

Deposition Testimony of:

Derek Hart

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Page 14:06 to 14:08

00014:06 DEREK HART,
07 having been first duly sworn, testified as
08 follows:

Page 14:17 to 16:13

00014:17 Q. Good for you. Where -- where
18 are you employed?
19 A. I'm employed by Transocean.
20 Q. And how long have you been
21 employed there?
22 A. Just under 23 years.
23 Q. Yes, sir. What is your current
24 job title?
25 A. My current job title is manager
00015:01 of quality, health, safety, and environment.
02 Q. For all of Transocean?
03 A. I'm currently assigned to our
04 operations in the North Sea.
05 Q. Were you ever assigned to any
06 operations in the Gulf of Mexico?
07 A. Not to -- I -- I've never worked
08 in the Gulf of Mexico.
09 Q. All right. Did you work as part
10 of the investigation team for Transocean with
11 respect to the Deepwater Horizon incident?
12 A. Yes, sir, I did.
13 Q. All right. Prior to that time
14 had you ever done any investigations or
15 inter-reports with respect to any other
16 incident that may have occurred on the
17 Transocean rig?
18 A. Yes, I -- I had done that in the
19 past.
20 Q. What -- what rigs?
21 A. I've been involved with QHSE for
22 a number of years, and I've undertaken a
23 number of incident investigations.
24 Q. Did you investigate the Sedco
25 711 incident?
00016:01 A. No, I did not. No, I did not.
02 Q. Have you read any of the reports
03 or memorandums with respect to the Sedco 711?
04 A. Yes, I have.
05 Q. Okay. Are you familiar with the
06 request for mandatory actions with respect to
07 well control and well control preparedness
08 after the Sedco 711 incident?
09 A. I'm aware that Transocean issued
10 an advisory, yes, I am aware of that.
11 Q. Would you -- to the extent you
12 can recall, would you tell us what the
13 advisory was or stated.

Page 16:16 to 16:25

00016:16 A. The advisory that was issued to
17 the whole company was a clarification of
18 existing requirements that were already
19 within the Transocean Well Control Handbook.
20 Q. (BY MR. MATTHEWS) Well, you
21 didn't answer my question. Can you tell me
22 what the requirements were or what the
23 changes were or -- or what was done with
24 respect to well control -- control
25 preparedness?

Page 17:02 to 17:08

00017:02 A. I -- I don't -- I don't believe
03 there were any changes called for. As I --
04 an advisory is -- by its definition within
05 Transocean is a clarification of
06 requirements. So this advisory was a
07 clarification of existing requirements that
08 were already within the well control manual.

Page 17:13 to 18:17

00017:13 Q. Was there a requirement or a
14 clar- -- clarification for monitoring and
15 maintaining at least two barriers when
16 displacing to an under-balanced fluid during
17 completion operation?
18 MR. MASSEY: Objection; form.
19 A. I can't remember if -- as I say,
20 I don't have that document in front of me.
21 Q. (BY MR. MATTHEWS) I know that,
22 but that wasn't my question, either. Was the
23 clarification that you monitor and maintain
24 at least two barriers when displacing in an
25 under-balanced situation during completion
00018:01 operations?
02 MR. MASSEY: Same objection.
03 A. The -- I -- I think you must be
04 reading from it, so I -- if that's the case,
05 then -- then that's what it says, but I --
06 without it in front of me, I -- I can't
07 confirm that.
08 Q. (BY MR. MATTHEWS) You don't
09 recall it?
10 A. I recall the -- the advisory. I
11 am not -- well control is not something that
12 is in -- particularly within my area of
13 expertise, but what -- what you have
14 described is -- is my general understanding,

15 yes.
16 Q. That was the same situation with
17 Macondo, wasn't it?

Page 18:19 to 21:23

00018:19 A. The incident on the Sedco 711 in
20 December 2009 was during a, what was called a
21 completion operation. That the -- my
22 understanding is that the incident on Macondo
23 was a -- was during a different type of
24 operation.

25 Q. (BY MR. MATTHEWS) But the --
00019:01 but it was during a completion, wasn't it?
02 If I'm --

03 A. The incident on the Sedco -- the
04 incident on the Sedco 711 was during a
05 completion operation. The incident on the
06 Deepwater Horizon was during a displacement
07 operation.

08 Q. The well was under-balanced at
09 the time fluid was being displaced; isn't
10 that correct?

11 A. On the Deepwater Horizon the
12 incident occurred when the well became
13 under-balanced, that is correct.

14 Q. And fluid was being displaced,
15 right?

16 A. Yes, fluid was being displaced
17 from the well on Macondo.

18 Q. And there were not two barriers
19 in existence at the time the well was
20 under-balanced and at the time the fluid was
21 being displaced; isn't that correct?

22 MR. MASSEY: Objection; form.

23 A. My understanding is that
24 there -- there were not two barriers in -- in
25 place, that is correct.

00020:01 Q. (BY MR. MATTHEWS) What were the
02 barriers on the Macondo well, as you know?
03 Or if you know.

04 A. I -- my understanding is that
05 the barrier that was supposed to be in place
06 was the cement between the -- at the bottom
07 of the -- at the bottom of the well.

08 Q. That's one.

09 A. That's -- that's the only one
10 that I'm aware of.

11 Q. All right. Did you have
12 anything to do with the preparation of the
13 Transocean accident investigation report on
14 Macondo?

15 A. Yes, sir, I did.

16 Q. What did you have to do? What
17 did you do?

18 A. I was the Transocean team lead
19 on looking at particularly gas dispersion and
20 the evacuation from the rig.
21 Q. All right. Gas dispersion,
22 meaning after --
23 A. We --
24 Q. -- after the -- after the gas
25 got to the rig surface, how was the gas
00021:01 dispersed, where was it dispersed?
02 A. Yes, sir, that -- that -- that
03 was what I looked at. I -- I looked at from
04 when the gas was released onto the rig, that
05 is correct.
06 Q. All right. And what did you
07 conclude?
08 A. I -- as in our report, we
09 concluded -- or under my lead we concluded
10 that a very large volume of gas dispersed
11 across the rig in a very short time period,
12 and that gas ignited.
13 Q. In preparing your part of --
14 relative to the TO, Transocean report, did
15 you do any analysis or study with respect to
16 how the gas got to the rig floor?
17 A. My colleagues did, but I -- I --
18 I did not.
19 Q. Have you read the Transocean
20 report?
21 A. Yes, sir.
22 Q. Okay. And it's Exhibit 4228, in
23 your book as tab 1.

Page 22:10 to 22:12

00022:10 Q. All right. Can you give me one
11 thing in this report that says Transocean did
12 something wrong?

Page 22:14 to 22:24

00022:14 A. We -- the investigation team
15 analyzed a lot of facts and witness evidence,
16 looked at a lot of studies, and our findings
17 of fact are set out in Chapter 4 of our
18 report.
19 Q. (BY MR. MATTHEWS) All right.
20 And what page is that on?
21 A. This is on Page 211.
22 Q. All right. Did you conclude
23 there was anything wrong with respect to the
24 way Transocean ran the production casing?

Page 23:01 to 23:20

00023:01 Q. (BY MR. MATTHEWS) Or -- or --
02 let me -- let me add this. Or did you
03 conclude that BP had instructed you how to
04 run the production casing?
05 A. My understanding -- and I'll
06 explain to you, sir, that I didn't -- I
07 didn't look at the drilling issues, but my
08 understanding is that BP issued and wrote the
09 program or the procedures for out running the
10 production casing, that is my understanding,
11 sir.
12 Q. Okay. So my question to you is
13 the same. We've got Chapter 4, Page 211 in
14 front of us. We've just gone through the
15 first set of facts, and that's BP instructed
16 TO with respect to running the production
17 casing. Where in this chapter is there any
18 statement that Transocean did anything
19 incorrect or wrong relative to the Macondo
20 well incident?

Page 23:22 to 24:06

00023:22 A. I restate that these are the key
23 findings that Transocean have come to. We --
24 we did not draw any conclusions that anyone
25 on the Transocean crew did anything wrong.
00024:01 Q. (BY MR. MATTHEWS) Do you agree
02 with that?
03 A. I do, sir.
04 Q. Who reached the conclusion that
05 the negative pressure test was a good
06 pressure test?

Page 24:08 to 24:10

00024:08 Q. (BY MR. MATTHEWS) If you know.
09 A. The -- I do not know the answer
10 to that.

Page 24:25 to 25:18

00024:25 Q. Who ran the float shoe, the dual
00025:01 flapper valve float shoe?
02 A. I under- -- my understanding
03 that that was equipment provided by
04 Weatherford.
05 Q. Yes, but that's not my question.
06 A. Who ran it?
07 Q. Yeah.
08 A. Well, part -- part of the crew's
09 job is to run equipment into the well. So
10 that -- that would have been the -- the drill

11 crew that ran -- that ran it, under the
12 instructions of both BP and Weatherford.
13 Q. Did you know that the crew, as
14 you put it, the Transocean crew, tried to set
15 the float shoe nine times?
16 A. I'm -- as part of discussion
17 with my colleagues and as set out in our
18 report, I'm -- I'm aware of that, yes, sir.

Page 26:04 to 26:12

00026:04 Q. Do you know whether or not the
05 float shoe dual flapper valve was set such
06 that the -- both valves, the bore, the valve
07 bore was closed by the flapper?
08 A. I don't know, sir.
09 Q. If it was open, isn't that the
10 way that gas, hydrocarbons, mud would come up
11 through the production casing? Isn't that
12 the only way --

Page 26:14 to 26:16

00026:14 Q. (BY MR. MATTHEWS) Isn't that
15 the only way it could come up through the
16 production casing?

Page 26:18 to 27:05

00026:18 A. If -- again, from discussions
19 with my colleagues, that would be a -- a flow
20 path, yes, for the -- for the gas to come
21 into the well.
22 Q. (BY MR. MATTHEWS) Who are your
23 colleagues you're referring to? Who did you
24 talk to about this, if you can recall?
25 A. The -- the team lead that looked
00027:01 at issues regarding the well was my colleague
02 Mr. Perrin Roller.
03 Q. Spell that, if you would.
04 A. Perrin, P-e-double r-i-n;
05 roller, R-o-double l-e-r.

Page 27:08 to 27:24

00027:08 Q. All right. Thank you. With
09 respect to the blowout preventer, have you
10 conferred with any of your colleagues about
11 the blowout preventer, or did you do any
12 study or any type of report with respect to
13 the function, operation, and result obtained
14 by the blowout preventer?
15 A. I have undertaken no examination

16 or investigation with regards to the blowout
17 preventer.

18 Q. Have you read in your report of
19 the different fail-safe systems for the
20 blowout -- for the blowout preventer?

21 A. Yes, sir, as I've already
22 stated, I have read the Transocean report.

23 Q. And the EDS did not operator or
24 function or work, did it?

Page 28:01 to 28:15

00028:01 A. The -- the evidence we have
02 available to us would indicate that the EDS
03 system did -- did not operate.

04 Q. (BY MR. MATTHEWS) Do you know
05 why?

06 A. I don't know the answer to that,
07 sir.

08 Q. Okay. Have you read that the
09 MUX cables to the blue pod and the yellow pod
10 were in the moon pool and were damaged when
11 the explosion occurred?

12 A. That is, I think, a likely
13 possibility, given the intense fire that was
14 reported by the chief engineer that was
15 going -- happened in the moon pool, yes.

Page 28:25 to 29:22

00028:25 Have you read whether or not the

00029:01 other fail-safe systems on the BOP stack
02 worked?

03 A. Have I read that they worked?
04 I -- the conclusion of the Transocean
05 investigation is that the -- that a number of
06 functions of the BOP did work.

07 Q. Name one.

08 A. Our report talks about the
09 variable bore rams closing on the drill pipe.

10 Q. Well, it does, doesn't it. What
11 about that? Are you -- is it your testimony
12 that the VBRs closed completely around the
13 drill pipe?

14 A. I -- I don't know that for
15 certain, myself, again, because I did not
16 investigate that, but that is what our report
17 states.

18 Q. Do you recall reading that the
19 VBRs, that the -- that the pressure was so
20 high that the VBRs didn't close and there was
21 a substantial leak around the VBRs, around
22 the rubber in the VBR?

Page 29:24 to 29:24

00029:24 A. I can't remember reading that.

Page 30:07 to 30:14

00030:07 Q. (BY MR. MATTHEWS) Are you --
08 are you aware that any of the alarm systems
09 were bypassed?
10 A. I was -- I'm not aware that any
11 of the alarm systems were bypassed, no.
12 Q. If they were bypassed, if they
13 were shut off, that would be gross
14 negligence, wouldn't it?

Page 30:16 to 30:20

00030:16 A. Transocean does not operate a
17 policy of shutting off alarms that...
18 Q. (BY MR. MATTHEWS) And if they
19 were shut off and bypassed, that would be
20 gross negligence, wouldn't it?

Page 30:22 to 31:06

00030:22 A. The -- I repeat, we do not
23 operate our rigs by shutting off alarms,
24 these important safety systems.
25 Q. (BY MR. MATTHEWS) And they are
00031:01 very important, aren't they?
02 A. Yes.
03 Q. And since Transocean doesn't do
04 that, if, by chance, the alarms were bypassed
05 or shut off on this well, that would be gross
06 negligence, wouldn't it?

Page 31:08 to 31:12

00031:08 A. I couldn't comment on whether
09 something is gross negligence or not. I just
10 repeat that that is not the way we -- excuse
11 me -- that is not the way we operate our
12 rigs.

Page 34:12 to 34:18

00034:12 Are you aware that the only monitoring
13 systems operating on April the 20th was a
14 monitoring system that required a human to
15 sit in front of some type of screen and
16 perform some type of readout where the human

17 was the judge on whether or not there was an
18 influx of gas?

Page 34:20 to 35:04

00034:20 A. Yeah, I -- I am aware of the
21 Tran- -- of -- from discussions with my
22 colleagues, I am aware that the Transocean
23 monitoring system, yes, was monitored by the
24 drilling crew, that -- yes, I'm aware of
25 that.
00035:01 Q. (BY MR. MATTHEWS) And there
02 were no alarms on, no automatic alarms were
03 on; they had been bypassed or turned off; are
04 you aware --

Page 35:06 to 35:08

00035:06 Q. (BY MR. MATTHEWS) Are you aware
07 of that?
08 A. I -- I -- I am not, sir.

Page 35:25 to 36:12

00035:25 Q. All right. When -- do you
00036:01 recall when you were appointed to the
02 investigation team?
03 A. Yes, sir, I was appointed to the
04 investigation team in May, early -- well,
05 actual fact, the first week of May of 2010.
06 Q. Is that when -- as far as you're
07 aware of, is that when the investigation team
08 was organized?
09 A. Yes, sir, I -- I -- when I -- I
10 flew to Houston I was one of the very first
11 investigation team members to arrive in
12 Houston.

Page 37:01 to 37:03

00037:01 Q. Do you recall whether or not the
02 Sedco 711 incident occurred when there was an
03 under-balanced well?

Page 37:05 to 37:11

00037:05 A. That is my -- my understanding,
06 yes.
07 Q. (BY MR. MATTHEWS) And, in fact,
08 there were less than two barriers present
09 during the under- -- under-balance --
10 under-balanced well displacement of fluid

11 situation on the Sedco 711, right?

Page 37:13 to 37:14

00037:13 A. Honestly, I can't -- I can't
14 remember, sir.

Page 39:02 to 39:10

00039:02 Q. All right. How long did it take
03 you -- when -- when was the report that we've
04 referred to, Exhibit 4228, when was the
05 report published or rendered; do you know?
06 A. June 2011.
07 Q. When was your part of the report
08 complete?
09 A. My part of the report was
10 complete towards the end of May 2011.

Page 41:09 to 41:11

00041:09 Q. (BY MR. MATTHEWS) So who told
10 you, who informed you what you were going to
11 write a report on?

Page 41:13 to 41:22

00041:13 A. I -- I come back to our
14 conversation earlier. I was asked to
15 investigate the gas dispersion and the
16 evacuation from the rig, and that -- that is
17 what I did, and the results of my
18 investigation are within the Transocean
19 report.
20 Q. (BY MR. MATTHEWS) Who -- who
21 told you to do this? Who asked you to do
22 this?

Page 41:24 to 42:12

00041:24 A. I -- I was contacted initially
25 by my -- I was -- by the time of the incident
00042:01 I was actually in West Africa. I returned to
02 the U.K. and was contacted by my supervisor,
03 who asked me to speak to a Mr. Adrian Rose,
04 who asked me to join the investigation team.
05 Q. (BY MR. MATTHEWS) Did -- is he
06 the one who told you what you would
07 investigate? If not, who did?
08 A. As far as I can -- yeah. As
09 far -- as far I can remember what Mr. Rose
10 asked me to do was to ask me if I would be

11 part of the Transocean investigation team
12 into what happened at Macondo.

Page 42:21 to 43:23

00042:21 Q. (BY MR. MATTHEWS) How did you
22 conclude who you would interview?
23 A. At the early stages of the
24 investigation we reviewed the persons on
25 board list of those who were on the Deepwater
00043:01 Horizon at -- on the night of April the 20th,
02 and that -- from that list we drew up a list
03 of who we would like to interview. That was
04 our initial starting point of who we would
05 like to interview.
06 Q. Did you interview anyone from
07 BP?
08 A. To my knowledge, we -- we did
09 not interview any -- or the Transocean
10 investigation team did not interview anybody
11 from BP.
12 Q. Did you interview anybody from
13 Halliburton or Cameron or any other --
14 A. Not that I'm aware of.
15 Q. The only people that you've
16 interviewed were Transocean people that were
17 on the rig; is that correct? And maybe some
18 guys that were not, I don't know.
19 A. Yeah.
20 Q. Go ahead.
21 A. We interviewed some Transocean
22 people from the rig, and we also interviewed
23 some people from Transocean onshore as well.

Page 44:05 to 44:23

00044:05 Q. What was the purpose of the
06 investigation report?
07 A. The purpose of the investigation
08 report is -- is set out in the executive
09 summary of the report to basically find out
10 what happened and -- and why on the -- on the
11 Macondo well, the Deepwater Horizon. But
12 the -- the exact wording is set out in the
13 executive summary.
14 Q. All right. And this report
15 concludes Transocean did nothing wrong?
16 A. We have -- as I've already said,
17 we -- I have found investigation -- I've not
18 found that.
19 Q. All right. Do you recall
20 interviewing Buddy "Trahan," Trahan?
21 A. Yes, sir, I -- I interviewed
22 Mr. -- together with a colleague I

23 interviewed Mr. Trahan, yes.

Page 45:11 to 45:19

00045:11 Q. It says, interviewee name, Buddy
12 Trahan; interviewers present, Bob Scott,
13 Derek Hart; June the 2nd, 2010; do you see
14 that?
15 A. Yes, sir.
16 Q. All right. I'm going to turn
17 the pages to the page that's Bates numbered
18 TRN-INV-02874546, and I'm turning to that
19 page. Can you see what I've put on the ELMO?

Page 46:02 to 46:06

00046:02 Q. One of the comments here is,
03 quote, "Buddy thinks BP cut corners to save
04 the producing well. Some best practices were
05 used."
06 Do you recall that he said that?

Page 46:08 to 46:10

00046:08 A. I was -- I was there. Yes, sir,
09 that -- that must be what Mr. Trahan said,
10 yes, sir.

Page 48:03 to 48:08

00048:03 Q. All right. Thank you. I'm
04 going to show you another interview that we
05 talked about, and see if you can see this.
06 That's the interview of Randy Ezell, senior
07 toolpusher Horizon, by Bob Scott and Wes
08 Bell, on May 2010. Do you see that?

Page 48:13 to 48:22

00048:13 A. Yes, we -- we have it now, sir.
14 Q. All right. Very good. I'm
15 going to turn to Page TRN-INV-00001427, where
16 it states, Randy stated that, BP is sketchy
17 about their information with us. He said he
18 recommended to BP that they run 21
19 centralizers, but they cut back to only 6.
20 He said that BP does not discuss cement
21 volumes with us.
22 Did I read that correctly?

Page 48:24 to 49:03

00048:24 A. Yes, I -- I -- age is not on my
25 side, but I -- I -- as far as I can see,
00049:01 that's correct, sir.
02 Q. (BY MR. MATTHEWS) Okay. That's
03 an accurate statement; is it not --

Page 49:05 to 49:06

00049:05 Q. (BY MR. MATTHEWS) As far as
06 Transocean is concerned?

Page 49:08 to 49:10

00049:08 A. That is obviously the opinion of
09 Mr. Randy Ezell when he was interviewed by my
10 colleagues.

Page 49:22 to 50:02

00049:22 Q. All right. I want to correct
23 one other thing. I referred to the
24 Transocean accident investigation report as
25 4 -- Exhibit 4228. It is Exhibit 4248. So I
00050:01 apologize because I gave the wrong exhibit
02 number.

