

# Deposition Testimony of:

## **Jay Odenwald**

Date: July 27, 2011

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Page 8:10 to 8:12

00008:10 JAY ODENWALD,  
11 having been duly sworn, testified as follows:  
12 EXAMINATION

Page 8:14 to 8:15

00008:14 Q. Mr. Odenwald, good morning.  
15 A. Good morning.

Page 9:14 to 9:23

00009:14 With that, would you tell us by  
15 whom you are currently employed?  
16 A. Transocean.  
17 Q. All right. For how long have  
18 you been employed by Transocean?  
19 A. About ten and a half years.  
20 Q. Okay. Share with us your  
21 educational background.  
22 A. I have a high school diploma  
23 from Huntington High School in Ferriday.

Page 11:02 to 11:09

00011:02 Are you ready? Primary  
03 agriculture background. I was in business  
04 for myself farming for 18 years.  
05 Q. Uh-huh.  
06 A. And then the two years prior to  
07 going to work for Transocean, I worked at a  
08 tire plant in Natchez, Mississippi, tread  
09 line operator.

Page 11:11 to 13:13

00011:11 Do I gather, then, that your  
12 first job in the oil field industry was with  
13 Transocean?  
14 A. No, sir, I actually had a couple  
15 of years of roughneck experience prior to the  
16 18 working for a small drilling contractor on  
17 an inland barge.  
18 Q. Okay. Was it offshore work or  
19 onshore work?  
20 A. It was on water, you know, it's  
21 what they called in -- inland barge.  
22 Q. Oh, inland barge. I'm --  
23 A. Yes, sir.  
24 Q. -- sorry. I didn't hear that.  
25 Okay.  
00012:01 And you were a roughneck?

02           A.       Yes, sir.  
03           Q.       Okay. All right. How did you  
04 come to seek employment with Transocean?  
05           A.       I actually saw a ad in the paper  
06 in 2000. They were new build rigs. They  
07 were looking to crew them up. Replied to the  
08 ad.  
09           Q.       Okay. All right. What was your  
10 entry-level job --  
11           A.       Roustabout.  
12           Q.       -- at Transocean?  
13                    You were a roustabout. Okay.  
14                    Was there any training that you  
15 were required to go through before they let  
16 you begin work as a roustabout?  
17           A.       They had the top school at that  
18 time, but I don't -- I didn't attend the top  
19 school. I think with my prior experience,  
20 oil field experience, you know --  
21           Q.       That was enough?  
22           A.       Yes, sir, because I'd -- I'd  
23 been at a higher position --  
24           Q.       Uh-huh.  
25           A.       -- than -- than roustabout.  
00013:01        Q.       Okay. Were you assigned to  
02 offshore rigs at that time?  
03           A.       Yes, sir, the RICHARDSON.  
04           Q.       Okay. How long were you aboard  
05 the RICHARDSON?  
06           A.       About two and half years until  
07 it went to Africa.  
08           Q.       All right. And during the --  
09 your tenure on the RICHARDSON, you were a  
10 roustabout for the whole time?  
11           A.       No, sir, I was a roustabout for  
12 approximately five months and then was  
13 promoted to roughneck, floor hand.

Page 14:09 to 23:15

00014:09        Q.       Did you finish out your tenure  
10 on the RICHARDSON as a roughneck?  
11           A.       Yes, sir.  
12           Q.       Okay. What was the next rig  
13 that you worked on?  
14           A.       I went to the CAJUN EXPRESS.  
15           Q.       Okay. Obviously you started  
16 there as a roughneck?  
17           A.       Yes, sir.  
18           Q.       How long were you aboard the  
19 CAJUN EXPRESS?  
20           A.       I think around 15 months.  
21           Q.       All right. A roughneck for the  
22 entire time?  
23           A.       Yes, sir. That's actually where

24 I got interested in subsea and started my  
25 subsea OJT --

00015:01 Q. Okay.  
02 A. -- and helping subsea.  
03 Q. Now, explain to us how you came  
04 to be interested in the subsea.  
05 A. Well, Transocean doesn't want  
06 you to stay in one position. They want you  
07 to grow. And my original intent was to go  
08 into maintenance. And subsea needs help when  
09 it stacks up during maintenance periods, so  
10 they'll send some floor hands down to help  
11 the seniors.  
12 And a -- a senior was on the  
13 rig. You know, he -- he approached me, he  
14 said, I can see you got some hydraulic  
15 experience.  
16 And I said, Well, I've worked on  
17 them tractors for 20 years --  
18 Q. Uh-huh.  
19 A. -- couldn't put them in the  
20 shop, had to fix them myself.  
21 And -- so he started doing -- he  
22 said -- he said, Which way do you want to go?  
23 And I said, Maintenance.  
24 He said, Well, we're  
25 maintenance, too. And come this way.

00016:01 So I started on my OJT, stayed  
02 over for rig moves when the stack was up and  
03 started working my way in that direction.  
04 Q. All right. Help me get a better  
05 understanding of exactly what one does to  
06 make the move. Do you sign some kind of an  
07 application? Is there some paperwork  
08 involved?  
09 A. Well, I mean, as far as, you  
10 know, you're starting your OJT and stuff --  
11 Q. Yes.  
12 A. -- you'll go -- you'll go get  
13 the -- the booklets and stuff and it will  
14 have -- it will have questions on it.  
15 Q. Uh-huh.  
16 A. And as you perform tasks, you  
17 know, during the rig move, the specific task,  
18 and you understand it, you can take it to the  
19 senior and he'll ask you, you know, how --  
20 how that system works --  
21 Q. Right.  
22 A. -- what you did, what you gonna  
23 do, what you're looking for. And when he --  
24 you convince him that -- that you understand  
25 how it works, he signs off and he initials

00017:01 it. And when you get all of the -- all the  
02 questions initialed, you take the test.  
03 Q. Are you actually working subsea

04 while you're doing this OJT? Are you in that  
05 position?  
06 A. No, sir, I was a roughneck.  
07 Q. All right. You're still called  
08 a roughneck?  
09 A. Yes, sir.  
10 Q. But even though you're called a  
11 roughneck, you're actually doing some of the  
12 functions of the subsea folks, aren't you?  
13 A. You're doing maintenance.  
14 Q. Maintenance?  
15 A. You're working under the --  
16 you're working under their instructions.  
17 They're there with you.  
18 Q. All right. But you actually are  
19 working for the subsea folks?  
20 A. Yes, you assist in their  
21 department.  
22 Q. All right. So are you assigned  
23 to their department?  
24 A. No, sir.  
25 Q. Okay. You're still assigned as  
00018:01 a roughneck?  
02 A. Yes, sir.  
03 Q. But -- so are you doing two  
04 different jobs at the same time?  
05 A. No, I mean, you're -- it depends  
06 on the -- you know, the particular situation.  
07 I mean, if you're on your regular hitch,  
08 you're going to be a floor hand.  
09 Q. Uh-huh.  
10 A. And you may be working on the  
11 floor or he may send you -- your driller --  
12 your super -- supervisor, he may send you  
13 down to assist them.  
14 Q. I see.  
15 A. But once -- once you've  
16 established that you're serious, if he's  
17 going to send -- if he's going to send a  
18 roughneck down, it's going to be the one  
19 that's shown the interest and is going  
20 through the motions.  
21 Q. All right.  
22 A. And is -- in my case I would --  
23 I would put in to stay over when there was a  
24 rig move, and the BOPs is actually going to  
25 be on the beams, which is the only time you  
00019:01 can work on it.  
02 Q. Right.  
03 A. And if you put in to stay over  
04 an extra week, you would be working just with  
05 subsea. You would still be getting paid  
06 roughneck pay, but you would be them -- with  
07 them all week long.  
08 Q. And when you put in -- you put

09 in with the driller?  
10 A. To work over?  
11 Q. Yes, sir.  
12 A. No, sir, you would -- you would  
13 put in with the senior toolpusher --  
14 Q. Okay.  
15 A. -- or the -- or the OIM.  
16 Q. So he knows that you are  
17 interested. And then once he knows that and  
18 he believes that, then he may give you a  
19 assignment to -- to work over, right?  
20 A. Yes, sir.  
21 Q. Okay.  
22 A. I mean, it works -- it works --  
23 in my case, you know, I would -- I'd tell  
24 OIM, you know, If you need something I'd like  
25 to be here when the stack's here, up. But I  
00020:01 understand it's a two-way street.  
02 Q. Uh-huh.  
03 A. You get in a bind, you need a  
04 roughneck or a roustabout, you call me at the  
05 house. I'd help them, and then, you know,  
06 they did what they could. They can't always  
07 help -- they can't always let you be out  
08 there because they may not have the bed  
09 space.  
10 Q. Now, what study did you do to  
11 understand exactly what a BOP was?  
12 A. The OJT.  
13 Q. Okay.  
14 A. It pretty much explains it.  
15 It's -- it's, you know, takes it and pretty  
16 much from the -- pretty -- you know, it -- it  
17 goes through the history, you know, of -- of  
18 how, you know, how the systems have actually  
19 evolved. But, I mean, when you first start  
20 off helping subsea, I mean, you're just a  
21 grunt. I mean, you're -- you're just going  
22 back to the shop and getting tools --  
23 Q. Sure.  
24 A. -- and dragging them up on the  
25 shop -- on the stack. You're not -- you're  
00021:01 not making any decisions or rebuilding  
02 anything. You're just going to get their  
03 stuff for them. You're just the go-fer.  
04 Q. I understand that. But I'm just  
05 curious to know whether or not they are  
06 teaching you exactly what the function of the  
07 BOP is. I mean, let's --  
08 A. Well --  
09 Q. -- start fundamentally with what  
10 it does.  
11 A. Well, I mean, as you know, as  
12 you -- as you work on a component -- I know  
13 the people I've got training under me now, as

14 we work on it, you know, we'll -- we'll stop  
 15 and we'll go through it, and I will actually  
 16 tell them, you know, when we get through --  
 17 say we're working on the pods and changing  
 18 the filters out on them, on the pilot system,  
 19 I tell them, Go to -- okay. While this is  
 20 fresh on your mind, go to your OJT --  
 21 Q. Uh-huh.  
 22 A. -- and pull that up and go  
 23 through it. And now you understand it  
 24 because you've had your hands on it.  
 25 Q. Exactly. So you get a better  
 00022:01 understanding of how it functions --  
 02 A. Yes. It's -- it's a  
 03 journeyman's position.  
 04 Excuse me.  
 05 MR. BAAY:  
 06 Let him finish his question --  
 07 THE WITNESS:  
 08 I apologize.  
 09 MR. BAAY:  
 10 -- before you start your answer.  
 11 EXAMINATION BY MR. BRUNO:  
 12 Q. That's no offense.  
 13 A. Yeah.  
 14 Q. We -- it's -- it's normal.  
 15 So do I gather that the first  
 16 BOP that you had hands-on experience with was  
 17 aboard the CAJUN EXPRESS?  
 18 A. No, sir. I had helped on -- I  
 19 had helped on the RICHARDSON in a limited  
 20 amount. But when I got to the -- when I got  
 21 to the CAJUN, that's when a senior actually  
 22 took me aside and said, I can see that you  
 23 have a understanding of hydraulic -- basic  
 24 hydraulics and you've got a talent for this.  
 25 And I said, Well, I don't --  
 00023:01 would you be interested in trying to go  
 02 subsea?  
 03 And I said, I don't know how.  
 04 And he said, Well, I'll tell you  
 05 how. I'll help you. And he wrote me a  
 06 letter of recommendation.  
 07 And I got started on the OJT,  
 08 and then, you know, just submitted it to  
 09 the -- at that time, Mike Rogers who ran the  
 10 SWAT team, which was actually our  
 11 journeyman's position.  
 12 And you did your time until your  
 13 name came up and, you know, when they had a  
 14 opening on the -- on the SWAT team,  
 15 eventually I got assigned to it.

00023:24 So just tell us what does  
25 "subsea" mean at Transocean.

00024:01 A. Subsea department basically  
02 deals with wellhead -- wellhead to diverter  
03 and the tensioning system.  
04 Q. Okay. Again, help us  
05 understand. What do you -- what is the  
06 wellhead? What's in -- what is inclusive of  
07 that phrase, "wellhead"?  
08 A. Well, the wellhead is the  
09 conduit pipe that comes up out of the mud.  
10 It's what the BOP actually latches up on.  
11 Q. Uh-huh.  
12 A. It has a profile. And a ring  
13 groove for -- for a ring gasket that actually  
14 seals between the wellhead and the BOPs.  
15 Q. Okay.  
16 A. So we don't actually have  
17 anything to do with the wellhead, but that's  
18 where we start --  
19 Q. All right.  
20 A. -- from that ring gasket.  
21 Q. That's just the beginning point?  
22 A. That's the beginning point.  
23 Q. All right. Then you described a  
24 diverter. Tell us -- tell the judge what a  
25 diverter is.

00025:01 A. The diverter is when it -- when  
02 the mud flow returns to the rig with the  
03 cuttings, it hit -- it comes to the diverter,  
04 and then it goes to the flow line, to the  
05 shaker house. That's your mud coming back.  
06 Q. Okay.  
07 A. It brings your cuttings up. As  
08 you're digging a hole, you have -- what you  
09 displaced out of that hole has to be removed  
10 and dealt with.  
11 Q. All right.  
12 A. And the mud returns through the  
13 diverter and goes to the flow line.  
14 Q. All right. Is it similar to the  
15 wellhead? Subsea doesn't have anything to do  
16 with the diverter, correct?  
17 A. No, sir. That's just --  
18 Q. That's the end point?  
19 A. That's -- that's pretty much  
20 where my stuff begins and ends.  
21 Q. All right. And then you said  
22 the tensioning system. Tell the judge what  
23 the tensioning system is.  
24 A. You have -- let's start back on  
25 the wellhead. You've got your BOPs that

00026:01 latch on to the wellhead.  
02 Q. Uh-huh.  
03 A. Between the BOPs and the



04 diverter, you have your riser, your riser  
05 pipe, which is where your mud returns and  
06 your drill pipe goes through. And it's  
07 filled with mud, too.  
08 And it has to have -- it has to  
09 have tension to hold it up, the weight of it.  
10 That also has to increase as the mud weight  
11 increases because it will try to bow. And so  
12 you have -- depending on the system, whether  
13 you have in-line tensioners that -- that pull  
14 directly on the -- on the SDC ring, which --  
15 which actually lifts on the -- on the riser  
16 or whether you have cable operators. But  
17 you're either going to have air or nitrogen  
18 that's actually applying tension to  
19 compensate for the weight of the riser and  
20 the mud. And that's part of our stuff, too.  
21 Q. All right. Now, you're not  
22 operating this equipment, correct? You are  
23 maintaining the equipment. Is that accurate?  
24 A. Well, we're operating the BOPs,  
25 too. No. Are you talking about -- where are  
00027:01 we? Are we -- are we back on the CAJUN?  
02 Q. Well --  
03 A. Or are we now --  
04 Q. -- we're talking now generally  
05 about subsea?  
06 A. Oh, we're talking about subsea  
07 department?  
08 Q. Yes, sir.  
09 A. Yes, sir. We maintain and  
10 operate.  
11 Q. You also operate?  
12 A. The BO -- yes, sir.  
13 Q. All right. So you operate --  
14 A. We're not the only ones, but we  
15 operate.  
16 Q. All right. Do you operate the  
17 tensioning system?  
18 A. Yes, sir.  
19 Q. Okay. And you operate the BOP?  
20 A. Yes, sir.  
21 Q. And what other types of  
22 equipment in that system does the subsea  
23 department operate?  
24 A. The diverter.  
25 Q. Okay. So you actually do  
00028:01 operate the diverter?  
02 A. Yeah, we -- yeah, we will  
03 operate the diverter. We're not the only  
04 ones that operate the diverter.  
05 Q. All right. And insofar as  
06 maintenance is concerned, do you maintain the  
07 wellhead?  
08 A. The wellhead, there's no

09 maintenance on the well --  
10 Q. Okay.  
11 A. -- I mean, it's --  
12 Q. Do you maintain the diverter?  
13 A. Yes, sir.  
14 Q. And do you maintain the  
15 tensioning system?  
16 A. Yes, sir.  
17 Q. And you maintain the BOP?  
18 A. Yes, sir.  
19 Q. Are there any other types of  
20 equipment within that system the subsea  
21 department maintains?  
22 A. I think I pretty much covered it  
23 all.  
24 Q. Okay. All right. You also  
25 described a SWAT team. Tell the judge --  
00029:01 we -- we -- we have an idea of what a SWAT  
02 team is from watching TV, but what does a  
03 SWAT team mean at Transocean?  
04 A. I think it's technically  
05 referred to as field support. And I don't  
06 know where SWAT team came from. It's --  
07 Q. That's okay. It's what -- it's  
08 what you guys call it?  
09 A. That's what it's called.  
10 Q. All right. But the -- but the  
11 group that the SWAT team -- I'm sorry.  
12 The group that the name SWAT  
13 team refers to is field support team?  
14 A. Yes, sir, it's part of field  
15 support.  
16 Q. All right. Now, what is a field  
17 support team?  
18 A. It's your people in town that --  
19 that support all the rigs. And with  
20 reference to the SWAT team, whenever there's  
21 a rig move is when you need the extra help.  
22 And when a rig move was scheduled when I was  
23 on it, you would go to the rig generally a  
24 couple of days before they unlatched and help  
25 them pull it and help them do the work and  
00030:01 stayed until they tested, possibly until they  
02 ran it and latched up --  
03 Q. Uh-huh.  
04 A. -- and assisted.  
05 Q. Well, is a SWAT team always in  
06 place, or is a SWAT team in place when there  
07 is a move of a rig?  
08 A. The SWAT team always existed.  
09 Q. Okay.  
10 A. But they would be on -- on  
11 different rigs. I went to four or five rigs  
12 when I was on the SWAT team, different rigs.  
13 Q. All right. So the SWAT team

14 actually goes out into the field when there's  
15 a rig move?  
16 A. It's a journeyman position.  
17 Q. I understand. Now, when did you  
18 become a member of the -- and maybe I'm not  
19 saying it correctly, but when did you become  
20 subsea or a member of the subsea department?  
21 A. I think it was January of '05.  
22 Q. When you become a member of  
23 subsea, do you get some kind of a certificate  
24 or some -- you know, some piece of paper that  
25 indicates to the -- your employers that you  
00031:01 have the requisite training and experience to  
02 fill that position?  
03 A. I had -- I had passed my OJTs.  
04 Q. All right.  
05 A. And I had certificates from  
06 them. I hadn't attended any schools at that  
07 time.  
08 Q. All right.  
09 A. And I started the team.  
10 Q. The point is there's nothing  
11 that says subsea specialist or no certificate  
12 or no piece of paper that labels you as a  
13 subsea person?  
14 A. None, other than my designation  
15 on payroll is assistant subsea.  
16 Q. Okay. Now, at any time before  
17 you were assigned to this department in  
18 January 2005, were you required to study any  
19 regulations -- and by "regulations," I mean  
20 governmental regulations -- that would be  
21 applicable to the work of a subsea  
22 department?  
23 A. Personally, no.

Page 32:02 to 32:09

00032:02 Q. As a member of the subsea  
03 department, are you expected to know what  
04 regulations may be applicable to the work of  
05 that department?  
06 A. Once again, I was working under  
07 the direction of a senior subsea.  
08 Q. All right.  
09 A. I worked as directed.

Page 32:20 to 32:25

00032:20 Q. I think I understand you. Let  
21 me ask it this way: So the answer is: No,  
22 you weren't required to be knowledgeable  
23 about any regulations that may be applicable  
24 to the subsea department. Is that accurate?

25           A.       That's accurate.

Page 34:09 to 34:17

00034:09       Q.       I just want to know whether or  
 10 not, in your experience in subsea -- and  
 11 again we're talking about the time frame  
 12 after you were a member of that department --  
 13 was it apparent to you that someone in your  
 14 department was knowledgeable about  
 15 regulations, US government regulations, that  
 16 may be applicable to the work of the subsea  
 17 department?

Page 34:20 to 34:20

00034:20       A.       The seniors, yeah.

Page 35:01 to 35:12

00035:01   Again, what is a senior?  
 02       A.       Senior subsea supervisor is his  
 03 title. He's department head.  
 04       Q.       All right. And I gather there's  
 05 more than one of them?  
 06       A.       There's going to be two assigned  
 07 to a rig because, you know, it's a 24/7  
 08 operation and they -- they relieve each  
 09 other.  
 10       Q.       All right. So there are many  
 11 senior subsea folks working at Transocean?  
 12       A.       Yes, at least two per rig.

Page 35:19 to 38:19

00035:19   If those folks are called  
 20 senior, what are you called? Just plain old  
 21 subsea?  
 22       A.       Presently?  
 23       Q.       No, no, no. Back then when  
 24 you -- when you began.  
 25       A.       As I stated previously,  
 00036:01   assistant.  
 02       Q.       You were assistant subsea?  
 03       A.       Yes, sir.  
 04       Q.       And as a senior subsea, are  
 05 there any other designated positions within  
 06 the subsea department other than senior and  
 07 assistant?  
 08       A.       There's the position I hold now,  
 09 which is subsea supervisor.  
 10       Q.       Okay. Did that exist when you  
 11 joined the department?

12 A. Yes, sir.  
13 Q. Okay. So there are three  
14 positions in subsea: Assistant, supervisor,  
15 and senior? Is that accurate?  
16 A. Yes, sir. And there may be  
17 some -- there may be some more designations  
18 as far as trainees that they bring in from  
19 outside the industry.  
20 Q. Okay. But insofar as the  
21 functioning of that department, there are  
22 only three positions: The senior, the  
23 supervisor, and the assistant? Is that  
24 correct?  
25 A. That are on the rig at -- at any  
00037:01 time, yes, sir. Your senior works days, your  
02 supervisor works nights, and your assistants  
03 are trainees that usually split half and  
04 half. We work -- we work 6:00 to 6:00.  
05 Q. All right.  
06 A. And they'll work 12:00 to 12:00.  
07 Q. All right. I understand. Now,  
08 I'm a little confused.  
09 In January '05, you were an  
10 assistant?  
11 A. That was my job classification  
12 and my pay scale.  
13 Q. Okay. But you were still  
14 regarded as a trainee?  
15 A. I was an assistant assigned to  
16 the subsea support SWAT team.  
17 Q. Okay.  
18 A. Now, I went from there  
19 to assigned to the HORIZON, also as  
20 assistant.  
21 Q. I'm sorry. The only reason I'm  
22 asking this question is because you told me a  
23 little bit ago that the assistant was a  
24 trainee. And I'm just trying to understand  
25 if an assistant is someone who is training or  
00038:01 still in training, or did I misunderstand  
02 your testimony?  
03 A. He is in training. He can be an  
04 assistant on the subsea support team where  
05 he's just seeing rig moves, where you're just  
06 working on the BOPs.  
07 Generally from there, he goes to  
08 an assistant position on a rig, which is  
09 still a trainee position working under the  
10 direction of a senior subsea or a night guy  
11 and he is -- he is training in the  
12 day-to-day --  
13 Q. Uh-huh.  
14 A. -- operations that you would do  
15 during drilling operations --  
16 Q. All right.

