
07 Do you recall these e-mails?
08 A. I -- let me make sure I
09 received -- I'm checking all the way back
10 to make sure I was in on all the -- yes, I
11 recall them.
12 Q. Okay. Starting from the back,
13 the first e-mail is from Tracy Dyer. Who
14 is Tracy Dyer?
15 A. She's an environmental
16 specialist in the BP environmental group.
17 She's a BP specialist and she's a waste
18 specialist who, as best I know, determines
19 where a particular waste coming in from
20 offshore, what disposal facility the waste
21 would go to.
22 Q. Okay. Now, she was e-mailing
23 Doyle Maxie about the LCM pill that was in
24 the pits on the DEEPWATER HORIZON; is that
25 right?
00331:01 A. That's correct.
02 Q. All right. And she was wanting
03 to know whose waste is it?
04 A. Yeah, she was asking several
05 questions.
06 Q. And the quantities, et cetera,
07 right?
08 A. (Witness nods head.)
09 Q. Is that right?
10 A. That seems to be the case, yes.
11 Q. Okay. And flip now to the
12 second page. At the very bottom you
13 replied to that e-mail and said, "I don't
14 think the pills can be held and re-used
15 because of bacterial degradation of the bio
16 polymer," correct?
17 A. Correct.
18 Q. All right. She had asked the
19 question about whether it could be re-used,
20 right?
21 A. Yes.
22 Q. So you were telling her no, you
23 can't re-use it because after it had been
24 mixed, the bio polymer starts to degrade
25 after time, correct?
00332:01 A. Well, it -- yes.
02 Q. Then after your e-mail,
03 Mr. Maxie wrote back and said, "After some
04 discussion, can we use the pills in
05 question on the HORIZON (water-based pills)
06 as a spacer for the displacement to
07 seawater. The pills would be used a

08 water-based buffer between the Rheliant
09 system and seawater and be discharged
10 overboard once they have been circulated
11 through the wellbore?"

12 He says at the beginning of that
13 e-mail, "after some discussion." Were you
14 involved in discussions with Mr. Maxie?

15 A. Well, I was involved in
16 some -- in an e-mail chain
17 that -- that -- it wasn't a -- all of the
18 discussion is contained in the e-mail chain
19 that I received.

20 Q. Okay. So you don't recall
21 having any phone calls or person-to-person
22 talks with Mr. Maxie regarding the use of
23 the LCM pills as spacer?

24 A. No.

25 Q. All right. About the same
00333:01 time -- let me see -- as you wrote your
02 e-mail -- I am going to show you Exhibit
03 1028, tab 60.

04 (Exhibit 1028 was marked
05 for identification.)

Page 334:04 to 335:03

00334:04 Q. You see Mr. Maxie's e-mail
05 concerning no environmental restrictions
06 for dumping the pills?

07 A. Yes.

08 Q. And he said, "I have talked with
09 Armand, Wilde, Manuel, Smith, about the
10 possibility of using the pills." Were
11 those, to your understanding, the four
12 people that Mr. Maxie mentioned in the
13 other e-mail we were looking at after some
14 discussion?

15 A. Well, those are the people he
16 mentions in one e-mail, but -- and I really
17 can't -- I really can't say who all he
18 talked to. I had an assumption about who
19 all he talked to and -- and, you know, in
20 testimony I've heard there's been some
21 discussions about using the pills as
22 spacers before, but I don't know -- again,
23 other than these four people that were in
24 the e-mail that I was copied on, I don't
25 know.

00335:01 Q. If this LCM pill material had
02 not been on the DEEPWATER HORIZON, what
03 would have been used as a spacer?

Page 335:06 to 335:22

00335:06 THE WITNESS:

07 Some similar materials,
08 water, bio polymer and barite.
09 BY MR. DART:
10 Q. When you say water, are you
11 talking about seawater?
12 A. Either seawater or drill water,
13 I'm not sure which one they would have
14 used. Probably I assume drill water.
15 Q. And you would add to that barite
16 and --
17 A. Bio polymer for suspension of
18 barite and barite.
19 Q. And that would have preceded
20 the -- the saltwater?
21 A. Yes. And it's also the basic
22 starting ingredients of a Form-A-Set pill.

Page 335:25 to 336:11

00335:25 Was the concern about having to
00336:01 send that LCM spacer to shore for hazardous
02 waste disposal a consideration in using
03 that spacer, that pill as a spacer?
04 A. There was no concern on my part.
05 I can speak only of myself. But there was
06 no concern of my part of sending the spacer
07 in for disposal at all, but only thing that
08 I wanted to assure is that we do the right
09 thing. If I send the pills in for
10 disposal, was -- what we need to do, we
11 would have done it.

Page 337:17 to 339:25

00337:17 Q. In your statement to Mr. Winters
18 of the investigation team on April 29th you
19 made this statement, "They had mixed a
20 tandem pill without X linker but did not
21 need it so discussion turned to dumping it
22 in order to wash tanks. Pill could not be
23 dumped if I -- if it had not been in
24 wellbore. Idea was to use it as spacer to
25 displace riser. Spacer products were
00338:01 acceptable to dump as long as there is no
02 sheen questions."
03 Is that what you told the
04 interviewer?
05 A. It sounds reasonable. I don't
06 recall exactly.
07 Q. So you -- you had -- you had LCM
08 material that was in tanks that had not
09 been used, and according to your statement
10 you didn't need it, right?

11 A. Yeah, the -- the rig built it
12 and ended up not needing it for curing
13 losses.
14 Q. So the discussion turned to
15 dumping it in order to wash the tanks?
16 A. Yeah, at the end of a well you
17 have to wash the pits and the question was
18 asked of me: Can we dump the pills?
19 Q. Right. And the answer is no
20 because of the hazardous regulations, you
21 would have had to off-load it to the boat,
22 send it to the shore?
23 A. Right.
24 Q. Okay. So the plan came up to
25 pump it down the well and by some sort of
00339:01 regulatory magic it could then be dumped
02 overboard, right?
03 A. Regulations are what they are
04 and --
05 Q. Right.
06 A. And that's the way the
07 regulations were written.
08 Q. Okay.
09 A. And the recommendation came from
10 M-I SWACO.
11 Q. Right. But the reason you
12 decided to pump that -- that LCM material
13 down the hole was for the sole purpose of
14 being able to dump it overboard as compared
15 with --
16 A. No.
17 Q. -- sending it to the beach?
18 A. No. No, the reason for using
19 the pill as a spacer was that it was a
20 valid use of the product in my opinion and
21 in M-I SWACO's very experienced opinion. I
22 saw no problem with -- with -- especially
23 with the great array of M-I SWACO technical
24 expertise that I knew personally and had
25 worked with personally.

Page 340:06 to 341:06

00340:06 Q. Okay. Well, not if you had
07 shipped that pill to the shore for proper
08 hazardous waste disposal?
09 A. We would have -- we would have
10 shipped it to shore for waste disposal.
11 That would have been however many barrels
12 of waste disposal. Then we would have
13 generated more waste that would have been
14 dumped overboard. So we are increasing the
15 overall waste stream during the process.
16 Q. Okay. But the alternative to
17 running it down the hole as a spacer was to

18 have shipped it to the shore for hazardous
19 waste disposal, correct?
20 A. That's the only
21 alternative -- that's the only alternative
22 I saw --
23 Q. All right.
24 A. -- was to send it in for
25 disposal.
00341:01 Q. Was a -- was a maintenance of
02 change document prepared to add this LCM
03 pill as a spacer?
04 A. I don't know.
05 Q. Whose job was it to do that?
06 A. I don't know.