Page 50:17 to 50:23

00050:17 Q. All right. Do you recall that I
18 previously asked you about whether or not you
19 recalled interviewing Buddy Trahan?
20 A. Yes, sir.
21 Q. And do you recall who Buddy
22 Trahan is?
23 A. Yes, sir. And before we

Page 51:05 to 52:03

00051:05 Would you look at tab 65, marked
06 as Exhibit 5619. Do you see that?
07 A. Yes, I have that in front of me.
08 Q. And do you see the second e-mail
09 from the top?
10 A. The one that thanks -- says,
11 "Thanks for the update"?
12 Q. Yes, sir.
13 A. Yes.
14 Q. And this -- this is from Buddy
15 Trahan to Kent James, telling him, "Thanks
16 for the update." Saying, I need you to look
17 deeper into Subsea's business. The last
18 couple years there seemed to be an increasing

19 trend of problems on the BOP of the DWH. I
20 want to know the maintenance program for pod
21 valves, hoses, bonnets, et cetera. We do not
22 want to wait until failures to act. When I
23 started looking at this a couple of years
24 ago, it was obvious they didn't keep track of
25 maintenance.
00052:01 Do you were -- know whether or
02 not Transocean found that the BOPs were not
03 maintained?

Page 52:05 to 53:08

00052:05 A. I -- as I've said, so this is --
06 BOPs is not something of my area of
07 expertise, but I -- our report concludes that
08 the BOP was maintained.
09 Q. (BY MR. MATTHEWS) Yes, sir.
10 Now, who was Buddy Trahan?
11 A. Buddy Trahan's position was
12 called operations manager for assets, as I
13 believe was his -- his title.
14 Q. Of the -- of the Deepwater
15 Horizon and four other wells in the Gulf of
16 Mexico; isn't that correct?
17 A. Mr. Trahan was the overseeing
18 manager, oper- -- asset manager for the
19 Deepwater Horizon and -- and other rigs, but
20 I couldn't tell you the name of those rigs.
21 Q. All right. Do you know whether
22 or not Transocean found that the BOP testing
23 unit, the bottom BOP that had been inverted
24 for testing had ever been properly plumbed
25 and wired, such that it would operate?
00053:01 A. I don't know the an- --
02 Q. If you know.
03 A. I don't know the answer to that.
04 Q. Do you know whether or not BP
05 used a modeling program to test the BOP
06 rather than actually physically test the BOP,
07 a digital modeling program that it had
08 patented? Do you know that?

Page 53:10 to 53:16

00053:10 A. I -- I -- I have no knowledge of
11 that. I don't know.
12 Q. (BY MR. MATTHEWS) Do you know
13 whether or not the accumulators, the
14 downhole, the subsea accumulators had
15 sufficient pressure in them to shear the
16 casing with BSR?

Page 53:18 to 53:24

00053:18 A. I -- I don't know the answer to
19 that question.
20 Q. (BY MR. MATTHEWS) Do you know
21 whether or not the casing used in the
22 Deepwater Horizon was of a psi or a strength
23 such that the BSR could not shear the casing
24 being used?

Page 54:01 to 54:10

00054:01 A. I don't wish to be -- appear
02 unhelpful, but you're asking me questions
03 which I -- I have very little normal --
04 knowledge of. So I don't know the answer.
05 Q. (BY MR. MATTHEWS) Well, you've
06 read the report. That's nowhere --
07 A. Yes, sir.
08 Q. -- nowhere in any of those last
09 five or six questions I've asked you listed
10 in Transocean report, are they?

Page 54:12 to 54:12

00054:12 A. Not that I'm aware of, sir.

Page 54:18 to 54:25

00054:18 Q. (BY MR. MATTHEWS) Well, those
19 last questions I just asked you with respect
20 to the BOP, its function and its operation
21 would seem to me to be the most relevant
22 questions in the world relative to shutting
23 in a well that's blowing out, but yet that's
24 not mentioned in the Transocean report.
25 That's an example.

Page 55:02 to 55:04

00055:02 A. Sorry, sir, I lost the end of
03 your question when my counsel objected to
04 form.

Page 55:08 to 55:21

00055:08 What I -- what I said at the end
09 was -- my question was an example of things
10 that were left out of the report that I
11 think, that I believe are very, very relevant
12 to shutting in a well that's blowing out. I
13 mean, if you've got blind shear rams in place

14 in a BOP stack and which the accumulators
15 first don't have enough pressure to even
16 close the rams, second, the pipe in place
17 being used is such that its psi strength
18 exceeds the shear capability of the rams.
19 I -- I find that un- -- I find it incredible.
20 But yet that's not in the report. That's an
21 example.

Page 55:24 to 55:25

00055:24 Q. (BY MR. MATTHEWS) Don't you
25 find that unbelievable?

Page 56:02 to 56:18

00056:02 A. The Transocean investigation
03 team invest- -- undertook the investigation
04 as per the scope of -- set out in the
05 executive summary, and I believe that we have
06 fulfilled that objective sent to us.
07 Q. (BY MR. MATTHEWS) Well, you are
08 aware this well blew out, aren't you?
09 A. Yes, sir.
10 Q. But yet nowhere in this report,
11 nowhere in this report does Transocean say we
12 made a mistake, we messed up, we misread the
13 negative pressure test, we were run --
14 running casing we shouldn't have been
15 running, we didn't maintain the BOP, the BOP
16 wouldn't operate. Nowhere in the report is
17 there any mention of anything like that. Why
18 is that?

Page 56:20 to 56:22

00056:20 A. As I said, we -- we conducted
21 our investigation, and we -- we never found
22 evidence of what you've just suggested.

Page 57:11 to 58:22

00057:11 Q. All right, good. Let's look at
12 tab 64, Exhibit 5618.
13 A. Yes, sir, I have that in front
14 of me.
15 Q. All right. Look at the second
16 e-mail from "DWH maint sup," and I think that
17 means maintenance supervisor to Paul
18 Johnson --
19 A. That's correct.
20 Q. Yes, sir. To Paul Johnson, et
21 al, and, also, to the toolpusher on the

22 Deepwater Horizon. And it starts off -- it's
 23 a "To Whom It May Concern" e-mail; is that
 24 correct?
 25 A. Yes, that -- that's what it
 00058:01 says, "To Whom It May Concern."
 02 Q. Yes, sir. And it's from Steve
 03 Bertone, maintenance supervisor, which is
 04 three pages over.
 05 A. Yes, I see his name.
 06 Q. He says -- and this is October
 07 2009. In doing your investigation, did you
 08 study any of the audits done on the Deepwater
 09 Horizon?
 10 A. I did not analyze any equipment
 11 audits as part of my investigation.
 12 Q. Have you ever seen a September
 13 '09 audit by ModuSpec? Are you familiar with
 14 whom ModuSpec is?
 15 A. I'm aware of that audit, but I
 16 did not examine that audit.
 17 Q. Are you aware that there is an
 18 audit by ModuSpec in September '09 and, once
 19 again, in April 2010, one of which says
 20 Transocean is 3200 hours behind in
 21 maintenance?
 22 A. I'm not --

Page 58:25 to 59:12

00058:25 A. (Continuing) I'm not aware of
 00059:01 that, sir, no.
 02 Q. (BY MR. MATTHEWS) All right.
 03 The Exhibit 5618 from Mr. Bertone says, The
 04 issue that the Deepwater Horizon is currently
 05 experiencing in my opinion is a lack of
 06 proper maintenance on the equipment for many
 07 years. The drive behind this has been from a
 08 performance-induced standpoint.
 09 And what he goes on to say
 10 throughout this e-mail is is that the
 11 equipment on this rig has not been properly
 12 maintained; isn't that correct?

Page 59:14 to 60:02

00059:14 A. I -- firstly, I would say I've
 15 never seen this e-mail until you -- you asked
 16 me to look at it, but --
 17 Q. (BY MR. MATTHEWS) Well, I -- I
 18 would naturally bring it up, since you say
 19 that the rig was maintained. Here's the
 20 maintenance supervisor saying no, no, no, it
 21 was not maintained.
 22 A. Yeah. I -- I can't argue with

23 what the -- this e-mail says in front of me,
 24 but --
 25 Q. Good.
 00060:01 A. -- I -- I stand behind our
 02 report and what it says.

Page 61:01 to 61:03

00061:01 Q. (BY MR. MATTHEWS) You are aware
 02 of the fact that this well blew out because
 03 it lost control of a well, no well control?

Page 61:05 to 61:19

00061:05 A. I'm aware that this well blew
 06 out, I've agreed with that -- with you that a
 07 little while earlier, yes.
 08 Q. (BY MR. MATTHEWS) Do you think
 09 this well was controlled?
 10 A. Well, the fact that it blew out
 11 means there was a loss of well control.
 12 Q. Or a loss of well control.
 13 A. A loss of well control is what I
 14 said, sir.
 15 Q. I didn't hear you, I'm sorry.
 16 Are you aware of the condition of the
 17 wellbore prior to the blowout? In other
 18 words, are you aware that this well had had
 19 several incidents prior to April the 20th?

Page 61:21 to 62:06

00061:21 A. Through reading, yes, I -- I --
 22 I'm aware of what you're referring to.
 23 Q. (BY MR. MATTHEWS) Well, are you
 24 aware that there had been four -- four kicks?
 25 A. I can't remember how many, but I
 00062:01 am aware that there -- there was -- there had
 02 been a kick on this well, yeah.
 03 Q. There had been four. One of
 04 them was so bad that the pipe stuck, they had
 05 to blow the pipe in two, and kick over and
 06 keep drilling; are you aware of that?

Page 62:08 to 62:18

00062:08 A. I say I'm aware that there were
 09 in- -- well control incidents on this well,
 10 but I -- I'm -- I'm not aware of what you've
 11 just described to me.
 12 Q. (BY MR. MATTHEWS) Are you aware
 13 that the well was -- had 13 lost circulation
 14 events?

15 A. No, I'm not aware of that.
16 Q. Is it your opinion that the
17 diversion of gas through the degasser was a
18 proper step for a well that's 18,000 feet?

Page 62:20 to 63:07

00062:20 A. The -- as described in our
21 report, based on the information that the
22 drill crew had, I believe that they took
23 timely and appropriate action when they saw
24 an influx.
25 Q. (BY MR. MATTHEWS) In other
00063:01 words, as a person with your background,
02 history, and experience relative to deepwater
03 offshore drilling operations, it's your
04 testimony that in a deepwater well -- yeah,
05 deepwater well where a blowout situation
06 occurs, you should divert into the mud
07 degasser?

Page 63:09 to 63:19

00063:09 A. As our report says, our analysis
10 is that based on the information that was
11 available to the drill crew when they did the
12 flow check, that they took appropriate
13 action.
14 Q. (BY MR. MATTHEWS) Has anyone
15 ever told you there would have been no
16 explosion even though there was gas on the
17 rig floor if you would have diverted the mud
18 or hydrocarbons over into the sea, Gulf of
19 Mexico, not through the degasser?

Page 63:21 to 64:22

00063:21 A. Again, I referred to our report,
22 which says that we -- we don't know. That
23 calls for speculation. We don't know what
24 would have happened, had they diverted
25 over -- directly overboard. There was a --
00064:01 there was a large gas cloud on the rig.
02 Q. (BY MR. MATTHEWS) Yeah, that's
03 interesting, isn't it? Which way was the
04 wind blowing when that gas was being diverted
05 through the mud degasser?
06 A. The -- the -- it was a very
07 light wind. I believe -- again, I would need
08 to look at the report coming from the -- off
09 the -- blowing across from the starboard side
10 of the rig, across the rig, but it was very
11 light.

12 Q. It was -- the gas was being
13 blown into the pump room, wasn't it?
14 A. The analysis that I undertook is
15 that -- one of the results of that analysis
16 is that gas probably entered the pump room,
17 that is correct.
18 Q. And so it's your testimony that
19 if the gas, mud, other hydrocarbons would
20 have been diverted over the rig floor into
21 the sea, that it still would have gone -- the
22 gas still would have gone into the pump room?

Page 64:24 to 65:07

00064:24 A. What I've said and as we've set
25 out in our report, we -- we don't know what
00065:01 would have happened if they'd had diverted
02 overboard.
03 Q. (BY MR. MATTHEWS) Well, we know
04 what happened when you didn't divert
05 overboard, don't we?
06 A. We know the re- -- that there
07 was an explosion, yes.

Page 65:10 to 65:15

00065:10 Is there anything that you wrote
11 with respect to the report or any part of the
12 report that you would change?
13 A. No, I believe and I've already
14 said I stand by -- I stand by the report and
15 what I have written.

Page 68:03 to 68:06

00068:03 Q. Hello, Mr. Hart, my name is
04 Rachel Hankey. I'm an attorney with the
05 Department of Justice, and I'm here
06 representing the United States. And I'm just

Page 68:12 to 68:23

00068:12 team. To your knowledge, was there any
13 member of the Transocean investigation team
14 who had previous experience investigating an
15 incident in which there were fatalities as a
16 result of a loss of well control?
17 A. Not that I'm aware of, no.
18 Q. And, to your knowledge, was
19 there anyone on the team who had experience
20 into the investigation of an incident where
21 there was a loss of well control where the
22 well could not be brought under control?

23 A. I don't know the answer to that.

Page 69:04 to 70:08

00069:04 Q. Now, as part of the -- we -- I
05 think you discussed this earlier with the
06 PSC. You interviewed quite a number -- a
07 few -- quite a number of people as part of
08 the investigation; is that correct?
09 A. That is correct.
10 Q. And as part of that process did
11 someone -- was someone at the interview
12 present taking notes?
13 A. That is -- that is correct.
14 Q. And after that person took
15 notes, did they then go back and type those
16 notes into a formal interview form?
17 A. Yes, the notes were -- the --
18 the note taker took their notes and typed
19 them up, and then they were reviewed by
20 the -- either the interviewer or the inter-
21 -- the couple of people that undertook the
22 interview, yes.
23 Q. And so, you know, one of the
24 other interviewers would have reviewed it,
25 either yourself or someone else was present
00070:01 would have reviewed those notes for accuracy?
02 A. If there was myself and another
03 person, then we would have both reviewed the
04 notes.
05 Q. And you made changes where you
06 thought there needed to be changes to make
07 sure the interview was accurate?
08 A. That is correct.

Page 75:07 to 75:24

00075:07 Q. Okay, thank you. And given the
08 number of interviews, is it fair to say that
09 the -- that the most accurate reflection of
10 what took place during those interviews is
11 those interview notes?
12 A. Yes. It wasn't like a
13 stenographer. It was a -- but it is the best
14 reflection of those interview notes.
15 Q. Okay, thank you. I wanted to
16 ask you, to your knowledge, on the Deepwater
17 Horizon during displacement of the Macondo
18 well is it your understanding that the crew
19 was able to monitor the active pit system?
20 A. Yes, there was a pit monitoring
21 system on the Deepwater Horizon.
22 Q. And while they were displacing
23 the well were they able to use that active

24 pit system to monitor returns?

Page 76:01 to 76:17

00076:01 A. I -- I don't know the answer to
02 that. As I explained to the previous
03 gentleman, I -- well control and BOPs is not
04 an area of my expertise.
05 Q. (BY MS. HANKEY) Well, are you
06 aware that, for example, mud was being
07 off-loaded to the Damon Bankston?
08 A. Earlier in the day up to about
09 5:00 o'clock in the evening I -- I am aware
10 that mud was being dis- -- discharged from
11 the rig to the Damon Bankston, yes.
12 Q. And the operations advisory that
13 the PSC discussed earlier with you with
14 regards to the Sedco 711, I -- I have one
15 point of clarification. To your knowledge,
16 was that advisory received by the Deepwater
17 Horizon prior to the incident on April 20th?

Page 76:19 to 77:12

00076:19 A. I -- I do not know the answer to
20 that question.
21 Q. (BY MS. HANKEY) As part of the
22 TO invest- -- Transocean investigation, did
23 you look into the question of whether or not
24 that advisory was received by the crew of the
25 Deepwater Horizon?
00077:01 A. That's not something that we
02 could establish. We know that the advisory
03 was issued, but we were not able to establish
04 if it was received on the rig.
05 Q. Did you in any of the interviews
06 with crew members ask them whether any of
07 them had received that advisory?
08 A. I did not.
09 Q. Do you know whether anyone on
10 the investigation team asked that question of
11 any of the crew members when they -- when
12 they interview -- were interviewed?

Page 77:14 to 77:23

00077:14 A. I -- I don't -- no, I don't know
15 if they did.
16 Q. (BY MS. HANKEY) And that
17 operations advisory, it went out on
18 April 14th, 2010; is that correct?
19 A. I -- I don't have -- I don't
20 know without looking at it.

21 Q. It's tab 46 in your items. And,
22 actually, I think it's been previously marked
23 as Exhibit 926.

Page 78:07 to 78:16

00078:07 Q. Okay. And you can -- the --
08 up -- up on the right-hand corner you can see
09 the issue date was April 14th, 2010?
10 A. That -- that is correct.
11 Q. And the event on the Sedco 711,
12 that occurred on December 23rd, 2009; is that
13 correct?
14 A. I couldn't confirm the exact
15 date, but it was certainly in December 2009,
16 yes.

Page 79:04 to 79:09

00079:04 Q. Okay. And do you know why it
05 took almost three months for an operation
06 advisory to go out with respect to this
07 incident?
08 A. I do not. I was not part of the
09 investigation team.

Page 80:21 to 82:04

00080:21 Q. (BY MS. HANKEY) Okay. I'm
22 going to ask you to look at tab 50, which has
23 been previously marked as Exhibit 5638, and
24 this is entitled the "Transocean Asset
25 Reliability Project." It's a document by
00081:01 Lloyd's Register.
02 A. Yes, I have that in front of me.
03 Q. Do you see it has a date of
04 May 1st, 2009?
05 A. Yes.
06 Q. And if you turn to Page 43, one
07 of the things that this report did is in the
08 middle of the page it says that the AR review
09 found the following strengths and weaknesses,
10 where strengths are highlighted in bold and
11 have -- they are considered to represent best
12 practice. And if you turn to Page 44,
13 there's a section on incident investigation.
14 A. Yes, I have that.
15 Q. And one of the items listed is
16 "Lessons Learned processes are not
17 sufficiently streamlined for effectiveness.
18 Not all incidents have a defined schedule for
19 investigation and reporting close-out."
20 As part of the Transocean

21 investigation -- did I read that correctly?
22 Let me ask you that first.
23 A. Yes, that's correct.
24 Q. And as part of the Transocean
25 investigation into the Deepwater incident,
00082:01 did anyone investigate why the -- well, I
02 think I asked you, did anyone investigate
03 whether the Sedco bulletin had gone to the
04 Deepwater Horizon crew?

Page 82:06 to 82:11

00082:06 A. I'm -- I don't know the answer
07 to that question.
08 Q. (BY MS. HANKEY) Well, to your
09 knowledge, is there anything in the
10 Transocean report addressing that question?
11 A. No, not that I am aware of, no.

Page 83:05 to 83:19

00083:05 Q. And it's not the one that we
06 just looked at?
07 A. That is correct.
08 Q. Let me ask you this: One of the
09 items listed as -- on this advisory that --
10 that you say went just to the North Sea, one
11 of the things on -- and this is Exhibit 926,
12 again, which was tab 46 for you. There is a
13 list of mandatory action items to take; do
14 you see that?
15 A. I see it on the screen, yes.
16 Q. And do you know whether or not
17 this list of mandatory action items was also
18 included in the advisory that was sent to the
19 whole fleet?

Page 83:21 to 84:20

00083:21 A. I don't -- I -- I don't know.
22 Q. (BY MS. HANKEY) Well, if we
23 look at item No. 3, it says, Rig managers
24 performance to ensure that well programs
25 specify operations that induce under-balanced
00084:01 conditions in the well bore.
02 Do you see that?
03 A. I see that on the screen, yes.
04 Q. And what would be the basis for
05 including an action item like that only to
06 the North Sea?
07 A. When we undertake incident
08 investigations, they're primarily initiated
09 within a division, and this is a division

10 advisory. Information from the -- from the
11 Sedco 711 incident investigation was then
12 shared with our corporate office, who issued
13 an advisory which went to the worldwide
14 operations.

15 Q. And you just -- you do not
16 recall whether it included the action item
17 listed here with respect to under-balanced
18 well conditions in the wellbore?

19 A. Without that worldwide advisory
20 in front of me, I'm -- I -- I can't comment.

Page 85:03 to 85:16

00085:03 Q. (BY MS. HANKEY) Well, one --
04 let me ask you this: One of the items that
05 it lists -- that under -- under that action
06 item that we just looked at it says that
07 "Well programs must specify operations where
08 a single mechanical barrier" -- and there is
09 a bracketed FIV -- "is in effect and a
10 warning must be included to raise awareness
11 and to highlight an SID."

12 And during your -- to your
13 knowledge, did -- did the rig manager
14 performance issue a warning for raised
15 awareness during displacement on the
16 Deepwater Horizon?

Page 85:18 to 85:23

00085:18 A. I'm -- I -- I don't know.

19 Q. (BY MS. HANKEY) During any of
20 your interviews with any of the crew members
21 did anybody state that such a warning was
22 issued?

