

Deposition Testimony of:
Robert Quitzau

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Page 367:07 to 367:11

00367:07 Q. Good morning, Mr. Quitzau. I'm
08 Geoffrey David. I'm with the law firm of
09 Kirkland & Ellis.
10 As you may know, we represent BP
11 in this matter, and I have about an hour and

Page 367:23 to 368:05

00367:23 testified yesterday that you took over as the
24 drilling engineer for the Macondo well for
25 Anadarko on or about March 18th; is that
00368:01 correct?
02 A. That's correct.
03 Q. All right. And from whom did
04 you take over that role?
05 A. Josh Nichols.

Page 369:05 to 369:05

00369:05 Q. Right. And I believe yesterday

Page 370:02 to 370:23

00370:02 Q. Okay. So how -- how did the
03 interface with the team differ from your
04 previous responsibilities?
05 A. My previous responsibilities as
06 drilling engineer with -- were with wells
07 that we -- that Anadarko operated. And in
08 that function, I would deal with various
09 vendors and various experts within the
10 Anadarko -- Anadarko vendor system, working
11 with an entire team of people to put together
12 a well plan.
13 Q. Okay. So could you briefly
14 describe your duties, I guess, when Anadarko
15 was an operator of the well?
16 A. We would form -- we would get
17 the well objectives from the geology group
18 and asset team. We would put together a well
19 design, casing plan, pore pressure analysis.
20 All the various vendors would come together
21 and contribute practices and procedures and
22 materials and equipment that would contribute
23 to the well design.

Page 372:14 to 372:16

00372:14 Q. How would you -- what -- how
15 would you qualify the design of the well?
16 What is included in the design of the well?

Page 372:20 to 373:15

00372:20 The design of the well would
21 include a very large number of things. That
22 would include the hole size selection,
23 interface with the completion engineers to
24 make sure that the proper geological
25 objectives and -- and asset team objectives
00373:01 were achieved.
02 There -- deepwater, there are
03 generally annular pressure buildup analyses
04 run, confirming and making sure that all of
05 the components in the well have enough
06 integrity to hold the loads, putting together
07 procedures for drilling the well.
08 That's what I can think of right
09 now.
10 Q. Would it -- would the design of
11 the well include everything from the
12 beginning of the well, from spud all the way
13 through either permanent abandonment or
14 temporary abandonment?
15 A. Yes.

Page 373:25 to 375:01

00373:25 Q. I believe you stated before that
00374:01 you would -- as part of your tracking, you
02 would monitor the well. Did you do similar
03 tracking when the well was going through the
04 temporary abandonment process?
05 A. My tracking of progress tracked
06 the process through the geological
07 objectives, and after that, I did not track
08 progress. So I did not track progress or
09 monitor during the abandonment -- temporary
10 abandonment.
11 Q. Okay. And about what date did
12 you stop tracking progress?
13 A. I don't know the exact date, but
14 the -- when wireline logs were finished being
15 run through the -- through the objective,
16 that -- at that point, I would consider the
17 well to have met the geological objectives.
18 Q. So would it be fair to say maybe
19 on or about April 14th?
20 A. That's approximate.
21 Q. Okay. And after -- after your
22 tracking, would anyone at Anadarko take over
23 that role of tracking the progress of the
24 well?
25 A. No one took over that role of
00375:01 tracking the progress.

Page 376:20 to 378:01

00376:20 Q. And would you access WellSpace
21 after you stopped monitoring the drilling
22 progress of the well?
23 A. Yes.
24 Q. Okay. And why would you do
25 that?
00377:01 A. To continue -- while the
02 drilling progress, as I described, is
03 finished, I still continued to make 30-second
04 updates in the morning meetings. So in
05 preparation for that, I would download
06 drilling reports sufficient to make -- to
07 make those updates. And then, continually,
08 as the asset team continues to have
09 questions, I would try to be prepared to
10 answer those questions.
11 Q. Okay. I believe yesterday you
12 spoke about your -- your preparation for the
13 morning meetings. I think you said that
14 you'd check WellSpace, InSite Anywhere,
15 e-mails, calls, records that you had to
16 prepare for these morning meetings; is
17 that -- is that correct?
18 MS. WILMS:
19 Object to form.
20 THE WITNESS:
21 For morning meetings, it was
22 predominantly downloading information from
23 WellSpace, which would include drilling
24 operating reports, mud logging reports, and
25 possibly pore -- pore pressure frac gradient
00378:01 reports.

Page 378:03 to 378:06

00378:03 Q. Okay.
04 A. And possibly geological reports.
05 Q. In your 30-second presentations,
06 what would you include?

Page 378:09 to 378:12

00378:09 THE WITNESS:
10 It would be a simple summary of
11 the activity on the rig since my last report
12 to the group.

Page 378:14 to 378:19

00378:14 Q. And what would those summaries
15 include?
16 A. The major activities that were

17 conducted.
18 Q. Okay. So what type of -- for
19 example, what type of major activities?

Page 378:22 to 378:25

00378:22 THE WITNESS:
23 Drilling, casing running, BOP
24 testing, just generally what took up time
25 during the day.

Page 379:02 to 379:22

00379:02 Q. Okay. I believe you -- and so
03 this would primarily be based on the daily
04 operations reports?
05 A. Yes.
06 Q. Okay. And when would you look
07 at the daily geological reports or the pp/fg
08 reports?
09 A. My normal routine -- our
10 meeting's at 7:30. So my normal routine is
11 when I would first get in, anywhere from 6
12 o'clock to 7 o'clock would be to look at
13 reports so that I could get an understanding
14 of what happened on the rig since my last
15 update. And hope -- my hopes would be that I
16 would have the drilling operating reports,
17 and that would give me what I need. And if
18 those didn't come in that morning, I would
19 look at the mud log report or the geological
20 report or the pore pressure frac gradient
21 report to get an idea of what happened on the
22 rig.

Page 379:24 to 380:03

00379:24 would it be fair to say that you would only
25 look at the daily geological reports or the
00380:01 mud logging reports or the pp/fg reports if
02 the daily operations report hadn't posted
03 yet?

Page 380:06 to 380:14

00380:06 THE WITNESS:
07 For the purpose of giving
08 morning updates, that's correct. And so as I
09 prepared well plan updates, as is described
10 in my e-mails, that might take place at other
11 times during the day. And so the pore
12 pressure frac gradient report, for example,
13 might have information that would be relative

14 to a well plan update.

Page 383:18 to 384:03

00383:18 Q. Okay. And for that other well,
19 were you the -- was Anadarko the -- the
20 operator of that well?
21 A. Yes.
22 Q. And were you the primary
23 drilling engineer on that well?
24 A. Yes.
25 Q. Have you ever been a drilling
00384:01 engineer for an Anadarko-operated well where
02 there has been a non-operator involved?
03 A. Yes, I have.

Page 385:07 to 385:18

00385:07 Q. Okay. And would you expect them
08 to ask questions?
09 A. From time to time, I would
10 expect them to ask questions.
11 Q. And why would you expect them to
12 ask questions?
13 A. Typically, they would be
14 responding to questions from their asset
15 team, and they would contact me to forward
16 those questions on.
17 Q. What types of questions would
18 they ask?

Page 385:22 to 386:01

00385:22 It could be a very wide range of
23 questions. For example, if there were some
24 drilling troubles, stuck pipe, or parted
25 casing, they might call to inquire what's
00386:01 going on.

Page 386:18 to 386:20

00386:18 Q. Would you expect the
19 nonoperating drilling engineer to make any
20 suggestions?

Page 386:24 to 387:01

00386:24 I would not expect that. I
25 wouldn't expect it, but they -- sometimes
00387:01 they do.

Page 387:03 to 387:09

00387:03 Q. Okay --
04 A. So in --
05 Q. Sorry, go ahead, sir.
06 A. Again, what do you mean by
07 "expect"? In other words, I'm not expecting
08 them to do it, but when there's trouble, then
09 I -- they probably will and do.

Page 389:07 to 389:12

00389:07 Q. Okay. Now, coming back to
08 your -- the monitoring of the well, I believe
09 you said that you'd look at daily operations
10 reports, pp/fg reports, daily geological
11 reports, daily mud reports.
12 Would you look at anything else?

Page 389:16 to 389:16

00389:16 Did you say mud log reports?

Page 389:24 to 390:16

00389:24 Q. But you'd -- would you say it is
25 your responsibility to look at anything that
00390:01 was posted on WellSpace?
02 A. It is not my responsibility to
03 look at anything that's on WellSpace.
04 Q. What is it your responsibility
05 to look at on WellSpace?
06 A. My responsibility is to get
07 whatever information I can, to give the
08 update in the morning meeting or whatever I
09 think I need to track the progress of the
10 well towards the geological objective.
11 Q. So in addition to the daily
12 operations reports, the pp/fg reports, the
13 daily geological reports, the mud logging
14 reports, what else would you look at from
15 Wire -- sorry, from WellSpace to prepare for
16 your morning meetings?

Page 390:19 to 390:22

00390:19 THE WITNESS:
20 There might have been other
21 things, but those are the main ones. I can't
22 recall anything --

Page 391:03 to 391:22

00391:03 Q. Would you look at MWDs or LWDs?

04 A. As we drilled -- as BP drilled
05 through the objective, I would and did look
06 at formation evaluation LWD logs to see what
07 the pay zones looked like. And there might
08 have been one or two meetings in there when I
09 looked at that prior to the morning meeting.

10 Q. And why would you look at the --
11 the pay zones?

12 A. Just to understand what we're
13 drilling or what BP's drilling.

14 Q. Okay. Why -- why is that
15 important?

16 A. The asset team is very, very
17 interested in that, and I wanted to be
18 prepared to respond to any questions that
19 they might have. They're very excited during
20 that time. So I want to be prepared, you
21 know, to deal with any requests they might
22 have.

Page 393:24 to 394:23

00393:24 Q. Okay. Now, when you're looking
25 at the -- we'll take the daily operations
00394:01 reports. When you're looking at the daily
02 operations reports, what are you specifically
03 looking at?

04 A. There's no general rule. But
05 typically, I would look at the 24-hour
06 summary and then skim through the -- the
07 operating steps on the morning report, where
08 they -- where they describe the operations
09 and the exact time range those operations
10 were conducted. I'd skim through that fairly
11 quickly.

12 And I might look at the --
13 there's a block in there on mud properties,
14 which would include mud weights. So I'd
15 generally look at that.

16 And then at the very end of the
17 report, there's a -- similar operating steps
18 from midnight to 5:00 a.m. I would typically
19 look at that to see what they had done from
20 midnight to 5:00 a.m.

21 Q. Okay. And when you're looking
22 at what they did, is there any specific
23 action that you're looking for in particular?

Page 395:01 to 396:02

00395:01 THE WITNESS:

02 No. Typically, just to get a
03 feel for what they're doing during that day
04 and what the bulk of the time was spent on
05 during the day. And then with regard to

06 updates, the one thing that -- that would be
07 specific would be any changes in mud weights.
08 So if I could see where they changed the mud
09 weight, what depth, I would look for that.