17           A.       -- that you wouldn't see during  
18 a rig move on the SWAT team. He's still a  
19 trainee.

Page 39:24 to 40:07

00039:24           Q.       When did you become a  
25 supervisor?  
00040:01           A.       When I came to the HORIZON.  
02           Q.       And when did you go to the  
03 HORIZON?  
04           A.       I think it was in -- I was on  
05 the HORIZON for three years. I think it  
06 was -- I think it was in March of -- I think  
07 it was in March of '07.

Page 40:11 to 41:23

00040:11 As part of your OJT, were you  
12 required to study Transocean's procedures as  
13 they relate to the work of the subsea  
14 department?  
15           A.       It's been years since I did the  
16 OJT. That was '04 or -- I can't really, you  
17 know, recall. It's possible, but I can't --  
18 I can't quote chapter and verse.  
19           Q.       Well, as you sit here today, are  
20 you knowledgeable about Transocean's  
21 procedures as they relate to the subsea  
22 department?  
23           A.       Yes, sir, based on ten years'  
24 experience. But I can't, you know, as far as  
25 when I had actually came in.  
00041:01           Q.       So do I gather that you learned  
02 the policies and procedures simply by doing  
03 the work?  
04           A.       And reading, yes.  
05           Q.       When you're on board a rig, do  
06 you have access to any written documents  
07 which would enable you to familiarize  
08 yourself with the Transocean policies and  
09 procedures as they relate to the work of the  
10 subsea department?  
11           A.       Yes, sir, well control manuals  
12 and -- and -- and HS&E manuals.  
13           Q.       All right. So there are manuals  
14 aboard the rig?  
15           A.       Yes, sir.  
16           Q.       And they're called well control  
17 manuals and they're called HS&E manuals,  
18 correct?  
19           A.       Yes.  
20           Q.       All right. And do either of  
21 those two manuals contain policies or

22 procedures that relate to the BOP?  
23 A. Yes.

Page 42:19 to 42:24

00042:19 And what I'm trying to  
20 understand is: Is there any policy or  
21 procedure that requires with any frequency an  
22 evaluation of the BOP out of the water to  
23 ascertain whether or not it is functioning  
24 the way it is supposed to function?

Page 43:02 to 43:15

00043:02 A. Not specifically that I can  
03 recall.  
04 EXAMINATION BY MR. BRUNO:  
05 Q. All right. Do you know -- have  
06 you heard the term "certification" in the  
07 context of a BOP or "certified"?  
08 A. Yes, sir, when the -- when the  
09 equipment is new, it comes with -- it comes  
10 with certifications.  
11 Q. All right. Are you aware as to  
12 whether or not Transocean has hired  
13 subcontractors to from time to time evaluate  
14 a BOP while it is out of the water on a move  
15 on a rig?

Page 43:18 to 43:19

00043:18 A. Yes, the service techs come out  
19 and help.

Page 44:02 to 44:03

00044:02 Q. What is your understanding of  
03 what work they're doing?

Page 44:06 to 44:17

00044:06 A. Well, if they were -- if they  
07 were coming out to inspect a annular for wear  
08 or a -- or a -- a ram bore for wear, you  
09 would actually -- they would be there, but --  
10 but you would be assisting in the  
11 disassembly. Now, as far as the actual  
12 making and the recording of the dimensions --  
13 EXAMINATION BY MR. BRUNO:  
14 Q. Uh-huh.  
15 A. -- to determine whether they  
16 were in spec or not with -- with -- with the

17 manufacturer, they would actually do that.

Page 46:08 to 46:12

00046:08 Q. All right. And I gather from  
09 your testimony that you're not required in  
10 your job to know what the recertification is;  
11 isn't that true?  
12 A. True.

Page 46:22 to 48:10

00046:22 Q. Okay. All right. Let's focus  
23 on the HORIZON, okay. I think you told us  
24 you -- you were there for about three years  
25 before April 20, 2010?  
00047:01 A. Yes, sir.  
02 Q. Okay. And I think you advised  
03 that you were not on board the HORIZON at the  
04 time of the catastrophe?  
05 A. Yes, sir, I was not there.  
06 Q. All right. When did you  
07 leave -- I should say: When did you last  
08 leave the HORIZON before the catastrophe?  
09 A. That morning.  
10 Q. April 20?  
11 A. Yes, sir.  
12 Q. Okay. And how long a shift -- I  
13 shouldn't say a shift.  
14 How long had you been out there  
15 on the rig?  
16 A. Days? Three -- three weeks.  
17 Q. Three weeks.  
18 And, of course, I'm assuming  
19 that during those three weeks you were  
20 working as the night supervisor?  
21 A. Yes, sir.  
22 Q. Can you recall when the BOP was  
23 placed subsea on the Macondo well, just  
24 approximately? I don't need to give -- I  
25 don't need a precise date.  
00048:01 A. I think it was somewhere around  
02 the 8th of February.  
03 Q. Okay. Does the subsea  
04 department have any role with regard to the  
05 placement of the BOP?  
06 A. You mean on the wellhead?  
07 Q. Yes, sir.  
08 A. We assist with them running it,  
09 the drill crew actually picking up the riser  
10 joints and connecting them --

Page 48:13 to 55:04



00048:13 Q. Well, let's talk just first  
14 about placing the BOP on the wellhead. Does  
15 your department have anything to do with  
16 that?  
17 A. Are you talking about -- are you  
18 referencing running it from the surface down  
19 to it or actually latching up?  
20 Q. Well, let's break it down into  
21 those two components. Running it down to the  
22 wellhead, does your department have anything  
23 to do with that?  
24 A. Yes, sir.  
25 Q. What is the department's role?  
00049:01 A. We stay in the moon pool because  
02 you have your -- your MUX cables and your --  
03 that's your -- that are your electronic  
04 connection to the pods --  
05 Q. Uh-huh.  
06 A. -- and the hot line, which is  
07 your hydraulic connection to the -- to the  
08 system.  
09 Q. Okay.  
10 A. And they have to be clamped to  
11 the riser joint at each -- you don't want  
12 them just flopping down there. And they have  
13 actual clamps that go on, and you put them on  
14 each joint. There's actually a clamp there  
15 to hold it.  
16 And as the drill crew picks up a  
17 joint of riser -- I think -- on the HORIZON I  
18 think they were 90-foot joints. They vary  
19 from different rigs.  
20 But every 90 feet, when they get  
21 down to the end of that joint, they set it on  
22 the spider/gimbal. And it is there picking  
23 up another joint, we've got people down there  
24 that -- that go in and -- and put those  
25 clamps on there and we tight -- tighten the  
00050:01 hoses and the MUX cables up. And we  
02 basically supervise the moon pool operation.  
03 And if they have issues with the  
04 riser wrenches that tighten up the bolts, we  
05 will go up and work on them. Periodically  
06 during the run, you will stop and test your  
07 choke and kill lines, because there are seals  
08 between each joint and you want to know  
09 that -- that the integrity is there before  
10 you get all the way down.  
11 Q. Briefly -- forgive me for  
12 interrupting you -- but would you share with  
13 us how that test is accomplished?  
14 A. You would close -- you would  
15 close your test valves on the BOPs for the  
16 choke and kill line. Rig floor would install  
17 a test cap and stabs and hook up test lines,

18 and Halliburton would pressure up and chart  
19 results and see that they didn't leak.  
20 Q. Okay. I'm sorry. I didn't mean  
21 to interrupt you. Continue. That's it?  
22 A. (Moving head up and down.)  
23 Q. All right. So briefly for the  
24 judge how many lines are connected to that  
25 BOP? You described some control lines, some  
00051:01 pressure lines. How many are there?  
02 A. Do you want me to list?  
03 Q. Please.  
04 A. You would have a choke and a  
05 kill line. You would have a boost line --  
06 THE REPORTER:  
07 A what line?  
08 THE WITNESS:  
09 Boost, b-o-o-s-t, boost.  
10 A. -- rigid conduit line. In  
11 addition, you would have a blue and a yellow  
12 MUX cable independent. And on that specific  
13 rig, you would have a hot line, one hot line.  
14 EXAMINATION BY MR. BRUNO:  
15 Q. So there's seven lines?  
16 A. Your MUX are actually cables.  
17 They're not lines, they're cables. They're  
18 electronic cables.  
19 Q. Five lines and two cables?  
20 A. (Moving head up and down.)  
21 Q. Fair enough?  
22 A. Fair enough.  
23 Q. Okay. Describe the choke line  
24 for the judge. What is it -- what is it made  
25 out of?  
00052:01 A. What is it made out of?  
02 Q. Yes, sir.  
03 A. It's a steel line.  
04 Q. Uh-huh.  
05 A. It's -- it and the kill line are  
06 pretty much identical. There when -- when  
07 you -- when you shut your BOPs in and you  
08 close your well in, it is your line of  
09 communication below the well, below the rams.  
10 Q. Uh-huh.  
11 A. When you're -- when you're  
12 working out a kick, you would shut it in. You  
13 still have your drill pipe going down through  
14 it so you can pump down, but you can take --  
15 you can still take your returns up through  
16 the choke manifold regulate -- that's how you  
17 work your gas -- that's how you work a kick  
18 out --  
19 Q. All right.  
20 A. -- if you --  
21 Q. The boost line?  
22 A. The boost line is just another

23 steel line that runs down, but it -- it -- it  
24 actually goes in above -- above the annular,  
25 and it's there to boost the riser. And the  
00053:01 reason being, when you're drilling your --  
02 your casing where you're actually drilling is  
03 smaller. Your riser's like 21 inches, your  
04 casing may be whatever casing you down there.  
05 It could be as low as 7 inches.

06 And you're down there drilling  
07 and you're pressuring and it's brining your  
08 cut -- you've got to get your cuttings up --  
09 really, your rate of penetration is  
10 determined by how fast you can get your  
11 cuttings up.

12 And once -- once that -- once  
13 that velocity hits into that larger size pipe  
14 when it gets up to that riser, it loses that  
15 velocity and you don't have -- and that boost  
16 line is just coming -- it's -- it's super  
17 charging mud to help get the cuttings up out  
18 of the riser.

19 Q. All right. And I believe the  
20 next one was the -- the rigid conduit line?

21 A. Your rigid conduit line is your  
22 actual hydraulic supply line to your BOP, how  
23 your BOP fluid -- your operating fluid for  
24 your BOP system. That's how you actually  
25 charge your accumulators and do your  
00054:01 functions. It provides the fluid for your  
02 functions subsea.

03 Q. All right. And then the hot  
04 line?

05 A. The hot line is basically just a  
06 hydraulic hose that does the same thing, but  
07 when -- when you're running riser, your rigid  
08 conduit is not connected, because you're  
09 breaking every joint as you put it in. So  
10 you do not have hydraulic supply then.

11 So your hot -- your hot line is  
12 your hydraulic supply during your riser run  
13 when you're running your BOPs, and it also  
14 serves as a backup once you're on bottom. If  
15 something -- once you get on bottom and get  
16 everything tested and flushed out, you charge  
17 up through your rigid conduit, but you keep  
18 your hot line charged. If you ever lost --  
19 if a seal or something went out on your rigid  
20 conduit and you lost it, the check valve  
21 would shut it up, but you still had your hot  
22 line. It's actually a redundant hydraulic  
23 supply --

24 Q. Okay.

25 A. -- to BOPs.

00055:01 Q. Okay. Now, did you accompany  
02 the HORIZON during the move to the Macondo

03 well?  
 04 A. No, sir.

Page 55:06 to 55:24

00055:06 ask this first: Before the HORIZON left its  
 07 previous location, had you been on the  
 08 HORIZON?  
 09 A. Yes, sir. I had done a  
 10 three-week hitch -- I think it was Kodiak 2  
 11 was the well name.  
 12 Q. All right.  
 13 A. But --  
 14 Q. Did you assist in preparing the  
 15 HORIZON for the move?  
 16 A. No, sir. It was still latched  
 17 up when I departed the rig.  
 18 Q. Okay.  
 19 A. When I returned, it was latched  
 20 up on Macondo.  
 21 Q. All right. What is your  
 22 understanding of what is supposed to be done  
 23 to the BOP, if anything, during the move to  
 24 the Macondo well?

Page 56:03 to 59:04

00056:03 A. I wasn't there. Been routine  
 04 stuff, but I couldn't -- I couldn't tell you  
 05 anything specific. They was going to open it  
 06 up and change packers.  
 07 EXAMINATION BY MR. BRUNO:  
 08 Q. I didn't ask you what they did  
 09 do. I asked you specifically what was your  
 10 understanding of what was supposed to have  
 11 been done, if anything --  
 12 A. No.  
 13 Q. -- to the BOP.  
 14 A. Specifically, I can't recall.  
 15 Q. All right. Generally -- yeah.  
 16 Let me -- let me be -- what I'm trying to  
 17 understand now is, is how the subsea  
 18 department does what it does.  
 19 Obviously, rigs move from time  
 20 to time, and when the rig moves the BOP is on  
 21 board the rig, correct?  
 22 A. Yes, sir.  
 23 Q. All right. What -- is there  
 24 some kind of a routine that the subsea  
 25 department follows with regard to the BOP  
 00057:01 while the rig is moving from one location to  
 02 another, if they do anything at all?  
 03 A. There will be a work list of  
 04 what you're going to do.

05 Q. Okay. How does that work list  
06 get generated?

07 A. Senior subsea.

08 Q. Okay. Do you know if there is a  
09 required inspection of the BOP and its  
10 components during the move? By "required," I  
11 mean by Transocean's policies and procedures.

12 A. I don't know of any, you know,  
13 specific policies and procedures.

14 General -- general practices,  
15 you know, you would -- on rig moves, you --  
16 you disassemble and inspect --

17 Q. Okay.

18 A. -- the wellbore and the packers.

19 Q. All right. So the general  
20 procedures are that you would disassemble and  
21 inspect the BOP? Is that your understanding?

22 A. Yes, sir. And -- and it -- a  
23 lot of that is client. It's client. I mean,  
24 it'd depend on your wells. Like, if you were  
25 doing some P&As close together, and the  
00058:01 client is going to tell you what -- because  
02 they pay for everything. And if you did P&As  
03 like, you'd -- you know, we had done P&As  
04 close together where BP'd say, Just -- just  
05 stump test it. And -- so I mean, a lot of  
06 that is client call. But like I said,  
07 senior -- senior handles that and then they  
08 work with the -- with the -- with the client.

09 Q. Tell us what a P&A is for the  
10 record.

11 A. Plug and abandon.

12 Q. All right. And what is a stump  
13 test?

14 A. It's a surface. It's a surface  
15 test where you actually, when you finished  
16 your maintenance, or say you were -- the  
17 issues with P&As, and generally when you go  
18 on a new well, they have to set the surface  
19 casing. So you're going to have seven or  
20 eight days to work on it. If you were just  
21 jumping from P&As from well to well, there's  
22 a wellhead already there. And once you got  
23 there, if -- if the client didn't want to --  
24 didn't want to pay for seven or eight days of  
25 maintenance time, then they may say, Just  
00059:01 stump test it. It may not have been down a  
02 week on the last P&A. Latch it up to your  
03 stump and take it to full op -- take it to  
04 15K. Client call.

Page 59:09 to 60:12

00059:09 Were you on board the HORIZON  
10 before the BOP was -- was put on the bottom

11 of the -- of the sea?  
 12 A. Macondo?  
 13 Q. Uh-huh.  
 14 A. As I stated previously, I left  
 15 when it was still latched up on the previous  
 16 well. When I got back, it was already  
 17 latched up on Macondo and tested.  
 18 Q. Okay. I -- I missed that. I'm  
 19 sorry. I didn't get that.  
 20 So it was already below?  
 21 A. Yes, sir. It was gone. I never  
 22 saw it.  
 23 Q. Do you know who the senior was  
 24 at the time that the -- during the time  
 25 period between the arrival of the HORIZON and  
 00060:01 the placement of the BOP on the subsea floor?  
 02 A. My hitch was split between both  
 03 seniors, between Mark Hay and Owen McWhorter.  
 04 When I left, Mark Hay was there.  
 05 When I got back, Owen was. So, you know,  
 06 both of them.  
 07 Q. All right. So I could conclude  
 08 that during the entire time that you were  
 09 aboard the Macondo -- I'm sorry -- the  
 10 HORIZON, when it was working the Macondo, the  
 11 BOP was subsea, was below the surface?  
 12 A. Yes, sir.

Page 61:09 to 61:12

00061:09 Q. All right. Mr. Odenwald,  
 10 let's -- as I understand the way the BOP  
 11 worked, it was a single-point failure system.  
 12 Is that correct?

Page 61:15 to 61:20

00061:15 A. What are you referencing?  
 16 EXAMINATION BY MR. BRUNO:  
 17 Q. Well, all five functions that  
 18 share the same accumulator bank on the ocean  
 19 floor, which supplies the hydraulic power  
 20 needed to operate.

Page 61:23 to 62:06

00061:23 A. Are you asking for an opinion?  
 24 I mean --  
 25 EXAMINATION BY MR. BRUNO:  
 00062:01 Q. No. It's either -- either it is  
 02 or it isn't.  
 03 Is it true that the way that --  
 04 that there are five ways to activate the --

05 the BOP, and all five of those activations  
06 have to go through the accumulator bank?

Page 62:09 to 62:17

00062:09 A. You still got your surface --  
10 you've still got your surface draw lines and  
11 your rigid conduit. You've still got supply.  
12 EXAMINATION BY MR. BRUNO:  
13 Q. Well, don't they also go through  
14 the accumulator bank?  
15 A. They feed to it, yeah; but  
16 it's -- like I said, it's -- it's been two  
17 years since I actually saw the HORIZON stack.

Page 62:22 to 64:01

00062:22 Q. Let's look at exhibit under Tab  
23 A of your book real quick. It's  
24 Exhibit 4423. It's been previously  
25 identified. We'll use that same number.  
00063:01 There's a Bates number, too.  
02 For the record it's BP-HZN-2179MDL3106206.  
03 If you look at the center of the page?  
04 A. Let me read it.  
05 Q. Okay. Take your time.  
06 A. Yes, sir.  
07 Q. Do you see the question there in  
08 the center of the page? "Can we close the  
09 shear rams with the ROV override without  
10 further damage to the BOP at 100, 200, 300  
11 bpd flow rate?"  
12 A. I'm reading it.  
13 Q. All right. And you see the  
14 answer?  
15 A. Yes, sir, I've read it.  
16 Q. All right. My only question is:  
17 Did you know that?  
18 A. In 2001 I was roughnecking on  
19 the RICHARDSON.  
20 Q. No, I'm sorry. Did you know  
21 that when you were on board the HORIZON? Did  
22 you know that --  
23 A. I'm not aware of that. I've  
24 never seen this --  
25 Q. You've --  
00064:01 A. -- before today.

Page 64:10 to 69:17

00064:10 Q. It's Exhibit No. 4309,  
11 TRN-INV-01262577. It's a change proposal.  
12 They should be in order.