23 A. I can't remember.

Page 87:03 to 88:04

00087:03 Q. Good morning. I have a few
04 questions for you. You told us earlier that
05 your focus in the investigation was on gas
06 dispersion and the evacuation from the rig?

07 A. That is correct.

08 Q. Can -- so that I'm on the same
09 page with you, can you explain to me what
10 those two areas involve? Specifically. What
11 were you looking at?

12 A. On the gas dispersion I was
13 looking at when -- from when the gas arrived
14 onto the rig from -- from the well, how it
15 then dispersed across the rig, and where it

16 dispersed to and up until there was some sort
17 of ignition and explosion. So that was the
18 gas dispersion.

19 The evacuation, I looked at from
20 when the event started on the mustering of
21 people, the loading of life boats, the
22 launching, and through until personnel were
23 onto the supply boat the Damon Bankston.

24 Q. Was it within your team's scope
25 of work to evaluate whether Transocean
00088:01 modified or by passed alarm systems?

02 A. I -- part of my area of
03 investigation was to look at the fire and gas
04 system.

Page 88:21 to 88:24

00088:21 Q. You referenced Section 4,
22 Chapter 4, the key findings earlier. Can you
23 tell me which of those key findings you are
24 responsible for?

Page 89:02 to 89:04

00089:02 A. The -- the key finding that --
03 that I am the author of is key finding 4.9,
04 Muster and Evacuation.

Page 90:23 to 91:07

00090:23 Q. Let me ask you this: Do you
24 agree that the most probable ignition source
25 was engine room No. 3 or No. 6?

00091:01 A. Our report, as set out in both
02 the report and in the appendix on the
03 possible -- possible ignition sources, we
04 have identified engine room 3 as a likely
05 ignition source, but we -- as our report
06 says, we were not able to definitively
07 identify ignition sources.

Page 92:07 to 92:17

00092:07 Q. Have you recommended any changes
08 to Transocean's policies or procedures as a
09 result of this incident?

10 A. I have made no formal
11 recommendations.

12 Q. Have you made any informal ones?

13 A. There were some investigation
14 tickets that I was working on that had some
15 outlines of -- of recommendations which are
16 now being reviewed by Transocean's

17 management.

Page 96:18 to 96:20

00096:18 Q. I'm marking tab 33 as
19 Exhibit 5749. This is an e-mail from you to
20 Robert Scott, correct?

Page 97:14 to 100:04

00097:14 Q. (BY MS. WINSTON) That's the top
15 of the e-mail from you to --
16 A. Yes.
17 Q. -- Robert Scott, correct?
18 A. That is correct.
19 Q. And this subject says,
20 Operations Advisory, Loss of Well Completion,
21 correct?
22 A. Yes, that is correct.
23 Q. And then going to the text of
24 the e-mail it says, "Bob, this was issued by
25 the North Sea following the incident on the
00098:01 SEDCO 711.
02 "Regards Derek Hart."
03 Correct?
04 A. That is correct, yes.
05 Q. Attached to this e-mail are two
06 advisories, and do you have those advisories
07 in your binder? There is one advisory dated
08 April 5th, 2010.
09 A. Yes, I have that.
10 Q. And then there is also advisory
11 dated April 14, 2010?
12 A. That is -- yes, I have that as
13 well.
14 Q. You stated earlier in your
15 testimony that the April 14, 2010 advisory
16 was not distributed to the -- wasn't
17 distributed worldwide, correct?
18 A. I -- if that is what I said,
19 then that's not strictly true. What I --
20 what I thought I said and what I -- or what I
21 should have said is this is an advisory for
22 the North Sea. So it would definitely be
23 distributed to the North Sea. I can't
24 comment and I don't know if it had any wider
25 distribution.
00099:01 Q. Okay. Let's look at the
02 April 5th, 2010 advisory. Are you aware --
03 A. Yes, I have that.
04 Q. Are you aware whether this was
05 distributed worldwide at Transocean?
06 A. By -- I can interpret by the
07 header that this is an advisory that would

08 have gone out on a worldwide basis.
 09 Q. And when you say "by the header"
 10 are you talking about the reference number
 11 that has HQS-OPS-ABD-09?
 12 A. Yes, that -- that's how I can
 13 determine that this is coming from our
 14 corporate office, yes.
 15 Q. Okay. And you also testified
 16 earlier that there were some changes made to
 17 the Well Control Handbook, correct?
 18 A. Yes, changes have been made to
 19 the Well Control Handbook, yes.
 20 Q. And if you look at the
 21 April 5th, 2010 advisory under -- at the
 22 first paragraph, it says, "The following will
 23 be added to the next revision of the Well
 24 Control Handbook to clarify the requirements
 25 for monitoring and maintaining at least two
 00100:01 barriers when displacing to an under-balanced
 02 fluid during completion operations."
 03 Did I read that correctly?
 04 A. Yes.

Page 100:11 to 101:06

00100:11 Q. (BY MS. WINSTON) Is this one of
 12 the changes that was made to the Well Control
 13 Handbook that you were referring to earlier
 14 in your testimony?
 15 A. That is my understanding, that
 16 this has been implemented.
 17 Q. Okay. And, also, I want to -- I
 18 want you to take a look further down on the
 19 page, and it looks kind of -- it's almost the
 20 last -- the second-to-last paragraph on that
 21 page that starts with, "Do not be
 22 complacent"... Do you see where I'm talking
 23 about?
 24 A. Yes, I have that.
 25 Q. The advisory states, "Do not be
 00101:01 complacent because the reservoir has been
 02 isolated and inflow tested. Remain focused
 03 on well control and maintain good well
 04 control procedures."
 05 Did I read that correctly?
 06 A. Yes, you did.

Page 101:13 to 102:16

00101:13 Q. Okay. I'm going to mark tab 46
 14 as Exhibit 5750.
 15 You write to Bill the following,
 16 In the most recent SQA the Company Man makes
 17 the following comment under Personnel &

18 Attitude. Attitude not as good since 21 and
 19 21 schedule started. The issue of morale
 20 around moving from 14 to 14 to 21/21 also
 21 comes up in the Lloyd's report. Have
 22 discussed this with Chad, who will get
 23 together something on the background to this
 24 change, how it was communicated, et cetera.
 25 Did I read that correctly?
 00102:01 A. Yes, ma'am.
 02 Q. SQA, that is referring to the
 03 service quality report?
 04 A. Service Quality Appraisal, that
 05 is correct.
 06 Q. Okay. And why were you sending
 07 this e-mail to Mr. Ambrose?
 08 A. As part of the -- my
 09 investigation I am at an early stage reviewed
 10 a lot -- lot of documents and the recent SQAs
 11 for the Deepwater Horizon was something that
 12 I -- that I reviewed and I was also aware
 13 from the Lloyd's report the issue that's
 14 stated here. So I was -- I had two different
 15 documents mentioning the same -- the same
 16 topic.

Page 103:08 to 105:05

00103:08 Q. Okay. In an e-mail you state
 09 that Chad will get together something on the
 10 background to this change, comma, how it was
 11 communicated, et cetera.
 12 Did Chad ever get this
 13 information to you?
 14 A. We took another approach with
 15 this issue, and we actually asked crew
 16 members as we interviewed them about this
 17 particular topic.
 18 Q. Okay. And we'll get to those
 19 interviews later, but did Chad ever get
 20 anything back to you on this topic regarding
 21 the background or how it was communicated?
 22 A. No, I said -- I just said we --
 23 we decided on another approach, which was
 24 through the interview process.
 25 Q. Let's turn to tab 47. Tab 47 is
 00104:01 a Service Quality Appraisal report, correct?
 02 A. That's correct.
 03 Q. I'm going to mark tab 47 as
 04 Exhibit 5751.
 05 Let's turn to Page 4 of 5 of
 06 this Service Quality Appraisal report.
 07 A. I have it in front of me.
 08 Q. Okay. And looking under the
 09 Section 8, Personnel. Do you see where I'm
 10 referring to at the top of the page?

11 A. Yes, I have that.
 12 Q. And under "Customer Comments" it
 13 says, "Attitude not as good since 21 and 21
 14 schedule started."
 15 Did I read that correctly?
 16 A. Yes.
 17 Q. And just to be clear,
 18 Exhibit 5751, looking at the first page, it
 19 is dated from January 1st, 2010 to
 20 March 31st, 2010, correct?
 21 A. That's correct, yes.
 22 Q. And the well is MC 252, correct?
 23 A. MC 252 ST00 BP01.
 24 Q. And MC 252 refers to the Macondo
 25 well, correct?
 00105:01 A. That is my understanding, yes.
 02 Q. Looking back at the e-mail in
 03 tab 46, is this one of the Service Quality
 04 Appraisal reports that you are referring to?
 05 A. As far as I can remember, yes.

Page 105:15 to 116:20

00105:15 Q. Okay. In the e-mail in tab 46
 16 you also refer to the Lloyd's report,
 17 correct?
 18 A. That is correct.
 19 Q. Will you turn to tab 45 in the
 20 binder. Tab 45 is Exhibit 4261 previously
 21 marked, and it's the Lloyd's Register "Safety
 22 Management Systems and Safety Culture Climate
 23 Review of the Deepwater Horizon Closing
 24 Meeting March 16th, 2010," correct?
 25 A. That is correct.
 00106:01 Q. I'm going to identify the pages
 02 by the last four numbers of the Bates number.
 03 So do you mind turning to 6757 of the
 04 presentation? Excuse me, I meant 6761.
 05 A. Yes, I have that.
 06 Q. Okay. And on this page of the
 07 Lloyd register report it says, Overwhelming
 08 concern relating to the 21 off, 21 -- excuse
 09 me, 21 on/21 off and long sleeve coveralls,
 10 correct?
 11 A. That is correct.
 12 Q. And then there are two quotes.
 13 The first quote say, "On their last week they
 14 seem like they are in another world,"
 15 correct?
 16 A. That's what it says, yes.
 17 Q. And then the second quote says,
 18 "On the last week you are so tired that you
 19 feel like a robot."
 20 Did I read that correctly?
 21 A. You did, yes.

22 Q. Is this the Lloyd's report that
23 you are referring to in the e-mail that you
24 sent to Mr. Ambrose in tab 46?
25 A. It is.

00107:01 Q. Therefore, as part of your work
02 on the Transocean investigation team you've
03 read the Lloyd's Register report, correct?
04 A. I did.
05 Q. Okay. Now, you also said that
06 you did some interviews with people regarding
07 the 21/21 schedule, correct?
08 A. I -- yes, I -- I stated that,
09 and that is correct.
10 Q. Let's turn to tab 20 in the
11 binder. And tab 20 is the interview of Amy
12 Annand of Lloyd's Register, correct?
13 A. That is correct.
14 Q. This was previously marked as
15 Exhibit 5705. Interviewers present, it says
16 you, Mr. Derek Hart, correct, on the first
17 page?
18 A. That is correct, yes.
19 Q. Also, there is no note taker
20 listed on this interview form, correct?
21 A. That is correct, because there
22 was no note taker.
23 Q. So does that mean you took the
24 notes of the interview yourself and typed
25 them up yourself?

00108:01 A. I did.
02 Q. And I understand this is not a
03 verbatim transcript, but this is the best
04 reflection of the interview with Ms. Annand?
05 A. Yes, that is correct.
06 Q. Going to the page ending in
07 Bates No. 88.
08 A. Yeah.
09 Q. Looking at the second -- second
10 question that says work rota, rotation, I
11 guess that's what it means?
12 A. Yes, that's...
13 Q. Okay. And this -- the question
14 is recently 21 days on/21 days off hitch has
15 been reintroduced for Transocean personal.
16 LRMEEA recognizes that this change is still
17 in the transition phase. However, many crew
18 members reported that this change was
19 affecting the workforce's motivation,
20 attention, and attitude, especially during
21 the final week of the hitch. What effect, if
22 any, do you think this was having on the
23 safety of the rig?
24 Did I read that correctly?
25 A. Yes, that's correct.

00109:01 Q. Her response to that question

02 was, There was a feeling of a lack of
03 involvement in the decision-making process.
04 It was forced on them, and the crews resented
05 this fact. It was meant people had to adjust
06 their lifestyles, not only themselves, but
07 also their families, and this was the feeling
08 across the whole rig. The last week of a
09 hitch supervisors felt they had to monitor
10 and the support the crews more, and this was
11 leading to an increase in risk.
12 Did I read that correctly?
13 A. That is correct.
14 Q. Going to tab 21, which is the
15 interview form for Mr. Gary Moon. He's also
16 of Lloyd's Register, correct?
17 A. That's correct.
18 Q. And interviewers present, it's
19 you, Mr. Derek Hart?
20 A. That's correct, yes.
21 Q. Tab 21 was previously marked as
22 Exhibit 5731. I ask you to turn to page with
23 the Bates no. ending 3410.
24 A. Yes, I have -- yes, I have that
25 in front of me.
00110:01 Q. And you pose the same question
02 to Mr. Moon about the 21 days on, 21 days off
03 hitch, correct?
04 A. That's correct.
05 Q. Okay. And his response -- and
06 I'm going to skip down to "Whilst it was
07 recognized"...
08 Whilst it was recognized that
09 the rig was in transition with the process
10 particularly the drew -- the drill crew
11 supervisors were reporting that in the final
12 week they were having to monitor their crews
13 much more closely and fatigue was seen as a
14 genuine issue?
15 Did I read that correctly?
16 A. That is correct.
17 Q. And these are notes that you
18 typed yourself, correct?
19 A. Yes.
20 Q. Okay. And you also interviewed
21 Transocean personnel about the 21/21
22 schedule, correct?
23 A. That is correct.
24 Q. Let's go to tab 24. Are you
25 there?
00111:01 A. Yes, sorry, I have it. I have
02 it.
03 Q. Okay. And tab 24 is the
04 interview form for Micah Lindsay, correct?
05 A. Correct.
06 Q. And he is the rig safety and

07 training coordinator on board the DW -- on
08 board the DWH, or at least he was, correct?
09 A. Just to clarify, he was not the
10 RSTC on the -- on the rig at the time of the
11 incident. He was the -- the -- on leave at
12 the time.
13 Q. Yes, but he did work as the rig
14 safety and training coordinator on the DWH,
15 correct?
16 A. That is correct.
17 Q. And, again, interviewers present
18 is you, Mr. Hart, and, also, Stefanie
19 Butefish, correct?
20 A. Butefish.
21 Q. Butefish, okay. And tab 24 was
22 marked as **Exhibit 5727**. I ask that you turn
23 to the page with the Bates number ending in
24 2898. It's almost the last page of the form.
25 A. Yep, I have that.
00112:01 Q. Okay. And going about the
02 fourth full paragraph down where it says,
03 "Derek Hart mentioned"... Do you see where
04 I'm at?
05 A. Uh-huh. Yes, sorry, yes. Yes.
06 Q. Derek Hart mentioned that in the
07 Lloyd's report, the change from 14-14 to
08 21-21 had some problems. Micah says the guys
09 became like robots, and that 70-75 percent
10 could not stand it. Those who worked inside
11 handled it better. He heard lots of
12 complaints about the change. He does not
13 believe that it -- he does believe that it
14 impacted rig safety; during their last 4-5
15 days the guys were "going through the paces."
16 You could tell the guys he saw were not
17 upbeat and ready to go home. It was not
18 worth the move. This did not work on the
19 Horizon. He doesn't know why. Some were
20 struggling with paydays and checks and they
21 felt they were not home as much.
22 Did I read that correctly?
23 A. That's as written here, yes.
24 Q. Okay. Let's turn to tab 25.
25 Tab 25 is the interviewing form for Chad
00113:01 Murry. He is the chief electrician on -- he
02 was the chief electrician on the DWH,
03 correct?
04 A. Correct.
05 Q. And you're listed as one of the
06 interviewers present, correct?
07 A. That is correct.
08 Q. And Exhibit -- I mean, tab 25
09 was marked as **Exhibit 5732**. Please turn to
10 the page ending in 3495.
11 A. Yes, I have that.

12 Q. Okay. And going to the
13 paragraph immediately before
14 "Recommendations." Do you see where I'm at?
15 It starts with, "When asked about"...

16 A. Yes, I have that.

17 Q. When asked about the hitch
18 change from 14 to 14 to 21/21 Chad said he
19 liked 14/14 better. He said normally when it
20 gets to about day 12 or 13 people are getting
21 tired and worn out. They get complacent, and
22 the morale weakens.

23 Did I read that correctly?

24 A. Yes.

25 Q. As part of your investigation
00114:01 into the change to the 21/21 schedule did you
02 become aware that there were -- there were
03 certain members of the drill crew who were on
04 their last days of their 21/21 hitch at the
05 time of the incident?

06 A. I -- yes, I was aware of that.

07 Q. You were aware that Dewey
08 Revette, the driller, was on his 20th day at
09 the time of the incident?

10 A. I couldn't be that specific, but
11 I know some people were on the last day of
12 their hitch.

13 Q. And when I'm speaking about the
14 drill crew, you understand that I mean the
15 driller, assistant driller, and toolpusher,
16 correct?

17 A. Yes, I understand that.

18 Q. Okay. Taking those facts into
19 consideration, including the Lloyd's Register
20 report, the two interviews you conducted with
21 the consultants from Lloyd's Register, and
22 the interviews you conducted with the
23 Transocean personnel, did you ever
24 investigate as part of your role on the TO
25 investigation team whether the 21/21 schedule
00115:01 impacted the actions that the drill crew took
02 on the night of April 20th?

03 MR. MASSEY: Objection; form.

04 A. I think you're asking me if I
05 investigated the -- whether the 21/21 had an
06 impact on the incident; is that what you're
07 asking me?

08 Q. (BY MS. WINSTON) Yes, I am.

09 A. I do not believe that the 21/21
10 work schedule had an impact on the incident.

11 Q. And what is your basis for that
12 belief?

13 A. I spoke to a number of other
14 people as part of the interview process. I
15 would also say that we worked 21/21 schedule
16 on a number of rigs in the Gulf of Mexico.

17 We also worked 28/28 in parts of West Africa,
 18 which I'm familiar with, and we worked that
 19 rota very successfully.

20 Q. You made that conclusion despite
 21 the fact that it was presented in the Lloyd's
 22 Register report and also in interviews with
 23 other Transocean crew members who were on the
 24 rig?

25 MR. MASSEY: Objection; form.

00116:01 A. Yes, I -- I -- I do, and I would
 02 also say that from my interviews with a
 03 number of people -- the main complaint about
 04 this 21/21 was the way that it was
 05 implemented rather than the fact that they
 06 were working 21/21.

07 Q. (BY MS. WINSTON) And you still
 08 came to that conclusion after the RSTC said
 09 that he believed it impacted the safety on
 10 board the rig?

11 MR. MASSEY: Objection; form.

12 A. I -- I draw -- drew an overall
 13 conclusion based on many interviews, not just
 14 the ones that you've -- that we've looked at
 15 today.

16 Q. (BY MS. WINSTON) And the 21/21
 17 schedule rotation change was not discussed at
 18 all in the Transocean investigation report,
 19 correct?

20 A. That is correct.

Page 117:17 to 120:13

00117:17 Q. Okay. Do you mind turning to
 18 tab 34 in your binder? Tab 34 is the
 19 Deepwater Horizon operations integrity case.
 20 It was marked as Exhibit 5644. Have you seen
 21 this before.

22 A. No, I have not.

23 Q. As part of your investigation
 24 with the Transocean internal investigation
 25 team, you did not review this when you were
 00118:01 evaluating the evacuation and response?

02 A. I -- I'm unaware of its
 03 existence.

04 Q. Do they have the operations
 05 integrity case in the North Sea's region?

06 A. I suppose a simple answer to
 07 that is no.

08 Q. So this is only specific to the
 09 Gulf of Mexico?

10 A. It is not. We have operations
 11 integrity cases on two rig -- at least two
 12 rigs that I'm familiar with in West Africa.

13 Q. Okay. And what is an operations
 14 integrity case?

15 A. Operations integrity case
 16 contains a number of elements, but it -- it
 17 des- -- it describes or details how major
 18 accident hazards can -- are assessed, using
 19 both a qualitative and semi-qualitative
 20 approach using a piece of proprietary
 21 software. But it not only possesses the HSE
 22 risks, it also looks at operational risks as
 23 well. So it -- it's -- it's more than a
 24 safety assessment.

25 Q. Okay. Let's go to the page with
 00119:01 Bates number ending 5367. Are you there,
 02 sir?

03 A. Just catching up. I have it in
 04 front of me.

05 Q. Okay. And let's go to the
 06 section that's entitled "Wick" safety
 07 training coordinator. Do you see where I'm
 08 at at the bottom of the page?

09 A. Yes, I'm -- I have that.

10 Q. Okay. This document states that
 11 The basic functions of the RSTC are to work
 12 with the rig supervisors to ensure compliance
 13 with the safety management system and provide
 14 in-house training, per the company training
 15 matrix.

16 Did I read that correctly?

17 A. That is correct.

18 Q. And then it goes on to list
 19 several bullet points, starting with the
 20 first one, "Maintaining safety training and
 21 OJT personnel record."