10 EXAMINATION BY MR. DAVID:

11 Q. So why are you particularly
12 interested in mud weight?

13 A. As I described earlier, the mud
14 weights, I would put into my well plan
15 update.

16 Q. And we'll get to the well plan
17 update. We'll discuss that.

18 Would you look at anything
19 besides mud weight in particular?

20 A. Again, as I described earlier,
21 the shoe test, I would capture that and look
22 for that. They'll spell that out very
23 clearly, and so I would look at that just to
24 see, you know, what they recorded as their
25 shoe test.

00396:01 Q. Would you look at LOTs or FITs?

02 A. That's a shoe test.

Page 397:13 to 397:16

00397:13 Q. And when you're looking at the
14 shoe test and the mud weight, if there had
15 been a shoe test or change in mud weight,
16 would you also look at the pp/fg reports?

Page 397:19 to 398:08

00397:19 THE WITNESS:

20 I looked at pp/fg reports any
21 time I was interested in pore pressure, mud
22 weight and loss -- any indication of the
23 formation fracture weak -- formation fracture
24 weakness, which would include a shoe test as
25 well, yes.

00398:01 EXAMINATION BY MR. DAVID:

02 Q. And how often would you look at
03 the pp/fg reports?

04 A. As needed. Sometimes they
05 didn't come in or weren't -- there wasn't one
06 submitted. But they -- they would contain
07 relevant information to what I just
08 described.

Page 398:18 to 398:22

00398:18 Q. Okay. Then what were you
19 missing from WellSpace?

20 A. Occasionally, the daily
21 operating reports would not come in at the

22 time that I needed them.

Page 399:05 to 400:06

00399:05 A. I did say that, and -- the exact
06 date, I'd have to go back and look at the
07 WellSpace log. But there were other times
08 when -- when the daily operating report would
09 not come in. I don't remember the dates.

10 In those cases, as I described
11 earlier, then I would go to the mud log
12 reports or the geological report.

13 Q. And those reports eventually
14 were posted to WellSpace, though; correct?

15 A. I recall they were eventually
16 posted to WellSpace.

17 Q. And did -- when they were posted
18 to WellSpace, did you review those -- those
19 documents?

20 A. My practice was -- as many other
21 functions, was to keep a record in our
22 well -- standard well file, electronic well
23 file. So I would download the reports that
24 came in late, but that does not necessarily
25 mean that I would look at them or review
00400:01 them.

02 Q. And when you, I guess,
03 downloaded them and posted them, when you did
04 review them, did that change your -- your
05 view or opinion on the progress of the
06 Macondo well?

Page 400:10 to 400:11

00400:10 I don't recall. I don't recall
11 that happening.

Page 400:13 to 400:15

00400:13 Q. Okay. When you'd download the
14 daily operations reports, why would you not
15 look at some of them?

Page 400:19 to 400:21

00400:19 If I got enough information off
20 the -- the mud log report or other reports,
21 that's all I needed.

Page 402:21 to 403:09

00402:21 Q. Did you ever monitor the Macondo
22 well for the safety of the operations on the

23 well?
24 A. I did not.
25 Q. Did you view it as your role and
00403:01 responsibility to do so?
02 A. I did not.
03 Q. Did you ever receive any
04 instruction from anyone at Anadarko to
05 monitor the Macondo well for safety?
06 A. I did not.
07 Q. Did you think that that should
08 be part of your job?
09 A. I did not.

Page 403:15 to 403:22

00403:15 Q. During the course of -- as the
16 drilling engineer for the Macondo well,
17 during the course of your review of material,
18 as you tracked the Macondo -- the course of
19 the drilling on the Macondo well, did you see
20 anything that caused you concern about
21 safe -- the safety of the operations on the
22 Macondo well?

Page 403:25 to 404:20

00403:25 THE WITNESS:
00404:01 I did not.
02 EXAMINATION BY MR. DAVID:
03 Q. Do you -- in the course of your
04 monitoring the Macondo well, did you track
05 the cementing of any shoes or -- of any
06 shoes?
07 A. My tracking would be simply to
08 acknowledge or be aware that the cementing
09 had occurred. I didn't get into any detailed
10 evaluation of the cementing process.
11 Q. Were you ever or did you ever
12 become aware of what type of cement was used
13 on the Macondo well?
14 This is before April 20th.
15 A. So when I'm reading the drilling
16 operations report, I would see simply that
17 cement job was pumped, and there might be a
18 detailed list of additives. I wouldn't read
19 that. I might see the density, but that
20 would be about it.

Page 406:08 to 406:11

00406:08 And I'm also going to reference
09 at the same time, just for ease, I think it
10 was DOJ's Tab 18, and that was marked as
11 2653.

Page 407:02 to 408:11

00407:02 Q. Okay. And if you scroll all the
03 way or go all the way to the last page, what
04 is that document?
05 A. This is a plot of pore pressure
06 frac gradient, mud weights, and casing
07 setting depths, actual and potential future
08 casing setting depths.
09 Q. Is that what you referred to
10 earlier as the well plan update?
11 A. That is.
12 Q. How often would you create
13 the -- these well plan updates?
14 A. As needed. And I don't have an
15 exact frequency on that.
16 Q. As needed. So you would be
17 requested to do that?
18 A. I would follow and track the
19 progress of the well as it drilled. And if
20 mud weight changes or leak off tests or shoe
21 tests were taken, I would update. And if
22 someone asked for an update, then I would
23 also revisit and update the -- the plot.
24 Q. So if there were changes in mud
25 weight or -- then you would update your plot?
00408:01 A. There could be multiple changes
02 of update during the times that I would look
03 at this. I wouldn't -- I didn't necessarily
04 go in and update this every time the mud
05 weights were changed. So if there were many
06 mud weight changes when I look at it in the
07 morning, I might update that. But there's no
08 standard time for -- time format or
09 conditions for -- for the updates.
10 Q. So how would you decide when to
11 update?

Page 408:14 to 409:13

00408:14 THE WITNESS:
15 Again, I don't know that there's
16 any general decision process. But when I
17 would look at the morning reports, if I saw
18 that there were multiple updates, I might go
19 ahead and go in and add those updates to the
20 plot.
21 EXAMINATION BY MR. DAVID:
22 Q. I believe yesterday you
23 described how you would create these, and
24 could you tell me again how you -- how would
25 you create these plots?
00409:01 A. The pore pressure, frac
02 gradient, mud weight, smooth dark curves, I

03 took those from a BP PowerPoint presentation
04 that I got from the information that Josh
05 Nichols provided me, which -- which I
06 believed to be a predrill estimate. And
07 the -- the step -- stepwise solid lines
08 would be the -- are the actual mud weights
09 that I recorded for the original well and for
10 the bypass well. And the solid lines on the
11 right, with the triangle representing shoes,
12 would be the actual casing setting depths
13 that occurred in the well.

Page 411:16 to 411:17

00411:16 Q. Okay. Why would you create
17 these plots?

Page 411:21 to 411:23

00411:21 This is the -- the way that I
22 can visualize and describe progress towards
23 the geological objective.

Page 411:25 to 412:22

00411:25 Q. Okay. And how would this
00412:01 describe how you're progressing to the
02 geological objective?
03 A. This describes the relationship
04 between the mud weight and the fracture
05 gradient and gives some idea as to -- an
06 approximate idea of whether or not the well
07 can reach the geological objectives.
08 Q. How would you determine from
09 this graph whether or not the well can reach
10 the geological objectives?
11 A. The -- as I described yesterday,
12 it's automated. It's not an exact predicting
13 tool, but it gives a general idea of how far
14 can be drilled before the mud weight
15 approaches the previous shoe strength with
16 some margin of -- some margin below that
17 shoe -- shoe strength.
18 Q. And why would you provide these
19 plots to others?
20 A. This would give some idea of the
21 chances of reaching the geological objectives
22 which they were interested in.

Page 417:10 to 417:13

00417:10 Q. Let's turn to -- it was marked
11 yesterday as Exhibit 2630. It's PSC Tab 13

12 from yesterday.
13 A. (Complying.)

Page 417:22 to 418:17

00417:22 Q. Okay. And would you scroll down
23 to the very last page ending in 2158.
24 A. Yes.
25 Q. Okay. You're there.
00418:01 Could you tell me what this
02 e-mail is.
03 A. Which e-mail?
04 Q. The -- the last e-mail, I guess,
05 on the page.
06 A. This is an e-mail to Bobby
07 Bodek, asking for an update on the Macondo
08 well.
09 Q. Okay. And would you read the
10 very last sentence from you?
11 A. "Is there any consideration to
12 reducing the mud weight to 14.3 pound per
13 gallon?"
14 Q. I believe yesterday you -- you
15 stated that you were asking this question as
16 a suggestion about mud weight; is that
17 correct?

Page 418:20 to 419:05

00418:20 THE WITNESS:
21 I said this was a -- a
22 suggestion to consider reducing the mud
23 weight.
24 EXAMINATION BY MR. DAVID:
25 Q. Did you ever make any other
00419:01 suggestions to -- to Mr. Bodek?
02 A. I don't recall any other
03 suggestions.
04 Q. When would you have made
05 suggestions to Mr. Bodek?

Page 419:08 to 419:24

00419:08 THE WITNESS:
09 Generally, I wouldn't.
10 EXAMINATION BY MR. DAVID:
11 Q. Okay. But you did in this -- in
12 this case, though; correct?
13 A. That's correct.
14 Q. Okay. And why did you choose to
15 make a suggestion to Mr. Bodek in this case?
16 A. In this case, I was just trying
17 to help out, based on -- they were dealing
18 with ballooning issues, and we had had some

19 experience with ballooning issues in Anadarko
20 operations, and so I offered some comments to
21 that effect.
22 Q. Okay. Now, could you -- I think
23 it's going to be the -- it's on both pages,
24 2157 and 2158.

Page 420:01 to 421:08

00420:01 Q. So could you tell me what the
02 e-mail is that spans 2157 and 2158?
03 A. It's called Macondo update, and
04 it's a recap of a phone call with Bobby
05 Bodek.
06 Q. Okay. And could you then turn
07 to the top of Page 2158.
08 Are you there?
09 A. Yes.
10 Q. And could you read aloud the --
11 the third paragraph?
12 A. Starting with operationally?
13 Q. Yes, sir.
14 A. Operationally, I agree with
15 their plan to pull out of the hole POH,
16 replace the equipment, how they're dealing
17 with the mud losses, and keeping the mud
18 weight at 14.3-pound per gallon, if possible.
19 The big question of whether or not we are
20 through the M55 is for you to answer.
21 Q. Okay. And why did you
22 operationally agree with the plan to pull out
23 of hole -- replace the equipment, the way
24 that they were dealing with the mud losses,
25 and keeping the mud weight at 14.3 pounds per
00421:01 gallon?
02 A. Basically after listening to
03 what Bobby had to say, I was passing on to
04 the asset team, that I agree with the BP
05 plans.
06 Q. Was this based on your previous
07 experience as a drilling engineer on your
08 previous Anadarko wells?