13                   You read it?  
14           A.       Yes, sir.  
15           Q.       All right. Do you know what  
16 this is?  
17           A.       Looks like a MOC for going to  
18 test rams.  
19           Q.       All right. Have you ever seen  
20 it before?  
21           A.       No, sir.  
22           Q.       Did you know that the BOP aboard  
23 the HORIZON on the Macondo well had been  
24 converted so that the lower most ram cavity  
25 was changed to an inverted test ram?  
00065:01       A.       Yes, sir, I was aware it had  
02 test rams other than -- that wasn't how it  
03 originally came, but all that happened before  
04 I got there.  
05           Q.       Okay. Did that have any  
06 particular implications to you in connection  
07 with the work that you did while on board the  
08 HORIZON?  
09           A.       No, sir, only -- the only  
10 difference would it would -- it would change  
11 out your -- change up your testing, your  
12 testing procedure. It was -- it helped the  
13 client. He didn't have to make a trip out of  
14 the hole and pick up a test plug every two  
15 weeks to test his BOPs.  
16           Q.       All right. When you say it  
17 helped the client, you mean it was --  
18           A.       Saved him money.  
19           Q.       Saved him money.  
20           A.       (Moving head up and down.)  
21           Q.       If -- if this hadn't been done,  
22 how would the test have been accomplished?  
23           A.       They would -- it's been a while  
24 since I tested with a plug.  
25           THE REPORTER:  
00066:01       I'm sorry? Can you --  
02           THE WITNESS:  
03                   I was just thinking out loud.  
04           A.       Before you test BOPs, if  
05 you're -- say you're in drilling. You've  
06 been drilling. Two weeks shows up, it's time  
07 to test. You've got open hole below your shoe  
08 where you had casing. You want to pull up --  
09 with test rams. Let's go with test rams to  
10 start with theoretically.  
11                   You would pull up inside of the  
12 shoe. And -- and generally you've got a test  
13 stand in your string that you actually test  
14 on. But you would want -- you would want  
15 your bit inside your shoe do a good flow test  
16 to make sure your well is static.  
17 EXAMINATION BY MR. BRUNO:



18 Q. Uh-huh.  
19 A. And with test rams, once you get  
20 up inside the shoe and get on the joint of  
21 the pipe that you can test on, be it your  
22 test stand or just any stand if you're going  
23 to use them, you can close test rams, and  
24 that gives you something to test against. Be  
25 your other pipe rams or your annular, you got  
00067:01 something on bottom to hold the pressure.  
02 Without test rams. You've got  
03 to get that bit up inside that shoe, plus  
04 you've got to trip out of the hole far enough  
05 to install a test plug that is going to seat  
06 in that wellhead to seal on the bottom.  
07 So what -- it depends on your  
08 water depth. If you're in 4,000 feet of  
09 water, you've got to trip an additional  
10 5,000 feet of pipe.  
11 Q. Uh-huh.  
12 A. 8,000, 8,000 feet of pipe.  
13 You've got to get it up, put that plug in  
14 there, run it down, set it. Then you can do  
15 your BOP test. Then you've got to trip all  
16 of that back out of the hole, lay that test  
17 plug out and go all the way back in to  
18 drilling. With the test ram, all they do is  
19 pull up inside the shoe, locate, test.  
20 EXAMINATION BY MR. BRUNO:  
21 Q. Okay.  
22 A. It saves them that trip time.  
23 Q. All right. That's a significant  
24 amount of money, then?  
25 MR. OCCHUIZZO:  
00068:01 Objection, form.  
02 EXAMINATION BY MR. BRUNO:  
03 Q. Isn't that true?  
04 A. Yes, sir.  
05 Q. All right. Now, do other BO --  
06 newer BOPs have this configuration already a  
07 part of them?  
08 A. From the shipyard?  
09 Q. Yeah. In other words, have the  
10 newer versions of BOPs have these test rams  
11 in them already so that you don't have to  
12 convert them?  
13 A. The rig I'm on now has them.  
14 The thing -- I think in the HORIZON incident,  
15 when the HORIZON -- I'm not sure there were  
16 test rams when the HORIZON was commissioned.  
17 And I think -- I think they were brought  
18 about after that.  
19 But with -- with your new  
20 builds, now you have test rams, and it's --  
21 and it's a client call. And some of the --  
22 the one I'm on now, it actually has six

23 cavities. It has an extra set of ram  
 24 cavities.  
 25 But it's a client call on how he  
 00069:01 wants it configured --  
 02 Q. Uh-huh.  
 03 A. -- inside of regulations.  
 04 Q. Right. My understanding of  
 05 that -- what I'm trying to get a handle on is  
 06 whether or not -- let me back up.  
 07 This document seems to suggest  
 08 that this change was made in '04. And I'm  
 09 wondering if, to your knowledge, BOPs that  
 10 were constructed after '04 had the test rams  
 11 built into them so that you didn't have to  
 12 convert the BOP?  
 13 MR. BAAY:  
 14 Objection to the form.  
 15 A. I don't have any personal  
 16 knowledge. I hadn't brought anything out of  
 17 the shipyard.

Page 69:19 to 72:10

00069:19 Q. Okay. All right. Let's look at  
 20 the next change proposal, which is 4312,  
 21 TRN-INV-01262584.  
 22 A. (Witness reading.)  
 23 Q. Ready?  
 24 A. Yes, sir.  
 25 Q. All right. Do you know what  
 00070:01 this is?  
 02 A. Looks like a MOC on a leak on  
 03 the auto shear.  
 04 Q. All right. Had you ever seen  
 05 this document before?  
 06 A. No, sir.  
 07 Q. Were you aware that this  
 08 occurred while you were on board the HORIZON?  
 09 A. I wasn't on the HORIZON.  
 10 MR. GANUCHEAU:  
 11 Objection, form.  
 12 MR. WALSH:  
 13 You've got to speak up.  
 14 A. Excuse me. I wasn't on the  
 15 HORIZON at that time.  
 16 EXAMINATION BY MR. BRUNO:  
 17 Q. While you were on board the  
 18 HORIZON, were you aware of any issues with  
 19 regard to the auto shear circuit?  
 20 A. Not that I can recall off the  
 21 top of my head. Like I said, it's been a  
 22 while.  
 23 Q. Take a look at 4313.  
 24 A. (Witness reading.)  
 25 Q. Okay.

00071:01 A. Yes, sir.  
 02 Q. And what is this?  
 03 A. An MOC for changing the lower  
 04 packer to a -- to a stripping in the lower --  
 05 the packer in the lower annular to a  
 06 stripping element.  
 07 Q. Okay. Do you know whether or  
 08 not when you were on board that the -- the  
 09 BOP on the HORIZON on Macondo had this  
 10 18-3/4-inch annular -- annular stripper  
 11 packer?  
 12 A. Personal knowledge?  
 13 Q. Right.  
 14 A. No, sir. I wasn't there when  
 15 they -- during the maintenance period when it  
 16 would have been installed.  
 17 Q. Would there be any indication on  
 18 the equipment or any of the devices utilized  
 19 to operate the BOP which would have indicated  
 20 that it was there?  
 21 A. Our pressure testing -- it was  
 22 to 3,500 on -- on all the annulars tests  
 23 except one with the upper to 5,000 for the --  
 24 for the -- for the hose. So it would have  
 25 been a lower pressure on that one.  
 00072:01 Q. So would there have been some  
 02 indication that this device had been  
 03 installed?  
 04 A. I don't have personal knowledge  
 05 of it.  
 06 Q. If you go to page 3 of the  
 07 document which has additional information, it  
 08 says, "It is strongly recommended by NARTFS .  
 09 . . ."  
 10 What is NARTFS?

Page 72:12 to 76:04

00072:12 You've got to answer the  
 13 question.  
 14 A. Oh, I don't recall. I don't  
 15 know.  
 16 EXAMINATION BY MR. BRUNO:  
 17 Q. It says, "The lower annular  
 18 function on all BOP panels be labeled to  
 19 indicate that the maximum wellbore working  
 20 pressure is restricted to 5,000 psi."  
 21 Do you recall whether or not any  
 22 of the panels were so marked while you were  
 23 on board the HORIZON when it was on the  
 24 Macondo?  
 25 A. I don't recall. I never saw an  
 00073:01 annular test on a subsea annular test on the  
 02 HORIZON in my three years that was above  
 03 5,000. So there -- I've -- I've never

04 witnessed an incident in three -- in three  
05 years that you exceeded 5,000.  
06 Q. This is just indicating that  
07 there should be a label. Did you ever see  
08 the label?  
09 A. I don't recall.  
10 Q. Can I assume that your job  
11 required you from time to time to see the  
12 panels on the BOP?  
13 A. Yes, sir.  
14 Q. Okay. And you don't recall  
15 having seen any label which said that the  
16 wellbore working pressure was restricted to  
17 5,000 psi?  
18 A. I don't recall. It's been over  
19 a year and a half since I saw the panel.  
20 Q. All right. Look at 4301.  
21 A. (Witness reading) Yes, sir.  
22 Q. Okay. You were working aboard  
23 the HORIZON in March of 2009?  
24 A. I couldn't tell you whether I  
25 was actually on the rig.  
00074:01 Q. I mean generally.  
02 A. Yes, sir, I was -- I was  
03 assigned to the rig, yes, sir.  
04 Q. You may not have been on  
05 board --  
06 A. Yes, sir.  
07 Q. -- at that time.  
08 The question is: Do you recall  
09 any incident with regard to a leaking  
10 function in the blue pod?  
11 A. This specific stack stinger  
12 extend function?  
13 Q. Yes.  
14 A. Yes, sir. Yes, sir.  
15 Q. Can you tell us what this was  
16 about?  
17 A. The stack stinger?  
18 Q. Uh-huh.  
19 A. The -- there is an interface.  
20 You've got your LMRP and your -- and your --  
21 and your stack. Your pods are on your LMRP.  
22 Then you've got your stack with your ram  
23 functions and your fail-safes, your  
24 connectors. There has to be an interface for  
25 that fluid to go from the LMRP pod side down  
00075:01 to for your flow path. And that's what they  
02 call the stinger that actually has the actual  
03 circuits. And that stinger has a extend  
04 and -- and retract.  
05 If you were going to unlatch, if  
06 you were going to unlatch in a -- in a EDS  
07 sequence, one of the sequence would have been  
08 they would -- you would go to vent on all the

09 functions on the BOP to relieve the pressure  
 10 on those circuits going through that stinger.  
 11 Then it would deenergize, and it would  
 12 retract up out of there. So when you -- so  
 13 when you did disconnect you wouldn't have  
 14 fluid just -- just blowing out of it --

15 Q. Uh-huh.

16 A. -- through those.

17 And the stack retract stinger  
 18 actually picks it up out of there.

19 The weight, you've got half of  
 20 the weight of the pod as far as your valves  
 21 and everything actually holding it down in  
 22 there. So it doesn't -- as far as  
 23 functionality, it does not need that extend  
 24 function, and only thing it really needs is  
 25 the retract.

00076:01 And it was leaking on the extend  
 02 side. And I think they actually put it in  
 03 block, you know, so you wouldn't be steadily  
 04 losing fluid, and that's what this is about.

Page 76:11 to 77:25

00076:11 (Exhibit No. 4610 marked for  
 12 identification.)

13 EXAMINATION BY MR. BRUNO:

14 Q. It's a change proposal dated  
 15 April 12th of '09.

16 A. (Witness reading).

17 Q. Okay.

18 A. Yes, sir.

19 Q. All right. Is this also a  
 20 management of change document?

21 A. Yes, sir. It looks like a leak  
 22 on the auto shear circuit.

23 Q. All right. This is April 12th  
 24 of -- of '09?

25 A. Yes, sir.

00077:01 Q. And you were working on the  
 02 HORIZON?

03 A. I was assigned to the HORIZON  
 04 during that period.

05 Q. All right. But you don't know  
 06 if you were working on this particular day?

07 A. No, sir.

08 Q. All right. Do you recall this  
 09 event?

10 A. No, sir.

11 Q. It says here, The "auto shear  
 12 circuit has a hydraulic leak when armed," one  
 13 gallon per minute. The "leak is stopped when  
 14 the system disarmed. Additionally, the  
 15 casing shear ram is leaking" at .5 gallons  
 16 per minute "and is placed in the vent

17 position to stop that leak."  
 18 It says, "Communicate that the  
 19 HORIZON is currently operating with a  
 20 disabled auto shear circuit. This is the  
 21 same situation as occurred in" February  
 22 "of 2006. . ." "and in October of 2008. The  
 23 casing shear ram leak is a new development."  
 24 Did you have any knowledge of  
 25 this event at all?

Page 78:05 to 78:16

00078:05 A. Not that I can recall. If you  
 06 go back -- if you go on back to this risk --  
 07 task risk assessment worksheet.  
 08 EXAMINATION BY MR. BRUNO:  
 09 Q. Yes, sir.  
 10 A. Find it?  
 11 Q. Yes, sir.  
 12 A. If you -- if you scroll down,  
 13 you will see the task risk assessment. You  
 14 will see my relief, Chris Pleasant, subsea  
 15 supervisor. He was obviously on the rig. I  
 16 was obviously at home.

Page 79:18 to 81:04

00079:18 Q. When you arrived on the HORIZON  
 19 in 2010, were you aware of any discussions  
 20 about the need to replace the annulars on the  
 21 BOP?  
 22 A. You mean the assemblies, the --  
 23 the complete -- the complete annulars?  
 24 Q. Well, the phraseology here is  
 25 "replace both annulars." So I cannot tell  
 00080:01 you whether they're referring just to the  
 02 component part or the whole -- the whole  
 03 assembly.  
 04 A. There was -- they were planning  
 05 a -- a shipyard visit. I think it was going  
 06 to be in '12 -- '11, '12. Too much water  
 07 under the bridge. There's going to be  
 08 components changed, it's possible. I don't  
 09 specifically recall.  
 10 Q. All right. But you do recall  
 11 that there was some discussion about bringing  
 12 the BP -- BOP into the shipyard?  
 13 A. Well, the whole rig was.  
 14 Q. Oh, the whole rig?  
 15 A. As I understood it.  
 16 Q. Well, I'm just focused on the  
 17 BOP.  
 18 A. Well --  
 19 Q. Is it your understanding that

20 there was a plan to do some work on the BOP  
21 the next time it went to a shipyard?  
22 A. Yes, sir.  
23 Q. All right. And what work did  
24 you understand that they were contemplating  
25 doing whenever the rig would end up at a  
00081:01 shipyard on the BOP?  
02 A. I can't recall, you know, a list  
03 of everything they were going to do. I don't  
04 recall annulars. It's possible, but --

Page 81:25 to 82:08

00081:25 Q. Do you know how long that BOP on  
00082:01 board the HORIZON on the Macondo well had  
02 been in service?  
03 A. As far as the mainframe and --  
04 and the -- and the -- the main body?  
05 Q. Yes.  
06 A. I assume it was original, you  
07 know, that they had come out with the rig in  
08 '01 or whatever.

Page 83:14 to 83:15

00083:14 Q. And I'm sorry. For the record I  
15 should indicate that D2 is Exhibit No. 3782.

Page 83:23 to 83:25

00083:23 Q. Are you familiar with any  
24 problems with the batteries in February of  
25 '10?

Page 84:03 to 85:01

00084:03 A. I'm not familiar with this.  
04 This was between Owen and -- and Mike.  
05 EXAMINATION BY MR. BRUNO:  
06 Q. All right.  
07 A. It sounds like just reading it,  
08 it's -- I mean, this -- this -- this  
09 continues, doesn't it? It's about --  
10 Q. It starts --  
11 A. -- three pages.  
12 Q. Yeah, if you look -- look  
13 backwards, it's -- the first one is from  
14 Cameron.  
15 A. It sounds to me like we had a  
16 SEM at the -- at the shop that needed  
17 batteries, and they -- and apparently Cameron  
18 didn't have any, and they were looking for  
19 some on the rig. They were -- they were

20 rebuilding our SEMs --  
 21 Q. Uh-huh.  
 22 A. -- periodically. That's what it  
 23 sounds like to me, but this is between Owen  
 24 and Mike.  
 25 Q. All right.  
 00085:01 A. I don't know anything about it.

Page 88:12 to 88:14

00088:12 Q. And in the course of your  
 13 experience with Transocean, have you ever had  
 14 a blowout preventer recertified?

Page 88:17 to 91:11

00088:17 A. As far as the whole BOP assembly  
 18 sent to the manufacturer to have the whole  
 19 thing recertified, no; components, yes.  
 20 EXAMINATION BY MS. DELEMARRE:  
 21 Q. And which BOPs have you had  
 22 components recertified?  
 23 A. Restate the question, please.  
 24 Q. Sure. You -- you just told me  
 25 that you had components of blowout preventers  
 00089:01 recertified, and I'd like to know which  
 02 blowout preventers you're referring to.  
 03 A. Specific components --  
 04 Q. Well, let's talk --  
 05 A. -- or models or --  
 06 Q. Yeah. How about this: Why  
 07 don't I ask you which rigs the BOPs were  
 08 from?  
 09 A. Okay. Well, the only rig I've  
 10 actually been assigned to as a -- as a subsea  
 11 supervisor, you know, prior to Macondo was --  
 12 was the HORIZON.  
 13 Q. Okay.  
 14 A. And there were bonnets changed  
 15 out, shear ram bonnets changed out.  
 16 Q. Do you remember when that work  
 17 was done?  
 18 A. No, ma'am.  
 19 Q. And who did the work?  
 20 A. I think Cameron did.  
 21 Q. Where was the rig at the time  
 22 that work was done?  
 23 A. I can't recall. It was in the  
 24 Gulf of Mexico. I can't recall wells.  
 25 Q. Was the rig involved in a -- or  
 00090:01 engaged in drilling a well at the time?  
 02 A. Oh, no.  
 03 Q. It would have been between  
 04 wells?



05 A. Would have had to have been.

06 Q. Okay. Do you know how long the  
07 job took?

08 A. Now, the way that -- way that  
09 worked is, we got bonnets from shared spares  
10 that had already been rebuilt and  
11 recertified. We turned in -- that's the way  
12 shared spares work. Different rigs that have  
13 the same model BOPs --

14 Q. Uh-huh.

15 A. -- there will be a spare set of  
16 bonnets in shared spares that has been  
17 rebuilt. And if you need them to swap out,  
18 you get them sent to your rig and you put  
19 them on and then take yours off and send them  
20 back to the vendor and they are rebuilt. And  
21 you pay for them, and then they go back in  
22 shared spares and the next rig that needs  
23 them gets them.

24 But as far as taking your actual  
25 ones and taking them off and sending them to  
00091:01 town, you know, and -- and being down for two  
02 or three months or however long it takes to  
03 get them back, no.

04 Q. Okay. So the advantage of your  
05 shared spares program is that you don't  
06 necessarily have to have rig downtime when  
07 you're getting something like the -- the  
08 shear ram bonnets recertified; is that  
09 correct?

10 A. Expedites the process. You can  
11 have something ready -- it's a spare.

Page 92:02 to 92:08

00092:02 What type of blowout preventer  
03 was on the DEEPWATER HORIZON?

04 A. It was a Cameron TL, Model TL.

05 Q. TL you say?

06 A. Yes, ma'am. 15 -- 15,000 --

07 Q. Okay.

08 A. -- working pressure.

Page 94:11 to 96:03

00094:11 The DEEPWATER HORIZON blowout  
12 preventer had three SEMs; is that correct?

13 A. It had three pods.

14 Q. Three pods. All right. And  
15 each pod had a SEM?

16 A. Yes, ma'am.

17 Q. And the pods, how were they  
18 designated at Transocean?

19 A. On the HORIZON, they were

20 designated 1, 2, and 3.

21 Q. Okay. Is it true that the SEMs

22 were sometimes interchanged between the pods?

23 A. Yes, ma'am.

24 Q. And why was that done?

25 A. If you needed a -- you're going

00095:01 to have two pods -- two pods on the stack any

02 time it's deployed. So there's going to be

03 one on the surface. And that's usually the

04 one you're in the process of rebuilding.

05 And if you pulled it on a rig

06 move and during the electronic checks or

07 whatever, they found an issue with -- with

08 some of the electronics in the SEM and the

09 other pod is sitting there with a SEM that

10 just came back from Cameron a few months, you

11 just -- it wasn't that big a deal just to

12 swap out the SEM.

13 Q. Okay. And -- and what records

14 were kept to track the movements of the SEMs

15 between the pods?

16 A. Daily logs would be a good place

17 to look and possibly the subsea workbook.

18 Senior entered the stuff in the -- in the --

19 in the daily work -- in the subsea workbook

20 as far as, you know, what was where and would

21 have been swapped. He took care of that.

22 Q. Okay. So the subsea workbook,

23 was that particular document an electronic

24 document or was it a paper document?

25 A. I believe it was electronic, but

00096:01 I can't -- I don't know if it was on the hard

02 drive or -- or like I said, the senior took

03 care of it.

Page 96:24 to 102:09

00096:24 Q. Tell me what kind of information

25 the subsea workbook contains, please.

00097:01 A. It's going to be -- it's a --

02 its -- its -- its intent is a quick

03 reference. Somebody calls you up and wants

04 to know your serial numbers on your

05 components. Go in your workbook. You got

06 them all listed there. That -- that was

07 its -- its intent, you know, was to have a

08 quick reference where you could find

09 information instead of having to dig through

10 all your cert manuals on every component,

11 that sort of stuff.

12 Q. So is it fair to say that the

13 subsea workbook tracks subsea equipment item

14 by item?

15 A. It's fair to say. I'm not going

16 to say everything -- I'm not going to say

17 every component -- every nut and bolt on the  
18 stack's not in there, but main components.  
19 Q. Okay. Does it also contain  
20 information pertaining to the actual  
21 maintenance on the subsea equipment?  
22 A. It would. It would -- like --  
23 like the hoses I -- that I mentioned, it told  
24 you when it was changed out. So that would  
25 tell you the -- the service date -- date in  
00098:01 service.  
02 Q. Okay.  
03 A. And like your valves and stuff,  
04 it would tell you when you swapped out  
05 valves; tell you how long that valve had been  
06 in service.  
07 Q. You're -- you're familiar with  
08 the Transocean's RMS system of record  
09 keeping?  
10 A. I'm learning it.  
11 Q. You're learning it. Okay.  
12 A. I'm in the process of  
13 understanding it.  
14 Q. And how long has RMS been  
15 affected -- in effect at Transocean, to your  
16 knowledge?  
17 A. To my knowledge, we inherited it  
18 from Global, from GlobalSantaFe, whom we  
19 merged with couple of years ago. And it  
20 was -- I think, ours before that was EMPAC,  
21 and it was -- RMS was theirs. And --  
22 Q. And the decision was made that  
23 the RMS super -- system was superior?  
24 A. It was the one we went with.  
25 Q. Okay. How is the RMS system  
00099:01 different from the subsea workbook in terms  
02 of the information that's kept?  
03 A. My knowledge on -- on -- on RMS  
04 is, it's more your -- it's more of a reminder  
05 on your maintenance as far as when you need  
06 to do maintenance on stuff. And where we use  
07 it -- like I said, I'm learning it and we're  
08 all learning it. And it will come up every  
09 week. You've got a function test every week.  
10 You've got a pressure test every week.  
11 Q. And you're referring to the BOP  
12 at this point?  
13 A. Yes, ma'am. And you will have  
14 a -- a plan maintenance -- it -- it will  
15 actually come up as a function test and a BOP  
16 pressure test. And you can go in there and --  
17 and -- and state what you did and your  
18 pressures. And you can actually attach --  
19 when you do your actual test sheets and  
20 everything, after you've gotten through with  
21 your test, it will all be printed up and all

22 be signed. You can -- and it will be kept in  
23 files that you can actually attach it in RMS.  
24 And there -- it will be there. And in --  
25 like in a case, you know, where you lost the  
00100:01 rig and you lost all your files, you would  
02 actually be able to go back to it.  
03 Q. Because the RMS records are also  
04 shared ashore?  
05 A. Yes, ma'am.  
06 Q. And as far as recording or  
07 attaching the test sheets, I guess they're  
08 scanned and somehow just associated with  
09 the -- the work that's being -- that's being  
10 described?  
11 A. Uh-huh.  
12 Q. Is that how that works?  
13 A. Yeah.  
14 Q. Okay. How frequently when you  
15 were on the DEEPWATER HORIZON did you consult  
16 or refer to the RMS database?  
17 A. Not very much at all. Seniors  
18 generally took care of that. And when I came  
19 on tower at 6:00 in the evening, senior would  
20 have a work list. He would -- they would go  
21 into RMS and see what needed to be done, and  
22 they would have a work list prepared for me.  
23 And I would perform the work at night and  
24 report back to them. They'd go in and close  
25 them out.  
00101:01 Q. Okay. What about the -- the  
02 daily logs? Tell me what those are.  
03 A. It was just -- it was like -- it  
04 was a diary, basically.  
05 Q. Okay.  
06 A. What'd you do today.  
07 Q. So was it handwritten or  
08 electronic, typically?  
09 A. It was electronic.  
10 Q. Was this information shared  
11 ashore?  
12 A. I don't think so.  
13 Q. Did you keep a daily log?  
14 A. I entered into the daily log as  
15 far as, you know, electronically.  
16 Q. Okay. Let me back up.  
17 Was there a daily log for the  
18 subsea department?  
19 A. I'm trying to think back to the  
20 HORIZON because I've been gone a while and  
21 we've got one on the -- on the rig I'm on  
22 now. And some rigs -- some rigs, it's a  
23 written log and it's just ledger on a desk.  
24 I can't honestly tell you what  
25 we had over there.  
00102:01 Q. So you can't remember today

02 whether --  
03 A. No. I think it was electronic,  
04 but like I said, it's been . . .  
05 Q. Okay. If it was an electronic  
06 record, then you would have been sitting at a  
07 computer, I assume, then, and making your  
08 entries as to what you did that day?  
09 A. Yes, ma'am.

