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1 IN THE UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY
2 Civ. No. 04-3749 (JAP)
Hon. Joel A. Pisano
3

4 _____)
IN RE ROYAL DUTCH/SHELL)
5 TRANSPORT SECURITIES)
LITIGATION)
6 _____)
7

VIDEOTAPED DEPOSITION UPON
8 ORAL EXAMINATION
OF
9 ANTON BARENDREGT
10 VOLUME I

11 Taken on:
12 Monday, 19 February, 2007
Commencing at 10:52 a.m.

13 Taken at:

14 The Hague Zurich Tower
15 Muzenstraat 89
2511 WB The Hague
16 The Netherlands
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22 REPORTED BY: FREDERICK WEISS, CSR, CM

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the Class:
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BERNSTEIN, LIEBHARD & LIFSHITZ, LLP

Deponent: Anton Barendregt

The Videographer: Richard Bly

Court Reporter: Frederick Weiss

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I N D E X

2 DEPONENT
3 ANTON BARENDREGT
4 Examination Page No:
5
6 Examination by Mr. Haber 9

EXHIBIT INDEX

9 EXHIBIT Page No:
10
11 Barendregt Exhibit 1 - 42
12 Shell document entitled "Creating Value
13 Through Entrepreneurial Management of
14 Hydrocarbon Resource Volumes" bearing Bates
15 Nos. GUI000398 through GUI 000422
16 Barendregt Exhibit 2 - 97
17 Draft Note dated 5 May, 2002 authored by
18 Anton A. Barendregt, bearing Bates Nos.
19 RJW01001167 through RJW01001170
20 Barendregt Exhibit 3 - 107
21 Note dated 31 May, 2002 authored by Anton
22 Barendregt regarding SEC Proved Reserves
0006 Audit, with Attachments 1, 2, 3 and 4
Bearing Bates Nos. RJW00061605 - RJW00061620

I N D E X - continued

EXHIBIT INDEX

3 EXHIBIT Page No:
4

Barendregt Exhibit 4 - 127

5

"2002 SEC RESERVES AUDIT BRUNEI -

6 CONCLUSIONS" dated February 15, 2004 consisting

Of seven slides bearing Bates Nos. RJW01001171 -

7 RJW01001177

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1 PROCEEDINGS --

2 THE VIDEOGRAPHER: This is the

3 Video Operator speaking, Richard Bley, of

4 LegalLink Action Video located at 420 Lexington

5 Avenue, New York, New York.

6 Today's date is February 19th,

7 2007. The time on the record is 10:52 a.m.

8 We are in a conference room in The

9 Hague, Netherlands to take the videotape

10 deposition of Anton Barendregt in the matter of In

11 Re: Royal Dutch/Shell Transport Securities

12 litigation in the United States District Court for

13 the District of New Jersey, Civil Action Number

14 04-3749 (JAP), consolidated cases before Honorable

15 Joel A. Pisano.

16 Will counsel please introduce

17 themselves?

18 MR. HABER: Jeffrey Haber,

19 Bernstein, Liebhard & Lifshitz on behalf of lead

20 Plaintiff, Peter M. Wood and The Class.

21 MS. COHEN: Rebecca Cohen,

22 Bernstein Liebhard & Lifshitz on behalf of lead
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1 Plaintiff, Peter M. Wood and The Class.

2 MR. ADLER: Derek Adler, Hughes
3 Hubbard and Reed on behalf of
4 PriceWaterhouseCoopers.

5 MS. MARIA: Leslie Maria, LeBoeuf
6 Lamb, on behalf of the witness.

7 MR. CORSON: Nicholas Corson on
8 behalf of KPMG Accountants NV, and I am
9 accompanied today by Leen Groen and Alastair
10 Hunter, both from KPMG.

11 MR. DAVIS: Sidney Davis on behalf
12 of KPMG.

13 MS. WICKHEM: Rebecca Wickhem,
14 Foley & Lardner LLP on behalf of Judith Boynton.

15 MR. GOLDSTEIN: Joseph Goldstein of
16 Mayer, Brown, Rowe & Maw on behalf of Sir Philip
17 Watts.

18 MR. MORSE: Adriaen Morse, Mayer,
19 Brown for Phil Watts.

20 MR. WARE: David Ware, Debevoise &
21 Plimpton, LLP on behalf of Royal Dutch/Shell
22 Transport and Anton Barendregt.

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1 MR. EADIE: James Eadie of
2 Blackstone Chambers, UK counsel for Mr.
3 Barendregt.