Page 421:11 to 422:19

00421:11 THE WITNESS:
12 Yes.
13 EXAMINATION BY MR. DAVID:
14 Q. Okay.
15 A. I'm sorry. Can you repeat the
16 question? You said based on Anadarko wells?
17 Q. Anadarko -- your previous
18 Anadarko wells?
19 A. Yes.
20 Q. Okay. The last sentence -- the

21 last sentence is: "The big question of
22 whether or not we are through M55 is for you
23 to answer. "

24 Why is that a question for the
25 recipients of this e-mail?

00422:01 A. At that point in the well, the
02 asset team was concerned about whether or not
03 the geological objectives had been achieved.
04 And so, in my discussion with Bobby Bodek, he
05 referenced some discussion on the sands --
06 the objective sands, and I simply point out
07 to the asset team that -- that I'm not
08 qualified or I'm not -- I don't understand
09 what the geological objectives are, you know,
10 how they're officially described, and that's
11 for them to worry about. In other words, I
12 can't tell which sand is which. That's for
13 them to decide.

14 Q. So you would not view it as your
15 role or responsibility to decide that?

16 A. To decide?

17 Q. Whether they were through the
18 M55?

19 A. That's correct.

Page 423:12 to 423:14

00423:12 For any other decisions --
13 operational decisions that were made on the
14 Macondo well, did you agree with them?

Page 423:17 to 423:20

00423:17 THE WITNESS:
18 I'm not aware of all the
19 operational decisions that were made on the
20 well.

Page 423:22 to 423:25

00423:22 Q. From March 18th through the time
23 that you stopped monitoring the well, did you
24 agree with all the operational decisions on
25 the well?

Page 424:03 to 424:08

00424:03 THE WITNESS:
04 My understanding is there are
05 numerous operational decisions. I had no
06 disagreements. I'm not aware of all them,
07 and I didn't have any disagreements with the
08 ones I might have been aware of.

Page 424:22 to 424:24

00424:22 Q. But Anadarko could contact BP if
23 it did disagree with any operational
24 decisions?

Page 425:02 to 425:05

00425:02 THE WITNESS:
03 Our position was that we were
04 not in any kind of decision-making role. So
05 we didn't really --

Page 425:07 to 425:07

00425:07 Q. That's not exactly my question.

Page 425:09 to 425:11

00425:09 Anadarko could contact BP if it
10 did disagree with any of the operational
11 decisions; correct?

Page 425:14 to 425:17

00425:14 THE WITNESS:
15 Anadarko had open lines of
16 communication and could contact BP at any
17 time.

Page 425:19 to 426:03

00425:19 Q. Okay. And for instance, if you
20 did have a suggestion for a different way to
21 operate the well, you could contact BP;
22 correct?

23 MS. WILMS:
24 Object to form.

25 THE WITNESS:
00426:01 As I said, Anadarko could
02 contact BP at any time through the existing
03 channels.

Page 426:05 to 426:11

00426:05 Q. So one of these -- an example of
06 a time that you could contact BP with a
07 suggestion was your e-mail to Mr. Bodek about
08 the 4.3 -- 14.3 mud weight; correct?
09 A. That was a suggestion to
10 consider, and that is an example of putting

11 forth a communication to BP.

Page 440:02 to 440:04

00440:02 Do you know if Anadarko ever
03 communicated with BP about drilling the
04 Macondo well deeper?

Page 440:07 to 440:12

00440:07 THE WITNESS:
08 I understand that there were
09 discussions about the possibility of drilling
10 deeper. That's the limit of my
11 understanding. I wasn't involved in any of
12 those discussions.

Page 441:01 to 441:03

00441:01 Q. Do you know why -- do you know
02 if Anadarko was concerned about calling TD at
03 that particular depth?

Page 441:06 to 441:09

00441:06 THE WITNESS:
07 I understand that Anadarko
08 finally agreed with the decision to -- BP's
09 decision to call TD at that depth.

Page 441:20 to 441:21

00441:20 Q. Why didn't Anadarko initially
21 agree to TD at that depth?

Page 441:24 to 442:05

00441:24 THE WITNESS:
25 In my limited involvement, they
00442:01 were trying to understand possible
02 alternatives, and they just -- just over a
03 few days, I think there was a weekend in
04 there, they were just considering
05 alternatives.

Page 505:01 to 505:01

00505:01 EXAMINATION BY MR. HYMEL:

Page 505:04 to 505:04

00505:04 Richard Hymel, and I represent Transocean.

Page 506:14 to 507:12

00506:14 Q. And one definition of drilling
15 margin is the difference between the pore
16 pressure and the mud weight; is that correct?
17 A. That's correct.
18 Q. Okay. And, of course, you want
19 your mud heavier than your pore pressure?
20 A. That's correct.
21 Q. Another definition of drilling
22 margin is the difference between the mud
23 weight and the fracture gradient; is that
24 correct?
25 A. That's correct.
00507:01 Q. And, of course, you want your
02 mud weight lighter than your fracture
03 gradient; correct?
04 A. That's correct.
05 Q. I want to show you a document.
06 This is a document that -- it's been
07 introduced in evidence already, and I don't
08 have the exhibit number, but it's BP-HZN-MBI
09 00110676. And it is an e-mail from Mark
10 Hafle to Brett Cocalles, dated March 14th,
11 2010, and then an e-mail below that from
12 Brett Cocalles to Mark Hafle and Brian Morel.

Page 507:21 to 508:12

00507:21 Q. Okay. I'm not suggesting that
22 you've seen any of these e-mails, but I want
23 to refer you to the second e-mail towards the
24 middle of the page.
25 And the statement is made in the
00508:01 first sentence: "The MMS regs just say we
02 have to do PIT below each casing, and since
03 we've done one on 16 inch, I don't think we
04 have to do another one. However, our FIT is
05 12.55 ppg, and our TDMW will be 12.1 ppg,
06 which falls just short of the .5 ppg drilling
07 margin.
08 And that's the point I want to
09 refer you to is: Did you have any
10 discussions with anybody at BP about -- about
11 a .5 ppg drilling margin?
12 A. I did not.

Page 508:16 to 508:25

00508:16 Q. Okay. You told us yesterday
17 that the drilling margin set by the operator
18 is usually set forth in the well plan and

19 then approved by the government; is that
20 correct?
21 MS. WILMS:
22 Object to form.
23 THE WITNESS:
24 It's set forth in the
25 application for permit to drill.

Page 509:02 to 509:03

00509:02 Q. Okay.
03 A. And approved by the government.

Page 509:13 to 509:16

00509:13 Q. Okay. Part of what you did for
14 Anadarko was review the daily reports and the
15 pp -- the pore pressure fracture gradient
16 reports; correct?

Page 509:19 to 509:20

00509:19 THE WITNESS:
20 Yes, that's correct.

Page 509:22 to 510:08

00509:22 Q. Okay. Now, when you were
23 reviewing these documents, did you look at
24 them for the pore pressure?
25 A. Sometimes I looked at them for
00510:01 BP's assessment of the pore pressure.
02 Q. Did you look at these documents
03 for the fracture gradient?
04 A. Sometimes I looked at them for
05 understanding of the fracture gradient as BP
06 interpreted it.
07 Q. Did you have an understanding of
08 what BP's intended drilling margin was?

Page 510:11 to 510:12

00510:11 THE WITNESS:
12 I did not.

Page 510:14 to 510:19

00510:14 Q. Okay. And you never asked that
15 question?
16 A. I did not.
17 Q. That question was not relevant
18 to anything that you were involved in?

19 A. No, it was not.

Page 510:25 to 510:25

00510:25 as Exhibit 2658, and counsel's already read

Page 511:07 to 511:11

00511:07 Q. The next sentence in that
08 document says: "Maybe it is close enough for
09 them, but we would have to ask them for this
10 waiver, as they require us to maintain .5
11 ppg, unless a waiver is granted."

Page 511:14 to 511:20

00511:14 Q. Now, I'm assuming he's referring
15 to "us" as the MMS, as who would require them
16 to maintain a certain drilling margin unless
17 a waiver is granted.
18 Are you aware of any such
19 requirement by the MMS that an operator must
20 maintain a .5 ppg drilling margin?

Page 511:23 to 512:09

00511:23 THE WITNESS:
24 My understanding is that we
25 submit or an operator engineer would submit
00512:01 the application for permit to drill, and that
02 is often included as a limit. But we can --
03 an engineer can propose and defend other
04 limits, and that -- what is ultimately valid
05 is what's approved by the MMS.
06 EXAMINATION BY MR. HYMEL:
07 Q. Okay. And when you say "that is
08 often included as a limit," you mean a .5 ppg
09 drilling margin is often the limit?

Page 512:12 to 512:16

00512:12 THE WITNESS:
13 It's common to submit a
14 application for permit to drill with the
15 margin of mud weight to shoe strength of .5
16 pound per gallon.

Page 512:18 to 512:22

00512:18 Q. And is it your experience as a
19 drilling engineer in the Gulf of Mexico,
20 working on deepwater wells, that if you want

21 to go to a drilling margin below .5 ppg, that
22 you must ask the Government for approval?

Page 512:25 to 513:03

00512:25 THE WITNESS:

00513:01 That's a general question. I
02 would -- I can't comment on what BP's
03 practice would be.

Page 513:05 to 513:14

00513:05 Q. Yeah. I'm not asking what BP's
06 practice would be. I want to know what the
07 MMS will approve and what the MMS will not
08 approve.
09 In your experience, as a
10 drilling engineer in the Gulf of Mexico
11 dealing with deepwater wells, has it been
12 your experience that if you want to have a
13 drilling margin below .5 ppg that you have to
14 ask the MMS for a waiver?

Page 513:17 to 513:21

00513:17 THE WITNESS:

18 Again, we submit -- we submit
19 what we would like, and we spell it out
20 clearly what the margin would be, and they
21 approve it or they don't.

Page 513:23 to 514:05

00513:23 Q. Okay. Have you ever submitted
24 a -- an application for permit to drill with
25 a drilling margin less than .5?
00514:01 A. For margins of mud weight for
02 shoe tests, I have.
03 Q. How about mud weight to pore
04 pressure?
05 A. I don't recall that I have.

Page 516:19 to 517:02

00516:19 Q. Okay. Do you remember losses
20 during the drilling of the production zone?
21 A. Yes, I do.
22 Q. Okay. And you remember what mud
23 weights were being used at that time?
24 A. I remember one circumstance.
25 Q. And what was that?
00517:01 A. Drilling with 14.3, raising it
02 to 14.4 and losing circulation.