Page 103:14 to 110:16

00103:14 Q. Okay. Have you had, prior to  
15 April of 2010, any well control training?  
16 A. Yes, ma'am.  
17 Q. Who did you have training with?  
18 A. Transocean's in-house well  
19 control, it's called.  
20 Q. How long does the training last?  
21 A. The course?  
22 Q. Yes.  
23 A. Five days.  
24 Q. And describe what those five  
25 days consisted of.  
00104:01 A. Leading you through well  
02 control -- I'd taken it twice. You take it  
03 every two years. And my last -- my last was  
04 in March of '10 because I'm due -- only  
05 reason I know that's because I'm due in March  
06 of '12.  
07 But they -- they lead you  
08 through, you know, your -- your fundamentals  
09 of well control, your first line of well  
10 control, which is your mud weight.  
11 Q. Okay. Tell me what your  
12 understanding -- I -- you just used the  
13 phrase "first line"; is that correct?  
14 A. Yes, ma'am.  
15 Q. Tell me what -- what the first  
16 line is.  
17 A. It's --  
18 Q. Is that your mud weight?  
19 A. Yes, ma'am. It's -- it's the  
20 hydrostatic weight of your column of mud.  
21 Q. Okay. I'd like to ask you about  
22 well control when there's -- when the well  
23 takes a kick.  
24 Did you learn about that in your  
25 well control school?  
00105:01 A. Yes, ma'am.  
02 Q. And as a subsea supervisor,  
03 would you have been involved in well control  
04 in the event of a kick?  
05 A. Yes, ma'am.  
06 Q. What would your involvement have  
07 been?

08           A.       Typically, I would be called to  
09 the rig floor when they took a kick.  
10           Q.       Okay. And when you're called to  
11 the rig floor, what are your -- what are your  
12 duties?  
13           A.       Generally, time I get there,  
14 it's going to be shut in. They're not going  
15 to wait on me. They're going to shut it in.  
16           Q.       Okay.  
17           A.       And I'm going to stand by the  
18 panel and monitor the regulators. And,  
19 typically, in a -- in a well control, when --  
20 when you've taken a kick, so your primary  
21 means of well control are the weight of the  
22 mud which, obviously, wasn't as heavy as the  
23 downhole pressure. So it's flowing back on  
24 you. And you gonna shut it in. And those  
25 choke and kill lines that -- that I  
00106:01 referenced earlier, you gonna open those  
02 fail-safes and line them up to the choke  
03 manifold where you got some gauges. And  
04 somebody going to make a pot of coffee and  
05 you're going to sit around and watch pressure  
06 gauges.  
07           Q.       Okay.  
08           A.       And at some point in time  
09 that -- they're going to watch that casing  
10 pressure until it stabilizes and quits  
11 rising. And that's gonna tell them how much  
12 pressure -- that pressure -- that casing  
13 pressure's gonna tell them -- it's gonna tell  
14 them the difference between -- they gonna --  
15 it's going to tell them what they need in the  
16 hole, how much mud weight they should have  
17 had.  
18                   And they gonna use that pressure  
19 to formulate what their kill mud ought to be,  
20 and that's -- this is what they're teaching  
21 you that week in well control.  
22           Q.       Okay. As far as the shut-in  
23 that occurs before you even arrive at the rig  
24 floor when there's a kick, how -- what is the  
25 typical or preferred shut-in method?  
00107:01           A.       Component?  
02           Q.       Yeah, which -- which component  
03 of the BOP --  
04           A.       Annular.  
05           Q.       -- is used?  
06                   And which annular?  
07           A.       On the HORIZON you had an  
08 option, you had an upper and lower. On the  
09 rig I'm on now, you just got one, so that  
10 kind of narrows it down.  
11                   Generally on shut-in on the  
12 HORIZON, you'd probably go with your upper.

13 Q. Okay. And why the upper?  
14 A. They generally tried to save the  
15 lower -- the lower had a -- had a -- actually  
16 had a stripping element in it where if you  
17 had to -- depending on the way you took this  
18 kick, if you're on bottom drilling, your pipe  
19 is down there. If you were pulling out of  
20 the hole, your pipe is somewhere in between  
21 bottom and the surface.  
22 When you got -- you've taken an  
23 influx, you've taken gas, and you've got to  
24 get that gas out of that wellbore. You've  
25 got to get that pipe back down to the bottom,  
00108:01 and you've got to do it through that annular.  
02 And you're going to be as easy as you can,  
03 but you're going to put some wear on that  
04 annular when you're shoving pipe through  
05 there.  
06 And -- and they tried to save  
07 the lower annular for that -- for that --  
08 seeing since you had to.  
09 Q. Okay.  
10 A. So it's generally going to be  
11 your upper annular.  
12 Q. And what are the respective  
13 ratings for the upper and the lower annulars  
14 for the DEEPWATER HORIZON's blowout  
15 preventer?  
16 A. Your upper annular was a 10K.  
17 Q. And your lower annular?  
18 A. It had been down-rated to 5K  
19 with a stripping element.  
20 Q. Okay. So procedurally, then,  
21 the normal thing in your experience would be  
22 that if there was a kick, the first thing  
23 that would happen is the upper annular --  
24 annular would be closed; is that correct?  
25 A. Yes, it's -- it's toolpusher  
00109:01 preference, whoever gets to the panel, that's  
02 generally.  
03 Q. Toolpusher would do that  
04 typically?  
05 A. If he was there.  
06 Q. Okay. And then what would  
07 typically happen next?  
08 A. After they shut the annular in?  
09 Q. Yes.  
10 A. As I stated, we're going --  
11 we're going to sit -- we're going -- we're  
12 going to open up to the choke manifold where  
13 we can monitor pressure, casing pressure, and  
14 we're going to -- we're going to get the OIM  
15 and company man up there and -- and somebody  
16 going to make some coffee, and we going to  
17 sit back and watch the pressure gauge.

18 Q. Okay. Were you on the DEEPWATER  
19 HORIZON when there were any kicks taken?  
20 A. Yes, ma'am.  
21 Q. Which kicks were you on the  
22 DEEPWATER HORIZON for?  
23 A. The only one I can specifically  
24 remember was on -- was on Macondo.  
25 Q. Okay.  
00110:01 A. It was right there around the  
02 end of my first hitch on Macondo. I was on  
03 Macondo for two hitch -- two three-week  
04 hitches.  
05 Q. Okay.  
06 A. Right there at the end of --  
07 right there at the first week in March  
08 sometime. I don't have a date.  
09 Q. All right. And what happened?  
10 A. I can't -- you know, I can't  
11 really recall any details. It -- the only  
12 reason it sticks out, there were -- there  
13 were a lot of well control events on Macondo.  
14 But most of them were from lost circulation.  
15 And the only reason that event sticks out is  
16 because it actually was a kick.

Page 112:15 to 114:11

00112:15 Q. Do you remember how you became  
16 aware of the kick?  
17 A. No, ma'am. I mean -- oh, well,  
18 if it happened on my tower, toolpusher would  
19 have come and told me, We shut the well in.  
20 Come to the rig floor.  
21 Q. Uh-huh.  
22 A. And if they shut it in on the  
23 senior's tower, when I came on tower, he  
24 wouldn't have been in the office; and I'd  
25 have paged him and he'd have called me from  
00113:01 the rig floor and told me that the well's  
02 shut in; I'm up here.  
03 Because when -- when the well's  
04 shut in, the subsea would -- would be in the  
05 drill shack.  
06 Q. Okay.  
07 A. Any time a -- any time a  
08 component ram or annular was closed on the  
09 DEEPWATER HORIZON, it was rig policy that a  
10 subsea engineer be standing by.  
11 Q. Okay. And -- and I take it you  
12 don't remember what, if anything, you would  
13 have had to do with shutting in the well for  
14 that kick; is that true?  
15 A. Not specifically, no, ma'am.  
16 Like I -- you know, the well would have been  
17 shut in when I was there. And as far as my



18 duties during any well control, I'm going to  
 19 be standing over there in the corner by that  
 20 panel just watching my regulators and making  
 21 sure that I've got pressure and waiting for  
 22 if they get ready to do a -- get ready to do  
 23 a function or something like that. I work as  
 24 instructed.  
 25 But like I said, when you're in  
 00114:01 a well control situation, your OIM and your  
 02 company man is going to be up there. They  
 03 were going to be running things. And if they  
 04 wanted to change over to a set of rams or  
 05 swap to an annular or reduce to try to strip  
 06 it or whatever, they would -- they would tell  
 07 me to do it, but they -- somebody else ran  
 08 it. The only thing I did was make  
 09 functions --  
 10 Q. Okay.  
 11 A. -- and monitor.

Page 115:16 to 116:16

00115:16 Do you know Mr. Don Vidrine?  
 17 A. Yes, ma'am.  
 18 Q. What job did he have?  
 19 A. He was BP company man. I  
 20 couldn't tell you what his designation as far  
 21 as, you know -- I think they have well site  
 22 leaders or -- he -- he was the BP company man  
 23 is all I knew.  
 24 Q. Did you work with him with any  
 25 frequency?  
 00116:01 A. Yes, ma'am.  
 02 Q. Okay. What about Robert Kaluza?  
 03 A. He had -- he had just shown up  
 04 and -- because I think Ronnie Sepulvado was  
 05 there, and he had to go in for something  
 06 right there at the end of the well. And  
 07 there was a new guy show up, and -- and  
 08 that -- that's who it was.  
 09 Q. Okay.  
 10 A. But I had very little dealings  
 11 with, so it was just the last day or so  
 12 before I left.  
 13 Q. As far as you know, had  
 14 Mr. Kaluza had any experience on the  
 15 DEEPWATER HORIZON or the Macondo well before  
 16 he showed up to replace Mr. Sepulvado?

Page 116:19 to 117:01

00116:19 A. On Macondo well?  
 20 EXAMINATION BY MS. DELEMARRE:  
 21 Q. Yes, sir.

22 A. As far as I know. I mean, I  
 23 don't -- like I say, he just showed up.  
 24 Q. This was his first time at  
 25 the -- at the well?  
 00117:01 A. That I'm aware of.

Page 117:08 to 117:21

00117:08 Tell me what your understanding  
 09 is as far as how the diverter system is used  
 10 when well fluids get above the BOP.  
 11 A. My personal experience?  
 12 Q. Yes, please.  
 13 A. I've never had it happen.  
 14 Q. You've never had an experience  
 15 where well fluids got above the BOP at a --  
 16 in a well?  
 17 A. No, ma'am.  
 18 Q. All right. Tell me what your  
 19 understanding, then, is of Transocean's  
 20 policies and procedures for use of the -- the  
 21 diverter when well fluids get above the BOP.

Page 117:24 to 118:03

00117:24 A. As far as -- I really don't  
 25 recall as far as -- I mean, if you de -- if  
 00118:01 you detected one, you would obviously shut  
 02 it, but as far as chapter and verse on -- on  
 03 a policy or procedure, I can't quote it.

Page 119:04 to 119:06

00119:04 Q. What is your understanding of  
 05 the fluids from the well how they behave as  
 06 they move up the riser --

Page 119:13 to 120:24

00119:13 A. The gas bubbles expand because  
 14 there's less hydrostatic as -- as -- the hire  
 15 you go in, that hydrostatic is -- is mashing  
 16 them down as it moves up. As it migrates it  
 17 expands and takes more volume.  
 18 EXAMINATION BY MS. DELEMARRE:  
 19 Q. And as -- as you've got gas  
 20 migrating up the riser and those bubbles are  
 21 expanding, does that have any impact on the  
 22 velocity of the fluid, to your knowledge?  
 23 MR. BAAY:  
 24 Objection to the form.  
 25 A. You need to talk to an engineer,  
 00120:01 you know, a fluid engineer. I don't . . .

02 EXAMINATION BY MS. DELEMARRE:  
 03 Q. You don't know?  
 04 A. No, I -- my well control is what  
 05 they call fundamental and -- you know. I  
 06 don't recall anything, you know, as far as --  
 07 you know, as far as, you know, it getting --  
 08 it was -- when you contained it, you know, at  
 09 the BOPs.  
 10 And as far as velocity of gas  
 11 expanding up a riser, that may be in the  
 12 advanced well control, that's your OIMs and  
 13 toolpusher.  
 14 But like I said, you know, my  
 15 duties during well control, I'm standing over  
 16 in the corner and punching buttons they tell  
 17 me to.  
 18 Q. Okay. But in the -- in the  
 19 event that there is -- there are hydrocarbons  
 20 in the riser because of a kick and those  
 21 hydrocarbons are traveling up to the rig  
 22 floor, what is your understanding as far as  
 23 how the diverter is supposed to be used in  
 24 that situation?

Page 121:02 to 124:06

00121:02 A. My understanding of it is that  
 03 if you've got -- if you've got expanding  
 04 hydrocarbons and you've got a kick in that  
 05 riser, it's coming to the surface. And what  
 06 the diverter does in a sequence, it -- and it  
 07 depends on different rigs and different  
 08 systems.  
 09 But -- but the basic thing is  
 10 it's -- that gas is coming to the surface.  
 11 That riser is not rated for the same thing  
 12 that BOP is. That BOP's rated for 15K.  
 13 Your weak spot, your weak link,  
 14 on your riser from the BOPs to the diverter  
 15 is going to be your slip joint.  
 16 EXAMINATION BY MS. DELEMARRE:  
 17 Q. Okay.  
 18 A. It's generally good for  
 19 500 pounds or less.  
 20 Q. Psi?  
 21 A. Yes, ma'am.  
 22 Q. Okay.  
 23 A. And what the diverter system  
 24 does is it closes -- it's basically an  
 25 annular. It's a rubber doughnut. It closes  
 00122:01 that and opens the diverter lines and gives  
 02 that -- and gives -- gives that kick -- that  
 03 hydrocarbon, expanding hydrocarbon, an option  
 04 besides the rig floor.  
 05 Q. Okay. And what are those

06 options?  
07 A. Overboard or -- you can go  
08 overboard port or starboard or you can go to  
09 your mud gas -- mud -- mud gas separator or  
10 poor boy separator.  
11 Q. And if you go to the mud gas  
12 separator, where -- where exactly do the  
13 fluids travel to? I know they go to the mud  
14 gas separator. I got that. But where on the  
15 rig is that?  
16 A. It's going to be on the rig  
17 floor.  
18 Q. Okay. And where on the rig  
19 floor?  
20 A. Usually right next to the choke  
21 manifold.  
22 Q. On the DEEPWATER HORIZON?  
23 A. Right next to the choke  
24 manifold.  
25 Q. Where in relation to the -- to  
00123:01 the -- the derrick crane is that?  
02 A. The derrick crane.  
03 Q. All right. I'm -- I'm using a  
04 term that you're not familiar with, I can  
05 tell.  
06 Is there not a -- a large  
07 structure in the -- kind of in the center  
08 what -- that the drill pipe hangs from, where  
09 the riser hangs from?  
10 A. Oh, that would be the block.  
11 Q. The block. Okay.  
12 A. Yeah, yeah. The traveling gear,  
13 yeah, yeah.  
14 Q. Where in relation to that is  
15 this choke -- choke line you mentioned?  
16 A. Let me get my bearings. Okay.  
17 We're sitting on the -- we're sitting on the  
18 aft of the rig looking to the forward of the  
19 rig. This is the rig floor, and this is the  
20 well center. This is starboard. This is  
21 port.  
22 This is well center. Your drill  
23 shack sits right here, which would be  
24 starboard aft of well center. Choke manifold  
25 sits right beside it. The choke manifold  
00124:01 sits back here behind the drill shack. And  
02 the poor boy separator is between drill shack  
03 and choke manifold on the starboard/aft  
04 corner --  
05 Q. Okay.  
06 A. -- of wellbore.

Page 124:09 to 125:04

00124:09 When the fluids get to the mud

10 gas separator, what happens to them there?  
11 A. It's basically a tank and --  
12 with two pipes, one going out of the top and  
13 one going out of the bottom, going  
14 straight -- all the way up to the top of the  
15 derrick and all.  
16 You use it several  
17 different ways. You can come from the -- if  
18 you take -- if you're pumping out a kick  
19 downhole, you're going to have some gas in  
20 there, and it comes through the choke  
21 manifold and you run it through the poor boy  
22 degasser. And the mud runs out the bottom  
23 and winds up in the shaker house and back in  
24 the pit, and the gas migrates up the -- up  
25 the vent pipe, up to the highest point on the  
00125:01 rig, which is the corner of the derrick --  
02 Q. Okay.  
03 A. -- and gets that gas as far away  
04 from you as it can.

Page 127:10 to 127:13

00127:10 Q. Okay. And is it the driller  
11 that decides whether fluids coming from the  
12 well either go to the mud gas separator or  
13 overboard?

Page 127:16 to 127:22

00127:16 A. Once they shut it in?  
17 EXAMINATION BY MS. DELEMARRE:  
18 Q. Yes.  
19 A. Once they shut the well in?  
20 It's going to be whoever pushes the button.  
21 Q. Okay. Who could that be on the  
22 rig?

Page 127:25 to 128:04

00127:25 A. It could be driller. It could  
00128:01 be ADs, assistant drillers --  
02 EXAMINATION BY MS. DELEMARRE:  
03 Q. Uh-huh.  
04 A. -- toolpushers.

Page 128:11 to 132:16

00128:11 Q. We were talking about using the  
12 diverter. And you said that the driller, the  
13 assistant driller or the toolpusher are all  
14 people who could make the decision as to  
15 whether well fluids are diverted either to

16 the mud gas separator or overboard; is that  
17 right?

18 A. I'm trying to think on the  
19 HORIZON system, because it's different from  
20 where I am now. And it had the Hydril.

21 On that system, on a Hydril -- I  
22 don't know what model it is.

23 On that Hydril diverter, when  
24 you close that diverter, it's going to --  
25 it's going to automatically -- it's got a  
00129:01 sleeve in it with ports in it, and it's going  
02 to automatically, as I recall -- hadn't  
03 fooled with one lately -- it's going to cut  
04 off your flow to the -- to the shaker house  
05 through your flow line and open up your other  
06 line that will run to a valve that'll -- that  
07 will be designated either the poor boy  
08 degasser or overboard.

09 Q. Okay.

10 A. And so when you function the  
11 diverter, then you would decide which way you  
12 were going with it.

13 Q. From what locations on the rig  
14 can you operate the diverter?

15 A. Driller's control panel,  
16 toolpusher's control panel, which is  
17 actually -- on the HORIZON was actually  
18 located on the bridge.

19 Q. Okay.

20 A. CCU.

21 Q. What's the CCU?

22 A. It's the -- it's down in --  
23 in -- right off the HPU room. It's where  
24 actually all of the computers are. All  
25 the -- all the commands from both panels --

00130:01 Q. Uh-huh.

02 A. -- come to a central computer  
03 and -- and the signal is sent subsea. And  
04 the CCU actually has a man/machine inter --  
05 I'm -- it actually has a screen where you  
06 could actually do functions. It's -- it's  
07 not recognized. You don't test -- and then  
08 in your rotation testing from your different  
09 panels for -- for MMS or now BOEMRE, it's not  
10 recognized in your tests. You either test --  
11 you alternate beneath the panel on your  
12 testing, and you do it either from a  
13 toolpusher's or from the -- or from the rig  
14 floor. But the panel is there. You actually  
15 can make functions on it.

16 Q. Okay.

17 A. And you can go to the diverter  
18 panel themselves, because the diverter panel  
19 is -- is there, and it's a manual valve. You  
20 can actually reach up there and -- you can

21 actually do it manually. You could actually  
22 function it from four locations.  
23 Q. Okay. What is -- I've got three  
24 of those locations: The driller's control  
25 panner -- panel, the toolpusher's control  
00131:01 panel, the CCU.  
02 And what was the fourth?  
03 A. It would be the actual diverter  
04 panel itself where all the actual valves are.  
05 Q. Okay.  
06 A. That's where the -- the diverter  
07 system is -- differs from the BOP, because  
08 your valves on it are actually on the pods  
09 because they're subsea. But all your  
10 diverter equipment is actually on the  
11 surface. So all your valves are actually --  
12 so you can manually --  
13 Q. And where is that diverter panel  
14 located?  
15 A. The diverter panel? It would  
16 have been in -- on the HORIZON, it would have  
17 been in the -- what we call the accumulator  
18 room, right off of the moon pool.  
19 Q. Okay. If you've got  
20 hydrocarbons, fluids from the well, and  
21 they've come up through the rotary table on  
22 the rig and the diverter is lined up such  
23 that the fluids are going to the mud gas  
24 separator, is it possible to change the  
25 routing of the fluids so that they go to  
00132:01 the -- they're diverted overboard?  
02 A. You know, like I stated  
03 previously, you're going to have a valve  
04 that's -- that's designated overboard or --  
05 or -- or poor boy degasser.  
06 Q. Okay. So you -- you can just  
07 use one of those four locations to change the  
08 routing of the fluids from up to the mud gas  
09 separator to overboard and off the rig,  
10 correct?  
11 A. Uh-huh.  
12 Q. Yes?  
13 A. Yes.  
14 Q. How long would it take for the  
15 path of the fluids to be diverted if you  
16 choose to make that change?