22 OJT is on-the-job training,
 23 correct?

24 A. That is correct.

25 Q. And the RSTCs are responsible
 00120:01 for making sure that the rig crew completes
 02 their safety training and OJT training?

03 A. The RSTC's role is to assist the
 04 supervisors in the administration of the OJT
 05 system and they may also undertake some
 06 training as part of that, but it is the
 07 supervisors who will undertake the or
 08 supervise the actual training. The RSTC is
 09 more of an administrative role.

10 Q. And if someone doesn't complete
 11 their OJT training, is it the responsibility
 12 of the RSTC to report them or to make sure
 13 they complete it?

Page 120:15 to 124:20

00120:15 A. The RSTC would liaise with the
 16 individual's supervisor and make that
 17 supervisor aware if there was anything

18 deficient in O -- in the OJT process.
19 Q. (BY MS. WINSTON) Okay. The
20 third bullet point says "performing on-board
21 rig-specific orientations."
22 Did I read that correctly?
23 A. Correct.
24 Q. Is it the responsibility of the
25 RSTC to -- to orientate visitors who come on
00121:01 the rig?
26 A. It -- it may be the RSTC. It
27 could be other people, other relative --
28 rel- -- excuse me. Relevantly trained
29 people. It's not always the RSTC that
30 undertakes orientations.
31 Q. Okay. And when this is stating
32 performing on-board rig-specific
33 orientations, what does it mean, then?
34 A. Well, it -- what I'm saying is
35 that is not an exclusive task to the RSTC.
36 Q. Yes, I understand. So what does
37 performing on-board rig-specific orientations
38 mean, in this policy?
39 A. Oh, sorry. I misunderstood your
40 question. I beg -- I beg -- I do beg your
41 pardon. An on-board orientation is something
42 that is required by Transocean's management
43 system that when such as visitors visit a
44 rig, that they are made aware of such as
45 their muster station, which lifeboat they're
46 assigned to, the rig's designated smoking
47 areas, and other emergency activities, what
48 the alarms are. They would be shown
49 something called "the station build" so that
00122:01 they were quite clear on the command
50 structure for the rig.
51 Q. Okay. Going to the fourth
52 bullet point, it says, "assisting and
53 conducting audits."
54 Did I read that correctly?
55 A. "Assisting and conducting
56 audits," yes, that's correct.
57 Q. Does that mean, for instance, on
58 the Deepwater Horizon that the RSTC would
59 assist in the ModuSpec audit, for example?
60 A. I think it unlikely that he
61 would be part of that team. He would assist
62 such as a ModuSpec audit in providing them
63 with information, but he would not be part of
64 their audit team.
65 Q. Okay. And would that mean he
66 would assist, for example, with the Lloyd's
67 Register review of the Deepwater Horizon?
68 A. Same response as I -- I gave
69 previously, when this says conducting audits,
70 it's where he actually undertakes audits

23 himself or herself.
 24 Q. And is the RSTC responsible for
 25 disseminating the audit results to the rig
 00123:01 after they're complete?
 02 A. The ones that he undertakes
 03 himself, yes.
 04 Q. Okay. And what about the ones
 05 that he provides information for, such as the
 06 ModuSpec or the Lloyd's Register?
 07 A. Well, that -- that would be the
 08 responsibility of the -- the persons
 09 undertaking. So Lloyd's personnel from
 10 Lloyd's would distribute the Lloyd's report.
 11 Q. To the rig crew? To the
 12 Transocean rig crew?
 13 A. I don't -- I don't know who --
 14 all right. Sorry, I can't remember who
 15 Lloyd's sent that -- their report to, but
 16 I'm -- I -- it would probably -- it would
 17 have gone to somebody in Trans man- --
 18 Transocean management.
 19 Q. Okay. And the next bullet
 20 point, "assisting and planning safety
 21 meetings." Are the RSTC --
 22 A. Yes.
 23 Q. -- RSTCs responsible for the
 24 weekly safety meetings on the rig, such as
 25 the Deepwater Horizon?
 00124:01 A. The RSTC is not responsible for
 02 the meeting. He will assist the OIM and the
 03 department heads in organizing and providing
 04 them with information for the safety
 05 meetings.
 06 Q. And when you say "providing them
 07 information for the safety meetings," is it
 08 the responsibility of the RSTC to report
 09 about lessons learned at Transocean at the
 10 safety meetings?
 11 A. That is something he -- he may
 12 do at a safety meeting, yes.
 13 Q. The next bullet point says,
 14 "conducting emergency preparedness training."
 15 Did I read that correctly?
 16 A. That is correct.
 17 Q. And when this policy is
 18 discussing the emergency preparedness
 19 training, are we talking about abandon ship,
 20 fire drills, et cetera, type training?

Page 124:22 to 126:05

00124:22 A. The RSTC, again, would be
 23 assisting with the emergency preparedness
 24 training. From my experience, I would
 25 question the wording on -- on this bullet

00125:01 point.
02 Q. (BY MS. WINSTON) So it's from
03 your experience the RSTC does not actually
04 conduct the emergency preparedness training?
05 A. Again, with -- come back to the
06 safety meetings. He would assist others in
07 helping them for that training to be
08 undertaken.
09 Q. Yeah, so my question was, so it
10 is your understanding that the RSTC would not
11 actually conduct emergency preparedness
12 training?
13 A. He may undertake some limited
14 training, but I'd say he would primarily
15 assist other people to do that.
16 Q. The next bullet point says,
17 "conduct random inspections of safety
18 equipment."
19 Did I read that correctly?
20 A. That is correct.
21 Q. And when this policy states,
22 "inspections of safety equipment" are we
23 talking about firefighting equipment?
24 A. That would be a -- an example,
25 yes.
00126:01 Q. Okay. Is it your understanding
02 of the role of the RSTC is that the
03 Transocean personnel on board the rig would
04 go to the RSTC to consult him or her about
05 HSE issues?

Page 126:07 to 126:24

00126:07 A. The RSTC, because of his
08 position, would have access to information;
09 and he's also highly trained in our safety
10 systems and processes. So he is there, yes,
11 to offer, help, and advice to everyone on the
12 rig.
13 Q. (BY MS. WINSTON) Okay. And is
14 the role of the RSTC to act as the
15 installation subject "magger" -- matter
16 expert for the company HSE management system
17 and training requirements?
18 A. Yes, he -- within the bounds of
19 his own knowledge, yes, he -- I think that's
20 what I described just now. People would seek
21 his advice on the safety management system.
22 Q. And the RSTC is also there to
23 assist in the continued development of the
24 HSE culture on board the rig, correct?

Page 127:01 to 127:08

00127:01 A. He and everybody else on the rig
02 would undertake that. It's not exclusive to
03 the RSTC.
04 Q. (BY MS. WINSTON) Okay. And one
05 of the functions of the RSTC is to actively
06 support the safety vision of an incident-free
07 workplace all the time, everywhere on board
08 the rig, correct?

Page 127:10 to 127:19

00127:10 A. The -- again, the same answers
11 as I gave you to the previous question. The
12 RSTC is not exclusive to the RSTC. All
13 Transocean employees promote that safety
14 vision.
15 Q. (BY MS. WINSTON) But as part of
16 one of the functions of the RSTC, that is one
17 of his roles, is to promote the -- the safety
18 on board the rig, correct?
19 A. That is correct.

Page 127:25 to 128:11

00127:25 Q. Okay. I'm marking tab 43 as
00128:01 Exhibit 5752. This is a Beacon newsletter
02 dated spring 2009, and the subject is "The
03 New RSTC."
04 Did I read that correctly?
05 A. That is correct.
06 Q. Okay. Have you seen this
07 article before?
08 A. Yes, although I haven't -- I
09 must admit, I haven't looked at it for an
10 awful long time, but, yes, I'm familiar with
11 it.

Page 129:01 to 129:25

00129:01 Q. Okay. And this article
02 discusses changes to the new RSTC job
03 description; is that correct?
04 A. That is correct.
05 Q. Okay. Some of the changes
06 include even more effective leadership in the
07 uses our safety tools, like Think, Start, and
08 Time Out For Safety, correct?
09 A. Yes, that is correct.
10 Q. And then there -- there was
11 added a functional report to the QHSE
12 management onshore in addition to the rig
13 OIM, which will increase communication and
14 support.

15 Did I read that correctly?
16 A. That is correct.
17 Q. Before this change who did the
18 RSTC report to?
19 A. From my recollection, he
20 reported exclusively to the offshore
21 installation manager in some parts of our
22 organization.
23 Q. And why was the change made to
24 have a direct report to the QHSE management
25 onshore in addition to the OIM on the rig?

Page 130:02 to 130:09

00130:02 A. The primary reporting line for
03 the RSTC was not changed. He still primarily
04 reported to the OIM. This is a functional or
05 what I would call a dotted line reporting to
06 the onshore QHSE management team that was
07 supporting operations onshore, and this was
08 to be a more visible connection between the
09 two.

Page 130:15 to 131:05

00130:15 Q. It says, RSTCs are crucial to
16 our HSE performance, comma, as they are
17 responsible for reinforcing the importance of
18 our safety vision on the front lines of our
19 operation each day. And that's a quote by
20 Adrian Rose, VP of QHSE.
21 Did I read that correctly?
22 A. Yes, that is correct.
23 Q. Is that how you understand the
24 RSTC role to be on board the rigs?
25 A. That is one of his functions,
00131:01 that is correct.
02 Q. Based on your understanding of
03 the role of the RSTC on board the rigs, do
04 third-party contractors consult with the RSTC
05 for HSE issues?

Page 131:07 to 131:11

00131:07 A. I can speak from my experience
08 working in both the North Sea and Africa, and
09 that is -- is the case.
10 Q. (BY MS. WINSTON) Okay.
11 A. Yes.

Page 136:05 to 136:11

00136:05 Now, as part of your role on the

06 Transocean investigation team you were
07 looking into various ignition points on the
08 rig, correct?
09 A. I was taking the lead on -- on
10 that with the assistance of such as Mr. Crain
11 and Mr. Ritter, that's correct.

Page 137:13 to 138:03

00137:13 Q. Were you responsible for
14 actually writing Chapter 3.5, "Gas Dispersion
15 and Ignition," in the Transocean report?
16 A. I took the lead on that section,
17 yes.
18 Q. And when you say --
19 A. On writing that.
20 Q. Okay. So you did actually write
21 portions of it?
22 A. I -- I'm responsible for that --
23 that section.
24 Q. And what do you mean by
25 "responsible"?
00138:01 A. Well, I -- I wrote that section,
02 but I did have assistance with other
03 colleagues in -- in preparing that.

Page 139:06 to 141:05

00139:06 Q. (BY MS. WINSTON) Mr. Hart, we
07 left off looking at Chapter 3.5, the "Gas
08 Dispersion and Ignition" chapter of the
09 Transocean investigation report. Are you on
10 Page 190 of that section?
11 A. Yes, I have that in front of me.
12 Q. Okay. And Page 190, there is a
13 section titled 3.5.4, "Ignition" and it
14 discusses the different or the likely
15 possibly or likely sources of ignition;
16 correct?
17 A. That's correct.
18 Q. On Page 190 it discusses the
19 engine spaces as being a likely source,
20 correct?
21 A. That -- that is correct, it says
22 engine sources, in brackets, likely.
23 Q. You mean engine spaces, in
24 brackets, likely?
25 A. That's what the subheading is.
00140:01 Q. Yes. What is your understanding
02 of the difference between the terms likely
03 and possible, as they are listed in this
04 chapter of the report?
05 A. This is a subjective
06 characterization that -- that I and the team

07 agreed on that, as our report says, we were
 08 not able to definitively identify a single
 09 or -- or multiple ignition sources, but on
 10 our analysis we've split things into likely
 11 as whether we -- we think that is -- the
 12 ignition could have happened there, possible
 13 where we think it less likely, and then
 14 there's ones that we've designated unlikely
 15 where we think it not impossible, but we
 16 doubt that those sources of ignition, as
 17 listed in the report, could have -- could
 18 have caused the gas to ignite.

19 Q. And the engine spaces is the
 20 only source that is identified as a likely
 21 ignition source, correct, in this report?

22 A. That is correct.

23 Q. Were you also responsible for
 24 Appendix Q of the Transocean investigation
 25 report?

00141:01 A. That is -- that's correct, yes.

02 Q. Okay. And Appendix Q is in
 03 tab 9 of the binder. Do you mind turning to
 04 it, please? Are you there?

05 A. Yes.

Page 142:03 to 142:20

00142:03 Q. "The team believes that ignition
 04 subsequent and explosion would most likely be
 05 from within the engine room space rather than
 06 an actual engine."

07 Did I read that correctly?

08 A. That is correct.

09 Q. As part of your investigation
 10 into the ignition sources, did your team or
 11 did you look at the testimony from the Marine
 12 Board investigation hearing or it's also
 13 called the joint investigation hearing?

14 A. The marine -- Marine Board, yes,
 15 we did look at evidence given at those --
 16 those hearings, yes.

17 Q. And did you perhaps look at Doug
 18 Brown's testimony at that hearing?

19 A. I -- yes -- yes, certainly, I --
 20 I reviewed Mr. Brown's testimony.

Page 143:13 to 144:13

00143:13 Q. Yeah. I asked you if you -- are
 14 you aware that Mr. Brown testified that he
 15 thought that engine No. 3 exploded? That's
 16 in lines 1 through 6 on Page 130.

17 A. Thank you. Yes, I'm familiar
 18 with his testimony, yes.

19 Q. Okay. And did you take that
20 testimony into -- into account when you were
21 determining whether an engine actually
22 exploded?
23 A. I -- I'm aware of that
24 testimony. I -- as per our report, we -- our
25 team do not believe that that testimony to --
00144:01 to be correct. We think the explosion
02 happened within the engine room space rather
03 than the engine.
04 Q. Okay. And that is just based on
05 the gas dispersion analysis?
06 A. That's based on -- that is based
07 on evaluation and information that my --
08 particularly my colleagues assisted me with.
09 I did not look specifically into the -- the
10 issue of engine rooms. My colleague
11 Mr. Robert Walsh assisted me in this area,
12 and that was the conclusion of his
13 investigation.

Page 146:10 to 147:12

00146:10 Q. I'm going to mark tab 52 as
11 Exhibit 5755. In the first e-mail Steve
12 Myers writes to you, "Who is going to be
13 looking at the safety culture on the DWH as
14 part of the investigation," question mark?
15 "I imagine we will be asking the same
16 questions that Lloyd's was asking when they
17 were on board," question mark.
18 Did I read that correctly, sir?
19 A. Yes, that's correct.
20 Q. And you respond back to him and
21 say, "Steve, I'll respond next week after
22 I've had a chance to consider properly."
23 Correct?
24 A. That is correct.
25 Q. Did you respond back to
00147:01 Mr. Myers?
02 A. Yes, I -- I had, from what I
03 recollect, a number of discussions with
04 Mr. Myers on this topic.
05 Q. Okay. And do you recall what
06 you said to Mr. Myers about this topic?
07 A. What we discussed was whether
08 this is something that we should investigate.
09 Q. And from the Transocean
10 investigation report you guys decided against
11 investigating safety culture on board the
12 DWH?

Page 147:14 to 148:15

00147:14 A. The -- the conclusion that we
 15 came to and as -- was that that was not
 16 something that had an impact on the -- on the
 17 incident. So we did not investigate safety
 18 culture, per se...
 19 Q. (BY MS. WINSTON) And how did
 20 you guys come to that conclusion, that it
 21 didn't have an impact on the incident if you
 22 guys didn't even investigate it?
 23 MR. MASSEY: Objection; form.
 24 A. Well, two things I would say:
 25 A, it's not as part of the remit that was set
 00148:01 out in our executive summary. But through
 02 our undertaking of interviews and looking at
 03 the -- such as the Lloyd's report, neither
 04 Mr. Myers or I made a thought that this was
 05 something that needed to be investigated.
 06 There was a very strong -- in our opinion, it
 07 was a very strong safety culture on the
 08 Deepwater Horizon, and I think -- I don't
 09 think I know that that is what's reflected in
 10 the Lloyd's report.
 11 Q. (BY MS. WINSTON) Let's go to
 12 the remit in the Transocean report. Do you
 13 still have the full report in front of you
 14 that was in tab 1 of the PSC binder?
 15 A. Yeah.

Page 149:01 to 149:20

00149:01 Q. (BY MS. WINSTON) Are you
 02 looking at the executive summary on Page 9?
 03 A. Yes, I have that in front of me.
 04 Q. Okay. And towards the bottom of
 05 the page it states that "The report focuses
 06 on the following critical questions." Do you
 07 see where I'm at, Mr. Hart? Towards the
 08 bottom.
 09 A. Yes.
 10 Q. Okay.
 11 A. Yeah.
 12 Q. One of them is "what actions did
 13 the drill crew take" and another one is "how
 14 did personnel on board evacuate the rig." Do
 15 you see those bullet points?
 16 A. Yes.
 17 Q. Does safety culture of
 18 Transocean or how safety was practiced on the
 19 Deepwater Horizon rig, does that not follow
 20 any of those bullet points?

Page 149:22 to 150:10

00149:22 A. The -- we investigated what

23 actions the drill crew took and how personnel
24 evacuated the rig. As I've already said,
25 from my discussions with Mr. Myers, we
00150:01 reached the conclusion that that was
02 something that did not need to be -- needed
03 to be investigated. There was a strong
04 safety culture on the Deepwater Horizon.
05 Q. (BY MS. WINSTON) You also said
06 you made that conclusion based on the Lloyd's
07 report, but as we discussed earlier, the
08 Lloyd's report had a comment about the 21/21
09 schedule that did present a safety issue,
10 according to one of the RSTCs, correct?

Page 150:12 to 150:14

00150:12 A. That -- that's -- there is a --
13 that is within the Lloyd's report, that is
14 correct.

Page 151:07 to 151:14

00151:07 Q. And the area of investigation is
08 "crew culture with respect to maintenance or
09 upkeep on the DWH." Did I read that
10 correctly?
11 A. That is correct.
12 Q. Was there ever an investigation
13 ticket created for the safety culture on the
14 DWH?

Page 151:16 to 151:19

00151:16 A. I can't remember.
17 Q. (BY MS. WINSTON) Okay. Was
18 there ever an investigation ticket to discuss
19 safety generally on the DWH?

Page 151:21 to 152:08

00151:21 A. Not that I can remember.
22 Q. (BY MS. WINSTON) Okay. And
23 there's nowhere in the report that discusses
24 the safety culture or general safety
25 awareness on board the DWH, correct?
00152:01 A. That is correct, but it's not
02 part of the investigation remit.
03 Q. If you thought that something
04 was a big issue and caused the incident, did
05 you have the opportunity to go back to
06 Mr. Newman, who gave you the remit, to
07 suggest another line of questioning with
08 regard to the Deepwater investigation?

Page 152:10 to 152:20

00152:10 A. If I had any concerns about the
11 investigation remit, I would have raised it
12 with the -- with our investigation team lead.
13 Q. (BY MS. WINSTON) And that would
14 have been Mr. Farr or Mr. Ambrose, correct?
15 A. That is -- that is correct.
16 Q. Okay. And you didn't raise
17 anything with Mr. Farr or Mr. Ambrose about
18 the safety culture on the Deepwater Horizon,
19 correct?
20 A. Not that I can remember.

Page 153:16 to 155:03

00153:16 Q. Tab 58 is marked as
17 Exhibit 5486. Have you seen this report or
18 presentation before?
19 A. I -- I don't think so.
20 Q. Did you attend this meeting in
21 December 2009 regarding the engineering and
22 technical suspect HSE meeting?
23 A. I'm pretty sure I didn't. I'm
24 trying to work out which group that would --
25 would have been, and I -- I think it must be
00154:01 one of the Houston group -- one of our
02 Houston group, but I'm -- I'm -- I'm guessing
03 here, so I'm pretty -- pretty sure I wasn't
04 there, and I'm pretty sure I've not seen this
05 before.
06 Q. Okay. On one of the pages it
07 talks about the "Mumbai Safety Vision -
08 February 2009." It also goes into Mumbai
09 safety vision a little bit more in detail.
10 Does that help you recall whether you
11 attended this meeting or whether this was
12 just a Houston-based meeting?
13 A. The front indicates it's a -- it
14 has -- I think the front cover speaks for
15 itself, Engineering & Technical Support
16 meeting.
17 But the page you just showed me
18 just now I think is an extract from a meeting
19 I did attend in Mumbai.
20 Q. And the meeting that you did
21 attend in Mumbai, did it talk about the
22 safety vision of Mumbai?
23 A. Yes, from my recollection of
24 that meeting, yes.
25 Q. Okay. I'm going to show you
00155:01 Page 12 of this PowerPoint. Sorry. I'm
02 going to show you Page 16 of this PowerPoint.

03 Can you see it? Do you need me to zoom in?

Page 155:07 to 155:17

00155:07 Q. (BY MS. WINSTON) Okay. On
08 Page 16 of this presentation it says, "What
09 you said: First: admit that we have lost
10 our safety culture.
11 "there is no quick fix. We have
12 to rebuild it."
13 Did I read that correctly?
14 A. That's correct.
15 Q. At any time after December 2009
16 did you become aware of this concern that
17 Transocean had lost our safety culture?