Page 519:04 to 520:02

00519:04 Q. I want you to refer to Page 56
05 in the Bly Report. Page 56 in the Bly Report
06 is a document that shows the different sands
07 in the Macondo well, and there is a sand
08 that's labeled as brine as 14.1 ppg.
09 Were you aware of that sand
10 during the drilling of the Macondo well?
11 A. Yes, I was.
12 Q. Okay. And did you know whether
13 that sand was brine or hydrocarbons before
14 the incident?
15 A. My understanding was that it was
16 thought to be brine, that based on
17 discussions with Bobby Bodek.
18 Q. Okay. But in any event, this
19 14.1 ppg sand, whatever it was, needed to be
20 taken into consideration when determining the
21 mud weight; correct?
22 MS. WILMS:
23 Object to form.
24 THE WITNESS:
25 That would be BP's decision as
00520:01 to how much impact that would have on the mud
02 weight.

Page 527:18 to 528:03

00527:18 Q. You testified yesterday that at
19 or about the time you took over in March of
20 2010, were you or any others at Anadarko
21 concerned about BP's ability to safely
22 complete drilling of the well, and your
23 response was, "No, we were not concerned."
24 My question to you today is:
25 Knowing everything you know about this well
00528:01 now, anything you learned since the incident,
02 does anything that BP did with regard to this
03 well cause you any concern now in hindsight?

Page 528:06 to 529:03

00528:06 THE WITNESS:
07 Yes.
08 EXAMINATION BY MR. HYMEL:
09 Q. And tell me about that -- those
10 concerns.
11 A. As I mentioned yesterday, I have
12 concerns about the negative testing and fluid
13 displacement practices during the
14 abandonment.
15 Q. All right. And tell me what

16 concerns you have specifically about the
17 negative-pressure test?
18 A. My statement yesterday was that
19 if there were anomalies, that those anomalies
20 should be resolved before continuing
21 operations.
22 Q. Should be resolved by whom?
23 A. Those in charge on the rig.
24 Q. And your specific concerns about
25 the fluid displacement practices?
00529:01 A. The fluid displacement practices
02 should be monitored in a way that ensure
03 there's no influx into the well.

Page 532:13 to 532:17

00532:13 Q. Going back to the
14 negative-pressure test, is it standard
15 industry practice to displace mud to over
16 3,000 feet below the mud line while doing a
17 temporary abandonment procedure?

Page 532:20 to 532:24

00532:20 MS. WILMS:
21 Object to form.
22 THE WITNESS:
23 I'm not aware of any previous
24 attempts to do that.

Page 533:01 to 533:05

00533:01 Q. Okay. You agree with me -- do
02 you agree with me that the purpose of a
03 negative-pressure test is to leave the well
04 -- is to test the well in the condition in
05 which you intend to leave it?

Page 533:10 to 533:11

00533:10 THE WITNESS:
11 Yes, I agree with that.

Page 534:07 to 534:11

00534:07 Q. Do you understand, though,
08 either before or after the incident, that BP
09 was going to leave the well with a surface
10 plug -- surface cement plug at approximately
11 83 -- 8,367 feet?

Page 534:14 to 534:16

00534:14 THE WITNESS:

15 I don't recall the exact depth.
16 I know that it was deep in the well.

Page 535:09 to 535:11

00535:09 Q. Is it standard industry practice
10 to use lost control material as a spacer when
11 performing a negative-pressure test?

Page 535:14 to 535:16

00535:14 THE WITNESS:

15 I'm not aware of any instances
16 where that has occurred aside from this.

Page 535:18 to 536:21

00535:18 Q. So then answer to my next
19 question is: Have you ever used lost control
20 material as a spacer in a negative-pressure
21 test is no?

22 A. No.

23 Q. No, meaning correct?

24 A. Yes. No, I have not used LCM as
25 a spacer in displacement.

00536:01 Q. And similarly, you've never
02 displaced mud to over 3,000 feet below the
03 mud line while doing a TA procedure?

04 A. I don't recall ever doing that.

05 Q. You were asked some questions
06 about centralizers yesterday. And the
07 question I went to ask you is: There was an
08 April 18th, OptiCem report issued by
09 Halliburton that addressed the number of
10 centralizers that should have been used with
11 the production casing with regard to the
12 cement.

13 Have -- did you ever see a copy
14 of that April 18th OptiCem report before
15 April 20th, 2010?

16 A. No, I did not.

17 Q. Did anybody ever tell you what
18 the results of that April 18th OptiCem
19 report -- on April 18th, 2010, OptiCem report
20 were before April 20, 2010?

21 A. No, they did not.

Page 538:11 to 538:14

00538:11 Q. Are you aware that there were
12 nine attempts to convert the float collar on
13 the 9 and 7/8ths by 7 production casing for

14 the Macondo well?

Page 538:17 to 538:23

00538:17 THE WITNESS:

18 At what time?

19 EXAMINATION BY MR. HYMEL:

20 Q. After the casing was run and
21 when circulation was being attempted through
22 the -- through the -- the casing through the
23 float collar?

Page 539:01 to 539:06

00539:01 THE WITNESS:

02 At what point?

03 EXAMINATION BY MR. HYMEL:

04 Q. Oh, I'm sorry. Before April 20,
05 2010?

06 A. No, I was not.

Page 540:03 to 540:09

00540:03 What is the purpose for a

04 bottoms up?

05 A. The purpose of a bottoms up.

06 There are many types of bottoms ups. The
07 purpose of a bottom up would be to circulate
08 the fluid on the bottom of the hole to the
09 surface.

Page 541:23 to 542:06

00541:23 Q. Do you agree -- do you agree
24 that it's a good practice to perform a full
25 bottoms up before a cement job?

00542:01 MS. WILMS:

02 Object to form.

03 THE WITNESS:

04 That depends on the -- the
05 circumstances. But in general, it is good
06 practice.

Page 542:08 to 542:10

00542:08 Q. Have you ever run a cement job
09 without performing a full bottoms up within
10 24 hours of a cement job?

Page 542:13 to 542:15

00542:13 THE WITNESS:

14 In other words, are you saying a
15 full bottoms up before the cement job?

Page 542:17 to 542:24

00542:17 Q. That's correct.
18 A. Yes.
19 Q. Are you aware that the casing
20 cement job -- strike that.
21 Are you aware that the cement
22 job run on the 9 and 7/8ths by 7 production
23 casing was run without putting a spacer in
24 the rathole?

Page 543:02 to 543:10

00543:02 THE WITNESS:
03 As of what time?
04 EXAMINATION BY MR. HYMEL:
05 Q. April 20th, 2010?
06 A. I was not aware of that.
07 Q. Okay. Do you agree that the
08 failure to place a spacer in the rathole
09 before a cement job can cause the cement to
10 get contaminated with the mud in the rathole?

Page 543:13 to 543:15

00543:13 THE WITNESS:
14 I am aware that that is a
15 possibility.

Page 543:17 to 543:22

00543:17 Q. Have you ever run a cement job
18 without placing a spacer in the rathole?
19 A. I've done so many cement jobs, I
20 suspect that's the case. But almost always
21 I've put some sort of heavy fluid in the
22 rathole.

Page 546:03 to 546:14

00546:03 Q. Sure. Do you agree that one may
04 not be able to confirm that the float collar
05 converted with a back pressure test if the
06 cement does not provide sufficient U-tube
07 pressure to cause the cement to flow back
08 into the shoe track?
09 MS. WILMS:
10 Object to form.
11 THE WITNESS:
12 When you say float collar

13 converted, are you saying -- are the floats
14 holding?

Page 546:16 to 547:05

00546:16 Q. That's correct.
17 A. Yeah. I agree that it may be
18 difficult to determine if the floats are
19 holding with very little differential
20 pressure.
21 Q. Have you ever run a cement job
22 where there was very little differential
23 pressure so that you really couldn't tell
24 whether or not the floats were holding or
25 not?
00547:01 MS. WILMS:
02 Object to form.
03 THE WITNESS:
04 I don't recall ever doing a
05 cement job like that.

Page 547:24 to 548:12

00547:24 Q. Okay. If you have a situation
25 where there's not sufficient U-tube pressure
00548:01 for the cement to flow back up the shoe
02 track, and there's not sufficient pressure,
03 therefore, to confirm that the floats are
04 holding -- the float valves are holding, is
05 that a condition that would concern you?
06 MS. WILMS:
07 Object to form.
08 THE WITNESS:
09 I've never been in that
10 situation. I would -- I would take -- I
11 wouldn't use the word "concern," but I would
12 take it into account in the operations.

Page 554:03 to 554:11

00554:03 Q. Sure. Okay. And I think this
04 question's been asked again -- before, but I
05 just want to just make sure I understand.
06 I know you were not watching the
07 realtime data on April 20th of 2010, but are
08 you aware of anybody that you've heard of or
09 talked to who said they were watching the
10 realtime data on April 20th, 2010, at any
11 time during that date?

Page 554:14 to 554:24

00554:14 THE WITNESS:

07 times, looked at the LWD data.
08 I believe that Paul Chandler has
09 looked at the LWD data to watch the progress
10 drilling -- and look at the LWD data for the
11 productive interval.
12 EXAMINATION BY MR. HARTLEY:
13 Q. That's from a geological
14 perspective?
15 A. From a geological perspective.

Page 557:21 to 557:23

00557:21 Q. Do you recall whether Forrest
22 Burton had access to InSite Anywhere?
23 A. My recollection is that he did.

Page 558:02 to 558:03

00558:02 Q. Did Derek Folger have access?
03 A. My recollection is that he did.

Page 558:11 to 558:19

00558:11 Q. Now, it's my understanding, and
12 correct me if I'm wrong, that you and others
13 with Anadarko had access to both WellSpace
14 and InSite Anywhere for various periods
15 during the Macondo well?
16 A. That's correct.
17 Q. I believe we looked at an e-mail
18 yesterday, that you gained access on or about
19 April 5th --

Page 558:21 to 558:23

00558:21 Q. -- to InSite Anywhere?
22 A. To InSite Anywhere, that's
23 correct.

Page 559:19 to 560:03

00559:19 Q. You did not access InSite
20 Anywhere to monitor ongoing operations on a
21 realtime basis?
22 A. I did not.
23 Q. Do you know whether anybody at
24 Anadarko did?
25 A. I don't know that for sure.
00560:01 Q. Okay. Do you suspect that
02 individuals may have?
03 A. I suspect --

Page 560:06 to 560:10

00560:06 THE WITNESS:

07 I suspect that the geologists
08 very were interested in the pay sand and may
09 have been watching the zone as they
10 drilled -- as BP drilled through it.

Page 560:22 to 561:04

00560:22 Q. Anadarko made the decision as to
23 which employees to grant access to InSite
24 Anywhere on the Macondo well?

25 A. I'm not sure exactly sure how
00561:01 the decision process went, but Anadarko had
02 preferred people that they wanted to have
03 access, and then they got approval from BP to
04 gain that access.

Page 561:22 to 562:13

00561:22 Q. Once those individuals were
23 approved and had access to InSite Anywhere,
24 are you aware of any restrictions on the data
25 to which they could access through that

00562:01 program?