Page 132:20 to 132:24

00132:20 Q. In other words, how long does it  
21 take for the system to set or to change its  
22 configuration such that, instead of the  
23 fluids going to the mud gas separator,  
24 they're now going overboard?

Page 133:02 to 133:05

00133:02           A.       I haven't functioned that in  
03   probably two years.  Less than a minute, but  
04   I can't tell you 30 seconds or 40 seconds.  
05   Less than a minute.

Page 133:07 to 133:19

00133:07           Q.       And physically what happens?  Is  
08   there just some kind of valve in the piping  
09   that changes the flow -- the route --  
10       A.       Uh-huh.  
11       Q.       -- of the fluids?  
12       A.       Yeah.  
13       Q.       Okay.  In the event that well  
14   fluids are coming up onto rig floor, what  
15   is -- as far as your training and your  
16   understanding of Transocean's policies is  
17   concerned, what is the proper course of  
18   action?  Do you divert to the mud gas  
19   separator or do you divert overboard?

Page 133:22 to 134:01

00133:22           A.       Every situation's going to be  
23   unique, and, you know, it's -- you know,  
24   it's going to be the judgments of the -- you  
25   know, of the man that's making the -- that's  
00134:01   making the call, the toolpusher on tower.

Page 134:03 to 134:04

00134:03           Q.       Okay.  
04       A.       You'd really have to be there.

Page 134:19 to 134:24

00134:19           Q.       If -- if you have a situation  
20   where your mud gas separator's actually being  
21   overwhelmed by the volume of fluids coming  
22   through, in that type of situation, is it the  
23   proper course of action to divert those  
24   fluids overboard?

Page 135:02 to 135:05

00135:02           A.       At some point in time, you know,  
03   and I guess when you made -- when you made  
04   that determination.  But, personally, I've  
05   never been in that situation.



Page 137:16 to 138:17

00137:16 Q. Okay. I thought I understood  
17 from your earlier testimony that you're one  
18 of the people that can operate -- excuse  
19 me -- the diverter. Is that true?  
20 A. I can operate it, yeah.  
21 Q. So if you found yourself in a  
22 situation where mud -- well fluids were  
23 coming up on to the rig floor, you're one of  
24 the people that could adjust the diverter to  
25 send those fluids overboard, if you chose to?  
00138:01 A. Somebody's going to see it, you  
02 know, a long time before I would. I mean,  
03 it's going to -- a situation like that, the  
04 odds of me being on the rig floor are pretty  
05 remote.  
06 Q. Okay.  
07 A. Driller and the toolpusher are  
08 going to deal with the situation, and they're  
09 not going to bother to call me and inform me  
10 of what they're doing. They going to do what  
11 they got to do and call me after the fact.  
12 Q. But in the event that the  
13 toolpusher and the driller might not be able  
14 to take care of that aspect of the response,  
15 then you -- you would know how to diverter  
16 the fluids overboard and you would be -- it  
17 would be permissible for you to do so?

Page 138:21 to 138:23

00138:21 Q. In other words, you're  
22 authorized to take that action in a well  
23 control event?

Page 139:01 to 139:07

00139:01 A. I'm authorized to operate the  
02 system, yeah.  
03 EXAMINATION BY MS. DELEMARRE:  
04 Q. Okay. Would you have to get  
05 permission from anybody to divert fluids  
06 overboard in the event of a well control  
07 event?

Page 139:10 to 140:01

00139:10 A. I would certainly inform  
11 somebody.  
12 EXAMINATION BY MS. DELEMARRE:  
13 Q. Okay. That's a little different  
14 from getting permission.

15                   Are you telling me that you  
 16 would tell someone that you were going to do  
 17 this or that you would seek permission to do  
 18 it?  
 19           A.       It's a spill.  
 20           Q.       Right.  
 21           A.       It's an INC. I would prefer to  
 22 run it past somebody.  
 23           Q.       Okay. Who?  
 24           A.       In the line of who I'd call  
 25 first? The toolpusher on tower, my  
 00140:01 supervisor, OIM.

Page 140:24 to 144:08

00140:24           Q.       Mr. Odenwald, have you ever been  
 25 involved in the exchange of batteries or the  
 00141:01 changing of batteries for any of the SEMs on  
 02 the DEEPWATER HORIZON?  
 03           A.       Once, probably.  
 04           Q.       When was that?  
 05           A.       Let's see, '07 -- it would have  
 06 probably been in '07 or early '08. We had a  
 07 rig move, and they went in -- I don't know if  
 08 they -- I can't recall whether we went -- we  
 09 went in the SEM to -- to change that or  
 10 change a pie connector, but there was a --  
 11 there was a Cameron electronic rep out there.  
 12           Q.       Okay.  
 13           A.       And we actually did it on the  
 14 rig. And he was there and did all the work.  
 15 He changed out a pie connector, but I think  
 16 he -- and -- he changed -- he changed  
 17 batteries as well.  
 18                   After that all the SEMs went to  
 19 Cameron and --  
 20           MR. GANUCHEAU:  
 21                   Object to last part as  
 22 nonresponsive.  
 23 EXAMINATION BY MS. DELEMARRE:  
 24           Q.       All right. Have you yourself  
 25 ever changed a -- the battery packs for any  
 00142:01 of the DEEPWATER HORIZON SEMs?  
 02           A.       No, ma'am.  
 03           Q.       Okay.  
 04           A.       I just watched.  
 05           Q.       What is your understanding as  
 06 far as the frequency of changing the  
 07 batteries for the SEMs on the DEEPWATER  
 08 HORIZON, if you know?  
 09           A.       Like I said, the -- the SEMs had  
 10 been -- had been -- I think both SEMs had  
 11 been -- had been rotated off in the last --  
 12 in the last year or two and -- but I don't --  
 13 I can't -- off the top of my head, I can't

14 tell you.  
 15 Like I said, the seniors took up  
 16 with that -- kept up with that in the -- in  
 17 the workbook as far as -- as far as when they  
 18 needed to -- when they needed to swap stuff  
 19 out.  
 20 And it was going -- as far as  
 21 personally when I -- as I was concerned, it  
 22 was going -- you know, it was going to show  
 23 up on the work list during a rig move.  
 24 Q. Have you ever been involved in  
 25 testing the batteries -- the battery voltage  
 00143:01 on any of the DEEPWATER HORIZON's SEMs?  
 02 A. No, any electronic work would --  
 03 would have been handled by -- the best of my  
 04 knowledge, a Cameron tech was already  
 05 there -- always there for rig moves if there  
 06 was going to be electronic work done.  
 07 Q. Okay. So --  
 08 MR. GANUCHEAU:  
 09 Object to the responsive.  
 10 EXAMINATION BY MS. DELEMARRE:  
 11 Q. -- in your experience, then,  
 12 if -- if the batteries for the SEMs on the  
 13 DEEPWATER HORIZON were tested, that work  
 14 would have been done by Cameron?  
 15 A. Like I said --  
 16 MR. GANUCHEAU:  
 17 Objection, form.  
 18 A. -- those -- those -- the SEMs  
 19 that were on -- the best of my knowledge, the  
 20 SEMs that were on that stack had been to  
 21 Cameron and rebuilt and recertified or  
 22 whatever they do during their  
 23 recertification. And I assume they change  
 24 the batteries when they're doing it, but I  
 25 don't -- you know . . .  
 00144:01 So that was done at Cameron.  
 02 EXAMINATION BY MS. DELEMARRE:  
 03 Q. You don't know?  
 04 A. I don't know.  
 05 Q. All right. Which particular  
 06 SEMs were deployed with the blowout preventer  
 07 on the Macondo well, if you know?  
 08 A. I have no idea.

Page 144:14 to 144:15

00144:14 Q. Okay. Have you ever rebuilt a  
 15 solenoid?

Page 144:22 to 144:22

00144:22 A. Yes.

Page 144:24 to 145:21

00144:24 Q. Okay. Have you ever built --  
25 rebuilt any solenoids for the DEEPWATER  
00145:01 HORIZON's control pods?  
02 A. Fluid ends, yes.  
03 Q. Okay. When you say "fluid  
04 ends," what do you mean?  
05 A. There's two components to the  
06 solenoid. There's the -- the solenoid itself  
07 which converts electric signal to a linear  
08 motion to move a valve. And then you have  
09 the fluid end that actually has that valve  
10 that redirects fluid -- pilot signal fluid to  
11 the SPM valve on the pod.  
12 Q. All right. And it's the fluid  
13 end that you have -- you've actually rebuilt?  
14 A. I assisted a Cameron -- that  
15 same Cameron tech that did the batteries. I  
16 think his first name was Billy. I can't  
17 remember his last name. And he rebuilt some  
18 solenoids with us.  
19 Q. Okay.  
20 A. And we assisted and -- and  
21 helped him.

Page 146:12 to 146:20

00146:12 Q. Okay. Does -- does the  
13 electrical end of the solenoid have coils in  
14 it?  
15 A. The solenoid end does, yes.  
16 Q. How many coils does it have?  
17 A. I believe there are two.  
18 Q. Do you know how those coils are  
19 supposed to be wired?  
20 A. No.

Page 146:24 to 147:01

00146:24 Q. Okay. Have you ever been  
25 involved in testing of solenoids?  
00147:01 A. Not that I can recall.

Page 150:06 to 151:10

00150:06 Q. Okay. Are you familiar with  
07 acoustic triggers?  
08 A. I've heard of the term.  
09 Q. Tell me what they are.  
10 A. My understanding is where you  
11 can actuate a BOP by, I guess, radio signal

12 subsea or remote. You can operate it remote.  
 13 You can function it remote.  
 14 Q. Okay. Does your current rig  
 15 have a -- have acoustic triggers?  
 16 A. No, ma'am.  
 17 Q. What's your current rig?  
 18 A. DISCOVERER AMERICAS.  
 19 Q. Did the DEEPWATER HORIZON have  
 20 acoustic triggers?  
 21 A. No, ma'am.  
 22 Q. Do you know why not?  
 23 MR. OCCHUIZZO:  
 24 Object to form.  
 25 A. I'm not aware of any Transocean  
 00151:01 rigs that have it. My understanding is --  
 02 understanding, there's still some question as  
 03 to the reliability of it. But like I said, I  
 04 don't . . .  
 05 EXAMINATION BY MS. DELEMARRE:  
 06 Q. I'm sorry. I missed your  
 07 answer. Your understanding is what?  
 08 A. Reliability of the system. They  
 09 may -- they may or may not be proven or  
 10 whatever.

Page 152:08 to 152:15

00152:08 Q. What about double blind shear  
 09 rams. Does your current rig -- the -- the  
 10 BOP on your current rig have those?  
 11 A. It has two sets of blind shear  
 12 rams. They don't designate them as double  
 13 blinds, but I guess you could call -- but  
 14 there -- there are two set of blind shears  
 15 and a casing -- those casing shears.

Page 152:23 to 153:20

00152:23 Q. Have you ever been involved with  
 24 on-deck testing of the blowout preventer for  
 25 the DEEPWATER HORIZON?  
 00153:01 A. On-deck test -- stump testing,  
 02 yes, ma'am.  
 03 Q. Okay. And during the course of  
 04 that stump testing, are the ROV ports for the  
 05 blowout preventer tested?  
 06 A. Not on the stump test, on the --  
 07 on the surface function test --  
 08 Q. Okay.  
 09 A. -- they were tested.  
 10 Q. Tell me how the ROV -- ROV ports  
 11 were tested during the surface function test.  
 12 A. I don't recall ever witnessing  
 13 them. Generally, the senior did that himself

14 during -- because that one -- was one of  
15 the -- they have a signoff sheet that they  
16 have to sign off before they deploy. And it  
17 was one of the things on there that he had to  
18 sign off on, and he generally -- they  
19 generally took care of the function test  
20 because they wanted to be sure.

Page 156:20 to 158:03

00156:20 Q. You told us before you completed  
21 high school, but no formal education after  
22 that?  
23 A. No, sir.  
24 Q. You're not licensed or certified  
25 as an engineer, are you?  
00157:01 A. No, sir.  
02 Q. Who -- when you were on the  
03 DEEPWATER HORIZON in 2010, who did you  
04 supervise?  
05 A. Mostly myself.  
06 Q. How'd you do?  
07 A. I didn't run myself off. The --  
08 the HORIZON, it had four subsea positions  
09 assigned to the rig, two seniors, two  
10 supervisors that alternated. One was at the  
11 house, one was out there. So you actually  
12 had two people on the rig at the time.  
13 And so during normal drilling  
14 operations, I was at night and there was  
15 nobody there, you know, as far as an  
16 assistant or anything like that.  
17 Now, if I had something to do  
18 that night that I needed some help, I would  
19 get a roustabout or a roughneck and I would  
20 supervise them.  
21 Q. All right.  
22 A. On a rig move when the SWAT team  
23 came out, extra help showed up on nights, I  
24 would be supervising them.  
25 Q. So on the HORIZON during typical  
00158:01 drilling operations, when you were on duty,  
02 you had no subordinates?  
03 A. Normally not.

Page 158:18 to 160:21

00158:18 And I understand from your prior  
19 testimony, that you became a subsea  
20 supervisor when you moved to the HORIZON in  
21 March of 2007; is that right?  
22 A. That's when I took that night  
23 guy position.  
24 Q. What training did you receive to

25 be a subsea supervisor?  
00159:01 A. I did the subsea OJT, as -- as I  
02 previously testified.  
03 Q. Right.  
04 A. And I went to several vendor  
05 schools and -- and schools that Transocean  
06 put on, some with -- some with Cameron, I've  
07 been to some with Hydril, and well control  
08 twice. I can't -- somebody has a copy of  
09 my -- of my training -- all my training  
10 certificates.  
11 You know, as far as the dates on  
12 what happened before I got assigned, I  
13 couldn't -- I couldn't tell you.  
14 Q. What training did you receive  
15 from Cameron? Was that a school you went to,  
16 a course --  
17 A. Yes, sir.  
18 Q. -- a seminar?  
19 A. Yes, sir. I -- I went to -- I  
20 went to some Cameron schools. I can't name  
21 you exactly which ones I've been to. I think  
22 one of them was a basic symbols and  
23 hydraulics, but it's in my training records.  
24 Q. How many did you attend, how  
25 many schools with Cameron?  
00160:01 A. I'd have to look it up.  
02 Q. More than one?  
03 A. Should be more than one with  
04 Cameron.  
05 Q. The well control training that  
06 you just referred to I think you said two  
07 times?  
08 A. Yes, for fundamental well  
09 control.  
10 Q. Is that in-house at Transocean  
11 or outside?  
12 A. That's in-house for fundamental  
13 well control.  
14 Q. Taught by Transocean people?  
15 A. Yes, sir, I think it's -- it's  
16 certified with whomever, WellCAP or somebody.  
17 They've got a -- but, yes, sir, it's -- it's  
18 Transocean personnel.  
19 Q. Were you ever certified as  
20 qualified to maintain a BOP?  
21 A. As far as a license? No, sir.

Page 165:07 to 165:08

00165:07 Q. What is conditions-based  
08 maintenance?

Page 165:12 to 166:01

00165:12 Q. Have you ever heard that term  
13 before?  
14 A. Testing components to maximum --  
15 you know, my interpretation of it is -- is  
16 testing components to maximum operating  
17 pressure, same thing, you know, they -- same  
18 test that they would actually pass after  
19 being shopped.  
20 Q. Doug Brown described  
21 conditions-based maintenance to us, how that  
22 worked on the HORIZON. And he described it  
23 as, quote, run it till it breaks.  
24 You're aware of -- of that  
25 general philosophy on the HORIZON, aren't  
00166:01 you --

Page 166:05 to 166:05

00166:05 Q. -- as it was back in 2010?

Page 166:09 to 166:09

00166:09 A. Not in my department.

Page 166:22 to 167:01

00166:22 Q. Were you ever trained by  
23 Transocean to follow conditions-based  
24 maintenance instead of the inspection and  
25 maintenance requirements set by federal  
00167:01 regulations?

Page 167:04 to 167:17

00167:04 A. I was the night guy. I worked  
05 off of -- you know, as far as what we did, I  
06 got a work list from my senior --  
07 EXAMINATION BY MR. HASSINGER:  
08 Q. You have what?  
09 A. -- when I came on tower.  
10 A work list from my senior who  
11 was the department head. And he decided what  
12 we were going to do and what we were going to  
13 work. And that -- and that was true of -- of  
14 rig management -- rig move maintenance, too,  
15 as what -- what was going to be done. So  
16 that -- those decisions were made up the  
17 chain.

Page 167:20 to 167:25



00167:20 Q. So when you were on the HORIZON,  
21 it wasn't your decision about what would be  
22 repaired, inspected, maintained, or  
23 certified?  
24 A. No, sir, I didn't make the work  
25 list.

Page 168:16 to 169:05

00168:16 Were you aware that in April of  
17 2010 ModuSpec performed an assessment of the  
18 conditions on the HORIZON?  
19 A. There were some audits done, but  
20 I couldn't -- I don't recall ModuSpec.  
21 Q. Were you ever given a copy of  
22 the report that ModuSpec produced as a result  
23 of their inspection of the rig in April of  
24 2010?  
25 A. Not that I recall. A senior  
00169:01 would handle it.  
02 Q. Did any of your supervisors ever  
03 give you a summary, a portion, a recap of  
04 that report?  
05 A. Not that I recall, like I said.

Page 169:12 to 169:24

00169:12 Q. Since you -- you haven't seen  
13 the report -- well, let me ask you this  
14 first: Did you discuss that report, the  
15 ModuSpec April 2010 report, with any of your  
16 supervisors?  
17 A. Not that I recall.  
18 Q. Since you haven't seen the  
19 report and since none of your supervisors  
20 discussed it with you, you can't tell me  
21 whether you addressed any of the deficient  
22 conditions identified in that report, can  
23 you?  
24 A. No, sir.

Page 170:03 to 171:03

00170:03 Q. During your time working on the  
04 HORIZON, did anyone ever express concerns to  
05 you about the ability of the BOP to prevent a  
06 blowout in light of either its configuration  
07 or the status of its maintenance?  
08 MR. BAAY:  
09 Objection to form.  
10 A. No, sir, nobody -- nobody raised  
11 those concerns.  
12 EXAMINATION BY MR. HASSINGER:

13 Q. Did you ever raise concerns like  
14 that to anyone else?  
15 MR. BAAY:  
16 Objection to form.  
17 A. No, sir.  
18 EXAMINATION BY MR. HASSINGER:  
19 Q. Did you ever overhear  
20 conversations like that either in meetings  
21 that you attended or anywhere else where  
22 concerns were expressed not to you but to  
23 someone else that you overheard, that is,  
24 concerns about the ability of the BOP to  
25 prevent a blowout?  
00171:01 MR. BAAY:  
02 Objection to the form.  
03 A. Not that I recall.

Page 171:05 to 171:22

00171:05 Q. Did you ever work with Cameron  
06 personnel on the rig?  
07 A. Yes, sir.  
08 Q. Can you explain that to me?  
09 A. They were present at -- at -- at  
10 most rig moves, somebody with Cameron would  
11 be there.  
12 Q. Were you present for any rig  
13 moves regarding the HORIZON?  
14 A. Yes, sir.  
15 Q. When?  
16 A. I think all of them from the  
17 time I got on the rig and -- with the  
18 exception of Macondo.  
19 Q. Did you have any -- well, let me  
20 ask it this way: Did you ever work with any  
21 Cameron personnel on the HORIZON at Macondo?  
22 A. No, sir.

Page 172:03 to 172:20

00172:03 Q. Look at Tab H-1. Is that -- do  
04 you have it there?  
05 A. Yes, sir.  
06 Q. That's not what is on the disk  
07 as Exhibit H1.  
08 Let me see the folder, and I'll  
09 see if I can find it for you. Thank you.  
10 All right. It looks -- it  
11 actually is what's in the folder as Tab H1.  
12 The formatting is different. So when I look  
13 at it on the CD, it looks different. But  
14 it's Bates No. TRN-INV-00003628 through 3632.  
15 Is that your name down there?  
16 A. Oh, yes, sir.

17 Q. I just have one question for you  
18 on this. Turn to page 638. You see the  
19 numbers down at the bottom?  
20 A. I stop at 632.

Page 173:10 to 173:12

00173:10 Q. This appears to be notes from an  
11 interview that you gave in June of 2010; is  
12 that right?

Page 173:15 to 174:02

00173:15 A. Yes, sir.  
16 EXAMINATION BY MR. HASSINGER:  
17 Q. The front says apparently you  
18 were interviewed by a Simon Watson?  
19 A. Yes, sir.  
20 Q. Who's Simon Watson?  
21 A. I'm not sure what his  
22 designation is. He's in -- he's in  
23 corporate.  
24 Q. Go back to that page with the  
25 circled paragraph there. Read through that,  
00174:01 and I just would like you to explain to me  
02 what it's referring to and what it means.

Page 174:05 to 174:09

00174:05 A. (Witness reading). It's -- it  
06 is -- it's asking about between well  
07 maintenance and -- and I don't understand --  
08 I don't understand the acceptance of  
09 maintenance.

Page 174:11 to 180:12

00174:11 Q. Let me just read it real  
12 quick --  
13 A. Okay.  
14 Q. -- so the record's clear.  
15 It says, "Subsea equipment - the  
16 between well maintenance. His take on the  
17 acceptance of management regarding time to do  
18 maintenance is that he would not have seen  
19 any direct pressure. Since Van (OIM) left,  
20 the pressure decreased. Van made pressure,  
21 and after he left, it went away. Regarding  
22 any pressure the OIM had from BP, the only  
23 issue he had with BP was that sometimes they  
24 wanted to run casing offline that interfered  
25 with BOP maintenance, but they always worked  
00175:01 it out."