4 MR. WEED: Earl Weed, in-house for
5 Shell.

6 MR. TUTTLE: Jonathan Tuttle,
7 Debevoise & Plimpton LLP on behalf of Shell
8 Defendants and the witness here today.

9 MR. BEST: Stephen Best, LeBoeuf,
10 Lamb, Greene & McRae LLP, Washington D.C. on
11 behalf of Mr. Barendregt in his individual
12 capacity.

13 THE VIDEOGRAPHER: Can we swear the
14 witness?

15 ANTON BARENDREGT,
16 Called as a Witness by counsel for the Plaintiffs,
17 after being duly sworn, testified as follows:

18 EXAMINATION BY MR. HABER

19 Q. Good morning, Mr. Barendregt.

20 A. Good morning.

21 Q. As you probably have been advised,
22 I am going to be asking you a series of questions
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1 over the next few days, several days. I am
2 looking for your best recollection and your
3 knowledge of the events and circumstances that
4 concern the recategorization of reserves at Shell.

5 If I ask you a question and you do
6 not understand the question, will you let me know?

7 A. (Nodding) Yes.

8 Q. And just as I am going through, a
9 lot of these sort of ground rules, if you will,
10 are just an understanding between us so that the
11 record is clear and we get all of your answers.

12 It's important for you to
13 articulate your answers with a yes or a no. Head
14 nods and Mm-Hmms, while they get picked up at the
15 video operator, they don't get picked up with the
16 stenographer.

17 So it's important for you to always
18 articulate and answer.

19 A. I understand.

20 Q. Thank you.

21 If at any time there is a question
22 that I ask that you would like me to rephrase or
0011

1 reask, will you let me know?

2 A. I will.

3 Q. And if you don't hear a question,
4 will you tell me?

5 A. I will.

6 Q. If you don't know the answer to a
7 question, will you let me know that as well?

8 A. Yes.

9 Q. Another occurrence, common
10 occurrence -- always unintentional, but it happens
11 anyway -- during question and answer, I will
12 sometimes speak over you or you will sometimes
13 speak over me.

14 I will do my best to make sure that
15 I don't do that and let you finish your answer

16 before I follow with a question, and I would just
17 ask that you wait for me to finish my question
18 before you answer. Is that okay with you?

19 A. I understand, yes.

20 Q. Good. And finally, if you need a
21 break, please let me know. I will accommodate any
22 requests for a break. The only exception will be

0012

1 if there is a question pending, in which case I
2 will ask for an answer and then we will break.

3 Okay?

4 A. I understand, yes.

5 Q. For the record, can you tell us
6 where you currently reside?

7 A. I reside in a place called
8 Wassenaar, not far from The Hague, in an address
9 Iepenlaan number 7.

10 Q. I take it you went to a university?

11 A. Yes, I did.

12 Q. And where did you attend
13 university?

14 A. In Delft, here in Holland.

15 Q. In what year did you graduate?

16 A. In 1968.

17 Q. Did you graduate with a degree?

18 A. An engineering degree in physics,
19 yes.

20 Q. Is this degree what we would have
21 in the United States as an undergraduate degree,
22 or would that include a higher degree such as a

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1 masters?

2 A. It would be at the level of a
3 Masters Degree.

4 Q. When you graduated, where did you
5 first get a job?

6 A. I got a job with Shell in
7 Amsterdam, the Amsterdam laboratory, where I was
8 employed as a mathematician/physicist.

9 Q. And how long were you in this
10 position?

11 A. For about a year.

12 Q. What did you do next?

13 A. Next I was transferred to The
14 Hague, to work with a group who had been
15 developing a software database administration
16 system for group exploration and production
17 companies.

18 Q. And how long were you in that
19 position?

20 A. That was approximately a year
21 and-a-half, beginning of 1969 to 1971 so it would
22 have been more than that. It was in fact two
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1 and-a-half years. It was originally for just one
2 year but then it got extend.

3 Q. So this takes us to around 1971?

4 A. Yes. Yes.

5 Q. And your role in this position was
6 to develop software?

7 A. To help develop software and to
8 help it being implemented and actually installed
9 on the computers of various exploration and
10 production companies.