02 A. I'm not aware of any
03 restrictions.

04 Q. Are you aware of any
05 restrictions on certain well operations that
06 they could or could not monitor?

07 A. I'm not aware of those
08 restrictions.

09 Q. Are you aware of any
10 restrictions on the time of day to which they
11 could gain access?

12 A. I'm not aware of any
13 restrictions on that.

Page 563:01 to 563:13

00563:01 Q. Do you understand there to be --
02 to have been any limits on the ability of
03 Anadarko employees to monitor well operations
04 for the Macondo well at any time after
05 March 18th, 2010, to April 20th, 2010?

06 A. I'm not aware of any
07 limitations.

08 Q. Similarly, with respect to
09 WellSpace, I understand that the difference
10 between the two is WellSpace is strictly a
11 static drop box? Is that a fair
12 characterization?

13 A. That's my understanding.

Page 563:19 to 564:11

00563:19 Q. I think you testified that BP
20 would periodically upload documents to
21 WellSpace for you and others to access?
22 A. That's correct.
23 Q. Are you familiar with any
24 restrictions on your ability to access
25 materials uploaded into WellSpace?
00564:01 A. I'm -- I don't recall any
02 restrictions.
03 Q. Are you familiar with any
04 restrictions placed on the access of other
05 Anadarko employees who had access to
06 WellSpace?
07 A. I'm not.
08 Q. Are you aware of any
09 restrictions on the type of data Anadarko
10 employees could review with respect to the
11 Macondo well through WellSpace?

Page 564:14 to 564:15

00564:14 THE WITNESS:
15 I'm not aware.

Page 564:17 to 565:09

00564:17 Q. I'm going to mark as
18 Exhibit 2662, which is Tab 32. This is a
19 March 11th e-mail from Mr. Bodek to a number
20 of individuals, and you're copied on the
21 e-mail.
22 (Exhibit No. 2662 marked for
23 identification.)
24 EXAMINATION BY MR. HARTLEY:
25 Q. Do you see that?
00565:01 A. Yes, I do.
02 Q. In the last line of Mr. Bodek's
03 e-mail, it indicates: "R/W access to all
04 except," single quote, "'BP only,'" end
05 single quote, "folder."
06 Do you see that?
07 A. Yes, I do.
08 Q. Are you familiar with what the
09 "BP only" folder was in WellSpace?

Page 565:12 to 565:13

00565:12 THE WITNESS:
13 I'm not.

Page 565:15 to 565:23

00565:15 Q. After receiving this e-mail did
16 you ask anybody what the BP only folder
17 contained?
18 A. I did not.
19 Q. In terms of your monitoring the
20 operations on the Macondo well to report to
21 the asset team in the morning meetings, did
22 you have any concerns about the information
23 that was or was not available to you --

Page 566:02 to 566:02

00566:02 Q. -- through WellSpace?

Page 566:05 to 566:17

00566:05 THE WITNESS:
06 As I stated earlier, there were
07 times when the daily operating reports would
08 come in either later in the day or after my
09 morning meeting or may be some days late. So
10 that would be my only concern with the
11 transmission of data.
12 EXAMINATION BY MR. HARTLEY:
13 Q. Aside from the information
14 perhaps not being uploaded to WellSpace at a
15 time that was convenient to you, you weren't
16 concerned about certain information being off
17 limits to your access?

Page 566:21 to 566:22

00566:21 THE WITNESS:
22 No, I was not.

Page 567:18 to 568:20

00567:18 Q. Okay. Let me ask it a different
19 way then. Did you access either WellSpace or
20 InSite Anywhere on April 20th, as far as you
21 can remember?
22 A. I believe I accessed WellSpace
23 on the 20th.
24 Q. Do you recall the purpose for
25 that access?
00568:01 A. It would have been my normal
02 mode of being prepared for the morning
03 drilling meeting.
04 Q. Looking at the daily operations
05 reports, the pp/fg reports to provide your
06 30-second update?

07 A. In that particular case, I
08 believe I accessed a morning drilling report
09 from a previous day and a mud log report.

10 Q. What information is demonstrated
11 on those mud log reports?

12 A. For my purposes, there's a very
13 short summary of what occurred during the
14 operations over the time of that report.

15 Q. How does that differ from the
16 information about operations contained on the
17 daily operations report?

18 A. It's basically a very short
19 summary; whereas, the daily operations
20 reports are very detailed.

Page 572:13 to 572:18

00572:13 Q. Do you know whether in
14 monitoring the Macondo well Anadarko assigned
15 any employee to monitor realtime data
16 transmissions?

17 A. I'm not aware of any assignments
18 to that effect.

Page 576:09 to 576:19

00576:09 Q. At any time between March 18th
10 and April 20th, 2010, did you interact with
11 Halliburton employees on the rig?

12 A. I did not.

13 Q. Do you recall any correspondence
14 between yourself and Halliburton employees
15 about drilling operations, cement job, or
16 anything relating to the T&A procedure?

17 A. On the Macondo well?

18 Q. On the Macondo well.

19 A. I do not.

Page 577:17 to 578:09

00577:17 I think you said you were
18 working in this time frame between March and
19 April of 2010 about 60 to 70 hours a week?

20 A. I forget the time frame that was
21 discussed. I thought that time frame was
22 nearer to the end of that period. Across
23 that entire period, it's probably more like
24 40 to 60 hours on average.

25 Q. And 3 to 4 hours a week of that
00578:01 was on the Macondo well?

02 A. That's correct.

03 Q. What did you do to monitor the
04 drilling operations or any operations on the
05 well other than a daily check-in of the

06 WellSpace material?
07 A. For the Macondo --
08 MS. WILMS:
09 Object to the form.

Page 578:11 to 579:21

00578:11 Q. For the Macondo well.
12 A. For the Macondo.
13 Early on, I was getting
14 familiar. So I would spend time downloading
15 some of the drilling reports, daily operating
16 reports, to review the mud weights and
17 leak-off tests -- shoe tests.
18 And at some point in there, I
19 think I previously stated that I looked at
20 some of the reports related to the kicks as
21 referred to as March 8th, to gain information
22 on the pressures related to that kick, so as
23 to calibrate my -- my well plan update, and
24 that's what I recall.
25 Q. When you took over for
00579:01 Mr. Nichols on March 18th, I think you said
02 Mr. Pfister did not give you specific
03 instructions as to what your job was with
04 respect to the Macondo well; is that right?
05 A. Other than --
06 Q. Do what Mr. Nichols was doing?
07 A. Correct.
08 Q. When you talked to Mr. Nichols,
09 what did he tell you he was doing?
10 A. He told me about the morning
11 update at the drilling meetings. He said
12 that he would respond to the asset team
13 questions as needed.
14 Q. Was there anybody with Anadarko
15 other than you as of March 18th, 2010, who
16 was responsible for monitoring the well --
17 Macondo well from a drilling perspective?
18 MS. WILMS:
19 Object to form.
20 THE WITNESS:
21 No, there wasn't.

Page 581:15 to 581:18

00581:15 Q. In Exhibit 613 in front of you,
16 if you would, turn to the page with the
17 numbers in the upper right-hand corner that
18 end in 574.

Page 581:22 to 582:04

00581:22 Q. The top three entries on this

23 page that ends 574 indicate that Dawn Peyton
24 accessed WellSpace on April 19th, 2010,
25 shortly after 9 a.m. Do you see that?
00582:01 A. Yes, I do.
02 Q. Looks like she downloaded
03 several files. Do you see that?
04 A. Yes, I do.

Page 582:13 to 582:20

00582:13 Q. I believe you said that she was
14 in the Anadarko's reservoir analysis group?
15 A. Reservoir engineering group --
16 Q. Reservoir engineering.
17 A. -- is my understanding.
18 Q. What role was she playing in the
19 reservoir engineering group on the Macondo
20 well?

Page 582:24 to 583:03

00582:24 My limited understanding of her
25 role is that she was interested in the casing
00583:01 size and the tubing size that might be run in
02 that well, and that's all I know about her
03 involvement.

Page 584:10 to 584:13

00584:10 Q. I'm going to hand you what's
11 been marked as Exhibit 2663. It's Tab 32.
12 (Exhibit No. 2663 marked for
13 identification.)

Page 584:22 to 585:17

00584:22 Q. In the top e-mail on the first
23 page of Exhibit 2663, the last paragraph, you
24 indicate: "I am reviewing the previous kick
25 and shoe test data to see where they are at
00585:01 on the pp/fg estimates and how many more
02 casing strings may be required to reach the
03 objective."
04 Did I read that correctly?
05 A. You did.
06 Q. What were you reviewing about
07 the previous kick on March 19th of 2010?
08 A. When a kick is taken off and
09 there is the determination of a known
10 formation pressure. That single known
11 pressure or pressure gradient could then be
12 used to place on my -- on my well plan update
13 as kind of a calibration point for the

14 predicted pore pressure.
15 Q. So your analysis of the previous
16 kick was related primarily to pore pressure
17 frac gradient issues?

Page 585:20 to 587:05

00585:20 THE WITNESS:

21 It was primarily related to
22 the -- that single value of pressure or
23 pressure gradient that can be deduced from
24 that kick.

25 EXAMINATION BY MR. HARTLEY:

00586:01 Q. And why were you doing that on
02 March 19th?

03 A. That's when I began catching up
04 and getting familiar with -- that's just when
05 I was starting to get familiar with what the
06 well looked like and how I'd be tracking it.
07 So I was kind of setting up to be prepared to
08 answer questions for the asset team.

09 Q. Did you review any information
10 about how the kick was monitored, handled,
11 responded to at that time?

12 A. I read through the morning
13 reports, but I didn't evaluate how well they
14 killed the kick.

15 Q. Did you review any information
16 on the March 19th or at any time from there
17 until April 20th about the drilling crew's
18 response to that kick on March 8th?

19 A. I did not.

20 Q. Did you ever review any
21 information about lessons learned from that
22 kick?

23 A. I don't recall reviewing any
24 lessons learned from the kick.

25 Q. I think you testified yesterday
00587:01 that when you met with the Gulf of Mexico
02 drilling team in those morning meetings, they
03 did not ask you many questions; is that
04 right?

05 A. That's correct --

Page 587:11 to 587:12

00587:11 Q. Did the asset team ask you
12 questions about operations on the well?

Page 587:15 to 588:01

00587:15 THE WITNESS:

16 They did not ask about specific
17 operations. It was more semantics, I guess.

18 They'd ask, what's going on? What are they
19 doing? To get an explanation for things that
20 would interrupt the drilling progress.
21 In other words, they -- they
22 liked to watch what's happening on the --
23 perhaps on InSite Anywhere as the drilling
24 progresses. And any interruptions to that,
25 they'll ask, you know, what's going on? So I
00588:01 help clarify when I can.

Page 588:03 to 588:07

00588:03 Q. Other than asking you questions
04 relating to interruptions in progress, do you
05 recall any other specific questions the asset
06 team asked you about operations on the
07 Macondo well?

Page 588:11 to 588:12

00588:11 THE WITNESS:
12 No, I don't.

Page 588:14 to 588:16

00588:14 Q. Was the asset team separate and
15 apart from you monitoring the well through
16 InSite Anywhere?