02                   So explain to me, are these  
03 comments, comments that you made to Watson  
04 during this interview?  
05       A.       This seems to be his -- his  
06 paraphrase or analogy --  
07       Q.       Uh-huh.  
08       A.       -- of -- of what I said.  
09                   Let me see. You know, as far as  
10 direct pressure, I'm the night guy. So --  
11 so, you know, any -- any pressure to -- to,  
12 you know, to -- to finish your maintenance,  
13 whatever, it wouldn't have come from me. It  
14 would have come to the senior, and which I  
15 wouldn't -- I wouldn't see.  
16       Q.       You mean if there was any  
17 pressure, it would have come to the senior  
18 and not to you?  
19       A.       Yeah. He deal -- he deals with  
20 the OIM. I don't. Chain of command.  
21       Q.       Who is Van?  
22       A.       Van Williams. He was OIM, been  
23 gone for a year or two. He wasn't there  
24 anymore.  
25       Q.       When did he leave?  
00176:01       A.       Oh, I don't know exactly. He'd  
02 been gone at least a year, probably a year  
03 and a half.  
04       Q.       The paragraph says -- the notes  
05 say, "Since Van (OIM) left, the pressure  
06 decreased. Van made pressure, and after he  
07 left, it went away."  
08                   Can you explain to me what that  
09 means?  
10       A.       I don't think that's a quote  
11 from me. I think that's somebody  
12 paraphrasing. But, you know, as far as -- as  
13 far as the BOP and everything, they had a  
14 work list and it was always completed or they  
15 got together and discussed it. The OIM and  
16 the senior and the maintenance supervisor,  
17 they would always discuss everything and sign  
18 off on it. So he had to sign off on it, too.  
19                   Now, the -- the last sentence in  
20 it, "Regarding any" -- see, it's -- it says,  
21 "Regarding any pressure the OIM had from BP."  
22 Well, I have no -- I have no way of knowing  
23 what pressure the OIM had from BP.  
24                   ". . . the only issue he had  
25 with BP was that sometimes they wanted to run  
00177:01 casing offline that interfered with BOP  
02 maintenance, but they always worked it out."  
03       Q.       The last part of that sentence,  
04 "The only issue he had with BP was that  
05 sometimes they wanted to run casing," et  
06 cetera, that's referring to communications

07 between the OIM and BP?

08 A. I have no idea.

09 Q. It's not referring to  
10 communications between you and BP personnel  
11 on the rig?

12 A. I think what he had -- I think  
13 what he had actually asked me --

14 Q. Uh-huh.

15 A. -- was had I seen any pressure  
16 from BP, you know, as far as -- as have we  
17 had any issue getting -- you know, as far as  
18 having time to get it done and all that. And  
19 what this is referencing is the -- the -- the  
20 HORIZON had the capability to run casing  
21 offline before -- while they were spudding in  
22 a well, they could actually be running casing  
23 on the BOP transporter that was right beside  
24 the BOP stack. It had that capability to be  
25 doing that. But when you were running casing  
00178:01 on that transporter, you had personnel down  
02 on it sitting directly beside where your  
03 stack was, and you couldn't be moving your  
04 BOP crane over the top of it.

05 And on your between well  
06 maintenance, you got so many days to get your  
07 stack ready before they get their casing run  
08 and they're ready for it. And if they want  
09 to run -- if they want to run their casing on  
10 that transporter, there may be some things  
11 that you can't do until they get through.  
12 You still gonna do them, but you may be  
13 delayed in doing them, and that may put you  
14 where your stack is not ready to go. And so  
15 when it comes down, are they going to put you  
16 on downtime, or are they going to say, Okay,  
17 we held you up, we'll get you some more time.  
18 And that's something, you know, that worked  
19 out, and it always got worked out.

20 Q. Uh-huh.

21 A. But that was just -- you know,  
22 that, just in the design of the rig, you  
23 know, the way it was, if you were running  
24 casing, you were going to have people  
25 working -- working side by side and -- and  
00179:01 the BOP crane couldn't be going over the top  
02 of them.

03 So you're taking your annulars  
04 apart, and you had to take it back across.  
05 You couldn't be moving it across while they  
06 were running casing. So if they were going  
07 to run casing, you would have to delay until  
08 they got through, and then -- and it may  
09 stretch out your maintenance period. And are  
10 you going to give me downtime, or are you  
11 going to work with me? And that's what I was

12 referencing. But that was all above me.  
 13 Q. In your work on the HORIZON, did  
 14 you have to deal with any BP folks?  
 15 A. Occasionally.  
 16 Q. Can you explain that?  
 17 A. They would be in the -- in the  
 18 drill shack on the rig floor, you know, if --  
 19 if they were -- for instance, a casing test.  
 20 Your BOPs aren't used just for well control.  
 21 They're used in operations. You'll close --  
 22 if you want to test the casing string, you'll  
 23 close a -- close an annular on pipe and  
 24 pressure up.  
 25 And they would be there, and --  
 00180:01 and I would be there to actually make the  
 02 functions and operate it. So I had that  
 03 interface with them. And if we were testing,  
 04 after the -- after the BOP test was over  
 05 with, and Halliburton and I and the company  
 06 man would -- would meet up in the office and  
 07 go over -- and go over everything and agree  
 08 that, you know, the tests were -- were  
 09 successful. And I'd type up the sheets and  
 10 bring them to them. They'd sign them.  
 11 Q. Uh-huh.  
 12 A. So I did have some interface.

Page 180:18 to 180:20

00180:18 So we'll mark as Exhibit 4611  
 19 this document Bates No. TRN-INV-3628 through  
 20 3632.

Page 181:20 to 188:09

00181:20 Q. Okay. I want to sort of start  
 21 in the reverse order of events here. If you  
 22 could turn to Tab A of the plaintiffs'  
 23 binders that they handed to you before that  
 24 is marked 4423. And let me know when you  
 25 have that in front of you.  
 00182:01 A. You said 4423?  
 02 Q. Yes, sir.  
 03 A. Yes, sir, I have it.  
 04 Q. Okay. And that was a  
 05 November 14, 2001 e-mail? See the sent date  
 06 at the top?  
 07 A. Yes, sir.  
 08 Q. Okay. And you were asked some  
 09 questions regarding whether or not the shear  
 10 rams with the ROV override can be used to  
 11 close the BOP when the well is flowing at  
 12 100, 200, or 300 barrels per day. Do you  
 13 recall those questions?

14 A. Yes, sir.  
15 Q. Okay. Were you involved at all  
16 in the response to the April 20th incident?  
17 A. I actually did, I think, a week  
18 and a half on BOA Sub C --  
19 THE REPORTER:  
20 On what?  
21 THE WITNESS:  
22 BOA Sub C.  
23 A. There was a subsea intervention  
24 ship that was involved in -- when we were  
25 trying to -- the top kill, when they hooked  
00183:01 the CoFlex hoses to the choke and kill and  
02 tried to shoot the junk shot in up under it.  
03 You know, I was just -- I was just there just  
04 as -- just if they needed a question.  
05 One of the seniors, Owen  
06 McWhorter, and I were there and working  
07 opposite each -- just if they had a question,  
08 you know, what is this on a stack.  
09 EXAMINATION BY MR. OCCHUIZZO:  
10 Q. Sure. So you were there to  
11 provide support as it related to the BOP  
12 stack --  
13 A. Yes, sir.  
14 Q. -- and they were attempting to  
15 interface --  
16 A. Yes, they -- yeah --  
17 THE REPORTER:  
18 Please wait.  
19 EXAMINATION BY MR. OCCHUIZZO:  
20 Q. -- that they were attempting to  
21 interface with, with for top kill operations;  
22 is that right?  
23 A. Yes, sir.  
24 Q. Okay. During that point in  
25 time, were you ever told by anyone or did you  
00184:01 ever hear that the rate -- rate of oil  
02 flowing was 100-, 200-, or 300,000 barrels of  
03 oil per day?  
04 A. I never heard anything.  
05 Q. Okay. And so this scenario that  
06 was described in 4423, to the best of your  
07 knowledge, of a flow of 100-, 200-, or  
08 300,000 barrels per day, that wasn't what was  
09 going on with the Macondo well, correct?  
10 A. I have no idea.  
11 Q. Okay. And so you don't know if  
12 the answer to this question as to whether or  
13 not you could close the shear rams with an  
14 ROV would be different if the flow rate was  
15 lower than, say, 100,000 barrels per day?  
16 A. I have no idea.  
17 Q. Now, you said you were on the  
18 DISCOVERER AMERICAS now; is that right?

19 A. Yes, sir.  
20 Q. Okay. And is that drilling a  
21 deepwater well in the Gulf of Mexico right  
22 now?  
23 A. Yes, sir.  
24 Q. How deep is that well expected  
25 to go?  
00185:01 A. I'm not sure what -- what --  
02 what is projecting. It's at -- it was at 22  
03 when I left, 22,000.  
04 Q. Do you know if it -- if -- then  
05 if 22,000 will be deeper than the Macondo  
06 well?  
07 A. I can't recall how deep Macondo  
08 was.  
09 Q. Okay. And I think earlier you'd  
10 been asked who held -- who were your  
11 supervisors on -- on Macondo.  
12 Who were -- who held the  
13 position opposite you on the DEEPWATER  
14 HORIZON?  
15 A. My relief was Chris Pleasant.  
16 Q. Okay. And when you say  
17 "relief," you mean the 21 days on and 21 days  
18 off; when you would go off for 21 days, he  
19 would come on, correct?  
20 A. Yes, sir.  
21 Q. Okay. What was done to  
22 transition between those -- those two shifts?  
23 Did you guys sit down in a room and talk  
24 about what had been done?  
25 A. No, we would -- we'd give verbal  
00186:01 handovers, you know, when -- as the chopper  
02 was unloading and refueling. And he would be  
03 off for -- he would -- that would generally  
04 be in the morning. He would come on tower at  
05 6:00 p.m., and he would get briefed by the  
06 senior, the senior -- because they were -- we  
07 didn't all change out on the same day.  
08 Someone was on -- so the senior  
09 would have been there -- a senior would have  
10 been there when each one of us arrived on the  
11 rig. And he ran the department, so he would  
12 do the briefing.  
13 Q. Okay. So it's fair to say,  
14 then, that the senior would be the one  
15 providing the briefing to the new subsea  
16 supervisor coming on to the new hitch?  
17 A. Yes, sir, they ran the  
18 department.  
19 Q. Okay. You mentioned before that  
20 you've gone to Cameron for training on BOPs.  
21 Do you recall that?  
22 A. Yes, sir.  
23 Q. Okay. Did that training apply



24 specifically to the -- the TL model that was  
 25 used with the DEEPWATER HORIZON?

00187:01 A. I would have to -- I would have  
 02 to review my -- my training, exactly which  
 03 ones I went to. One of them -- one -- one I  
 04 do recall, I think, was basic hydraulics and  
 05 symbols. So it was actually a -- it was a  
 06 hydraulic and electronic schematic school  
 07 that would -- that would be generic for --  
 08 for all hydraulics.

09 Q. Okay. And you mentioned  
 10 symbols. Are you referring to sort of the  
 11 electronic symbols that are typically found  
 12 on panels or on various electronic devices,  
 13 boards?

14 A. On a schematic.

15 Q. Okay.

16 A. On a wiring or hydraulic  
 17 schematic.

18 Q. Okay. Is it your understanding  
 19 that Transocean owned the BOP that was used  
 20 on the DEEPWATER HORIZON?

21 A. Yes, sir.

22 Q. Okay. And your understanding  
 23 that Transocean was responsible for the  
 24 maintenance of the BOP that was on the  
 25 DEEPWATER HORIZON?

00188:01 A. Yes, sir.

02 Q. Okay. And, in fact, that was  
 03 what your group was charged with doing, was  
 04 maintaining the BOP on the DEEPWATER HORIZON,  
 05 correct?

06 A. Yes, sir.

07 Q. Okay. Is it fair to say BP was  
 08 relying on Transocean to maintain the BOP on  
 09 the DEEPWATER HORIZON?

Page 188:12 to 189:11

00188:12 A. Yes, sir.

13 EXAMINATION BY MR. OCCHUIZZO:

14 Q. And I think you had testified  
 15 earlier that the -- the senior subsea  
 16 supervisor was responsible for documenting  
 17 the serial numbers and -- and other events;  
 18 is that right?

19 A. Yes, sir. He was -- he was the  
 20 department head. He would -- if someone  
 21 called and needed to know something, they  
 22 would contact him during the daytime when he  
 23 was on tower.

24 Q. Okay. For the work that you did  
 25 at night, would you input a log of that in  
 00189:01 the morning before you went off your shift?

02 A. Yes, sir, and -- and it -- it

03 may be verbal with the senior.  
04 Q. So there were times, then, where  
05 you would just verbally relay to the senior  
06 in the morning what you had completed over  
07 the evening and leave it to the senior to put  
08 that into a maintenance database or a log?  
09 A. Yes, sir, it could have been --  
10 it could have been a task like mopping the  
11 shop. No need to put it in the log.

Page 189:14 to 192:02

00189:14 Are you familiar with the term  
15 "stop work authority"?  
16 A. Yes, sir.  
17 Q. What does that mean to you?  
18 A. The right to shut a job down.  
19 Q. Do you feel that -- strike that.  
20 By the right to shut a job down,  
21 do you mean that employees or personnel on  
22 the rig have the ability to shut down the  
23 work that's going on around them?  
24 A. Yes, sir.  
25 Q. And -- and why would they be --  
00190:01 why would they want to do that?  
02 A. If they had safety concerns.  
03 Q. Okay. And, now, isn't it true  
04 that stop work authority is something that  
05 under Transocean policy applies to all of its  
06 employees on the rig. If they see something  
07 unsafe, they're supposed to shut it down,  
08 right?  
09 A. Yes, sir.  
10 Q. Okay. Have you ever been in an  
11 instance where you saw something unsafe going  
12 on and -- and stopped work?  
13 A. Yes, sir.  
14 Q. Could you describe that for me,  
15 please?  
16 A. I mean, it could -- it can be  
17 anything. I mean, it could -- it could be a  
18 crane crew picking up a lift and noticing  
19 that a shackle pin is not screwed all the way  
20 in. Shut it down and screw the pin in.  
21 Q. Now, is that an example that's  
22 actually happened to you?  
23 A. I'm sure in 11 years there's  
24 been a lot of them.  
25 Q. Okay. Is that something that  
00191:01 all Transocean employees are trained on?  
02 A. Yes, sir.  
03 Q. And that training occurred prior  
04 to April 20, 2010, right?  
05 A. They've been -- they've been  
06 telling me that ever since I've been working

07 for them.  
 08 Q. So it's engrained in the  
 09 employees from day one?  
 10 A. Pretty much.  
 11 Q. There's something unsafe going  
 12 on and you feel it's unsafe, you stop that  
 13 work right then and there. Right?  
 14 A. Yes, sir.  
 15 Q. Now, as a subsea supervisor, do  
 16 you generally have a role in performing  
 17 negative pressure tests if you're on board?  
 18 A. A negative pressure test? If I  
 19 was on board and it was happening on my  
 20 shift, I would -- I would -- I would be there  
 21 to do the functioning --  
 22 Q. Okay.  
 23 A. -- the actual functioning of the  
 24 components that they used to test against.  
 25 Q. Would you help prepare  
 00192:01 procedures --  
 02 A. No.

Page 193:13 to 194:07

00193:13 Q. Now, you didn't participate in  
 14 any discussions regarding the results of the  
 15 negative pressure test on April 20, 2010,  
 16 correct?  
 17 A. No.  
 18 Q. Okay. You didn't participate  
 19 from shore?  
 20 A. No.  
 21 Q. Okay. So you can't provide  
 22 testimony under oath today as to who from BP  
 23 or Transocean said what to each other about  
 24 the results of the negative pressure test,  
 25 correct?  
 00194:01 A. No, sir.  
 02 Q. Okay. And sitting here today,  
 03 you don't know firsthand knowledge why the  
 04 people on the rig made the decisions or  
 05 interpreted the negative pressure test the  
 06 way they did, correct?  
 07 A. No, sir.

Page 194:20 to 195:08

00194:20 Q. Okay. Now, Transocean personnel  
 21 lived on the rig during their hitch, correct?  
 22 A. Yes, sir.  
 23 Q. And BP employees who were  
 24 working there also lived on the rig?  
 25 A. Yes, sir.  
 00195:01 Q. Along with the third-party

02 contractors who were out there participating  
03 in whatever activities would be going on?

04 A. Yes, sir.

05 Q. Okay. Do you think that  
06 Transocean people that you knew would risk  
07 their lives if they thought something was  
08 wrong during the negative pressure test?

Page 195:24 to 195:24

00195:24 A. Of course not, no.

Page 196:01 to 196:04

00196:01 Q. Okay. And you agree under the  
02 stop work authority that if they had thought  
03 something was wrong, they could have stopped  
04 things, correct?

Page 196:09 to 196:13

00196:09 A. They had stop work authority.  
10 EXAMINATION BY MR. OCCHUIZZO:  
11 Q. And that stop work authority  
12 would have applied in the context of negative  
13 pressure tests, correct?

Page 196:19 to 196:20

00196:19 A. Stop work authority applies to  
20 everything.

Page 196:22 to 197:07

00196:22 Q. Okay. I think you talked a  
23 little bit before about Cameron being hired  
24 to come on to the rig and perform some  
25 maintenance and repairs of the DEEPWATER  
00197:01 HORIZON BOP or its components. Do you recall  
02 that?  
03 A. Yes, sir.  
04 Q. Okay. Generally speaking, what  
05 types of activities or what types of  
06 maintenance work would Cameron be hired to  
07 come out to the rig to perform?

Page 197:10 to 197:12

00197:10 A. Predominantly electronic dealing  
11 with the -- with the SEMs or the -- the  
12 electronic --

Page 197:14 to 198:03

00197:14 Q. Okay.  
15 A. -- part of it. And, usually,  
16 when you completely disassemble the annular,  
17 your complete operating system, they'd come  
18 out and -- and mike your housings and how  
19 much wear was in it. And the same thing on  
20 your -- on your bores for your ram blocks,  
21 you would periodically, once a year or so,  
22 you wanted to check them for wear, and you  
23 let them come out -- let them come out and do  
24 their measurements and give you the -- give  
25 you the numbers.  
00198:01 Q. Would Cameron have -- be brought  
02 out to deal with maintenance of the control  
03 pod batteries?

Page 198:06 to 198:11

00198:06 A. As I stated this morning, in my  
07 three years, there was one set of batteries  
08 that I recall being changed on the rig, and  
09 the rest of them, the SEM -- the whole -- the  
10 complete SEM was sent to Cameron. So they --  
11 they did it in shop.

Page 198:13 to 198:15

00198:13 Q. Okay. Have you ever had any  
14 issues with Cameron's maintenance?  
15 A. Not when I was there.

Page 199:09 to 199:16

00199:09 Q. Okay. Did your subsea group on  
10 the DEEPWATER HORIZON have an annual budget  
11 for maintenance costs?  
12 A. Yes. Every department has a  
13 budget.  
14 Q. Were you involved in developing  
15 that budget at all?  
16 A. No, sir, senior.

Page 199:19 to 200:01

00199:19 The senior subsea supervisor  
20 would be involved with establishing the  
21 maintenance budget for the B -- for the BOP?  
22 A. Yes, sir, he and the asset  
23 manager.  
24 Q. Okay. Who is the asset manager?

25 A. I think James Kent was asset  
00200:01 manager.

Page 200:23 to 202:04

00200:23 Q. And I think we've discussed the  
24 term "condition-based maintenance," correct,  
25 earlier?  
00201:01 A. Yes, sir.  
02 Q. Okay. What's your understanding  
03 of condition-based maintenance?  
04 A. As I stated in previous  
05 testimony, my understanding is you subject it  
06 to the same tests, full operator tests, that  
07 it would see after coming out of the shop.  
08 And it passed the same test. So it was still  
09 in good condition.  
10 Q. And under condition-based  
11 maintenance, how often would you need to test  
12 the BOP equipment?  
13 A. My experience on the HORIZON was  
14 it was -- we operator tested every time it  
15 was on the beams, the full operating -- rated  
16 operator pressure.  
17 Q. Okay. And that was every time  
18 you did a rig move, it was up on the beams?  
19 A. Every rig move that I can recall  
20 that where -- where you actually opened it up  
21 and changed all your packers. Like I stated  
22 previously, we had done some P&As for BP  
23 where they would -- you know, you'd jump from  
24 one well to the other, and they may just want  
25 to -- you wouldn't have but two or three  
00202:01 days, and they just wanted to do -- you know,  
02 do a stump test and testing it. And I can't  
03 recall them, but I can't -- I can't sit here  
04 and tell you that we did them on that one.

Page 202:19 to 205:19

00202:19 You had mentioned doing a stump  
20 test. Do you recall when it was that you last  
21 participated in a stump test for the  
22 DEEPWATER HORIZON BOP?  
23 A. The last time I actually put my  
24 hands on a HORIZON BOP was almost two years  
25 ago during the rig move for the well prior to  
00203:01 Macondo, which I think was Kodiak 2. It  
02 would have been between the Tiber prospect  
03 and whatever came after that. But I can't  
04 tell you whether I actually did the stump  
05 test for that one or the one before.  
06 Q. Okay. If you do a stump test,  
07 is that something that would be recorded in

08 the maintenance logs?

09 A. It would be charted. It would  
10 be charted. And my understanding pre-Macondo  
11 was that a stump test was not required by  
12 MMS. Theirs was the first one on the  
13 wellhead. Your stump test was actually being  
14 sure that it was ready to go before you ever  
15 splashed it. And that was between you and  
16 the client. And -- but as far as whether  
17 the -- like I said, we would -- we would  
18 chart it when we did the test.

19 When we went to full operating  
20 pressure, every time we did a 15K, full-rated  
21 pressure, they would be charted. And if we  
22 did them on our tower, we would -- we would  
23 sign them and leave them for the senior, and  
24 he would take them to the morning meetings  
25 and show them to whoever. And he may have  
00204:01 recorded them; he may not have.

02 Q. Let's talk a little bit about  
03 some of the maintenance that went on in  
04 December 2009 through the rig move leading to  
05 Macondo.

06 What types of components are  
07 typically changed out during rig moves,  
08 components of a BOP?

09 A. You want to know what was  
10 changed out specifically for the Macondo  
11 well?

12 Q. Let's start generally. As a  
13 subsea supervisor, what is generally changed  
14 out on a BOP during rig moves?

15 A. Just on a general rig move,  
16 you're going to -- you're going to open up  
17 all your bonnets and change all your packers  
18 and your annular packers.