Page 155:19 to 156:12

00155:19 A. I'm not aware of that.
20 Q. (BY MS. WINSTON) At the Mumbai
21 meeting that you did attend, was there a
22 discussion about a loss of safety culture at
23 Transocean?
24 A. I'll be honest, I can't -- can't
25 remember.
00156:01 Q. Okay. And then the second part,
02 bullet point says, "Next: recognize that we
03 have to define the problem before we can fix
04 it." And the bullet point underneath that
05 says, "engage an independent expert to help
06 us figure out exactly what is broken."
07 Did I read that correctly?
08 A. Yes, that -- that's correct.
09 Q. At any time after 2009 did you
10 become aware that there was a problem that
11 needed to be fixed within Transocean
12 regarding safety?

Page 156:14 to 156:14

00156:14 A. I -- I can't recollect that, no.

Page 158:21 to 160:15

00158:21 Q. (BY MS. WINSTON) Let's change
22 topics. During the course of the Transocean
23 investigation of the incident were you
24 responsible for looking into watertight
25 integrity of the vessel?
00159:01 A. Watertight integrity was not
02 something that I -- I personally
03 investigated, no.
04 Q. Do you know who did personally

05 investigate watertight integrity as part of
06 the Transocean investigation?

07 A. There was Mr. -- Mr. Farr, the
08 team lead, did have -- or did undertake some
09 invest- -- excuse me, some investigation into
10 this area because there was, I believe, an
11 investigation ticket raised as to why the --
12 what caused the rig to sink.

13 Q. Okay. Actually, let's turn to
14 that ticket. It's tab 18 in your binder.
15 I'm going to mark tab 18 as 5757. As you
16 said, this is the "DWH investigation ticket
17 for engineering design - why did rig
18 actually sink?"

19 Did I read that correctly?

20 A. That is correct.

21 Q. Now, you just said that Dan
22 Farr, the team lead, was looking into this,
23 correct?

24 A. That is correct.

25 Q. However, on this investigation
00160:01 ticket when you look at team lead and
02 assigned to, it says Derek Hart, correct?

03 A. That is correct.

04 Q. So why is your name listed on
05 the investigation ticket, if you were not the
06 person looking into this?

07 A. The -- this was assigned at a
08 very early stage. If you -- if you go right
09 down to the bottom, this was created on the
10 17th of May 2010, and probably the person
11 that created it thought at that time that I
12 was maybe the best person to be looking at
13 that. But as I've already stated, I did not
14 investigate this. This was something
15 Mr. Farr was taking a lead on.

Page 161:03 to 161:09

00161:03 Q. And this particular
04 investigation ticket says, percent complete,
05 25 percent. Did I read that correctly?

06 A. That's correct.

07 Q. Did Mr. Farr at any time
08 complete this investigation ticket, that you
09 are aware of?

Page 161:11 to 161:17

00161:11 A. I'm -- I'm not aware if he did,
12 no.

13 Q. (BY MS. WINSTON) Okay. And as
14 the team lead listed on this investigation
15 ticket, you did not follow up with Mr. Farr

16 to see if he completed this investigation
17 ticket?

Page 161:19 to 162:02

00161:19 A. At the time I left the
20 investigation I -- I did not follow up, but I
21 know Mr. Farr was undertaking some work on
22 this.
23 Q. (BY MS. WINSTON) Okay. But as
24 the Transocean report stands right now, there
25 is no discussion of why the rig sank,
00162:01 correct?
02 A. That -- that is correct.

Page 163:18 to 165:16

00163:18 Q. (BY MS. WINSTON) So I'm marking
19 this e-mail attachment as Exhibit 5758, and
20 this is an e-mail from Mr. Ritter to you,
21 Mr. Hart, the subject, "Minutes of meetings
22 09-10-2010 about sinking of the DWH,"
23 correct? That's what the subject line says?
24 A. Yeah, minutes of meeting about
25 sinking of the Deepwater Horizon, yes.
00164:01 Q. And as you said, the subsistence
02 of the e-mail says, as discussed on the
03 phone, regard, Bjoern -- Bjoern. Sorry.
04 A. Yes.
05 Q. Okay. Now, going to the actual
06 minutes of the meeting. Let's go down to the
07 "Suggested Approach." Do you see where I'm
08 at in that document? The middle of the page.
09 A. Yes, I have that.
10 Q. Okay. And it talks about doing
11 a stability analysis, correct?
12 A. That is correct.
13 Q. And it says, Find explanation
14 for list. Which compartments would have to
15 be flood, et cetera, correct?
16 A. That is correct.
17 Q. It also talks about doing a
18 structural analysis, right?
19 A. Yes.
20 Q. And also a firefighting
21 analysis, correct?
22 A. That is correct.
23 Q. And under the firefighting
24 analysis it says, combine with structural
25 analysis to see if structural failure could
00165:01 have been prevented.
02 Did I read that correctly?
03 A. That is correct.
04 Q. This e-mail and the minute --

05 and the date of these notes is
06 September 10th, 2010, correct?
07 A. That is correct.
08 Q. Okay. If you were not the
09 person investigating the rig sinking, then
10 why did Mr. Ritter send this e-mail to you?
11 MR. MASSEY: Objection; form.
12 A. At that time I was set -- well,
13 I was certainly involved in the discussions
14 about the rig sinking. Mr. Ritter then was
15 undertaking work directed -- or being
16 directed by Mr. Farr.

Page 165:21 to 166:02

00165:21 Q. Okay. Let's go to the next tab,
22 tab 51. And I'm hoping you have an e-mail
23 from Mr. Ritter to you, dated September 27,
24 2010. The same subject line, but there is
25 three e-mail exchanges on that page. The
00166:01 Bates number is 2442.
02 A. Yes.

Page 166:05 to 167:07

00166:05 Q. Okay. I'm going to mark that
06 e-mail Exhibit 5759. And in the middle part
07 of this page where there's an e-mail from you
08 to Mr. Ritter -- do you see where I'm looking
09 at?
10 A. Yes.
11 Q. Okay. And you respond, "These
12 notes look OK to me"... you tell him to go
13 speak with Bill and/or Dan about the sonar
14 scan of the rig. As indicated, this
15 already -- already exist, but there will be a
16 substantial cost to do from scratch.
17 Did I read that correctly?
18 A. That is correct.
19 Q. And Bill, you're referring to
20 Bill Ambrose, correct?
21 A. That's correct.
22 Q. And Dan, you're referring to Dan
23 Farr?
24 A. That is correct.
25 Q. Okay. And you also talk about,
00167:01 "there would be a substantially cost to do
02 from scratch."
03 Was the sonar scan ever done of
04 the rig to determine why the rig sink --
05 sank?
06 A. There was a sonar scan survey
07 done of the rig.

Page 168:02 to 170:08

00168:02 Q. Okay. If the sonar scan was
03 done, of the Deepwater Horizon, why was --
04 why did the report not contain a section on
05 why did the rig sink?
06 A. I think I need to explain why
07 the soap -- the site -- sonar was done. The
08 sonar scan was undertaken, my understanding,
09 at the instruct- -- on the instructions of
10 the U.S. Coast Guard.
11 Q. Okay.
12 A. For a different reason than why
13 the rig sank.
14 Q. Okay. So the sonar scan had
15 nothing to do with the evaluation of why the
16 rig sank?
17 A. The primary purpose of the
18 sign -- the sonar scan, excuse me, was --
19 I'll say, at the behest of the -- I believe
20 at the instruction of the U.S. Coast Guard,
21 and that was to do with determining the
22 condition of the -- of the rig on the bottom
23 of the seabed.
24 Q. Okay. Now, let's go back to --
25 A. Particularly with rig -- okay.
00169:01 Q. Sorry, go ahead. I'm sorry.
02 MR. MASSEY: You can finish your
03 answer.
04 A. (Continuing) Yes. In regard to
05 the condition of the pontoon tanks on the
06 rig.
07 Q. (BY MS. WINSTON) Let's go back
08 to tab 50 and look at the minutes of the
09 meeting again. Are you there?
10 A. Yes.
11 Q. Okay. Was the stability
12 analysis ever done of the Deepwater Horizon?
13 A. Not that I'm aware of.
14 Q. Okay. Was the structural
15 analysis ever done of the Deepwater Horizon?
16 A. Not that I'm aware of.
17 Q. And was there a fire -- and was
18 the firefighting anal -- analysis ever done
19 of the Deepwater Horizon?
20 A. Not that I am aware of.
21 Q. Okay. Under suggested
22 contractors it say, "Herbert Engineering."
23 Was Herbert ever hired to do the stability
24 model?
25 A. I did -- well, I'll say I don't
00170:01 think the stability model was done, so I
02 don't -- the answer is I don't know.
03 Q. Okay. And who would know
04 whether the Herbert Engineering was hired or

05 whether the stability model was completed?
 06 A. I think -- as mentioned all
 07 ready, I think the best person to answer that
 08 question would be Mr. Dan Farr.

Page 171:12 to 172:20

00171:12 Q. Okay. I'm going to mark this
 13 e-mail as Exhibit 5760. The bottom e-mail is
 14 from Theresa to a group of you-all, and it's
 15 Wes Bell, Dan Farr, you, Mr. Hart, Steve
 16 Myers and Perrin Roller. And she says to
 17 you-all, "I would like to get a feel for who
 18 all will be writing reports. Can you please
 19 list the members of your team and who will be
 20 reporting on what topics?
 21 "Thanks! T."
 22 Did I read that correctly?
 23 A. That's correct.
 24 Q. Okay. You respond back to her
 25 stating, "Theresa, On the evacuation escape
 00172:01 and rescue the only person apart from me that
 02 will be doing any writing up is Bjoern Ritter
 03 who will be covering 'why the rig sank.'"
 04 Did I read that correctly?
 05 A. That's correct.
 06 Q. So based on this e-mail, is it
 07 still your belief that Mr. Farr was the
 08 person who was investigating why the rig
 09 sank?
 10 MR. MASSEY: Objection; form.
 11 A. Mr. Ritter was assisting
 12 Mr. Farr in -- in that investigation.
 13 Q. (BY MS. WINSTON) Okay. And it
 14 also sounds like according to your e-mail
 15 that he will also be writing that section of
 16 the report, too?
 17 A. That's what it says here, but I
 18 think you need to put this e-mail in context.
 19 This is October 2010. We were some months
 20 away from concluding our report.

Page 173:14 to 173:20

00173:14 Q. Okay. And just to clear up,
 15 this -- this e-mail, October 6th, 2010, is a
 16 couple weeks after the e-mail Exhibit 5758,
 17 which is dated September 23rd, 2010, and
 18 attaches the meeting of the minutes about
 19 sinking of the DWH, correct?
 20 A. That is correct.

Page 174:01 to 174:06

00174:01 Q. Okay. But it's still your
02 understanding that this is very early in the
03 investigation process?
04 A. Yes, we were still in the ev- --
05 very much in the evidence gathering part of
06 our investigation.

Page 174:15 to 174:18

00174:15 Q. (BY MS. WINSTON) But based on
16 your e-mail from October 26th, 2010, it
17 appears that there was going to be a section
18 about why the rig sank, correct?

Page 174:20 to 174:23

00174:20 Q. (BY MS. WINSTON) I mean, you
21 already explained that was based on your
22 thoughts at that time?
23 A. That -- that --

Page 174:25 to 175:08

00174:25 A. (Continuing) The -- this was my
00175:01 thoughts about who would be writing what.
02 It's not a -- it's not saying that we're
03 definitely -- one way or the other whether
04 we're going to write something like that.
05 Q. (BY MS. WINSTON) Okay. So when
06 was the decision made that nothing would be
07 written or investigated about why the rig
08 sank?

Page 175:10 to 176:09

00175:10 A. I've already explained that
11 there was some investigation work done into
12 why the rig sank. As to when any decision
13 was made about whether -- whether to or
14 whether not to include why the rig sank,
15 I'm -- I don't know the answer to that.
16 Q. (BY MS. WINSTON) Okay. And you
17 just said in the first sentence of your
18 reply, "I've already explained that there was
19 some investigation work done into why the rig
20 sank."
21 I don't recall you informing me
22 of what investigation work was done into why
23 the rig sank.
24 A. Sorry, I thought I -- I'd said
25 in an earlier stage of this area that
00176:01 Mr. Farr was looking in -- into that area.

02 Q. But are you aware of him
03 doing --
04 A. With the assistance of
05 Mr. Ritter.
06 Q. But are you aware of him doing
07 any type of investigations?
08 A. He had Mr. Ritter doing some
09 work in this area.

Page 177:17 to 178:01

00177:17 Q. (BY MS. WINSTON) Do you know
18 what type of work Mr. Ritter did with regard
19 to this area, regarding how the rig sank or
20 why the rig sank?
21 A. Mr. Farr -- Mr. Ritter looked
22 into to see -- he was trying to understand
23 certain things about where or where water may
24 or may not have got to. I -- I don't think
25 he was able to draw any conclusions from that
00178:01 investigation that he was doing.

Page 178:23 to 180:19

00178:23 Q. Let's turn to Page -- I'm at
24 tab 28 in the binder tab 28 is marked -- was
25 previously marked as Exhibit 3280. Are you
00179:01 there, Mr. Hart?
02 A. Yes, I have it. Sorry, yeah.
03 Q. No problem. Let's go to the
04 page ending in 3120.
05 A. Yes, I have that.
06 Q. And let's go to the fourth
07 paragraph down, starting with, "When asked if
08 he or Smith"... Do you see where I'm
09 referring to, Mr. Hart?
10 A. Yes, yes.
11 Q. Okay. It reads, "When asked if
12 he or Smith had a discussion about the water
13 being sprayed on the rig, he said yes. He
14 said that ultimately they were just trying to
15 do the best they could. There was some
16 concern about it contributing to the
17 stability problems. It was decided to spray
18 the columns instead of the deck."
19 Did I read that correctly?
20 A. That is correct.
21 Q. Okay. After you completed your
22 interview of Robert McKechnie, did you pass
23 this information about the concern of
24 spraying water on the rig contributing to the
25 stability problems to Mr. Ritter or Mr. Farr?
00180:01 A. I can't remember.
02 Q. Do you recall whether Mr. Ritter

03 or Mr. Farr investigated whether the -- the
04 water being sprayed on the rig caused the rig
05 to sink?

06 A. As I think I previously stated,
07 Mr. -- Mr. Ritter was looking at where water
08 may or may not have got into compartments
09 on -- on the rig part of his work that he was
10 doing for Mr. Farr.

11 Q. And do you happen to recall what
12 conclusion Mr. Ritter came to with regard to
13 the water being sprayed on the rig and
14 whether that caused the rig to sink?

15 A. From recollection of discussions
16 I had with Mr. Ritter, it was proved
17 impossible to identify where water may or may
18 not have got.

19 Q. Okay.

Page 180:23 to 181:15

00180:23 Q. (BY MS. WINSTON) And have you
24 seen any video or photographs of the
25 Deepwater after the explosions, but before it
00181:01 actually sank on the morning of April 22nd?

02 A. Yes, I have.

03 Q. Okay. And have you seen any of
04 those videos and photographs that identify
05 the Deepwater Horizon was listing prior to
06 its sinking?

07 A. Yes, I'm aware of that.

08 Q. And is it your understanding
09 that the Deepwater Horizon listed to the
10 starboard side?

11 A. Yes, that's correct.

12 Q. And do you know whether
13 Mr. Ritter or Mr. Farr investigated why the
14 Deepwater Horizon listed to the starboard
15 side?

Page 181:17 to 181:24

00181:17 A. I'm pausing because I'm trying
18 to remember, but I -- I -- I can't remember
19 that.

20 Q. (BY MS. WINSTON) And just to be
21 clear, there is no discussion of why the rig
22 sank in the Transocean investigation report,
23 correct?

24 A. That is correct.

Page 182:15 to 187:14

00182:15 Q. Okay. Turning to Page 174 of

16 the Transocean report.
17 A. Yes.
18 Q. And let's go down to the section
19 titled "Mud Gas Separator." Do you see where
20 I'm at?
21 A. Yes, yeah.
22 Q. Okay. And point No. 2 in that
23 section, the second sentence where it states,
24 "The MGS," which is the mud gas separator,
25 "is rated for 2,000 gallons per minute."
00183:01 Did I read that correctly?
02 A. Yes, that's correct.
03 Q. Excuse me. Now, let's turn to
04 Page 177 of the report and go to the box that
05 discusses the use of the diverter. Do you
06 see where I'm at, Mr. Hart?
07 A. Yes, I see that, yeah.
08 Q. Okay. This section talks about
09 the flow rate at different points,
10 particularly 9:40 p.m. It says that the flow
11 rate was approximately 47 bpm.
12 Did I read that correctly?
13 A. That's correct, barrels per
14 minute.
15 Q. Okay. And that's what "bpm"
16 stands for?
17 A. Yes.
18 Q. Okay. And then it says that "By
19 9:42 p.m. the trip tank began to fill and
20 indicated to the driller that the well was
21 flowing at a rate of 17 bpm."
22 Did I read that correct?
23 A. That's correct.
24 Q. Okay. And the 17 bpm is a flow
25 rate within the capacity of the mud gas
00184:01 separator, correct?
02 A. That -- that is -- that is
03 correct.
04 Q. Okay. And the mud gas separator
05 capacity, as we just read on Page 174, is
06 2,000 gallons per minute, correct?
07 A. That's correct.
08 Q. Okay. This box goes on to say
09 that "At 9:43 p.m. the drill crew closed the
10 upper annular BOP element."
11 Did I read that correct?
12 A. The drill crew closed the upper
13 annular BOP element at 9:43 p.m.
14 Q. Okay. And that's what the
15 report states?
16 A. Yes, that's what it states,
17 yeah, sorry.
18 Q. Okay. The report says nothing
19 about the flow rate at 9:43 p.m., at least in
20 this section it doesn't, correct?

21 A. There is -- no, there is no
22 mention of the flow rate here, no.

23 Q. Do you know what the flow rate
24 was at 9:43 p.m.?

25 A. I do not.

00185:01 Q. Okay. And then it also goes on
02 to say in the third sentence of that
03 paragraph, "After activating the diverter at
04 9:45 p.m., the drill crew activated the
05 variable bore rams, which sealed by
06 9:47 p.m."

07 Did I -- did I read that
08 correctly?

09 A. Yes.

10 Q. Okay. And, again, there is no
11 flow rate for -- there is no flow rate for
12 the 9:45 p.m. time is there listed here?

13 A. That -- there is no flow rate
14 for 9:45, that is correct.

15 Q. Okay. Do you know what the flow
16 rate was at 9:45 p.m.?

17 A. I do not.

18 Q. Okay. The flow rate is listed
19 on Page 153 of the report. Do you see the
20 box on Page 153, "Flow Rate in Context"?

21 A. Yes, I have that.

22 Q. Okay. And it says there that
23 when the annular closed at approximately
24 9:45 -- 9:43 p.m., the flow rate from the
25 well at the BOP was approximately a hundred

00186:01 barrels per minute.

02 Did I read that correctly?

03 A. Yes, that's correct.

04 Q. Okay. And at 9:43 is when the
05 drill crew closed the upper annular BOP
06 element, correct?

07 A. Yes, that's correct.

08 Q. And looking at the flow rate in
09 context, it says that one barrel is equal to
10 about 42 gallons. Did I read that correctly?

11 A. That's correct.

12 Q. So at 9:43 p.m. with the flow
13 rate being a hundred barrels per minute, that
14 means it was 4,200 gallons flowing up the
15 well?

16 A. Yes.

17 Q. Okay. And 4200 barrels is twice
18 the capacity of the mud gas separator,
19 correct?

20 A. 4200 gallons, yes, based on what
21 we discussed earlier, yes, that's correct.

22 Q. Okay. Earlier when asked about
23 the diverter and whether the drill crew
24 should have diverted the gas to the overboard
25 lines, you stated or at least testified that

00187:01 "Based on the info that the drill crew had,
02 they took timely and appropriate actions by
03 diverting to the mud gas separator."
04 Do you remember saying that in
05 response to questions earlier, I believe from
06 the PSC?
07 A. Yes, I do.
08 Q. Okay. Based on what we just
09 looked at, that the flow rate at 9:43 p.m.,
10 two minutes before they diverted, was twice
11 the capacity of the mud gas separator, do you
12 still believe that the drill crew acted
13 appropriately by diverting to the mud gas
14 separator at that time?

Page 187:16 to 188:13

00187:16 A. Based on the information that we
17 believe was available to the drill crew --
18 and we don't know what they were -- what they
19 saw or what they were discussing -- I stand
20 by what is -- what is in the report on the
21 use of the diverter, yes.
22 Q. (BY MS. WINSTON) Okay. And the
23 report though makes clear that the flow rate
24 at 9:43 p.m. was twice the capacity of the
25 mud gas separator, correct?
00188:01 A. Based on our calculations just
02 now, yes.
03 Q. Okay. And you stand by that
04 conclusion in the report, correct?
05 A. I do.
06 Q. Okay. And at 9:43, that was
07 just two minutes before the crew actually
08 diverted at 9:45 p.m., correct?
09 A. I -- according to the times on
10 this -- in here, that is correct.
11 Q. Okay. And you stand by what the
12 report says about when the crew diverted,
13 correct?