Page 588:19 to 588:21

00588:19 THE WITNESS:
20 I don't know that for sure, but
21 I assume that they were.

Page 588:23 to 589:07

00588:23 Q. Why do you make that assumption?
24 A. They -- they follow the logs.
25 The -- the geologists like to follow the
00589:01 logs.
02 Q. By logs, what are you referring
03 to?
04 A. The LWD -- the LWD logs that
05 show the resistivity and the gamma ray that
06 can show sands and shales so they can track
07 their correlations.

Page 590:20 to 591:01

00590:20 Q. I'm going to hand you what's
21 previously been marked as 1911. This is an

22 e-mail from Mr. Bodek to Paul Chandler on
23 April 9th, 2010.
24 And you are not copied on this
25 one; is that right?
00591:01 A. That's correct.

Page 592:02 to 592:09

00592:02 Q. Towards the end of that line,
03 Mr. Bodek writes: "We've been aggressively
04 fighting losses."
05 Did I read that correctly?
06 A. That's correct.
07 Q. In April 9th of 2010, were you
08 aware that BP had been aggressively fighting
09 losses on the Macondo well?

Page 592:12 to 592:19

00592:12 THE WITNESS:
13 The dates are a bit mixed up.
14 What I recall is that they were circulating
15 at some point with 14.3-pound per gallon mud,
16 tries to raise -- tried to raise it to 14.4
17 and lost returns. So that's what I know
18 about -- about what may have happened during
19 this time period.

Page 592:21 to 593:06

00592:21 Q. From the time you started
22 monitoring operations on March 18th, 2010,
23 through your access to WellSpace, InSite
24 Anywhere, or conversations with Mr. Bodek or
25 others, were you aware of loss returns at
00593:01 periodic times through that time frame?
02 MS. WILMS:
03 Object to form.
04 THE WITNESS:
05 Can I clarify that you say
06 March 18th through --

Page 593:08 to 593:17

00593:08 Q. Yes, sir?
09 A. Yes, I am.
10 Q. So through that time period
11 while you were assigned to the well, you were
12 aware that there were periodic episodes of
13 lost returns?
14 A. There were some lost -- lost
15 circulation instances.
16 Q. You were aware of prior well

17 control events on this Macondo well?

Page 593:20 to 593:25

00593:20 THE WITNESS:

21 Yes.

22 EXAMINATION BY MR. HARTLEY:

23 Q. You were aware of the March 8th
24 kick?

25 A. Yes.

Page 594:11 to 594:24

00594:11 Q. Prior to April 20th, 2010, were
12 you aware of a kick on the Macondo well in
13 early April of 2010?

14 A. A kick in early April?

15 What I recall is the well
16 flowed, they shut it in, and they ended up
17 monitoring and diagnosing. And I believe
18 they returned to drilling or returned to
19 circulating with the same mud weight. That's
20 what I recall.

21 Q. Did you have any concerns about
22 this well, given these various loss
23 circulation events and well control
24 incidents?

Page 595:02 to 595:06

00595:02 THE WITNESS:

03 I didn't have any concerns.

04 EXAMINATION BY MR. HARTLEY:

05 Q. Did it not raise any issues in
06 your mind about safety or wellbore integrity?

Page 595:09 to 595:14

00595:09 THE WITNESS:

10 It didn't -- it did not raise
11 any concerns on safety.

12 EXAMINATION BY MR. HARTLEY:

13 Q. It did raise concerns with
14 respect to wellbore integrity?

Page 595:17 to 595:19

00595:17 THE WITNESS:

18 By definition, lost circulation
19 is an impact on wellbore integrity.

Page 595:21 to 595:22

00595:21 Q. Were you concerned about the
22 ability to reach TD?

Page 595:25 to 596:02

00595:25 THE WITNESS:
00596:01 I wasn't concerned, but we were
02 tracking the progress towards TD.

Page 596:04 to 596:13

00596:04 Q. You certainly had an interest in
05 reaching TD?
06 A. We had an interest in reaching
07 TD.
08 Q. I hand you what's been
09 previously marked as Exhibit 1255.
10 And this is an e-mail from you
11 to Mr. O'Donnell and others on April 9th of
12 2010; is that correct?
13 A. That's correct.

Page 597:13 to 597:15

00597:13 Q. Do you recall Mr. Bodek calling
14 you and telling you that BP was going to call
15 TD at 18360?

Page 597:19 to 597:20

00597:19 THE WITNESS:
20 He said that they had called TD.

Page 597:22 to 598:02

00597:22 Q. Did he tell you it was at 18360?
23 A. Yes, he did. This is a
24 transcription of what I heard him say.
25 Q. So you -- so you typed precisely
00598:01 what he said, that they drilled the head to
02 18360 and called this final TD?

Page 598:05 to 598:07

00598:05 THE WITNESS:
06 This is my recollection of
07 what -- what he said during our phone call.

Page 598:09 to 598:14

00598:09 Q. Did he explain in the context of

10 that phone call why they called TD?
11 A. He said they got through the
12 zone with enough rathole so that we could --
13 so that they could get the wireline logs
14 through the pay zone.

Page 598:23 to 599:05

00598:23 EXAMINATION BY MR. HARTLEY:

24 Q. When he -- in your last line you
25 say: "He says they saw some abnormal
00599:01 resistivity in the small sand just below the
02 pay sand that may indicate where they were
03 losing returns."
04 Did I read that correctly?
05 A. You did.

Page 599:13 to 599:15

00599:13 Q. Did he explain what he meant in
14 that conversation about abnormal resistivity?
15 A. I don't recall --

Page 599:19 to 599:20

00599:19 I don't recall that he explained
20 that.

Page 599:22 to 599:24

00599:22 Q. Did you have an understanding of
23 what abnormal resistivity may have been when
24 he told you that?

Page 600:05 to 600:07

00600:05 I have an understanding of how
06 abnormal resistivity can be an indication of
07 lost circulation location.

Page 600:09 to 600:15

00600:09 Q. What is abnormal resistivity?
10 A. Abnormal resistivity could be
11 many different things. But my understanding
12 of what this could be is that -- and he
13 didn't explain all these details. But it
14 could be a change -- an increase in
15 resistivity caused by the synthetic mud.

Page 600:24 to 601:06

00600:24 Q. Well, now, you said that
25 abnormal resistivity can mean many different
00601:01 things; right?
02 A. Correct.
03 Q. Did you ask him what he meant by
04 it?
05 A. I did not.
06 Q. Why not?

Page 601:10 to 601:16

00601:10 The well was -- well was
11 called -- TD was called, and as a matter of
12 interest, he said that there could be a lost
13 zone near the base of the pay sand. He's
14 letting me know that there -- that we
15 might -- that they might have a lost zone
16 identified there.

Page 602:02 to 602:05

00602:02 Q. At this time, Anadarko still had
03 an interest in -- in drilling deeper than
04 18360 to explore that deeper -- deeper
05 potential pay; is that right?

Page 602:08 to 602:11

00602:08 THE WITNESS:
09 I don't know that I would call
10 it an interest. They were considering
11 alternatives is my understanding.

Page 602:22 to 603:01

00602:22 Q. And you don't remember anything
23 in that conversation with Mr. Bodek on
24 April 9th, 2010, him explaining what that
25 abnormal resistivity was?
00603:01 A. I don't recall details.

Page 603:09 to 603:14

00603:09 Q. I've handed you what's been
10 previously marked Exhibit 1257. This is an
11 e-mail from Mr. Bodek to Mr. Beirne and
12 others on April 13th, 2010.
13 You are not on; is that right?
14 A. That's correct.

Page 603:20 to 604:06

00603:20 Q. Have you had an opportunity to
21 read through it?
22 A. I read through it. Can you
23 repeat the question?
24 Q. Yes, I'll do that.
25 Now that you've had an
00604:01 opportunity to review Mr. Bodek's e-mail in
02 Exhibit 1257, is the subject matter of this
03 e-mail consistent with his conversation with
04 you on the telephone on April 9th, 2010,
05 about BP's decision to call total depth at
06 18,360?

Page 604:10 to 604:12

00604:10 It -- it seems consistent to me.
11 I don't see any reference in this e-mail
12 about this abnormal resistivity.

Page 604:14 to 604:17

00604:14 Q. Did -- in the conversation with
15 Mr. Bodek on April 9th, did he convey to you
16 the substance of the information contained in
17 his e-mail on -- in Exhibit 1257?

Page 604:20 to 605:13

00604:20 THE WITNESS:
21 There's a great deal of
22 substance and detail in t his e-mail that's
23 not in -- in this e-mail or in the discussion
24 that we had.
25 EXAMINATION BY MR. HARTLEY:
00605:01 Q. Okay. On Exhibit 1257, about
02 two-thirds of the way down, Mr. Bodek writes:
03 It appeared as if we had minimal, if any,
04 drilling margin.
05 Do you see that?
06 A. Okay. Yes.
07 Q. Did he convey that to you on
08 April 9th, 2010?
09 A. I don't recall him conveying
10 that to me.
11 Q. But by that point, you knew that
12 there was minimal, if any, drilling margin on
13 the Macondo well?

Page 605:17 to 605:18

00605:17 Q. From your reviews of the pp/fg
18 reports and other information?

Page 605:21 to 605:25

00605:21 THE WITNESS:
22 The word "minimal" is a relative
23 number. I -- I was aware of the losses, and
24 I was aware of the mud weight. That's all I
25 can say.

Page 606:02 to 606:04

00606:02 Q. You may disagree referring to it
03 as a minimal margin, but you were certainly
04 aware of what the margins were at that point?

Page 606:07 to 606:15

00606:07 THE WITNESS:
08 As I said, I knew what the
09 surface mud weight was, and I knew that they
10 had had some lost circulation when the mud
11 weight was raised from 14.3 to 14.4. How
12 that translates into a quantitative margin
13 would require me to know a lot of the
14 details -- these types of details and more
15 before I would have that understanding.

Page 606:17 to 607:05

00606:17 Q. In your daily review of the
18 morning reports when you accessed WellSpace,
19 it included the information about the mud
20 weights and pore pressures; didn't it?
21 A. The mud weights are certainly in
22 there, and there are various references to
23 pore pressures.
24 Q. And you prepared the charts you
25 worked on, you testified about earlier today
00607:01 and yesterday, that demonstrated the curved
02 lines about pore pressure, frac gradient, and
03 mud weights in there; is that right?
04 THE WITNESS:
05 Yes.

Page 607:09 to 607:14

00607:09 Q. So you were aware on -- at least
10 on a regular basis, from March 18th through
11 April 20th, 2010, what those margins were?
12 Whether they're characterized as
13 minimal or not, you were certainly aware of
14 where they fell?