11 Q. What was the purpose for the
12 software?

13 A. It was a database, a new database
14 administration system. It was felt in exploration
15 and production that there was a lack of tools to
16 store the large amount of data that was coming in
17 from various parts of the operation, from well
18 logs and all the way to production data.

19 Q. Where did you go after this
20 position?

21 A. I was transferred to Brunei for
22 about a year and-a-half until the end of 1972,
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1 where I was made in charge of the conversion of
2 all computer programs from the 19 -- from the
3 previous ICL computer to the new IBM 360 computer
4 that they had just purchased.

5 Q. Did you have a title while you were
6 in Brunei?

7 A. I believe it was Team Leader,
8 computer conversion.

9 Q. So you were there from around 1971

10 to the middle of 1972?

11 A. No. The end of 1972.

12 Q. The end of '72.

13 Did you have any responsibilities
14 with regard to any field work that was being
15 performed in Brunei?

16 A. No. Not at that time.

17 Q. Did there come a time when you had
18 responsibilities for field work?

19 A. Yes. Much later.

20 Q. So you had another stint in Brunei?

21 A. Yes.

22 Q. So when you finished with this

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1 position in Brunei in 1972, where did you go next?

2 A. I went back to The Hague, to the
3 central office in The Hague, where I joined the
4 group who were developing new kinds of software,
5 not specifically for exploration production
6 purposes, but for more general purposes.

7 And that assignment lasted until
8 the end of 1973.

9 Q. Where did you go after that?

10 A. I went to Shell International
11 Chemicals in London as a computer systems designer
12 and analyst.

13 Q. And how long were you in that
14 position?

15 A. It was until September of 1975.

16 Q. And where did you go after Shell
17 International Chemicals?

18 A. At that time I decided to make a
19 career change, and I applied for joining the
20 exploration and production function.

21 Before that time, I had been
22 working in the information and computing function.

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1 That career move was agreed and I was transferred
2 to the NAM, N-A-M for short, in Assen, who are the
3 Dutch exploration and production operating arm for
4 Shell.

5 Q. And what made you decide on this
6 career change?

7 A. I found that in my previous
8 assignments in the information and computer
9 section, I was getting more and more away from my
10 technical background; and also in my periods in
11 Brunei and in visits to other EP operating
12 companies in the years before, I had developed an
13 interest in exploration production activity.

14 So these two factors combined led
15 me to a request for a career move.

16 Q. When you got assigned to NAM, how
17 long were you in the position that you were given?

18 A. I was given the position of
19 Reservoir Engineer, and that position I kept until
20 June 1978.

21 Q. Had you been given any training to
22 serve as a Reservoir Engineer?

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1 A. Absolutely. Yes. I had numerous
2 training assignments in The Hague during those
3 first years while I was in Assen.

4 Q. So when you got assigned to NAM,
5 that's when you had -- in the initial period you
6 were given the training?

7 A. Yes. I had to join classes and of
8 course I had to fit the schedule of these classes.
9 There wasn't an individual training scheme set up.
10 I had to join these classes, but they started
11 almost within the first week that I joined NAM in
12 Assen.

13 Q. In total, how long was the training
14 courses that you had taken?

15 A. Difficult to say. All I can say is
16 that the standard set of training courses that new
17 graduates take typically take about three months.
18 So I guess since mine was prepared at fairly late
19 notice, I had to join the classes that still had
20 time available.

21 So I didn't get them as one bunch,
22 but I got them with intervals. But all in all,

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1 they must have added up to those three months.

2 Q. Did any of this training course
3 work include reserves reporting requirements?

4 A. Reserves calculation requirements,
5 there was a training course on reservoir
6 engineering and that included reserves and
7 reporting requirements, yes.

8 Q. Do you recall how long that course
9 work was?

10 A. I believe it was a two-week course.

11 Q. Do you recall if there was any --
12 any lecture or discussion within this course work
13 of SEC requirements for reporting Proved Reserves?

14 A. No. Because this was 1975 and this
15 was before the SEC came out with that requirement
16 for their requirement of Proved Reserves.

17 Q. Did you take any subsequent
18 training in reserves reporting?

19 A. Yes. That was during my next
20 assignment.

21 Q. And what was your next assignment?

22 A. My next assignment was as a

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1 Reservoir Engineer in Sarawak in Malaysia, and
2 that lasted from June 1978 until late 1981.