Page 188:15 to 188:25

00188:15 A. Yes, I do, but I'll also
16 restate, we -- we don't know what the crew --
17 the information that was available to the
18 crew at the time, what discussions was going
19 on because, unfortunately, those gentlemen
20 are no longer with us.
21 Q. (BY MS. WINSTON) Okay. But you
22 made the statement earlier that based on the
23 info that the drill crew had. So now you're
24 telling me that you do not know what
25 information the drill crew had at this point?

Page 189:02 to 189:04

00189:02 A. What I'm saying is we don't know
03 what information that they had available to
04 them.

Page 189:22 to 190:15

00189:22 Earlier when you were asked
23 about the crew members diverting to the mud
24 gas separator you testified that based on the
25 information that the drill crew had, they
00190:01 took timely and appropriate actions by
02 diverting to the mud gas separator. Do you
03 recall making that statement in response to
04 questions from, I believe, the PSC?
05 A. Yes.
06 Q. Okay. And now you were just
07 telling me that you do not know what
08 information the drill crew had. Do you
09 recall making that statement to me in my most
10 recent question?
11 A. Yes.
12 Q. Okay. So therefore you cannot
13 conclude whether they took timely and
14 appropriate action because you do not know
15 what information they had at --

Page 190:17 to 190:19

00190:17 Q. (BY MS. WINSTON) -- 9:43 or
18 9:45 when they diverted to the mud gas
19 separator?

Page 190:21 to 196:06

00190:21 A. Our analysis is -- post incident
22 analysis is we believe that the crew -- no,
23 sorry, restate -- restate that.
24 Our report states that the crew
25 took timely and appropriate action based on
00191:01 our post incident analysis, but we do not
02 know a hundred percent what information they
03 had or what they were discussing at that
04 time.
05 Q. (BY MS. WINSTON) And where in
06 the report does it state that the drill crew
07 took timely and appropriate action?
08 A. I believe that's my words.
09 Q. Yeah. Okay. I agree with that.
10 So when you just testified that "Our report
11 states that the crew took timely and

12 appropriate action," you meant to say that
13 based on what my understanding of the
14 situation was, I believe they took timely and
15 appropriate action?

16 A. If you turn to Page 193 of the
17 report and the fourth bullet point --

18 Q. Yes.

19 A. -- it talks about it does not
20 appear actions were taken to divert the flow
21 overboard prior to the explosions. It's
22 possible, given the magnitude of flow, the
23 packer would have kept the flow diverted
24 overboard. And, also, we say, however, the
25 rapid expansion of gas in the riser, the mud
00192:01 gas separator was quickly overwhelmed.

02 Q. But at no point on this page it
03 does not state that the drill crew took
04 timely and appropriate actions?

05 A. That, I think as we've
06 established, is my words.

07 Q. Okay. I just want to clear that
08 up. And let's talk about the mud gas
09 separator was quickly overwhelmed and
10 hydrocarbons reached the aft deck rig floor
11 and certain pump spaces, as you just read in
12 bullet point 1 under 3.5.6 on Page 193. You
13 agreed with that conclusion, correct?

14 A. Yes, I do.

15 Q. Okay. Let's go to tab 48 in the
16 binder. Tab 48 is an e-mail from you,
17 Mr. Hart, to Alistair Gill of Prospect; is
18 that correct?

19 A. That is correct.

20 Q. Okay. I'm going to mark tab 48
21 as **Exhibit 5761**. The subject of this e-mail
22 is the diverter system, correct?

23 A. That is correct.

24 Q. And you say to Alistair, "Spoke
25 with Wes Bell about the diverter system and
00193:01 he says that it is the view of Stress
02 Engineering that the flow of the Mud/Water
03 through the 500 psi diverter system would
04 have totally overwhelmed it and it would have
05 failed very quickly."

06 Did I read that correctly?

07 A. That is correct.

08 Q. Okay. And you say this is
09 supported by eyewitness testimony, and you
10 give three bullet points listing a summary of
11 that testimony: "Mud coming out of centre of
12 the rig floor with flow increasing with
13 time"; 2, Mud flow decreasing, slash,
14 stopping from the rig floor and coming out
15 the MGS & MGS lower vent in the derrick; and,
16 3, mud, slash, water, slash, gas come --

17 flowing from the MGS & the rig floor.
18 Did I read that correctly?
19 A. Yes.
20 Q. Let's go to tab 49. Are you at
21 tab 49, Mr. Hart?
22 A. Yes.
23 Q. Okay. And this is an e-mail
24 from you to Mr. Ritter, and it's cc'd to Chad
25 Crain and yourself again and the subject line
00194:01 is "Release Logic." Did I read that
02 correctly?
03 A. That is correct.
04 Q. Okay. And your e-mail to
05 Mr. Ritter says, As discussed following our
06 meeting with Stress Engineering last Thursday
07 my thinking is now that the diverter was
08 starting to fail, brackets, leak, before we
09 had significant amounts of gas on the rig.
10 Did I read that correctly.
11 A. Yes, that's correct.
12 Q. And this fact statement was
13 based on a conversation or a meeting that you
14 had with Stress Engineering, correct?
15 A. Yes, that's what it states, yes.
16 Q. Okay. And do you recall that
17 meeting with Stress Engineering where you
18 talked about the diverter system -- the
19 diverter failing even before there was
20 significant amounts of gas on the rig?
21 A. I'll be honest, I -- I can't
22 actually remember the -- the meeting taking
23 place, but if I've written an e-mail about
24 it, then, yes, it must have happened.
25 Q. That's understandable. And then
00195:01 let's go to point No. 3 in your e-mail. And
02 you say, Fluid flow reduces, slash, stops on
03 Drill Floor, comma, then after approximately
04 30 seconds, parentheses, this is roughly how
05 long Stress thinks it would take to fill the
06 MGS plus pipework up, close parentheses.
07 Did I read that right?
08 A. Yes.
09 Q. So at this time it was the
10 understanding of you along with the -- along
11 with your meeting with Stress that it would
12 take only 30 seconds to completely fill the
13 MGS system; am I understanding that
14 correctly?
15 A. Yes, it must have been, because
16 if I wrote this after meeting with Stress
17 Engineering that must be the case, yes.
18 Q. Okay. And point 7, looking at
19 that in the e-mail, supports the view that
20 the engine space was the likely source of the
21 ignition. It states, 1st explosion, open

22 paren, initiated possibly in area of MGS,
23 slash, Motor House roof and flame travels
24 into under deck spaces through ventilation
25 ducting, e, period, g, period, No. 3 engine
00196:01 room, causing an explosion in that space with
02 subsequent impact on the ECR, plus the
03 injured person at the Bucking Machine hit by
04 the door blowing open.
05 Did I read that correctly?
06 A. You did.

Page 196:08 to 198:07

00196:08 A. (Continuing) Yes, you did read
09 that correctly, yes.
10 Q. (BY MS. WINSTON) Okay. And
11 this is your thinking of the diverter as of
12 November 23rd, 2010, correct?
13 A. As you appreciate, this is
14 nearly a year ago, so this -- this is
15 reflecting my -- my thinking at that time.
16 Q. Okay. Well, has your thinking
17 changed since November 23rd, 2010?
18 A. You've just read bullet point
19 No. 7 there. Certainly, my thinking as we
20 investigated further about the first ignition
21 initially possible in the mud gas
22 separator -- motor house roof, certainly my
23 thinking on that has changed, yes.
24 Q. Okay. And your thinking on that
25 has changed because of why? Or why?
00197:01 A. On further investigation, as set
02 out in our report, we conclude that the most
03 likely ignition source is within one of the
04 engine rooms, possibly No. 3.
05 Q. Okay. And this bullet point
06 No. 7 is talk about -- is talking about the
07 first explosion. So it is your thinking as
08 we sit here today that the first explosion
09 happened in the engine space?
10 A. That, as per the report, is
11 the -- my view and that of the team of where
12 the initial explosion initiated from, yes.
13 Q. Okay. As part of the Transocean
14 investigation report did you at all
15 investigate what would have happened if the
16 drill crew had decided to divert the gas
17 overboard?
18 A. As part of the Transocean report
19 I did not investigate that.
20 Q. Okay. Are you aware of anyone
21 else on the Transocean investigation team
22 investigating what would have happened if the
23 drill crew had decided to divert to the
24 overboard diverter line?

25 A. I'm not aware of any of the
00198:01 investigation team investigating this for our
02 report.
03 Q. And you're also not aware of any
04 discussion in the report discussing what
05 would have happened if the drill crew had
06 decided to divert to the overboard diverter
07 line?

Page 198:09 to 201:08

00198:09 A. I'll just go back to Page 193,
10 the fourth bullet point. "It is impossible,
11 given the magnitude of the blowout, to know
12 if the diverter packer would have kept flow
13 diverted overboard and if the gas ignition
14 could have been prevented." That -- that's
15 as far as we could go with looking at that
16 issue.
17 Q. (BY MS. WINSTON) Okay. But
18 there was no further investigation into that
19 issue besides the statement in the report on
20 Page 193, correct?
21 A. That is correct.
22 Q. Let's change topics again.
23 Let's go back to tab 1, which is your CV.
24 A. I have it, yes.
25 Q. Okay. And your CV was admitted
00199:01 as Exhibit 5700. Let's go to the second page
02 or the page that's Bates labeled 3934.
03 A. Yeah.
04 Q. Okay. The second date entry on
05 that page is April 1990 to June 1992, dash,
06 barge master, back slash, OIM on
07 semi-submersibles.
08 Did I read that correctly?
09 A. That is correct.
10 Q. Okay. It says, the master, back
11 slash, OIM. Does that mean that you were
12 both a master and an OIM during this time
13 period?
14 A. That is -- that is correct.
15 Q. And how many semi-submersibles
16 were you on during this two-year time period?
17 It's plural, so that's why I'm assuming there
18 was more than one.
19 A. Yes. At least two.
20 Q. Okay. And do you happen to
21 recall the names of the vessels?
22 A. The two that I can recollect are
23 the Transocean Explorer and a rig called the
24 Hunter.
25 Q. On the Transocean Explorer, were
00200:01 you the master on that vessel?
02 A. If I could just clarify, at this

03 time, which we're talking about 20 years ago,
 04 the role of the master and that of the OIM
 05 was a conjoined position.
 06 Q. So therefore on the Transocean
 07 Explorer you were both the master and the
 08 OIM, correct?
 09 A. That is correct.
 10 Q. And on the rig called the Hunter
 11 you were both the OIM and the master?
 12 A. No, I was the -- I was acting as
 13 the master, but I was not the OIM.
 14 Q. So when you say in this time the
 15 two roles were conjoined, you only meant that
 16 for the Transocean Explorer?
 17 A. That is correct.
 18 Q. When you were on the Transocean
 19 Explorer as both the master and the OIM, in
 20 cases of emergency you were the only person
 21 in charge, correct?
 22 A. That is correct.
 23 Q. Therefore, there was no
 24 confusion when an emergency arises who was
 25 the person in charge because you were both
 00201:01 the master and the OIM, correct?
 02 A. That is correct. I -- I'm
 03 sorry, I've not completely given you the --
 04 the full information. When I first joined
 05 the Transocean Explorer I was the master, but
 06 not the OIM, and then I became both master
 07 and the OIM on the Transocean Explorer. So I
 08 just want to set the record straight.

Page 202:09 to 207:10

00202:09 Q. I'm going to mark this as
 10 Exhibit 5763. Going to the page that ends in
 11 Bates No. 6321, the section is 2.1.1,
 12 "Responsibility and Authority of the Person
 13 in Charge," begin parentheses, PIC, end
 14 parentheses.
 15 Did I read that correctly?
 16 A. Yes, that's correct.
 17 Q. Okay. Going to the fourth
 18 paragraph down, starting with, "During an
 19 emergency situation"... Are you there,
 20 Mr. Hart?
 21 A. Uh-huh, yes.
 22 Q. The manual reads, During an
 23 emergency situation, comma, the transfer of
 24 responsibility and authority of PIC may be
 25 done verbally, comma, the time noted and a
 00203:01 formal documented transfer completed when
 02 time allows, period. Whenever possible a
 03 P.A. announcement should be made at the time
 04 of transfer, period.

05 Did I read that correctly?
06 A. That is correct.
07 Q. As your role on the Transocean
08 investigation team, looking into the
09 evacuation and muster, did you find any
10 evidence that there was a P.A. announcement
11 announcing that Captain Kuchta was the PIC in
12 charge during the emergency.
13 A. I did not.
14 Q. Do you know whether there was
15 any -- any P.A. announcement announcing that
16 Captain Kuchta was the PIC?
17 A. I don't know any way one way or
18 another.
19 Q. In your interviews with the
20 Transocean rig crew members did you ask them
21 whether they heard any P.A. announcement
22 announcing that Captain Kuchta was the PIC
23 during the emergency?
24 A. I -- not that I can recall, no,
25 I did not.
00204:01 Q. Are you aware of anyone else on
02 the Transocean investigation team asking
03 Transocean crew members whether they heard a
04 P.A. announcement stating that Captain Kuchta
05 was the PIC during the emergency?
06 A. I'm not aware of anybody asking
07 that question.
08 Q. Okay. Let's turn to tab 12.
09 Tab 12 is a Transocean DWH investigation
10 ticket for what were the emergency planning,
11 dash, reaction to rig alarms.
12 Did I read that correctly?
13 A. Yes, that is correct.
14 Q. Okay. And I'm going to mark
15 this as **Exhibit 5764**.
16 Mr. Hart, you're listed as the
17 team lead and assigned to for this ticket,
18 correct?
19 A. That -- that is correct.
20 Q. And did you actually investigate
21 the emergency planning, dash, reaction to rig
22 alarms?
23 A. Yes, I -- I believe I did, yes.
24 Q. Okay. Let's go down to
25 recommendations. Do you see that section of
00205:01 the ticket?
02 A. Yes.
03 Q. It states, It needs to be clear
04 to everyone who has authority to operate rig
05 internal and external alarms. There is no
06 evidence that there was any delay in
07 initiating -- initiating the rig -- rig s
08 internal alarms, but there appears to have
09 been some discussion about authority levels

10 for operating external alarms, under slash
 11 EDS plus ESD.
 12 Did I read that correctly?
 13 A. That is correct, yes.
 14 Q. Okay. Has Transocean taken any
 15 steps to address the authority of activating
 16 external alarms during emergency situations?
 17 A. I -- I do not know the answer to
 18 that. Any recommendations like this are
 19 being reviewed by our Transocean management
 20 for further action.
 21 Q. Okay.
 22 A. So I can't answer that.
 23 Q. Okay. And this investigation
 24 ticket was completed in April of 2011; am I
 25 reading that correct on the ticket?
 00206:01 A. That -- yes, last modified --
 02 Q. I'm looking at --
 03 A. -- 15th of April.
 04 Q. Yeah, I'm looking at the
 05 investigation completed date that's listed on
 06 the ticket. Do you see where that is?
 07 A. Oh, sorry, yes, yes.
 08 Q. Okay. And it states 4/15/2011,
 09 correct?
 10 A. That's correct.
 11 Q. Okay. And the report was issued
 12 in June 2011, correct?
 13 A. That is correct.
 14 Q. And Transocean is still looking
 15 into the recommendations of the report to
 16 consider what actions they're going to take
 17 to address certain issues?
 18 A. As I've pre- -- I think I've
 19 just stated the Transocean management is
 20 reviewing our reports along with others to
 21 evaluate what actions need to be taken.
 22 Q. And a discussion about the
 23 authority to operate rig external alarms is
 24 not in the Transocean report, correct?
 25 A. Authority to activate the
 00207:01 alarms. We clearly state that the alarms --
 02 the external alarms were activated.
 03 Q. Okay. But the issue here is
 04 that you're talking -- you're saying that it
 05 needs to be clear to everyone who has
 06 authority to operate rig internal and
 07 external alarms. There is no discussion in
 08 the report about this issue that you raise
 09 about everyone knowing who has the authority
 10 to operate the rig external alarms?

Page 207:12 to 207:12

00207:12 A. I believe that is correct.

Page 208:01 to 208:13

00208:01 Q. Okay. Now, your comment about
02 "It needs to be clear to everyone who has
03 authority to operate rig internal and
04 external alarms," is that based on interviews
05 that you conducted with the Transocean rig
06 crew?
07 A. Yeah, I -- it mentions about
08 numerous interviews that we undertook.
09 Q. Okay. And I'm just talking in
10 relation to this issue about who has the
11 authority to operate rig external alarms. Is
12 that based on the interviews that you
13 conducted with Transocean rig crew members?

Page 208:15 to 213:03

00208:15 A. Yes, that -- that has to -- that
16 was my source of information, that is
17 correct.
18 Q. (BY MS. WINSTON) Okay. And
19 let's take a look at Andrea Fleytas
20 interviewing form, which is behind tab 22.
21 A. Yes, I have that.
22 Q. The inter- -- interview form has
23 been previously marked as Exhibit 4472.
24 Interviewers present, you're listed,
25 Mr. Hart, correct?
00209:01 A. That is correct.
02 Q. Let's turn to Page 5 of the
03 interview form.
04 A. Yes, I have that. Sorry, yeah.
05 Q. And let's go down to the fifth
06 full paragraph on that page, starting with,
07 "The Captain wanted to start the engines"...
08 Do you see that paragraph?
09 A. Yes.
10 Q. And I'm going to go to fifth
11 sentence of that paragraph, starting with,
12 "She took it upon herself"... Do you see
13 where I'm reading from?
14 A. Yes.
15 Q. Okay. She took it upon herself
16 to activate the mayday plus GM DSS alarms,
17 period. She told the Captain that she had
18 issued the distress signal, period. The
19 Captain turned to her and cursed her and
20 said, quote, did I give you authority to do
21 that, question mark, end quote.
22 One minute before the distress
23 signal was sent Captain Kuchta wanted
24 permission from Jimmy Harrell to disconnect,

25 open paren, operate the EDS, close paren,
00210:01 period.
02 Did I read that correctly?
03 A. Yes.
04 Q. Okay. During the emergency
05 Captain Kuchta was the PIC, correct?
06 A. That is correct.
07 Q. Okay. Captain Kuchta also had
08 the authority to EDS, correct?
09 A. The -- as set out in the
10 emergency response manual for the Deepwater
11 Horizon, the marine crew have authorities for
12 EDSing for drift-off. The emergency response
13 manual addresses responsibilities for
14 drilling people in regards well control
15 incidents.
16 Q. Okay. But my question was
17 Captain Kuchta had the authority to EDS,
18 correct?
19 A. The command structure on board
20 the Deepwater Horizon, Captain Kuchta would
21 quite correctly liaise with people with the
22 appropriate expertise for EDSing in a well
23 control situation.
24 Q. Okay. And, again, my question,
25 though, is did Captain Kuchta have the
00211:01 authority to EDS on the night of the
02 incident?
03 MR. MASSEY: Objection; form.
04 A. I -- Captain Kuchta as the PIC
05 has the ultimate authority, but I'm saying to
06 you as somebody of having experience, as an
07 OIM that he quite rightly would consult with
08 the drilling expertise for EDSing during a
09 well control event.
10 Q. (BY MS. WINSTON) But like you
11 said, he does have the ultimate authority as
12 the PIC to activate the EDS, correct?
13 A. That is correct.
14 Q. Okay. And let's go to tab 23,
15 which is the interview form for Stephen
16 Bertone.
17 A. Yes, I have that, I'm sorry.
18 Q. This has been previously marked
19 twice and I guess three times today but --
20 one exhibit number is 3339 and then the
21 second exhibit number is 4365. Interviewers
22 present, you're listed, correct, Mr. Hart?
23 A. That's correct, yes.
24 Q. Let's go to Page 5 of this
25 interviewing form, and let's go to --
00212:01 A. Yes, I have that.
02 -- and let's go to the --
03 A. Yeah.
04 Q. -- fifth full paragraph on that

05 page starting with, "Stephen went through the
06 port transit room"... Do you see where I'm
07 at?
08 A. Yes, yeah.
09 Q. Stephen went through the port
10 transit room, comma, up the stairs, comma,
11 and to the bridge, period. He walked in on
12 Captain Kuchta -- Kurt, sorry, yelling at
13 Andrea Fleytas, period. He said Curt was
14 screaming at her asking why she had activated
15 the EDS and saying they were not in distress,
16 period.
17 Did I read that correctly?
18 A. Yes, that's what it says here.
19 Q. Okay. And then going to Page 6
20 of this same interviewing form, and, again,
21 the fifth full paragraph down, starting with
22 "Stephen then heard Brent Mayfield say"...
23 Do you see where I'm at?
24 A. Yeah. Yeah.
25 Q. Okay. And I'm starting with the
00213:01 fifth sentence, "Stephen checked the panel
02 again and then saw Chris Pleasant." Do you
03 see where I'm at?