19 Q. Anything else?

20 A. If you're wanting to --  
21 generally, you're trying to rotate so many of  
22 your valves out. You change any of those  
23 that you plan on changing. Or if you've got  
24 a stack that's got hoses as equipment, hoses.  
25 -- some of them have hard piping; some of  
00205:01 them have hoses -- you may rotate some hoses  
02 out.

03 Q. How far in advance do you start  
04 planning for a rig move?

05 A. Seniors take care of it; but  
06 pretty much as soon as you get through with  
07 the -- once you get splashed and latched up  
08 on the -- on the -- on the wellhead, your  
09 next big project's going to be a -- is going  
10 to be a rig move.

11 Q. So it's something that you would  
12 have time to think about the elements that

13 you want to change and the issues that you  
14 would want to address on the next rig move,  
15 correct?  
16 A. Yes. It's going to -- like I  
17 say, it's going to be between the senior and  
18 the maintenance supervisor and the asset  
19 manager.

Page 206:04 to 206:06

00206:04 For the record, Tab 37 has been  
05 marked 4612. And it is Bates  
06 TRN-MDL-01650615 through 616.

Page 206:11 to 209:08

00206:11 Q. Okay. First off, I just had a  
12 question about the -- the To line here.  
13 It says: "To DWH," and a comma,  
14 then "SubSeaSup (Deepwater Horizon)."  
15 What is SubSeaSup?  
16 A. It's actually a e-mail address.  
17 Q. And that e-mail address, is that  
18 for your subsea group on the DEEPWATER  
19 HORIZON?  
20 A. Yes, sir. On the -- on the  
21 HORIZON, in our office, it was just one  
22 computer. And --  
23 Q. And would you have access to  
24 that e-mail box when you were on -- up in the  
25 tower?  
00207:01 A. Yes, sir.  
02 Q. Okay. And when you were on your  
03 shift, would you go and look back at the  
04 previous e-mails that were sent during the  
05 day to the senior?  
06 A. Possibly. Not -- not as a --  
07 not as a matter, you know, of habit. You  
08 know, I didn't go back and look at all of  
09 them.  
10 Q. Okay. And this is an e-mail  
11 chain which begins on the bottom. You see  
12 it's February 15, 2010.  
13 Do you see the bottom e-mail?  
14 A. Yes, sir.  
15 Q. All right. And this is from  
16 Buddy Trahan.  
17 Who's Buddy Trahan?  
18 A. He -- as I understand it,  
19 he's -- he was James Kent's boss. I  
20 don't know. Ought to be a title there  
21 somewhere.  
22 Here we go. Flip your page.  
23 Q. He's the operations manager for



24 assets?  
 25 A. That's what it says.  
 00208:01 Q. Okay. And in his e-mail, he  
 02 states that this is a follow-up from several  
 03 e-mails sent over the last year to assist you  
 04 and your rig.  
 05 And then, he goes on to say,  
 06 "Due to some recent examples, I feel some  
 07 have been dropped." And he goes on to list a  
 08 few specific issues.  
 09 Do you see those ten issues that  
 10 he's listed?  
 11 A. Yes, sir.  
 12 Q. Okay. One of them includes the  
 13 latest BOP hose registry, and the second one  
 14 is the latest battery inventory, correct?  
 15 A. Yes, sir.  
 16 Q. Did you have any responsibility  
 17 for maintaining the BOP hose registry?  
 18 A. Other than what the senior would  
 19 have told me to -- you know, to put into it.  
 20 Q. And what is the hose registry?  
 21 A. A history of when hoses have  
 22 been -- have been changed out on the BOP.  
 23 Q. Are you aware of hose changes  
 24 that were made to the Macondo -- or to the  
 25 DEEPWATER HORIZON BOP?  
 00209:01 A. They had been changing hoses out  
 02 on -- on previous rig move. I think they  
 03 pretty much all had been changed out.  
 04 Q. Has there ever been a time where  
 05 you've been involved with a hose change where  
 06 the configuration was also changed in  
 07 addition to the hose itself?  
 08 A. No, sir.

Page 209:13 to 209:20

00209:13 Q. Mr. Trahan mentions on the last  
 14 page that "Together we can become better  
 15 organized and hopefully prevent some further  
 16 embarrassment."  
 17 Were you aware of any  
 18 embarrassing issues regarding Transocean's  
 19 abilities to track changes being made to the  
 20 hose registry or battery inventory?

Page 209:23 to 210:15

00209:23 A. As I understood it, what  
 24 actually facilitated this hose change-out was  
 25 a incident on another rig. The CAJUN  
 00210:01 EXPRESS, I think, had actually had a hose  
 02 blow out subsea, and they wound up having to

03 do a stack pull to replace it, and took a lot  
 04 of downtime. And I think there was actually  
 05 a -- a directive came out that they wanted to  
 06 go on and change all the hoses out on pretty  
 07 much all the rigs, just looking at -- basing,  
 08 you know, downtime for pulling the stack to  
 09 change one, it would have cost to buy all new  
 10 hoses, it may be better off to change them  
 11 all out.  
 12 But that -- I don't think that  
 13 had anything to do with the HORIZON. That  
 14 was just the reason they were changing them  
 15 out.

Page 210:17 to 211:18

00210:17 Q. Were you involved at all in  
 18 preparing the work list for the BOP as it  
 19 related to the rig move over to Macondo?  
 20 A. No, sir.  
 21 Q. Do you know whether or not the  
 22 tasks identified on -- as a part of the work  
 23 list for the rig move were actually completed  
 24 or not?  
 25 A. No, sir. I wasn't there.  
 00211:01 Q. How often was the BOP inspected  
 02 at Macondo?  
 03 A. While on the well?  
 04 Q. Yes, sir.  
 05 A. I mean, are you referencing from  
 06 a -- you know, just an ROV doing a dive and  
 07 just -- just looking around, or do you mean  
 08 as far as testing?  
 09 Q. Well, let's start with any sort  
 10 of inspection that would be done on behalf of  
 11 the subsea group.  
 12 A. You know, as far as -- I mean,  
 13 you can't physically touch it, obviously.  
 14 All they can do is -- is ROV can dive -- and  
 15 I think they -- depending on different rigs,  
 16 different operators. Every couple of days  
 17 they do a regular schedule day, just go down  
 18 and look around and . . .

Page 211:21 to 212:08

00211:21 A. They look at the riser all the  
 22 way around and fly around, look at the  
 23 wellhead, look at the bulls eyes and -- and  
 24 make sure they don't see any mud oozing out  
 25 or anything.  
 00212:01 Q. Do you know if there was a  
 02 policy at Transocean as to how frequently the  
 03 ROVs needed to visually inspect the BOP once

04 it was latched on?  
05 A. Not that I'm aware of.  
06 Q. Do you believe that a BOP will  
07 work as it's designed to do so long as it's  
08 properly maintained?

Page 212:13 to 212:14

00212:13 A. As far as -- as far as holding  
14 the pressure, yes, sir.

Page 212:23 to 213:01

00212:23 Q. Okay. Do you believe while you  
24 were on the rig that the DEEPWATER HORIZON  
25 BOP was capable of shearing the drill pipe  
00213:01 that was being used to drill the well?

Page 213:04 to 213:10

00213:04 A. All the pipe? Because you've  
05 got to have -- you're probably going to have  
06 surface -- you're probably going to have some  
07 casing that -- you know, that -- that -- that  
08 exceeds the shearing of the shear rams and  
09 the casing ram, but, to my knowledge,  
10 everything that went past it, it would.

Page 213:12 to 213:20

00213:12 Q. And while you were on the rig,  
13 did you believe that the BOP was capable of  
14 sealing the well?  
15 A. Yes, sir.  
16 Q. Okay. And agree that's what it  
17 was designed to do, right?  
18 A. Yes, sir.  
19 Q. Do you think it could seal a  
20 flowing well?

Page 213:25 to 214:03

00213:25 A. I have no idea.  
00214:01 EXAMINATION BY MR. OCCHUIZZO:  
02 Q. Okay. When a kick is occurring,  
03 is the well flowing?

Page 214:06 to 214:06

00214:06 A. Yes, sir, fluid is moving.

Page 214:14 to 214:18

00214:14 EXAMINATION BY MR. OCCHUIZZO:  
 15 Q. Sure. When a kick is detected,  
 16 one of the first things you're trained to do  
 17 at Transocean is to seal the BOP and shut in  
 18 the well, correct?

Page 214:21 to 214:21

00214:21 A. Yes, sir.

Page 215:07 to 221:25

00215:07 Q. Now, when the BOP's latched on,  
 08 its functions are controlled by two control  
 09 pods, correct?  
 10 A. Yes, sir.  
 11 Q. And solenoid valves are used in  
 12 the control pod?  
 13 A. Yes, sir.  
 14 Q. And each solenoid valve controls  
 15 a specific BOP function; is that right?  
 16 A. Yes, sir.  
 17 Q. Okay. Is it fair to say that  
 18 solenoid valves need to be maintained  
 19 frequently?  
 20 MR. BAAY:  
 21 Objection to the form.  
 22 A. They're function tested, yes,  
 23 sir.  
 24 EXAMINATION BY MR. OCCHUIZZO:  
 25 Q. And the reason is, is if the  
 00216:01 solenoid valve doesn't function properly,  
 02 then that aspect of the BOP that it would  
 03 trigger can't be triggered; is that right?  
 04 MR. BAAY:  
 05 Objection to the form.  
 06 MR. GANUCHEAU:  
 07 Objection, form.  
 08 A. If the solenoid on one pod  
 09 didn't function, you'd rather have your other  
 10 pod.  
 11 EXAMINATION BY MR. OCCHUIZZO:  
 12 Q. So the idea is with two pods,  
 13 you have a redundant system so if one  
 14 solenoid valve doesn't work on one pod, the  
 15 expectation is that the other pods's solenoid  
 16 will fire and activate that same function?  
 17 MR. BAAY:  
 18 Objection to the form.  
 19 A. Yes, that's the backup.  
 20 EXAMINATION BY MR. OCCHUIZZO:  
 21 Q. How often did you have to

22 replace the solenoid valves on the DEEPWATER  
23 HORIZON BOP?  
24 MR. BAAY:  
25 Objection, form.

00217:01 A. Personally when it -- when it --  
02 in my -- in my position it'd come up on the  
03 work list, you know, as far as on the -- as  
04 far as the engine -- individual solenoids  
05 that they wanted to -- to swap out. But both  
06 pods had been -- had been rebuilt and all  
07 solenoids had been changed since I'd been  
08 there.

09 EXAMINATION BY MR. OCCHUIZZO:  
10 Q. How did you track --  
11 MR. GANUCHEAU:  
12 Objection to the form of the  
13 answer.

14 EXAMINATION BY MR. OCCHUIZZO:  
15 Q. How did you track the solenoids  
16 that were being changed?  
17 A. On the pods that -- that had  
18 been -- that had been shopped out or been  
19 rebuilt, they all went to town and they all  
20 came back. They were all rebuilt.

21 Past that, I think the senior  
22 probably kept it in his workbook or in the  
23 daily logs.

24 Q. Do you know if Transocean  
25 purchased refurbished solenoid valves from a  
00218:01 company other than Cameron?  
02 A. Actually purchased refurbished?  
03 Q. Yes.  
04 A. I'm not aware of actually  
05 purchasing refurbished.

06 Q. Are you aware of them -- let me  
07 strike that, ask the question this way, then.  
08 Are you aware of Transocean  
09 sending out solenoid valves to be refurbished  
10 by a third-party vendor other than the  
11 original equipment manufacturer, Cameron?  
12 A. Yes, sir, they had sent  
13 solenoids to a company, I believe, called D&D  
14 along with -- with Cameron repair kits and --  
15 because we didn't have the -- we didn't have  
16 the facility there to -- to -- really to  
17 rebuild and test them, that many. And they  
18 actually rebuilt them with Cameron parts  
19 and sent them back to us.

20 Q. Okay. Were these refurbished  
21 solenoid valves provided by D&D used on the  
22 control pods for the DEEPWATER HORIZON BOP?  
23 MR. BAAY:  
24 Objection to the form.

25 A. As far as I know, they were.

00219:01 EXAMINATION BY MR. OCCHUIZZO:

02 Q. Do you know which of the  
03 refurbished solenoids were installed on the  
04 deepwater BOP on April 20, 2010?  
05 A. No.  
06 MR. BAAY:  
07 Objection to form.  
08 A. No, sir.  
09 EXAMINATION BY MR. OCCHUIZZO:  
10 Q. Did Transocean's policies permit  
11 Transocean employees to rebuild solenoid  
12 valves in the BOP control pods?  
13 MR. BAAY:  
14 Objection to the form.  
15 A. Did their policies permit? As  
16 far as I know.  
17 EXAMINATION BY MR. OCCHUIZZO:  
18 Q. Did Transocean's policies permit  
19 Transocean employees themselves to replace  
20 solenoid valves on the BOP control pods  
21 instead of having Cameron install them?  
22 MR. BAAY:  
23 Objection to form.  
24 A. As far as I know.  
25 EXAMINATION BY MR. OCCHUIZZO:  
00220:01 Q. What training did you have to  
02 work on solenoid valves?  
03 A. As I stated previously, there  
04 was a Cameron tech out one time that rebuilt  
05 some -- some solenoids for us, changed the --  
06 the actual solenoids themselves. You had to  
07 solder the wires, the E-connectors, too. And  
08 he did that and he rebuilt some fluid ends.  
09 And he worked with us, and then he was there  
10 with us, and we did rebuild a few of them  
11 there with him with him -- him standing there  
12 watching us. And we put them all back  
13 together and he tested them.  
14 Q. Was there ever a time that you  
15 rebuilt or refurbished a solenoid valve  
16 yourself without Cameron personnel present?  
17 A. Not that I recall.  
18 Q. Are you aware of anyone at  
19 Transocean on the DEEPWATER HORIZON  
20 rebuilding or repairing the solenoid valves  
21 not under the supervision of a Cameron  
22 technician?  
23 A. Not that I witnessed.  
24 MR. GANUCHEAU:  
25 Objection, form.  
00221:01 EXAMINATION BY MR. OCCHUIZZO:  
02 Q. Let's turn to Tab 8. And we'll  
03 mark Tab 8 as 4613.  
04 (Exhibit No. 4613 marked for  
05 identification.)  
06 EXAMINATION BY MR. OCCHUIZZO:

07 Q. And it is TRN-MDL-01645048  
08 through 054. If you could just -- thank you  
09 very much.  
10 MR. WALSH:  
11 You're welcome. Say the number  
12 again, Mike.  
13 MR. OCCHUIZZO:  
14 It's Tab 8 and ends 5048.  
15 A. That's it.  
16 EXAMINATION BY MR. OCCHUIZZO:  
17 Q. All right. This is a technical  
18 information bulletin from Transocean entitled  
19 Instructions for Rebuilding Cameron Controls  
20 Solenoid Valve; is that right?  
21 A. Yes, sir.  
22 Q. Front cover.  
23 Have you ever seen this document  
24 before?  
25 A. Not that I recall.

Page 222:04 to 222:20

00222:04 You previously discussed  
05 on-the-job training. Were you provided with  
06 technical information bulletins such as this  
07 one, if not this one, obviously, as part of  
08 the process of learning the ropes, if you  
09 will, of being a subsea supervisor?  
10 A. Yes, sir, we had manuals and  
11 technical updates, most of them from Cameron.  
12 Q. Do you know if Cameron reviewed  
13 and approved this?  
14 A. I have no idea.  
15 Q. Do you know if it was the policy  
16 of Transocean to have their subsea engineers  
17 rebuild Cameron Control solenoid valves if  
18 possible?  
19 A. I'm sure somebody somewhere has.  
20 We didn't that I witnessed.

Page 223:13 to 223:25

00223:13 Q. Okay. What is the -- are you  
14 familiar with the term "deadman system"?  
15 A. Yes, sir.  
16 Q. What is your understanding of a  
17 deadman system?  
18 A. In the event that you lose both  
19 hydraulic supply and electronic signal from  
20 both pods, it triggers the -- it triggers the  
21 blind shear rams to your wellbore.  
22 Q. So if the deadman system is not  
23 capable of functioning, then the blind shear  
24 ram would not close automatically under the

25 circumstances you described, correct?

Page 224:03 to 224:03

00224:03           A.       The way I understand it.

Page 224:09 to 224:12

00224:09           Q.       And if there's a solenoid valve  
10 that is responsible for functioning the  
11 deadman system and it doesn't operate, then  
12 the deadman system won't fire; is that right?

Page 224:17 to 224:22

00224:17           A.       I'm not that familiar with the  
18 Cameron system. You've got your other pods,  
19 you know, and I've never tested the deadman  
20 on that particular rig and never worked on  
21 it. And so I really can't -- I really don't  
22 have an opinion.

Page 225:02 to 225:17

00225:02           Q.       Are you -- are you aware of  
03 anyone else besides yourself testing the  
04 deadman functions for the DEEPWATER HORIZON  
05 BOP?  
06           A.       I'm not aware of it. Like I  
07 say, it wasn't tested when I was there. I  
08 don't know what they did when I wasn't there.  
09 I never tested it.  
10           Q.       You say while you weren't there.  
11 Do you mean during your shift or do you mean  
12 from March 2007 until April 20, 2010?  
13           A.       I never witnessed a -- a deadman  
14 function or, you know, testing solenoids.  
15 There was -- there was ETs testing solenoids  
16 all the time. I don't know what they were  
17 testing.

Page 226:07 to 226:08

00226:07   (Exhibit No. 4614 marked for  
08 identification.)

Page 226:10 to 229:11

00226:10           Q.       We'll mark that is 4614. That  
11 is Bates TRN-MDL-00494706.  
12                   The first question, sir, is:  
13 Have you ever seen this document before?



14 A. No, sir, I hadn't seen this  
15 document.

16 Q. Okay. This appears to be a  
17 daily report sheet by Cameron Controls. And  
18 if you follow along under May 6th over on the  
19 page ending 708, the bottom right corner, it  
20 indicates that they stimulated -- sorry.  
21 Strike that -- indicates that they simulated  
22 the deadman test with the correct Solenoid  
23 Valve 103. Electronic magnetic pin was held  
24 against Solenoid Valve 103 and the deadman  
25 was fired. No indications of the valve  
00227:01 firing. This valve was rebuilt February 2010  
02 by unknown person. It appears this was done  
03 on the rig, as the date was written in paint  
04 pen.

05 Do you see that? It's in the  
06 upper box, page ending 708, 2146. The time,  
07 11:46.

08 A. Yes, sir, I've got it.

09 Q. Okay. If, in fact, this valve  
10 was rebuilt in February 2010, do you have any  
11 idea who that might have been, who rebuilt  
12 it?

13 MR. GANUCHEAU:  
14 Objection.

15 A. I wasn't there.

16 My experience on the -- on the  
17 DEEPWATER HORIZON, when you changed out a  
18 solenoid, they would write the date on it  
19 when it was actually changed out. And they  
20 had an inventory of solenoids that had been  
21 to D&D and been rebuilt, and that's what they  
22 changed out.

23 EXAMINATION BY MR. OCCHUIZZO:

24 Q. And when you say --

25 A. I wasn't there, but if it -- if  
00228:01 I walked up to a pod and it had a date --  
02 HORIZON pod had a date wrote on it, my  
03 interpretation would be that that was the  
04 date that a rebuilt pod from D&D was put on  
05 it.

06 Q. And who would have been the one  
07 that wrote that date in pen on -- on the --  
08 on the BOP?

09 A. Whoever put it on.

10 Q. And who would have put that on?

11 MR. BAAY:  
12 Objection to form.

13 A. I have no idea.

14 EXAMINATION BY MR. OCCHUIZZO:

15 Q. Was it the policy or practice of  
16 the subsea group on the DEEPWATER HORIZON to  
17 use a paint pen to write the date when they  
18 installed a solenoid valve?

19 MR. BAAY:  
 20 Objection to the form.  
 21 A. Solenoids and -- and valves.  
 22 EXAMINATION BY MR. OCCHUIZZO:  
 23 Q. Is that something that Cameron  
 24 technicians that work on the BOP also do:  
 25 Use a paint pen to mark when they've made  
 00229:01 changes?  
 02 MR. GANUCHEAU:  
 03 Objection, form.  
 04 A. I don't know.  
 05 EXAMINATION BY MR. OCCHUIZZO:  
 06 Q. In your years of experience  
 07 dealing with changes made to the BOP, have  
 08 you ever seen the Cameron technician write  
 09 with a paint pen the date that's -- they are  
 10 making the change?  
 11 A. I don't recall.

Page 229:20 to 230:05

00229:20 Q. I believe you were asked this  
 21 before, but just to confirm: You don't have  
 22 any information or recall the last time the  
 23 batteries would have been changed for the  
 24 SEMs in the control pod, correct?  
 25 A. To the best of my knowledge,  
 00230:01 the -- both the SEMs had been sent in to  
 02 Cameron in the last two years, and they  
 03 rebuilt them and recertified them, and I'm  
 04 sure they were changed then. But I don't --  
 05 I don't know the dates.

Page 231:01 to 231:04

00231:01 Do you know if the AMF deadman  
 02 batteries were ever replaced on any of the  
 03 control pods while you were on the DEEPWATER  
 04 HORIZON?

Page 231:07 to 231:11

00231:07 A. Personally, like I said, I -- I  
 08 witnessed batteries changed out on one pod  
 09 the whole time I was there, and the rest of  
 10 them went to -- went to Cameron. I'm not  
 11 sure what they did.

Page 231:13 to 232:13

00231:13 Q. Okay. If you flip to Tab 42,  
 14 it's documents that's been previously marked  
 15 as Exhibit 588.

16 Are you there?  
 17 A. Yes, sir.  
 18 Q. All right. This is entitled  
 19 "DAR Consolidation Report."  
 20 Had you ever seen a report like  
 21 this before?  
 22 A. DAR. Not in this format, no,  
 23 sir.  
 24 Q. Okay. What format have you seen  
 25 this -- this type of information displayed?  
 00232:01 A. We type -- they have a GRS that  
 02 each department goes in daily. That's one of  
 03 my tasks to type in the daily activities in  
 04 the GRS, and that's what that looks like. It  
 05 looks like it's just -- it's breaking down  
 06 the daily stuff, you know, that was done  
 07 and -- and just putting -- you know, just  
 08 lining them up.  
 09 Q. Okay. Would the information  
 10 that you entered on the daily basis, would  
 11 that contain a reference to any battery  
 12 changes if, in fact, battery changes did  
 13 occur?