Page 607:19 to 607:21

00607:19 The data that's on my well plan
20 update is -- is very sparse compared to this
21 level of detail. I mean, there's just --

Page 607:23 to 608:17

00607:23 Q. On the third-to-last line of
24 this e-mail, Mr. Bodek writes: Drilling
25 ahead any further would unnecessarily
00608:01 jeopardize the wellbore.
02 Do you see that sentence?
03 A. Yes, I do.
04 Q. Did he tell you about that in
05 his call on April 9th, 2010?
06 A. I don't recall discussing that
07 with him.
08 Q. Did he tell you that at any
09 point between April 9th of 2010 and
10 April 20th of 2010?
11 A. I don't recall him telling me
12 that.
13 Q. Did you hear from anybody at
14 Anadarko that BP had conveyed that
15 information to them?
16 A. To --
17 Q. To anybody with Anadarko?

Page 608:20 to 609:18

00608:20 THE WITNESS:
21 I did not hear that.
22 EXAMINATION BY MR. HARTLEY:
23 Q. The e-mail continues: "Having a
24 14.15 ppg exposed sand and taking losses in a
25 12.6 ppg reservoir in the same hole section
00609:01 had forced our hand. We had simply run out
02 of drilling margin. At this point, it became
03 a well integrity and safety issue. TD was
04 called at 18,360 feet," parens, "MD," close
05 parens.
06 Did I read those last three
07 sentences correctly?
08 A. Yes, you did.
09 Q. Did Mr. Bodek convey this
10 information to you in his phone call with you
11 on April 9th, 2010?
12 A. He didn't convey anything to me
13 regarding a safety issue, no.
14 Q. Did he convey the information
15 contained in these sentences about running
16 out of drilling margin or well integrity
17 issue?
18 A. I don't --

Page 609:21 to 610:02

00609:21 THE WITNESS:
22 I don't recall that he did.
23 EXAMINATION BY MR. HARTLEY:
24 Q. After that April 9th, 2010,
25 phone call, id he convey that sort of
00610:01 information to you prior to April 20th of
02 2010?

Page 610:05 to 610:06

00610:05 THE WITNESS:
06 I don't recall that he did.

Page 611:10 to 611:11

00611:10 (Exhibit No. 2664 marked for
11 identification.)

Page 611:13 to 612:13

00611:13 Q. In the middle of the page is an
14 e-mail from you to Mr. O'Donnell and others
15 dated April 9th at 3:16 p.m.
16 Do you see that?
17 A. Yes, I do.
18 Q. In the first paragraph of that
19 e-mail, the last sentence reads: "They
20 clearly cannot tolerate any well control
21 incident based on their recent mud losses."
22 Did I read that correctly?
23 A. Yes, you did.
24 Q. What were the recent mud losses
25 to which you're referring in this e-mail to
00612:01 Mr. O'Donnell and others?
02 A. When they drilled to 18,260, and
03 tried to raise the mud weight from 14.3 to
04 14.4, they lost circulation.
05 Q. And what did you mean that they
06 clearly can not tolerate any well control
07 incident?
08 A. In this case, the well control
09 incident would be some sort of further
10 increase -- something that would require a
11 further increase in mud weight.
12 Q. Any sort of kick requiring
13 higher mud weight to suppress?

Page 612:16 to 612:19

00612:16 THE WITNESS:

17 A kick -- a kick would be one
18 way that the mud weight could -- you know,
19 would require an increase in mud weight.

Page 613:14 to 614:17

00613:14 Q. I'm going to hand you what's
15 been previously marked as Exhibit 1929. It's
16 a series of e-mails between April 9th and
17 April 12th, 2010.

18 I'm going to direct your
19 attention to the e-mail that starts at the
20 bottom of the first page from Mr. Hollek to
21 Mr. O'Donnell on April 12th at 9:10 a.m.

22 Do you see that e-mail?

23 A. Yes, I do.

24 Q. Mr. Hollek writes: "With what
25 we have out in the well and a commitment to
00614:01 run pipe at this point, why would BP not be
02 curious to drill below this point since it is
03 not in its well. It doesn't appear there's a
04 lot to lose, and it would help design the
05 next well. I guess I could better understand
06 if we were looking at a minimal pay section."

07 Did I read that correctly?

08 A. Yes, did you.

09 Q. Now, you had attended the
10 meeting on April 12th to discuss the issue of
11 BP calling total depth and what -- what
12 Anadarko's concerns, interests, curiosities
13 were; is that right?

14 THE WITNESS:

15 Yes.

16 MS. WILMS:

17 Object to form.

Page 615:10 to 615:13

00615:10 Q. Okay. Were you involved in any
11 discussions with other employees of Anadarko
12 about the potential pay sections below
13 18,360?

Page 615:16 to 615:25

00615:16 THE WITNESS:

17 I knew generally that they had
18 interest in exploring deeper, but we didn't
19 get involved in specific pay sands.

20 EXAMINATION BY MR. HARTLEY:

21 Q. Okay. In your April 12th, 2010,
22 meeting, they discussed this interest in
23 potentially drilling deeper?

24 A. They discussed the -- possible

25 interest in that and possible alternatives.

Page 616:11 to 616:19

00616:11 Q. I'm going to hand you what's
12 been previously marked as 1592, more for
13 context than anything else. This is the
14 e-mail you were shown yesterday with the
15 meeting notice for the April 12th meeting.
16 Do you recall that?
17 A. Yes, I do.
18 Q. Did you offer any input in this
19 meeting on April 12th?

Page 616:22 to 616:24

00616:22 THE WITNESS:
23 I don't recall offering any
24 input.

Page 617:01 to 617:03

00617:01 Q. Did you convey any information
02 to the other attendees of this meeting about
03 what Mr. Bodek told you on April 9th, 2010?

Page 617:06 to 617:08

00617:06 THE WITNESS:
07 I don't recall conveying that
08 information.

Page 618:08 to 618:14

00618:08 Q. Do you recall any action items
09 coming as a result of this meeting on
10 April 12th, 2010?
11 A. My recollection -- recollection
12 was that they were going to approach BP about
13 finalizing a decision or finalizing their
14 position on BP's decision.

Page 619:07 to 621:24

00619:07 EXAMINATION BY MR. HARTLEY:
08 Q. Mr. Quitzau, before our break,
09 we were talking about conversations within
10 Anadarko in or around April 9, April 12, 13,
11 and 14th time frame when BP was calling TD at
12 18,360.
13 I'm going to hand you now what's
14 been marked previously as Exhibit 2328. At

15 the bottom of Exhibit 2328 is an April 13th
16 e-mail from Michael Beirne to Nick Huch and
17 Naoki Ishii. Do you see that?

18 A. Yes, I do.

19 Q. And I think you actually
20 received this e-mail when it was forwarded
21 along to you, and you discussed that
22 yesterday. Do you recall that?

23 A. I recall that.

24 Q. Did you have any conversations
25 with Mr. Bodek about the Macondo well between
00620:01 April 13th of 2010 and April 20th of 2010?

02 A. No. Let me look back. I don't
03 recall any conversations other the -- other
04 than the one that was documented on that
05 e-mail.

06 Q. Okay. After receiving
07 Mr. Beirne's e-mail when it was forwarded to
08 you within Anadarko, did you ask anybody with
09 BP what the reference to safety concerns or
10 wellbore integrity was?

11 A. I did not.

12 Q. Why is that?

13 A. The well was TD'd, so the
14 operations were done.

15 Q. Once you heard that BP was
16 calling TD, it didn't interest you what the
17 safety concerns or wellbore integrity issues
18 were that led to that decision?

19 A. No. I assumed BP had everything
20 under control and that the -- that the
21 drilling was finished.

22 Q. Did you have any conversations
23 within Anadarko about what the reference was
24 to safety concerns and wellbore integrity
25 issues?

00621:01 A. There was no discussion on
02 safety concerns. The wellbore integrity
03 issues were discussed about what -- you know,
04 what we couldn't do, as documented in the
05 e-mails.

06 Q. And that relates to the mud
07 weight issues with the narrow drilling
08 margin?

09 A. With the mud weight issues and
10 losses, yes.

11 Q. Okay. In the context of the
12 meetings that you were having at Anadarko
13 between April 12th and 14th about the TD
14 issue, did wellbore integrity issues -- were
15 they discussed in those meetings?

16 A. You're talking about those two
17 meetings, that one on April 12th -- I don't
18 recall that they were.

19 Q. Okay. Were safety concerns
20 discussed in any of those meetings?

21 A. I don't recall that they were.
22 Q. Do you know whether anybody with
23 Anadarko was monitoring the Macondo well from
24 a safety perspective?

Page 622:02 to 623:16

00622:02 THE WITNESS:

03 To my knowledge, no one was
04 monitoring an Anadarko well from a safety
05 perspective.

06 MS. WILMS:

07 Macondo well. You misspoke.

08 THE WITNESS:

09 Macondo well.

10 EXAMINATION BY MR. HARTLEY:

11 Q. Was anybody from Anadarko
12 monitoring the well in terms of reviewing the
13 propriety of procedures being employed?

14 A. What do you mean by "the
15 propriety of the procedures being employed"?

16 Q. Looking at, for example, the T&A
17 procedure, determining whether there was an
18 agreement by Anadarko as to the progress, as
19 to the decisions being made?

20 A. We didn't look at any
21 operational procedures.

22 Q. You just assumed BP, as the
23 operator, made those decisions and sort of
24 watched as -- as the well was making progress
25 towards total depth?

00623:01 A. We assumed that they were making
02 all -- we knew that they were making all the
03 decisions, and we -- we tracked the progress
04 toward reaching the geological objectives.

05 Q. In response to Mr. Fineman's
06 questions yesterday morning, you talked about
07 the root -- he asked you whether you thought
08 the well design was what caused the incident.

09 I think your response was
10 that -- that you disagreed and that your view
11 of the root cause was the misinterpretation
12 of the negative test and that the
13 displacement of a lot of large volume of
14 hydrocarbons come into the well.

15 Is that accurate?

16 A. That's correct.

Page 623:19 to 624:14

00623:19 THE WITNESS:

20 That's correct.

21 EXAMINATION BY MR. HARTLEY:

22 Q. And that's your opinion as to
23 the root cause of the incident?

24 A. That's my personal opinion;
25 correct.
00624:01 Q. And in response to Mr. Hymel's
02 questions, you talked about the negative test
03 a little bit as well.
04 I think, if I heard you
05 correctly, you said that if -- if an anomaly
06 was identified as a negative test was being
07 conducted, it's your opinion that operations
08 would stop until the anomaly is resolved?
09 A. The anomaly should be resolved;
10 that's correct.
11 Q. You would not continue towards
12 displacement of the riser until that anomaly
13 is resolved?
14 A. That's correct.

Page 627:11 to 627:17

00627:11 Q. Have you reviewed the Bly
12 Report?
13 A. Yes, I read the Bly Report.
14 Q. Okay. I'm going to hand you
15 what I'm marking as Exhibit 2666.
16 (Exhibit No. 2666 marked for
17 identification.)

Page 627:19 to 628:02

00627:19 And ask you is that -- are those
20 your handwritten notes?
21 A. Yes, they are.
22 Q. Okay. And it appears to me that
23 this is a photocopy of two pages of notebook
24 paper followed by the Bly Report with your
25 handwritten notes sporadically through it.
00628:01 Is that accurate?
02 A. That's correct.