Page 213:09 to 214:04

00213:09 Q. I'm starting with that sentence
10 afterwards. Stephen checked the panel again
11 and then saw Chris Pleasant, period.
12 A. Yes.
13 Q. Stephen asked if they had
14 already activated the EDS, comma, and Chris
15 said that he needed permission first, period.
16 Daun Winslow said to do it,
17 comma, as Jimmy Harrell was walking in.
18 Stephen asked him if they could activate the
19 EDS, at which point Jimmy gave Chris
20 permission to activate, period. Stephen said
21 Chris was already at the panel, ready to hit
22 the button, period. Stephen yelled to Chris
23 for verification that he did EDS, and Chris
24 confirmed that he had, period. Chris then
25 confirmed again that he hit the EDS, period.
00214:01 Stephen then asked Curt if he could start the
02 stand-by generator, period.
03 Did I read that correctly?
04 A. Yes, that is correct.

Page 214:20 to 215:15

00214:20 Q. (BY MS. WINSTON) Okay. Let's
21 start at Page 6 of the Stephen Bertone
22 interviewing form. Stephen talks about that

23 he looked -- checked the panel and then saw
 24 Chris Pleasant, and then he asked Chris
 25 Pleasant if he had already activated the EDS,
 00215:01 and Chris said he needed permission first.
 02 So, basically, he hadn't activated yet. Daun
 03 Winslow told him to do it, as Jimmy Harrell
 04 was walking in. And then Stephen asked him
 05 if they could activate the EDS, at which
 06 point Jimmy gave Chris permission to
 07 activate.

08 So that's two people right there
 09 who are questioning who has the authority to
 10 EDS. Stephen tells Chris to do it. Chris
 11 says I need permission. Daun Winslow, who is
 12 just visiting the rig, comes in and says do
 13 it. Stephen instead turns to Jimmy Harrell
 14 and asks permission, and Jimmy Harrell gives
 15 them permission.

Page 215:17 to 215:19

00215:17 Q. (BY MS. WINSTON) Am I
 18 paraphrasing that -- that paragraph
 19 correctly?

Page 215:21 to 216:20

00215:21 A. Chris Pleasant asked for
 22 permission, and Jimmy Harrell gave it to him.
 23 Q. (BY MS. WINSTON) Okay. And
 24 that was after Daun Winslow had given him
 25 permission, correct, according to these

00216:01 interviewing notes?

02 A. Yes, but Mr. Winslow is -- as
 03 you said, is a visitor to the rig.

04 Q. Okay. So if John Winslow said
 05 do it, Jimmy Harrell said do it, and
 06 according to Fleytas, Curt didn't know
 07 whether he could do it and asked Jimmy
 08 Harrell, correct?

09 MR. MASSEY: Objection; form.

10 A. Yes, I believe we've established
 11 that Curt, and as I said earlier on, was
 12 quite rightly seeking advice from his
 13 drilling people on activating the EDS in a
 14 well control situation.

15 Q. (BY MS. WINSTON) And at any
 16 point in your investigation with the
 17 Transocean report did you look into how the
 18 confusion about who had the authority to EDS
 19 impacted the response to the blowout that
 20 night?

Page 216:22 to 217:02

00216:22 A. Not that I can remember.
23 Q. (BY MS. WINSTON) Okay. Do you
24 recall anyone on the Transocean team
25 investigating the confusion about who had the
00217:01 authority to EDS and how that impacted the
02 response to the blowout that night?

Page 217:04 to 217:16

00217:04 A. I do not believe anybody
05 investigated, but I don't believe that that
06 activation of the EDS had an impact on the
07 event.
08 Q. (BY MS. WINSTON) You don't
09 believe that whether the time it took to
10 decide whether to push the EDS button had an
11 impact on the incident that night?
12 A. At this time the explosion and
13 fire was already underway.
14 Q. Okay. But you didn't look into
15 whether that actually did impact the response
16 to the incident that night, correct?

Page 217:18 to 217:19

00217:18 A. That is not something that I
19 investigated.

Page 220:01 to 220:10

00220:01 Q. (BY MS. WINSTON) However, as we
02 have seen from this incident, there really is
03 no structure to an emergency situation,
04 correct?
05 MR. MASSEY: Objection; form.
06 A. I believe that the crew of the
07 Deepwater Horizon did a tremendous job in
08 safely evacuating 115 survivors from -- from
09 the rig in a very, very difficult
10 circumstances.

Page 220:13 to 220:21

00220:13 Q. (BY MS. WINSTON) My question
14 was, "However, as we have seen from this
15 incident, there really is no structure to an
16 emergency situation, correct"?
17 MR. MASSEY: Objection; form.
18 A. I would give you the same
19 response, that on the night of the 20th of
20 April that they safely evacuated 115 people

21 in extremely difficult circumstances.

Page 221:17 to 223:05

00221:17 Exhibit 5705. Going to the page number
18 ending in 87. Going to the last -- the
19 second-to-last question on that page, do you
20 see where I'm at, regarding "Training"?
21 A. Yes.
22 Q. The question, training, dash,
23 the focus appears to be on ticking the box to
24 complete the matrix, comma, rather than an
25 emphasis on learning.
00222:01 And Mrs. Annand responded, there
02 was too much focus on the percentage
03 compliance rather than what quality and what
04 training is being undertaken, period.
05 Did I read that correctly?
06 A. Yes.
07 Q. Okay. And you also ask the same
08 question of Mr. Moon, who is also of Lloyd's
09 Register, and his interviewing form is on --
10 in tab 21, which has been marked
11 Exhibit 5731. And if you go to the page
12 ending in 3409, do you see where I'm at, sir?
13 A. Yes.
14 Q. Okay. And, again, the question,
15 training, the focus appears to be on ticking
16 the box to complete the matrix rather than
17 emphasis on learning. Setting a target of
18 85 percent compliance is not having the
19 desired result in that people are completing
20 training to meet a target, which is leaving
21 holes in their knowledge, plus concentrating
22 on the quick fixes to keep up the compliance
23 levels.
24 Did I read that correctly?
25 A. Yes.
00223:01 Q. As part of your role in the
02 Transocean investigation team did you
03 investigate how the ticking the box using the
04 Lloyd's Register comma -- I mean, comment,
05 had an impact on the incident at all?

Page 223:07 to 224:07

00223:07 A. I did not investigate --
08 training.
09 Q. (BY MS. WINSTON) You didn't
10 investigate training at all?
11 A. No, I did not investigate
12 training.
13 Q. Okay. But in the investigation
14 ticket in tab 17, which talks about drills

15 and exercises, that discusses training,
 16 correct?
 17 A. Drills and exercise -- I'm
 18 differentiating between drills and exercises.
 19 I -- when you refer to training, I'm thinking
 20 of formal courses, as per the Transocean
 21 training matrix.
 22 Q. Okay. So you're within -- when
 23 I say "training," you're thinking about
 24 on-the-job training type models and stuff
 25 like that?

00224:01 A. That is correct, that's what I
 02 was thinking of.

03 Q. Okay. And you did not
 04 investigate how the -- the formal training
 05 impacted the incident or the lack of formal
 06 training impacted the incident, correct?

07 A. That is correct.

Page 225:19 to 226:15

00225:19 Q. (BY MS. WINSTON) Mr. Hart, you
 20 are -- you are aware of the stop job
 21 authority, correct?

22 A. Yes, I'm -- yes, I'm aware of
 23 that.

24 Q. And what is your understanding
 25 of the stop job authority?

00226:01 A. That anyone on a Transocean rig
 02 has the authority to stop work if they see
 03 something unsafe or if they're unsure what is
 04 happening.

05 Q. And you --

06 A. That -- that's a very short
 07 phrasing of it.

08 Q. Okay. And you expect the
 09 Transocean rig crew member on board the DWH
 10 to exercise their stop the job authority if
 11 they saw anything that was unsafe or could
 12 harm people or the environment, correct?

13 A. Well, as I've already stated,
 14 I -- you know, it -- it's an expectation of
 15 Transocean that that is done.

Page 229:06 to 229:19

00229:06 I understand your current
 07 position is manager of quality health safety
 08 and environment globally for Transocean; is
 09 that right?

10 A. I'm -- I've just taken up
 11 recently an appointment. I am now assigned
 12 just to the North Sea division within
 13 Transocean.

14 Q. As of April 20th of 2010 you
15 were assigned to Europe and Africa?
16 A. Yeah, prior -- prior to joining
17 the Transocean investigation team I -- I was
18 overseeing QHSE functions for Europe and
19 Africa, that's correct.

Page 230:24 to 231:04

00230:24 Q. Either as a function of your
25 responsibilities for QHSE and/or your role in
00231:01 the Transocean investigation team have you
02 come to an understanding of how Transocean
03 trains its employees with respect to well
04 control?

Page 231:06 to 232:10

00231:06 A. I -- I have a general
07 understanding of how people are trained in
08 well control, yes.
09 Q. (BY MR. HARTLEY) What is that
10 general understanding?
11 A. The -- Transocean has a -- a
12 training matrix which is applicable on a
13 worldwide basis and such as drillers have to
14 undertake training which would lead to either
15 an IADC well cap or IWCF well -- well control
16 certificate. They undertake on-the-job
17 training, on our rigs on-the-job training,
18 known as OJT, and they also participate in
19 well-related drills and exercises on -- on
20 our rigs.
21 Q. Are you familiar with how they
22 are trained to respond to a well control
23 event, substantively what they're supposed to
24 do?
25 A. I have a general knowledge of
00232:01 that, but not -- not a detailed
02 understanding.
03 Q. Okay. Recognizing that -- that
04 your employees, at least those required to,
05 attend certification classes, obtain
06 on-the-job training, and may attend other
07 in-house training, what is your general
08 understanding of how a Transocean drill crew
09 is supposed to or is trained to respond to a
10 well control event?

Page 232:12 to 233:16

00232:12 A. The -- what is taught, I
13 believe, in line with our Well Control

14 Handbook that they are taught to detect an
15 influx and then take the appropriate action.

16 Q. (BY MR. HARTLEY) Do you have an
17 understanding of what the appropriate action
18 is upon detection of an influx?

19 A. Well, my general understanding
20 is on the -- on the detection of an influx is
21 to shut-in the well.

22 Q. And -- and Transocean instructs
23 and trains its employees to shut-in the well
24 immediately upon detection of an influx; is
25 that right?

00233:01 A. That is my understanding, sir,
02 yes.

03 Q. Transocean emphasis' to its
04 employees that the immediacy of the response
05 is critical to getting a well under control?

06 A. Yes, I -- I'm not sure that
07 that's the exact words. But reacting swiftly
08 to a -- on detection of an influx is very
09 important, and that's what people are trained
10 on.

11 Q. In the course of your work on
12 the Transocean internal investigation, did
13 you form any opinion as to whether the drill
14 crew on the Deepwater Horizon on April 20th
15 responded appropriately when an influx was
16 detected?

Page 233:18 to 238:07

00233:18 A. I think as set out in -- in our
19 report, that our investigation shows that
20 when the crew detected that there was an
21 influx, that they took appropriate actions to
22 shut-in the well.

23 Q. (BY MR. HARTLEY) What is your
24 understanding of when the Transocean drill
25 crew first detected an influx on April 20th,
00234:01 2010?

02 A. I would have to go to the report
03 to identify that -- that time, but it is set
04 out in our report.

05 Q. Do you recall it being at or
06 about 21:30 or 9:30 p.m. that night?

07 A. I -- I think that is generally
08 in the area, but I say without getting the
09 report in front of me, I couldn't -- I
10 couldn't be specific on that.

11 Q. Do you recall, based on your
12 involvement with interviews and with the
13 investigation processes generally when the
14 Transocean drill crew first shut-in the well
15 or attempted to do so?

16 A. Yeah, that is -- again, is

17 detailed in our report that -- from our
18 investigation, that on detection, when they
19 realized that the well was flowing, that
20 they -- they -- they started to take the
21 appropriate well control action.

22 Q. I think when you were discussing
23 earlier some questioning by Ms. Hankey on
24 behalf of the United States, I believe, she
25 showed you Page 177 of the Transocean report,
00235:01 and do you recall the reference there that
02 the annulars were first closed at or about
03 9:43 p.m. that night?

04 A. Would you mind if I get that in
05 front of me again, please?

06 Q. Absolutely.

07 A. You said what page? 177, yes?

08 Q. 177, yes, sir.

09 A. Yes, I have that in front of me.

10 Q. Okay. Now, is there a reference
11 in there to the annulars first being closed
12 at 9:43 p.m.?

13 A. Yes, I have that in front. That
14 is correct, yes.

15 Q. Are you aware of any effort by
16 the Transocean drill crew to close the BOP
17 annulars or otherwise shut-in the well prior
18 to 9:43 p.m. that night?

19 A. I'm -- I'm not aware of that
20 information.

21 Q. Okay. In the course of your
22 investigation on behalf of Transocean did you
23 talk to or visit with David Young, the chief
24 mate on the Deepwater Horizon?

25 A. I -- I did not interview
00236:01 Mr. Young.

02 Q. Do you know that he was
03 interviewed by Transocean?

04 A. Oh, yes. Yes, I'm aware of
05 that.

06 Q. Are you familiar with -- with
07 the information he provided to Transocean as
08 a part of that investigation?

09 A. Generally, yes, I'm -- I'm aware
10 of some information that he provided.

11 Q. Are you aware that Mr. Young was
12 deposed here in New Orleans a couple or three
13 weeks ago?

14 A. I -- I was advised by my counsel
15 that that had happened, yes.

16 Q. Are you familiar generally with
17 the nature of Mr. Young's testimony?

18 A. I've -- I've not been -- sorry,
19 I -- which -- could you be specific on which
20 testimony?

21 Q. Sure, let me go straight to --

22 straight to the point. Are you aware that at
 23 or about 9:30 p.m. on April, 20th Mr. Young
 24 went to the drill shack and heard Mr. Revette
 25 and Mr. Anderson discussing a pressure
 00237:01 differential at or about 9:30 p.m.?

02 A. I'm aware of Mr. Young saying
 03 that he was up on the drill floor at -- at
 04 about 9:30 p.m. and that there was
 05 discussions going on, I am -- I'm aware of
 06 that, yes.

07 Q. Are you aware of any actions by
 08 Mr. Revette and/or Mr. Anderson to respond to
 09 that pressure differential prior to closing
 10 the BOP annulars at 9:43?

11 A. I am not.

12 Q. As a course of the Transocean
 13 investigation did you ever come to learn that
 14 any action was taken prior to 9:43 to shut-in
 15 the well?

16 A. This isn't really my area, but,
 17 no, I'm -- I don't believe I am.

18 Q. Whose area would that be?

19 A. This area of investigation was
 20 led by my colleague, Mr. Perrin Roller.

21 Q. Well, earlier this morning when
 22 you were responding to some question by
 23 Mr. Matthews you said with respect to the
 24 drill crew, quote, I believe that they took
 25 timely and appropriate action when they saw
 00238:01 an influx. Do you recall testifying to that?

02 A. Yes.

03 Q. In your mind would waiting 12 or
 04 13 minutes after detecting an influx to close
 05 the BOP annulars or otherwise shut-in the
 06 well be a timely, and appropriate response to
 07 an influx?

Page 238:09 to 239:08

00238:09 A. As we've already said, that --
 10 I've already said to you, people are trained
 11 to take appropriate action to shut a well in
 12 when they detect an influx, and I -- that's
 13 what our -- our report, I believe, indicates
 14 that they did.

15 Q. (BY MR. HARTLEY) Right.
 16 You're -- you train your employees to respond
 17 promptly, because you want to suppress the
 18 influx as quickly as possible to prevent a
 19 blowout; is that fair?

20 A. At -- that's what our crews are
 21 trained to do, yes.

22 Q. And the training and the
 23 Transocean Well Control Handbook and
 24 on-the-job training and the well

25 certification training all emphasize the
00239:01 urgency in responding quickly once an -- an
02 influx is detected?
03 A. That is my understanding, yes.
04 Q. So based on that understanding,
05 is it your opinion that waiting 12 or
06 13 minutes after first detecting an influx is
07 consistent with the training that you provide
08 your drill crews?

Page 239:10 to 240:08

00239:10 A. I -- as I -- I've already
11 stated, I think we've agreed that appropriate
12 action should be taken on detection of a --
13 an influx.
14 Q. (BY MR. HARTLEY) Okay. And
15 that appropriate action would be shutting in
16 the well immediately and investigating the
17 problem?
18 A. I believe the guidance in our
19 Well Control Handbook is -- on detection of
20 an influx is to shut-in the well, that's
21 correct.
22 Q. Do you know whether that
23 actually happened once an influx was
24 detected, whether the well was shut-in?
25 A. Our report indicates that --
00240:01 that the drill crew closed the annular at
02 9:43 on -- on detection of an influx, yes.
03 Q. Do you know whether anybody
04 associated with the Transocean internal
05 investigation explored or examined the
06 possibility of what would have happened had
07 the well been shut in at 9:32, 9:35,
08 somewhere in that time frame?

Page 240:10 to 240:16

00240:10 A. I -- I -- I don't know if that
11 was investigated.
12 Q. (BY MR. HARTLEY) Do you know
13 whether there was any effort to ascertain
14 what would have happened to the flow of
15 hydrocarbons had the well been shut in five,
16 ten minutes sooner than 9:43?

Page 240:18 to 240:24

00240:18 A. No, I -- I don't -- I don't know
19 if that was investigated.
20 Q. (BY MR. HARTLEY) In the course
21 of the Transocean investigation did you come

22 to any understanding of what the pressure
 23 differential Mr. Revette and Mr. Anderson saw
 24 was?

Page 241:01 to 242:05

00241:01 A. I can't comment in that. That
 02 may be in our report, but this is not an area
 03 that I'm -- I investigated or am familiar
 04 with.

05 Q. (BY MR. HARTLEY) Okay. So --
 06 so that brings me, then, back to -- back to
 07 the original point. When you testified this
 08 morning in response to Mr. Matthews'
 09 questions, you said, I believe that they took
 10 timely and appropriate action when they saw
 11 an influx. Tell me, what is the basis for
 12 your coming to that belief.

13 A. As it says in our report,
 14 they -- they did a flow check and then took
 15 appropriate action to shut-in the well.

16 Q. So separate and apart from
 17 the -- the written report that Transocean
 18 produced, do you have any other basis for
 19 your belief that the Transocean rig crew
 20 responded appropriately and timely when first
 21 detecting an influx?

22 A. I -- I just come back to what we
 23 say in our report.

24 Q. Okay. All right. I want to
 25 shift gears for a few minutes and talk about
 00242:01 the Sedco 711 incident and you discussed that
 02 a little bit this morning and I think what I
 03 want to look at is the document that's
 04 Exhibit 5749. It was tab 33 in -- in BP's
 05 notebook.

Page 242:16 to 243:12

00242:16 Q. This is your e-mail to Robert
 17 Scott on May 8th of 2010?

18 A. Oh, I think we had that same
 19 problem with -- with your colleague from BP,
 20 that I don't have that e-mail.

21 Q. Okay. So you have the April 5,
 22 2010 HQS advisory?

23 A. That is correct.

24 Q. Okay. We'll -- we'll start
 25 there, then. You're generally familiar with
 00243:01 the Sedco 711 incident in the North Sea,
 02 aren't you?

03 A. I -- I'm aware of that incident,
 04 yes.

05 Q. That was an influx of

06 hydrocarbons that occurred December 23 of
 07 2009?
 08 A. That is correct, during a
 09 completion operation.
 10 Q. Would you say those operations
 11 were similar to the operations going on in
 12 the Macondo well on April 20th, 2010?

Page 243:14 to 245:01

00243:14 A. I -- the -- the Macondo
 15 operation was during a displacement, and
 16 the -- my understanding is, as I just said a
 17 minute ago, the Sedco 711 was during a
 18 completion operation.
 19 Q. (BY MR. HARTLEY) In both events
 20 they were displacing synthetic-based mud to
 21 seawater?
 22 A. I believe that is -- that is the
 23 case, yes.
 24 Q. Okay. I think -- I think in
 25 that material in front of you is also the
 00244:01 April 14th advisory. Do you have that?
 02 A. Yes, I do.
 03 Q. As I understand it, this is the
 04 advisory issued on April 14th only in the
 05 North Sea or to the North Sea operations
 06 group?
 07 A. Yes, that was -- I can tell that
 08 by looking in the -- the header, this is
 09 issued within the North Sea, that is correct.
 10 Q. Okay. I want to focus on -- on
 11 the first page of this advisory. Just below
 12 the halfway point there is a heading for well
 13 cleanup, and then it lists a series of
 14 actions that were being undertaken on that
 15 well in the North Sea; do you see that?
 16 A. Yeah.
 17 Q. Okay. The first one reads, "The
 18 well was being circulated as per the well
 19 program."
 20 Do you see that?
 21 A. Yes.
 22 Q. Now, is it your understanding
 23 that this is also what was occurring on the
 24 Macondo well on April 20th, 2010, that the
 25 Macondo well was being circulated, as per a
 00245:01 well program?