Page 232:16 to 233:01

00232:16 A. Possibly, you know, if somebody  
 17 entered it.  
 18 EXAMINATION BY MR. OCCHUIZZO:  
 19 Q. Was there a -- any training on  
 20 what information was supposed to be entered  
 21 in the GRS system that you described?  
 22 A. It would be your daily  
 23 activities.  
 24 Q. So if you repair a solenoid  
 25 valve that day, that would be something that  
 00233:01 you would list?

Page 233:04 to 234:14

00233:04 A. It should be. And if it was  
 05 on a -- you know, if it was in a rig move,  
 06 there would be a lot of things going on that  
 07 day, so it could have, you know.  
 08 EXAMINATION BY MR. OCCHUIZZO:  
 09 Q. Is it fair to say that either  
 10 the senior subsea supervisor or the subsea  
 11 supervisor would input what they feel was  
 12 important maintenance that had been completed  
 13 into the GRS system?  
 14 A. We would put a -- it would be  
 15 more detailed in our daily logs, and then you  
 16 would -- then you would post in the -- you'd  
 17 copy and post into the -- into the GRS.

18 Q. And I don't know that we've had  
 19 it -- what does the GRS stand for? What do  
 20 the terms stand for?  
 21 A. I think it's global reporting  
 22 system. Don't quote me on that.  
 23 Q. How does that compare to the RMS  
 24 system that they were talking about earlier?  
 25 A. GRS is -- is -- as a log of, you  
 00234:01 know, daily activities, and RMS, I think, is  
 02 resource management system.  
 03 Q. And the RMS system would provide  
 04 reminders when certain maintenance activities  
 05 needed to be undertaken for BOP?  
 06 A. Yes, sir, it's my understanding.  
 07 Q. Who would program or put in  
 08 those due dates, if you will, for the  
 09 maintenance that needed to be accomplished?  
 10 A. I have no idea.  
 11 Q. Do you know if it was someone  
 12 back in town or someone on the rig?  
 13 A. It wouldn't be on the rig, it  
 14 would be somebody in town.

Page 236:09 to 236:15

00236:09 Q. Okay. Do you know who  
 10 determined the precharge levels for the  
 11 Macondo well?  
 12 A. No, sir.  
 13 Q. Okay. That wasn't you, though,  
 14 correct?  
 15 A. No, sir, it wasn't me.

Page 237:07 to 239:25

00237:07 Q. I want to hand you what was  
 08 marked a little bit ago as 4611, which was  
 09 the result of your interview.  
 10 And these are notes as you  
 11 understand it of an interview you gave  
 12 shortly after the DEEPWATER HORIZON incident,  
 13 correct?  
 14 A. Yes, sir.  
 15 Q. And just to clarify, if we go  
 16 back to the page 3630, the circled  
 17 paragraph --  
 18 A. Yes, sir.  
 19 Q. -- are you there?  
 20 The only issue you identified  
 21 with BOP was that they occasionally wanted to  
 22 run this casing off line that would have  
 23 interfered with BOP maintenance, correct?  
 24 A. As I stated, it would have -- it  
 25 could have possibly delayed it to keep it

00238:01 from happening.  
 02 Q. But it was your understanding  
 03 that those -- those issues were always worked  
 04 out on the rig, correct?  
 05 A. Yeah.  
 06 Q. And it goes on to say on the  
 07 next page that Jay has had no issues with BP.  
 08 Was that a true statement when  
 09 you gave it?  
 10 A. It's a true statement.  
 11 Q. Sorry to jump around a little  
 12 bit, but back to 3630 above the circled  
 13 paragraph. It's entitled "Regarding --  
 14 Regarding Emergency Drills on the Rig.  
 15 They're held every Sunday. He believes they  
 16 were apparently good and helped people when  
 17 the accident happened."  
 18 Did I read that correctly?  
 19 A. Yes, sir.  
 20 Q. Are those what's referred to as  
 21 D drills?  
 22 A. I've never heard them called  
 23 D drills.  
 24 Q. Okay. What have you heard them  
 25 called?  
 00239:01 A. Fire and abandon.  
 02 Q. And those are drills that are  
 03 held with both TO and BP?  
 04 A. Yes, everybody on the rig is  
 05 accounted for.  
 06 Q. And that's something that  
 07 happened every Sunday since you were on board  
 08 the DEEPWATER HORIZON?  
 09 A. Pretty much every Sunday.  
 10 They'd throw one in every now and then just  
 11 to -- just as a surprise.  
 12 Q. Were you ever involved with  
 13 testing the shearing capabilities of the  
 14 blind shear rams for the DEEPWATER HORIZON  
 15 BOP?  
 16 A. No, sir.  
 17 Q. Are you aware of anyone at  
 18 Transocean testing the shearing capabilities  
 19 in the blind shear rams of the DEEPWATER  
 20 HORIZON BOP?  
 21 A. Not to my knowledge.  
 22 Q. What do Transocean's policies  
 23 require in terms of ensuring that the blind  
 24 shear rams are capable of cutting the drill  
 25 pipe that's being used on the well?

Page 240:03 to 240:16

00240:03 A. In my experience they go off  
 04 of -- of data supplied from Cameron as far as

05 shearing capacities.  
06 EXAMINATION BY MR. OCCHUIZZO:  
07 Q. So your understanding is that  
08 Transocean relied on information provided by  
09 Cameron regarding the shearing capacity of  
10 the DEEPWATER HORIZON BOP?  
11 A. That would be any vendor, yeah.  
12 They were power vendors.  
13 THE REPORTER:  
14 They were what? Power vendors.  
15 THE WITNESS:  
16 Equipment vendors.

Page 242:18 to 242:21

00242:18 Just to confirm, you started  
19 work at the DEEPWATER HORIZON on March in  
20 2007; is that correct?  
21 A. Yes, sir.

Page 243:22 to 244:02

00243:22 Q. Right. Earlier testimony you  
23 said you were present for all of the rig  
24 moves that the DEEP -- the DEEPWATER HORIZON  
25 made with the exception of the one between  
00244:01 Kodiak and Macondo; is that correct?  
02 A. Yes, sir.

Page 250:18 to 251:08

00250:18 Q. Okay. Stepping back to your  
19 earlier testimony today about DEEPWATER  
20 HORIZON -- correct me if I'm wrong -- there  
21 are three different pods on the DEEPWATER  
22 HORIZON, correct?  
23 A. Yes, sir.  
24 Q. And you refer to them as Pod 1,  
25 Pod 2, Pod 3?  
00251:01 A. Yes, sir.  
02 Q. And these pods can be placed in  
03 the blue position or the yellow position;  
04 they can be switched from one to one?  
05 A. Yes, sir.  
06 Q. Right. Assuming that the BOP is  
07 on the rig and not subsea?  
08 A. (Moving head up and down.)

Page 253:20 to 256:09

00253:20 Q. Okay. We will move on to Tab  
21 No. 8, please. Tab No. 8 is Bates  
22 No. TRN-INV-00034309. And reading it from

23 the top, this is an "RMS 2 Equipment History  
 24 for the Equipment BOP Control Pod Tag WCS  
 25 BOPP 003."

00254:01 And did I read that correctly,  
 02 Mr. Odenwald?  
 03 A. That number?  
 04 Q. Just the -- the top the label of  
 05 this document.  
 06 A. Well, read it one more time.  
 07 Q. "RMS 2 equipment history,  
 08 equipment BOP control pod tag WCS BOPP003."  
 09 A. Correct.  
 10 MR. MCDONELL:  
 11 And we'll submit this as  
 12 Exhibit 4617.  
 13 (Exhibit No. 4617 marked for  
 14 identification.)  
 15 EXAMINATION BY MR. MCDONELL:  
 16 Q. Is it your understanding that  
 17 WCS BOPP 003 refers to what we referred to  
 18 before as Pod No. 3?  
 19 A. It's possible. I don't know for  
 20 sure.  
 21 Q. You're not sure?  
 22 A. No.  
 23 Q. Okay. If you flip forward to --  
 24 if you look at the lower right-hand corner,  
 25 it will be page 67 of 72 of this same  
 00255:01 document. And this is Bates No.  
 02 TRN-INV-00034375.  
 03 A. You said 67?  
 04 Q. Yes. It says in -- in very  
 05 small writing it will say page 67 of 72.  
 06 Do you see that?  
 07 A. Where now?  
 08 MR. BAAY:  
 09 You're there.  
 10 A. Okay.  
 11 EXAMINATION BY MR. MCDONELL:  
 12 Q. Okay. At the top of that page,  
 13 there's an entry which I will read.  
 14 It says, "06/04/2009." It says,  
 15 "This pod was just overhauled and put into  
 16 service on" -- March 14th -- sorry --  
 17 "3-14-09."  
 18 Do you have any recollection of  
 19 a pod being overhauled and put into service  
 20 on March 4 -- sorry -- March 14, 2009?  
 21 A. The -- all three pods were in  
 22 the process of being overhauled and swapped  
 23 out --  
 24 Q. Okay.  
 25 A. -- the whole three years I was  
 00256:01 in there.  
 02 Q. Okay. But do you have any

03 recollection about --  
 04 A. Specifically, no.  
 05 Q. -- specific date --  
 06 A. No.  
 07 Q. -- or this specific pod?  
 08 A. No.  
 09 Q. Okay. Fair enough.

Page 268:02 to 269:11

00268:02 Q. Good afternoon, Mr. Odenwald.  
 03 My name is Andrew Homer, and I represent two  
 04 companies, MOEX Offshore 2007, L.L.C., and  
 05 MOEX USA Corporation. These are separate  
 06 companies, but for purposes of my question,  
 07 I'll refer to them as MOEX. Will you  
 08 understand what I mean?  
 09 A. Yes, sir.  
 10 Q. Okay. Have you heard of MOEX?  
 11 A. No, sir.  
 12 Q. Okay. So you hadn't heard of  
 13 MOEX, then, obviously before the April 20,  
 14 2010 incident?  
 15 A. No, sir.  
 16 Q. And you've never had any  
 17 communication with MOEX or its employees?  
 18 A. No, sir.  
 19 Q. And you never observed any MOEX  
 20 employees on the DEEPWATER HORIZON?  
 21 A. No, sir.  
 22 Q. And you never heard of any MOEX  
 23 employees on the DEEPWATER HORIZON?  
 24 A. No, sir, not to my knowledge.  
 25 Q. Are you aware of any other  
 00269:01 members of the subsea department, Transocean  
 02 subsea department, communicating with MOEX  
 03 employees?  
 04 A. Not that I'm aware of.  
 05 Q. Are you aware of any information  
 06 about subsea department's activities being  
 07 transmitted to MOEX?  
 08 A. No, sir.  
 09 Q. So, to your knowledge, the  
 10 subsea workbook that we talked about earlier  
 11 today was never shared with MOEX?

Page 269:14 to 269:18

00269:14 A. Not that I'm aware of.  
 15 EXAMINATION BY MR. HOMER:  
 16 Q. And, to your knowledge, the  
 17 subsea daily log that we spoke about this  
 18 morning was never shared with MOEX?



Page 269:21 to 270:05

00269:21           A.       Not -- not that I'm aware of.  
22       EXAMINATION BY MR. HOMER:  
23           Q.       And, to your knowledge, the GRS  
24       or what you thought was -- stood for the  
25       global reporting system was never made  
00270:01       available, information within it was not made  
02       available to MOEX?  
03           A.       Not that I'm aware of.  
04           Q.       Okay. Thank you. I have no  
05       further questions.

Page 271:19 to 272:15

00271:19           Q.       If leaks were detected on the  
20       pods or on the BOPs, were those generally  
21       addressed during the next rig move?  
22           A.       Yes, sir.  
23           Q.       If they were serious enough,  
24       would you pull the pods -- or pull the BOP to  
25       address the leaks?  
00272:01       A.       Yes, sir. It -- if it -- if it  
02       affects its functionality.  
03           Q.       During the time that you were on  
04       the DEEPWATER HORIZON, did any of the issues  
05       that you guys saw rise to the level that  
06       you're aware of where it required the pulling  
07       of the BOP stack in order to address an  
08       issue?  
09           A.       I don't recall a -- a stack pull  
10       that involved a leak.  
11           Q.       Do you recall a stack being  
12       pulled for any reason during the time, the  
13       three years that you were on the HORIZON?  
14           A.       Other than hurricanes, I really  
15       don't.

Page 272:19 to 273:18

00272:19           Q.       Now, we talked briefly about the  
20       fact earlier that you were on the Kodiak and  
21       it was still latched up, and by the time you  
22       got back to the DEEPWATER HORIZON on the  
23       Macondo, it was latched up again, correct?  
24           A.       Yes, sir.  
25           Q.       So you were not there for the  
00273:01       removal of the BOP from the seabed when it  
02       left the Kodiak, correct?  
03           A.       Correct.  
04           Q.       And you were not there for the  
05       splashing of the BOP at the Macondo well,  
06       correct?

07 A. Correct.  
08 Q. And you were not there in  
09 between, so you have no personal knowledge of  
10 what was done in relation to the BOP between  
11 the time it left the Kodiak well and the time  
12 it was splashed at Macondo; is that fair?  
13 A. That's fair.  
14 Q. Okay. So you have no personal  
15 knowledge of what maintenance was done or  
16 what testing was done on the BOP during that  
17 time, correct?  
18 A. No, sir, not personal knowledge.

Page 273:21 to 275:15

00273:21 And you're familiar with the RMS  
22 system, correct?  
23 A. Yes, sir.  
24 Q. And, generally, would you be the  
25 person to enter information into the RMS  
00274:01 system, or would that be something the senior  
02 does?  
03 A. Usually, on the HORIZON, the  
04 seniors would enter it in.  
05 Q. You're aware that when  
06 maintenance is performed, it is tracked in  
07 the RMS, though, correct?  
08 A. Yes, sir.  
09 Q. And that, if services are  
10 requested, for instance, if Cameron personnel  
11 were requested to come out to the rig, that  
12 would likewise be tracked in the RMS system?  
13 A. I'm thinking.  
14 Q. You understand that, when  
15 services are requested, purchase orders are  
16 issued, and purchase orders are tracked in  
17 the RMS system?  
18 A. That is correct, yes.  
19 Q. Okay. So if service techs were  
20 called out from Cameron, for instance, that  
21 information would be tracked in the RMS  
22 system because purchase orders would be  
23 issued, correct?  
24 A. It should be, yes.  
25 Q. Yes. And the same would hold  
00275:01 true if the pods, for instance, were sent  
02 back to Cameron for whatever services; those  
03 would likewise be tracked in the RMS system,  
04 correct?  
05 A. If something went back to  
06 Cameron, you know, when we were using the RMS  
07 system, which we inherited from Global -- I  
08 don't know the exact date -- but probably  
09 stuff that -- that went back when I first  
10 arrived on the rig was probably still in

11 EMPAC.  
12 Q. Are you aware that the EMPAC  
13 data was transferred over into RMS?  
14 A. All of it, no, sir, I wasn't  
15 aware of that.

Page 277:01 to 278:11

00277:01 Q. And you said that you recall  
02 that someone came out from Cameron in 2007 or  
03 2008 and worked on changing out the batteries  
04 and may have repaired some solenoids or  
05 rebuilt the solenoid, correct?  
06 A. Yes, sir.  
07 Q. And that's the only battery  
08 change that you have personal knowledge of  
09 that you witnessed, correct?  
10 A. On the rig, yes, sir.  
11 Q. On the rig?  
12 A. Yes.  
13 Q. Now, you said -- later you  
14 testified, when you were asked about the SEMs  
15 being transferred back to Cameron, you said  
16 you're not sure what they did.  
17 And that would be a true  
18 statement, would it not?  
19 A. Yes, sir.  
20 Q. If we wanted to know what  
21 work -- when work was done by Cameron or what  
22 work was done by Cameron, we would look into  
23 the RMS system or the Cameron records to  
24 determine when work was performed and what  
25 work was performed. Is that fair?  
00278:01 A. Yes, sir.  
02 Q. That would be the best place to  
03 go look?  
04 A. Yes, sir.  
05 Q. And the same that would be --  
06 hold true for not only batteries and what --  
07 and whether batteries may have been changed  
08 out, but solenoid work or any other work that  
09 was done on the pods or the BOPs themselves,  
10 correct?  
11 A. Yes, sir.

Page 278:13 to 279:17

00278:13 You have been to well control  
14 school twice?  
15 A. Yes, sir.  
16 Q. That was only internal at  
17 Transocean, correct?  
18 A. Yes, sir.  
19 Q. You've not been to Randy Smith

20 training or any of the -- any of the external  
 21 schools, correct?  
 22 A. No, sir.  
 23 Q. You have not?  
 24 A. No, sir.  
 25 Q. Okay. You're not a drilling  
 00279:01 engineer, are you?  
 02 A. No, sir.  
 03 Q. You're not a mechanical  
 04 engineer?  
 05 A. No, sir.  
 06 Q. And you're not a petroleum  
 07 engineer, correct?  
 08 A. No, sir.  
 09 Q. And you hold no engineering  
 10 licenses, correct?  
 11 A. No, sir.  
 12 Q. Have you ever worked for a BOP  
 13 manufacturer?  
 14 A. No, sir.  
 15 Q. Have you ever designed a blowout  
 16 preventer?  
 17 A. No, sir.

Page 280:25 to 283:25

00280:25 Q. You mentioned a little bit about  
 00281:01 testing earlier. I want to make sure that I  
 02 understand it.  
 03 Every rig move, the BOP is  
 04 tested; is that right?  
 05 A. Yes, sir.  
 06 Q. Now, you would not have put the  
 07 BOP subsea after a move unless you believed  
 08 it was working intend -- as intended and  
 09 working properly, would you?  
 10 A. Correct.  
 11 Q. And you and the other members of  
 12 the Transocean team would have assured  
 13 yourselves that the BOP was in good working  
 14 order before you placed it subsea, right?  
 15 A. Yes, sir.  
 16 Q. And you performed weekly  
 17 function tests, right?  
 18 A. Correct.  
 19 Q. And you did pressure testing  
 20 every 14 days, right?  
 21 A. Correct.  
 22 Q. And if there was any issue with  
 23 the BOPs, you personally would have -- that  
 24 you thought would affect the safety of the  
 25 rig and the crew and the environment, you  
 00282:01 would not have allowed that drilling to go  
 02 forward through the use of that BOP, would  
 03 you?

04 A. If I saw enough, I -- I ran  
05 across a issue during my tower, I would have  
06 reported it to my -- to my senior subsea.  
07 Q. Do you recall reporting any such  
08 issues during Macondo?  
09 A. No, sir.  
10 Q. And the 14-day testing, that's  
11 an MMS requirement, is it not?  
12 A. Yes, sir, at that time.  
13 Q. And those testings, the testing  
14 that was done, was that required to be  
15 recorded and filed?  
16 A. As far as the pressure testing  
17 or the function testing?  
18 Q. Either one. Let's do both.  
19 A. The pressure testing, they were  
20 using the BP -- I think they called it  
21 digitally analyzed within the computer  
22 program, and Halliburton administered that  
23 and -- and when the testing was all done,  
24 they printed it all up and brought it to the  
25 company man's office. And -- and everybody  
00283:01 looked at it and signed off on it. And as  
02 far as the function testing, we'd -- we'd do  
03 the sheets and type them up and get the  
04 signatures and make copies. And it was  
05 copied to the toolpusher's office, company  
06 man's office in subsea.  
07 Q. During the time you were at the  
08 Macondo, the BOP passed the function tests  
09 and the pressure tests, did they not?  
10 A. Yes, sir.  
11 Q. In your time on the DEEPWATER  
12 HORIZON, you testified before that you were  
13 involved in kicks.  
14 Do you recall that?  
15 A. Yes, sir.  
16 Q. In each instance where you were  
17 on the DEEPWATER HORIZON and you were  
18 involved in a kick, the blowout -- the  
19 blowout preventer functioned as intended and  
20 was activated to control that kick, did it  
21 not?  
22 A. Yes, sir.  
23 Q. And that kick was eventually  
24 circulated out, was it not?  
25 A. Yes, sir.

Page 284:24 to 285:01

00284:24 Q. Okay. Sir, I think you'll agree  
25 with me that the earlier a kick is detected,  
00285:01 the easier it is to manage?

Page 285:04 to 285:15

00285:04           A.       That's what they teach us in  
05 well control.  
06 EXAMINATION BY MR. GANUCHEAU:  
07       Q.       The earlier a kick detected,  
08 it -- the less flow into the well, correct?  
09       A.       That's what they teach us in  
10 well control.  
11       Q.       And you're also taught that you  
12 want to try to keep the hydrocarbons below  
13 the BOP so that you can control it through  
14 the BOP and circulate that kick out, correct?  
15       A.       Yes, sir.

Page 286:01 to 286:21

00286:01           Q.       Did you have any communications  
02 with the folks at Cameron back in the office,  
03 back when -- via the telephone or e-mail  
04 communications?  
05       A.       No, sir, I never -- I never --  
06 Senior -- senior talked to them.  
07       Q.       Your only commun -- your only  
08 interaction with the Cameron folks was on the  
09 vessel itself?  
10       A.       Correct.  
11       Q.       When was the last time you  
12 recall having someone from Cameron on the  
13 vessel that you're aware?  
14       A.       The earliest possible would have  
15 been September of '09. That was the last rig  
16 move I was there, I think, for. And I can't  
17 recall whether there was anybody there or  
18 not.  
19       Q.       The records, RMS or the Cameron  
20 records, would tell us that, correct?  
21       A.       They should.

Page 287:08 to 287:15

00287:08           Q.       With respect to your experience  
09 with the Cameron folks, did Cameron do what  
10 you asked them to do?  
11       A.       To the best of my knowledge.  
12       Q.       That's your recollection?  
13       A.       Yes, sir. I didn't -- like I  
14 said, I didn't have a whole lot of inter --  
15 interaction with them, but I don't . . .