Page 630:24 to 631:11

00630:24 Q. The next entry says: "Bladder
25 effect." And then there's some writing to
00631:01 the right.
02 Can you tell me what that says?
03 A. "What is this?"
04 Q. Have you ever heard of the
05 bladder effect?
06 A. I have not.
07 Q. In reviewing the Bly Report, is
08 it your understanding that in conducting the
09 negative test, there was a comment,
10 attributing the pressure differential to some
11 sort of bladder effect?

Page 631:14 to 632:02

00631:14 THE WITNESS:
15 I recall that the bladder effect
16 was attributed to questions on the negative
17 test.
18 EXAMINATION BY MR. HARTLEY:
19 Q. You have some 30 -- 30-plus
20 years experience in the oil and gas industry
21 as a drilling engineer; is that right?
22 A. Yes.
23 Q. In that 30-plus years, have you
24 ever heard of a bladder effect?
25 A. I have not.
00632:01 Q. And you agree that the negative
02 test was misinterpreted?

Page 632:06 to 632:09

00632:06 THE WITNESS:
07 My recollection from reading the
08 Bly Report is that the negative test was
09 misinterpreted.

Page 633:11 to 633:16

00633:11 Q. In your 30-plus years as a
12 drilling engineer, have you ever designed a
13 well or been involved in a well in which
14 displacement was that deep?
15 A. I don't recall ever displacing
16 that deep.

Page 641:25 to 642:03

00641:25 Q. Okay. In your experience, do
00642:01 changes or increases in drill pipe pressure
02 indicate increased mud flow coming up the
03 casing?

Page 642:06 to 642:09

00642:06 THE WITNESS:
07 Changes or increases in pressure
08 reflect many different things during the
09 circulation of a well.

Page 643:01 to 643:18

00643:01 Q. In your experience, what do
02 increases or decreases in drill pipe pressure

03 indicate in terms of downhole conditions?
 04 A. They can represent many things.
 05 They could represent changes in fluid
 06 densities. They can represent changes in
 07 friction. They can represent changes in flow
 08 rate.
 09 Q. Anything else comes to mind now
 10 that the changes in drill pipe pressure can
 11 indicate?
 12 A. Changes in solids content.
 13 Q. What do you mean by "solids
 14 content"?
 15 A. If there were -- there were
 16 cuttings coming into the well, they could --
 17 and collecting in the well, that could change
 18 that.

Page 644:05 to 644:12

00644:05 Q. Would you agree that changes in
 06 drill pipe pressure are not -- is not
 07 necessarily a direct indicator of a kick?
 08 A. It's not necessarily a direct
 09 indicator of a kick.
 10 Q. It's an indicator of various
 11 activities or factors going on downhole?
 12 A. Yes.

Page 649:05 to 649:07

00649:05 Q. Which zones would it make sense
 06 to you for centralization to be required to
 07 extend 100 feet above those zones?

Page 649:10 to 649:13

00649:10 THE WITNESS:
 11 It would make sense to me to do
 12 that for productive intervals,
 13 hydrocarbon-bearing intervals.

Page 649:15 to 649:24

00649:15 Q. That's because centralization
 16 will allow you to get a higher probability of
 17 success for zonal isolation on a cement job?
 18 A. That is correct.
 19 Q. The lack of centralization
 20 through those -- those productive intervals
 21 compromises the success rate for zonal
 22 isolation?
 23 MS. WILMS:
 24 Object to form.

Page 650:01 to 650:02

00650:01 Zonal isolation is more
02 difficult if the pipe's not centralized.

Page 650:22 to 651:04

00650:22 Q. Does the lack of centralization
23 increase the probability of channeling in a
24 cement job?

25 MS. WILMS:
00651:01 Object to form.

02 THE WITNESS:
03 It increases the chance of
04 channeling cement through mud, yes.

Page 651:06 to 651:14

00651:06 Q. This paragraph goes on to read:
07 "If those conditions are not met, as in this
08 case, TOC should be determined by a proven
09 cement and valuation technique."

10 Do you see that?

11 A. Yes, I do.

12 Q. Would you agree that a proven
13 cement evaluation technique should be run
14 after a cement job?

Page 651:17 to 652:02

00651:17 THE WITNESS:
18 Any cement job?

19 EXAMINATION BY MR. HARTLEY:

20 Q. In a productive interval?

21 A. I agree that some form of cement
22 evaluation is recommended when cementing
23 production -- productive intervals.

24 Q. Prior to April 20th, 2010, did
25 you know that BP had not done that for the
00652:01 cement job on the 9 and 7/8th by 7/8th-inch
02 productive casing on the Macondo well?

Page 652:05 to 652:06

00652:05 THE WITNESS:
06 I was not aware.

Page 658:05 to 659:04

00658:05 Q. Okay. If you would, turn to the
06 page with the. Bates ending 678?

07 A. (Complying.)

08 Q. You have a handwritten note on
09 this page that appears to read: "Negative
10 tests should be step-by-step detailed
11 procedure."

12 Is that correct?

13 A. That's correct.

14 Q. Why did you write this, if you
15 recall?

16 A. I wrote that as just a personal
17 observation that -- kind of a look forward in
18 the industry that negative tests should be
19 very -- have very detailed procedures.

20 Q. At the time of the incident,
21 April 20th, 2010, were you aware of any
22 detailed step-by-step negative test procedure
23 utilized or employed by BP on the Macondo
24 well?

25 A. I was not.

00659:01 Q. Did Anadarko have any such
02 step-by-step detailed procedures for how to
03 conduct a negative test on -- as of
04 April 20th, 2010?

Page 659:07 to 659:19

00659:07 THE WITNESS:

08 On some wells, we had detailed
09 procedures for negative tests.

10 EXAMINATION BY MR. HARTLEY:

11 Q. Were those detailed procedures
12 consistent across wells, or was it a
13 well-by-well specific procedure?

14 A. They would be a well-by-well
15 specific procedures.

16 Q. Did you ever see a procedure
17 employed -- to be employed by BP on the
18 Macondo well for conducting a negative test?

19 A. I did not.

Page 661:16 to 661:17

00661:16 Q. If you would, turn to the page
17 with the Bates ending 701.

Page 661:19 to 662:01

00661:19 Q. It looks like there's a
20 handwritten comment on the left-hand margin.
21 Could you read that to me, please?

22 A. It says: This is BP's
23 responsibility to use -- to see model run
24 properly.

25 I can't read the bottom comment,
00662:01 the bottom two lines.

Page 662:11 to 663:02

00662:11 Q. This paragraph in your related
12 note relates to the OptiCem modeling run by
13 Halliburton on the Macondo well?
14 A. The paragraph does relate to
15 that.
16 Q. Okay. In your experience in the
17 industry 30-plus years, have you had
18 occasions where you've been working for the
19 operator, and Halliburton has run cement
20 simulations or modeling, whether it's OptiCem
21 or otherwise?
22 A. Yes.
23 Q. Is the operator in those cases,
24 when you've been working on those wells, the
25 entity that provides the information to plug
00663:01 into those simulations or models?
02 A. Yes.

Page 670:07 to 670:13

00670:07 EXAMINATION BY MS. WILMS:
08 Q. Good afternoon Mr. Quitzau. As
09 you know, I'm Nancy Wilms. Just a couple of
10 questions.
11 Was it Anadarko's role to
12 communicate with BP regarding operational
13 decisions that were made on the Macondo well?

Page 670:16 to 670:21

00670:16 THE WITNESS:
17 No, it was not.
18 EXAMINATION BY MS. WILMS:
19 Q. Was it Anadarko's role to
20 evaluate BP's operational decisions that were
21 made on the Macondo well?

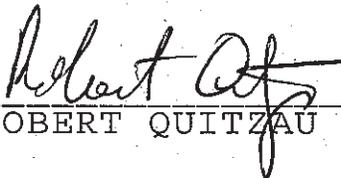
Page 670:24 to 670:25

00670:24 THE WITNESS:
25 No, it was not.

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WITNESS' CERTIFICATE

I have read or have had the foregoing testimony read to me and hereby certify that it is a true and correct transcription of my testimony with the exception of any attached corrections or changes.



ROBERT QUITZAU

PLEASE INDICATE

() NO CORRECTIONS

() CORRECTIONS; ERRATA SHEET(S) ENCLOSED

ERRATA SHEET

DEPOSITION OF ROBERT QUITZAU

MAY 25-26, 2011

In Re: Oil Spill by the Oil Rig DEEPWATER HORIZON in the Gulf of Mexico, on April 20, 2010

<u>Page</u>	<u>Line</u>	<u>Change</u>	<u>Reason</u>
18	22	Change "'99 or 2000" to "2002"	Correction
20	4	Change "Intun" to "Intan"	Misspelled
22	7	Change "2001 or 2002" to "2004"	Correction
23	1	Change "Yes" to "Yes, since 2002"	Correction
23	4	Change "No" to "Not since 2002"	Correction
25	1	Change "2002" to "2004"	Correction
31	1	Change "did that involved" to "did. That involved"	Transcription error
36	6	Change "understanding to" to "understanding: to"	Transcription error
46	22	Change "Viasco" to "Viosca"	Misspelled
47	3	Change "Viasco" to "Viosca"	Misspelled
48	18	Change "at Water" to "Atwater"	Misspelled
91	5	Change "report" to "respond"	Transcription error
137	13	Change "loss" to	Misspelled

<u>Page</u>	<u>Line</u>	<u>Change</u>	<u>Reason</u>
		"lost"	
182	24	Change "that there" to "that if there"	Transcription error
217	2	Change "19th" to "20th"	Correction per contemporaneous acknowledgement at 217:16-17
243	18	Change "Syler" to "Seiler"	Misspelled
291	14	Change "oil" to "mud"	Transcription error
308	10	Change "of" to "in"	Transcription error
309	9	Change "hazards" to "HAZIDs"	Misspelled
309	21	Change "and identified" to "an identified"	Misspelled
341	9	Change "and predicted" to "than predicted"	Transcription error
353	11	Change "ECD mud loss of sand." to "ECD - mud losses - sand."	Transcription error
355	2	Change "159.98" to "15.98"	Transcription error
448	17	Delete "No"	Transcription error
448	20	Change "They" to "No, they"	Transcription error
454	13	Change "As the well" to "On the wells"	Transcription error
530	13	Change "Anadarko's" to "Anadarko"	Transcription error

<u>Page</u>	<u>Line</u>	<u>Change</u>	<u>Reason</u>
531	21	Change "loss" to "lost"	Misspelled
585	8	Change "off and" to "often"	Transcription error
590	6	Change "Alls" to "All"	Misspelled
601	12	Change "lost" to "loss"	Transcription error
601	15	Change "lost" to "loss"	Transcription error
604	22	Change "t his" to "this"	Misspelled
623	13	Change "of a lot of" to "allowed a"	Transcription error
623	14	Change "hydrocarbons come" to "hydrocarbons to come"	Transcription error
656	5	Change "spent" to "cement"	Transcription error