Page 245:03 to 245:12

00245:03 A. I -- I don't -- I don't know.
 04 Q. (BY MR. HARTLEY) You don't know
 05 whether the Macondo well was being circulated

06 on April 20th?
07 A. No. I -- we're getting into
08 areas out with my knowledge and expertise.
09 Q. And that's -- and that's a fair
10 point. What is your understanding of what
11 was going on operationally on the Macondo
12 well on April 20th?

Page 245:14 to 247:01

00245:14 A. I suppose in the -- in the
15 broader sense is that it was the end of the
16 well and that they were preparing to get
17 ready to move -- pull the BOP and move the
18 rig to another location after setting a -- a
19 cement plug in the well.
20 Q. (BY MR. HARTLEY) Were you aware
21 that they were -- they were displacing mud
22 with seawater to about 8367 feet below mud
23 line?
24 A. I -- I guess I'm aware -- sorry.
25 I'm aware that they were displacing mud with
00246:01 seawater. I couldn't -- I couldn't comment
02 on the figure that you mentioned.
03 Q. Fair enough. Were you aware
04 that -- that a float collar had been -- had
05 been put downhole and there were a series of
06 efforts to -- to convert that float collar?
07 A. Yes, sir, I'm aware of that.
08 Q. Were you aware that -- that
09 cement had been run on the primary production
10 casing on April 19th, leading over to the
11 early morning of April 20th?
12 A. Yes, I'm -- I'm aware of that.
13 Q. So -- so you have -- have some
14 understanding of some of the operations going
15 on in the last couple days of the Macondo
16 well?
17 A. Oh, yes, definitely, sir, yes.
18 Q. Okay. The second entry, back on
19 the operations advisory, read, "Standing
20 instructions for the driller and a mud pit
21 displacement plan were in place to
22 communicate this."
23 Do you see that point?
24 A. Yes.
25 Q. Are you aware of that occurring,
00247:01 also, on the Macondo well on April 20th?

Page 247:03 to 247:13

00247:03 A. No, I am not aware of that.
04 Q. (BY MR. HARTLEY) The next point
05 reads, "The well was being displaced to

06 seawater, removing the overbalanced oil-based
07 mud from the well."
08 Do you see that?
09 A. Yeah. Yeah.
10 Q. And I think you just testified
11 you're familiar with that occurring on the
12 Macondo well?
13 A. Yes, yes.

Page 248:10 to 248:22

00248:10 Q. (BY MR. HARTLEY) Okay. The
11 next point reads, "The drill crew did not
12 consider well control as a realistic event
13 during the well cleanup displacement
14 operation, as the FIV had been successfully
15 inflow tested."
16 Do you see that?
17 A. Yes, sir.
18 Q. Do you know whether the --
19 anybody associated with the Transocean
20 internal investigation looked into whether a
21 similar atmosphere existed on the Macondo
22 well?

Page 248:24 to 250:19

00248:24 A. I -- I don't know if they
25 investigated it. I know that they were --
00249:01 that our wells team were aware of this
02 incident.
03 Q. (BY MR. HARTLEY) You say, "our
04 wells team was aware of this incident." The
05 wells team on the Deepwater Horizon was aware
06 of the North Sea incident?
07 A. That -- yes.
08 Q. Who was on that wells team
09 you're referencing?
10 A. Well, that -- that's the team
11 that I mentioned that's headed by my
12 colleague, Mr. -- I'm sorry, I think it was
13 earlier on to the other lady. The wells team
14 was headed up by a gentleman named Mr. Perrin
15 Roller.
16 Q. Okay. So you're saying that --
17 that members of the wells team for Transocean
18 on the investigation side were familiar with
19 the North Sea incident as they conducted
20 their investigation of the Macondo well?
21 A. I'm saying that they were aware
22 of the -- of the incident, yes.
23 Q. Do you know whether they
24 attempted to look into the analogies between
25 the two situations?

00250:01 A. I -- I do not know that.
02 Q. Do you think that would be a
03 worthy endeavor?
04 A. You're asking me to speculate in
05 an area that is out with my expertise. I'm
06 sorry, I can't answer that.
07 Q. I think this morning you
08 testified in response to some of
09 Mr. Matthews' questions about taking lessons
10 learned and trying to apply those to the
11 organization to improve operations going
12 forward; is that fair?
13 A. Yes, that -- that -- that's a
14 fair statement, yes.
15 Q. Okay. As a part of that
16 exercise, you would obviously want to explore
17 incidents like the Sedco 711 in the North Sea
18 and like the Macondo well to derive lessons
19 learned, wouldn't you?

Page 250:21 to 251:03

00250:21 A. Yes, part of our learning
22 process, not exclusive, but learning from
23 incidences is -- can be part of our
24 continuous improvement process.
25 Q. (BY MR. HARTLEY) How are -- do
00251:01 you know how these lessons learned or
02 operations advisories are communicated beyond
03 a region in which an incident may occur?

Page 251:05 to 253:01

00251:05 A. Yes. We have a number of
06 systems within Transocean to -- share
07 information. So something like this incident
08 on the Sedco 7 -- Sedco 711 would be shared
09 with our colleagues within our corporate
10 group, and it -- it is evident this was done,
11 because our corporate group issued the -- the
12 other advisory that we were looking at
13 earlier on.
14 Q. (BY MR. HARTLEY) Does that
15 other advisory include any details as to what
16 occurred on the Sedco 711 on December 23 of
17 2009?
18 A. What the -- the well advisory
19 issued by a corporate group is a
20 clarification of -- then was included in our
21 Well Control Handbook.
22 Q. Okay. And here's where I'm
23 struggling. See if you can help me out.
24 It's my understanding chronologically that on
25 December 23, 2009 the Sedco 711 incident

00252:01 occurs. Transocean looks into it, derives
02 some lessons learned, and issues an
03 operations advisory in the North Sea group on
04 or about April 14th of 2010.

05 Separate from that, on April 5th
06 you have a global operations advisory that
07 only relates to a Well Control Handbook
08 modification dealing with complacency after
09 an inflow test.

10 So what I'm struggling with is
11 how do you communicate lessons learned from
12 an incident like the Sedco 711 to people,
13 working in another area like the Gulf of
14 Mexico that suffers a similar experience?

15 A. I can -- I can only go back to
16 what the process is. I wasn't involved in
17 the evaluation of the data from the 711 or
18 the decisions that were put in place to issue
19 this corporate advisory. So people will
20 evaluate information and -- and decide what
21 is to be shared on a global basis.

22 Q. As manager of QHSE in the North
23 Sea would you want to be apprised of
24 incidents occurring in the Gulf of Mexico
25 that you might experience in the North Sea

00253:01 that might -- might affect QHS or E?

Page 253:03 to 254:10

00253:03 A. The -- yeah, we have a process
04 in place to -- to -- to share lessons across
05 our fleet.

06 Q. (BY MR. HARTLEY) You want the
07 entire fleet to derive benefit from lessons
08 that can be learned from events that may
09 recur?

10 A. Yeah, that's part -- as I've
11 already said, that is part of our continuous
12 improvement process.

13 Q. Okay. Other than this April 5th
14 advisory issued by corporate, have you seen
15 or are you aware of any specific instructions
16 or information provided to the Gulf of Mexico
17 prior to April 20th, 2010, conveying lessons
18 learned from the North Sea incident?

19 A. I am not.

20 Q. Do you know whether that
21 occurred?

22 A. I don't know.

23 Q. Would it be important for people
24 like Mr. Revette and Mr. Anderson working in
25 the Gulf of Mexico to appreciate the risks
00254:01 that they face even after what they deemed to
02 be a successful inflow test?

03 A. I -- I've already agreed with

04 you that it's important to share lessons
 05 across the company and say we have a process
 06 and we do our best to ensure those lessons
 07 are -- are learned across the company.
 08 Q. Okay. But in -- at least in
 09 this instance we don't know whether that
 10 actually occurred prior to April 20th?

Page 254:12 to 254:13

00254:12 A. As far as I know, we do not know
 13 if that happened, that is correct.

Page 255:05 to 257:07

00255:05 Earlier this afternoon you were
 06 asked about possible investigation or lack of
 07 investigation of the safety culture at
 08 Transocean. I'm just setting that as a -- a
 09 topic here or a -- an area of exploration.
 10 I'd like you and your counsel to turn to
 11 tab 1 of the documents we've provided. I'm
 12 going to mark that as Exhibit 5766, which has
 13 Bates No. TRN-MDL-01007255.

14 A. Yes, I have that in front of me
 15 yes.

16 Q. Okay. I would like you to turn
 17 to the Bates number that -- the page that
 18 ends in Bates No. 7261.

19 Are you -- let me back up one
 20 second. Are you aware of Transocean
 21 performing from time to time performance
 22 monitoring audit and assessment or PMAA?

23 A. Yes, I am.

24 Q. Okay. And then turning to 7261.

25 A. Yes, I have that in front of me.

00256:01 Q. Okay. Down at the bottom of
 02 that page under the general heading of
 03 "Policies & procedures" there is a heading --
 04 sub heading saying, "Client," colon, and it
 05 reads, "Everything from" --

06 A. Yes, I have that.

07 Q. And it reads, Everything from
 08 the client company man indicated that BP was
 09 very happy with the rig performance, comma,
 10 safety culture and moral, perhaps meaning
 11 morale, of the crews. He did indicate there
 12 was inconsistency with the catering crew. He
 13 said, BP is making a concerted effort to
 14 adopt the Transocean Company Management
 15 System.

16 Do you see that?

17 A. Yes, I do.

18 Q. In your investigations for

19 Transocean did you ever have any indication
20 that BP was not happy with the safety culture
21 of the Deepwater Horizon.

22 A. I -- I found no indication of
23 that, and I think the reflection of that is
24 with the exception of one well, the -- the
25 Deepwater Horizon worked continuously for BP
00257:01 since it was built.

02 Q. And this self-audit and other
03 audits seem to indicate that BP was happy
04 with the safety culture and performance of
05 Transocean up to the time of the incident; is
06 that correct?

07 A. That is correct.

Page 260:01 to 260:12

00260:01 Q. And you would expect that if
02 there was unhappiness, that that would have
03 been brought up prior to the time of the
04 incident and would have been something that
05 you would have investigated as part of your
06 investigation?

07 A. I say I found no in- -- we found
08 no indication of that, and if there -- along
09 with a lot of other data that we analyzed, if
10 there had been any way -- complaint on record
11 from BP, then, yes, we would certainly have
12 investigated that.

Page 267:20 to 278:11

00267:20 Q. Hello, Mr. Hart, I'm Jack Massey
21 for Transocean and with me is Mark
22 Thibodeaux. I want to ask you a few
23 questions to clean up the record, is that all
24 right?

25 A. Yes, please go ahead.

00268:01 Q. Mr. Hart, who initially assigned
02 the task of looking into the sinking of the
03 Deepwater Horizon?

04 A. That was myself.

05 Q. And do you recall why you
06 initially had that assignment?

07 A. I believe that was because I was
08 looking at events after the loss of well
09 control sections, the gas dispersion and
10 evacuations.

11 Q. So those kinds of post well
12 control events seem to fit naturally into
13 your area?

14 A. Yes, I -- I -- well, they did.
15 I'm not saying they did fit in my area.

16 Q. Did the responsibility to

17 investigate the Macondo incident move to
18 another person or other persons as the
19 investigation progressed?

20 A. As regards the sinking, yes,
21 they did pass to -- to other parties or other
22 people within the investigation team as time
23 progressed, yes.

24 Q. So who on the investigation team
25 took over on this inquiry into the sinking of
00269:01 the rig?

02 A. There were two people involved
03 in that, my -- one of my team, Mr. Bjoern
04 Ritter and our team -- investigation team
05 lead, Mr. Daniel Farr.

06 Q. Why did responsibility for
07 investigating the -- the sinking of the rig
08 pass to these two individuals?

09 A. Because in discussions with
10 Mr. Farr it was felt that those two gentlemen
11 were more -- had the more appropriate skill
12 levels to -- to lead that investigation
13 rather than myself.

14 Q. And so when you talk about their
15 appropriate skill levels, for instance, what
16 skills did Bjoern Ritter have that make him a
17 more appropriate investigator in that area?

18 A. Mr. Ritter had a Master's degree
19 in naval architecture. So that was very
20 appropriate -- Mr. Farr and I thought that
21 was appropriate for him to be actively
22 engaged in that investigation.

23 Q. And what relevant skills did
24 Dan Farr have?

25 A. Mr. Farr is a very experienced
00270:01 engineer, looking at rig structures. But his
02 background is also naval architecture and an
03 ex- Coast Guard officer.

04 Q. I know you testified earlier
05 that the -- the sinking of the rig couldn't
06 be attributed to any one source, but do you
07 know if Mr. Farr and Mr. Ritter reached
08 conclusions on that score?

09 A. Yes, they did reach conclusions.

10 Q. What was it?

11 A. They concluded that after
12 extensive investigation, that they could draw
13 no conclusion as to why the rig sank.

14 Q. Mr. Farr, I'd like to move to a
15 different subject. You testified earlier
16 today that you believe that the crew acted
17 reasonably in diverting mud gas separator,
18 based on the information that was available
19 to them at that time. Do you recall that?

20 A. Yes, and that is what I believe.

21 Q. And what information did the

22 crew rely on before diverting to the mud gas
23 separator?

24 A. The crew, as per their training
25 when they -- they undertook a flow check
00271:01 using the -- the trip tank.

02 Q. And what did that flow check
03 reveal?

04 A. That indicated that there was
05 a -- an influx from the well.

06 Q. And what about that influx led
07 the crew to think they could divert safely to
08 the mud gas separator?

09 A. The information that we believe
10 was available to them at that time, that the
11 influx was small and within the capacity of
12 the mud gas separator.

13 Q. And that appears in the
14 Transocean investigation report; does it not?

15 A. It does. It's contained within
16 the section I was responsible for in 3.5 of
17 the Transocean report.

18 Q. Okay. Mr. Hart, how many people
19 got off the Deepwater Horizon on the night of
20 April 20th, 2010?

21 A. 115 people evacuated the
22 Deepwater Horizon.

23 Q. And what were the conditions on
24 the rig at the time of the evacuation?

25 A. These were extremely difficult
00272:01 circumstances. If I could just briefly
02 list --

03 Q. Go ahead, tell the Court what
04 those circumstances were.

05 A. We had -- the people were faced
06 with an ignited blowout. So you had -- and
07 fire underneath the -- in the moon pool area.
08 So we had a massive fire. As described, I
09 believe in our report the noise was
10 tremendous. I think we use an -- or the
11 analogy has been used, like a jet engine.
12 There was damage to areas that the rig --
13 there was limited lighting because the rig
14 had lost power, and it was also nighttime.

15 Q. Did you reach any conclusions
16 over the course of your investigation as to
17 why 115 people escaped the Deepwater Horizon
18 safely, despite these difficult conditions?

19 A. I did.

20 Q. What were your conclusions?

21 A. My conclusions were that -- that
22 those involved on the night of the 20th,
23 particularly the supervisors of the Deepwater
24 Horizon crew did a tremendous job in
25 organizing that safe evacuation from the rig,
00273:01 and that is also backed up by some of our

02 service partners that were also on the rig,
03 that the effectiveness and the quality of the
04 training that both the Transocean crew had
05 received and, also, the -- some of our
06 service partners were a major contributor to
07 the successful evacuation and safe recovery
08 of 115 people.

09 Q. In a similar vein, Mr. Hart, do
10 you recall -- I think you've testified today,
11 but do you recall reading the Lloyd's report
12 on the Deepwater Horizon safety culture
13 during the course of the investigation?

14 A. I -- I've already testified
15 earlier today that I'm -- I've read that
16 report, yes.

17 Q. And in your view, having been
18 involved in operations on rigs for more than
19 20 years and having been a -- in many ways, a
20 specialist in QHSE issues, was that report
21 positive or negative about the safety culture
22 on the Deepwater Horizon?

23 A. In my opinion, that -- the
24 overall conclusion of that report was very
25 positive about the Deepwater Horizon.

00274:01 There -- if you look at the summary to the
02 report, it lists a number of positives that
03 were found by Mrs. -- Mrs. Annand and
04 Mr. Moon.

05 Q. Mr. Hart, I'm going to hand you
06 a document that's been previously marked as
07 Exhibit 4261, which is the Lloyd's Register
08 safety management systems and safety culture
09 document for the closeout meeting. And
10 starting on Page TRN-INV-16754, will you
11 please list the strengths that the Lloyd's
12 auditor found regarding the Deepwater Horizon
13 safety culture?

14 A. It reads, There was a strong
15 leadership on the rig, in brackets, the OIM
16 and his team, including supervisors, closed
17 brackets, and on the beach, and in brackets
18 it says RMP, which stands for rig manager
19 performance. In particular, people recognize
20 and appreciate the rig manager performance
21 efforts to get the rig back to basics.

22 Q. And do you agree with that
23 finding?

24 A. I have no -- I -- I found
25 nothing within my investigation to dispute
00275:01 that finding.

02 Q. Another strength is the use of
03 the Think plan, correct?

04 A. That is correct.

05 Q. And do you have any reason to
06 disagree with that finding?

07 A. I do not.
08 Q. The report also lists a strength
09 as empowerment. Do you see that?
10 A. I do.
11 Q. And what does it mean when it
12 says that the rig was empowered or the rig
13 crew were empowered?
14 A. This -- empowerment within
15 Transocean means that people will take
16 actions and undertake things, based on self
17 motivation, that they don't necessarily have
18 to be told or led to do things.
19 Q. Okay. What is the next
20 strength?
21 A. It says, strong safety culture.
22 It was clear that the crews understood their
23 responsibility and accountability for safety
24 and the crews they work with. This is led
25 from the top. And there is a genuine belief
00276:01 in keeping each other safe and using the
02 tools and processes they have got to do that.
03 Q. We are moving pretty briskly
04 here. So what are the last two strengths you
05 see here in the -- in the document?
06 A. The HSE policies and awareness
07 and resources for safety.
08 Q. You interviewed the Lloyd's
09 auditors during the course of your
10 investigation; did you not?
11 A. That's correct, I interviewed
12 both Ms. Annand and Mr. Moon.
13 Q. And it was these two individuals
14 who developed the report which lists these
15 rig's strengths, correct?
16 A. That -- that is correct.
17 Q. And it is these two individuals
18 that agreed that the rig had a strong safety
19 culture?
20 A. Yes, and they -- they -- I
21 interviewed them on the issues that they
22 raised in their report, and they -- they
23 confirmed that.
24 Q. Let's move on, Mr. Hart. Do you
25 recall being asked earlier today if the
00277:01 Transocean report was evasive?
02 A. I believe that word was used
03 sometime earlier in the day, yes.
04 Q. Do you agree with any
05 characterization of the report as evasive?
06 A. I do not. As I've stated on the
07 record already, the investigation team
08 undertook a very challenging investigation.
09 As against the scope set out in our -- in the
10 executive summary of our report, we've tried
11 to be as honest as we can with the

12 information that was available, but I would
13 say that we had a number of challenges in
14 constructing our report: limited information
15 with regard to what happened on the drill
16 floor, because we -- we lost 11 colleagues,
17 we had no information available to us on the
18 actual rig itself because it sank, and, also,
19 we had limitations on who we -- who we could
20 interview.

21 Q. Mr. Hart, did you have any
22 reason to question the integrity of your
23 fellow team members who were on the
24 investigation team?

25 A. None whatsoever.

00278:01 Q. Would you tell the Court,
02 Mr. Hart, why it was important to you that
03 the Macondo incident be investigated fully.

04 A. This is my personal view, is
05 that we owe to the families of the 11 people
06 that lost their lives that we investigate the
07 Macondo incident as thoroughly as we can and
08 that those -- so that we can do whatever is
09 possible within our power and also, I
10 believe, industry's power to prevent this
11 from happening again.

1 WITNESS CORRECTIONS AND SIGNATURE
 2 DEREK HART OCTOBER 7, 2011

3 Please indicate changes on this sheet of
 4 paper, giving the change, page number, line
 5 number and reason for the change. Please
 6 sign each page of changes.

PAGE/LINE CORRECTION REASON FOR CHANGE

7 23 / 9 DELETE "OUT" THIS WORD DOES NOT BELONG
 8 MAKE SENSE.

9 54 / 3 CHANGE "NORMAL" TO FORMAL AS THIS
 10 IS WHAT I SAID

11 56 / 6 CHANGE "SENT TO US" TO "SET US"
 12 AS THIS IS WHAT I SAID

13 119 / 6 "WICK" SHOULD READ "RIG" THIS IS
 14 THE CORRECT WORD

15 121 / 25 CHANGE "BUILD" TO BILL AS THIS
 16 IS THE CORRECT WORD

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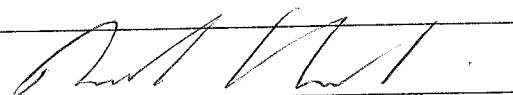
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 DEREK HART