3 Q. What were your responsibilities in
4 your assignment in Malasia?

5 A. I was Reservoir Engineer for the
6 new gas province that had been discovered and that
7 was being prepared for development in Central
8 Luconia Gas Province.

9 And later on, I was made -- I
10 became in charge of the -- of a group of reservoir
11 engineers consisting of three reservoir engineers
12 responsible for oil and gas fields in the southern
13 South China Sea offshore fields. And that
14 included the Central Luconia fields but also some
15 smaller oil fields nearby.

16 Q. Did you have any responsibility for
17 the estimation of Proved Reserves in this
18 position?

19 A. Yes, I did.

20 Q. Can you discuss a little bit what
21 that entailed?

22 A. The gas fields were, like I said,

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1 they were new gas fields, they had been discovered
2 in the previous five to ten years, and they were
3 going to be developed by means of cluster
4 development running, because they were pretty
5 large fields and quite prolific.

6 We didn't really have sophisticated
7 -- the sophisticated simulation tools available in
8 those days that we would have available now, but
9 some crude simulation work was done at that time.

10 In fact, four gas fields, it was
11 found that it wasn't so much the subsurface for
12 these particular fields because that was
13 relatively easy, but it was the integration with
14 the surface facilities that turned out to be a
15 problem.

16 A problem that needed technical
17 evaluation for which at that time in Sarawak there
18 were no tools available. As it happened, in one
19 of my last few months in the NAM in Assen, I had
20 developed such a tool integrating surface with
21 subsurface facilities and thereby getting more
22 reliable forecasts of gas concentrate rates. I
0022

1 had taken this program with me to Sarawak and I
2 applied it there with quite some success.

3 Q. Now, when I asked the question
4 about the SEC reporting requirements, I did stand
5 -- I was stood corrected, if you will. I stand
6 corrected in a sense that the SEC did not
7 promulgate its rule until 1978.

8 And in your answer, you said that
9 you had some training with regard to the SEC rule
10 in your subsequent position.

11 Is this the position you are
12 referring to, or that you referred to?

13 MR. TUTTLE: Objection.

14 Mischaracterization of the testimony. You can
15 answer.

16 THE WITNESS:

17 A. The way I interpreted your question
18 was did we report Proved Reserves in those days in
19 the days in Assen? And the answer is yes, we did.

20 Shell had developed in the early

21 70s -- which is before I joined the exploration
22 production function, Shell had developed a method
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1 which at that time was unique in the industry, of
2 determining not only what we call the expectation
3 or best estimate reserves, but also determining a
4 more conservative and therefore a more robust
5 estimate of proven -- what they called proven
6 reserves.

7 This was done on the basis of
8 probabilistic reserves, and that was adequately --
9 that was extensively dealt with in the reservoir
10 engineering courses that I followed.

11 So I was used to reporting Proved
12 Reserves already straight from my first month in
13 my assignment in Assen.

14 Q. When you got to Malaysia, were you
15 given any course work with regard to the SEC rule
16 on reporting Proved Reserves?

17 A. Not course work as such. But when
18 the new guidance was introduced, I believe I am
19 reaching back into the early recesses of my brain
20 now. But I believe that it took sometime, a few
21 months if not a year, before it actually was
22 filtered down from The Hague.

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1 The first dealings, when the
2 request by the SEC, the first dealings were done
3 in The Hague. And they were then ultimately
4 translated into instructions, coming down from The
5 Hague to the operating companies, how to report
6 Proved Reserves.

7 Q. Were these instructions embodied in
8 guidelines that were created in The Hague and
9 disseminated to the various operating units?

10 A. There must have been some sort of
11 document, but I honestly can't remember in what
12 form that took.

13 Q. Other than the instructions that
14 came down from The Hague, did you have any
15 training or course work concerning the SEC
16 requirements?

17 A. No. I think at this stage, it's

18 useful to remind you that when the SEC came
19 forward with their request for Proved Reserves,
20 within Shell that wasn't seen as a major new
21 request. It was just a request for some
22 additional data, yes.

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1 But it was data that we were
2 already in the process of preparing internally.
3 And therefore, it was a matter of picking up the
4 data and putting it together in the report and
5 reporting it to the SEC.

6 I understand, but I wasn't there,
7 but I understand that at that time, there was
8 contact between Shell, The Hague, the central
9 office in The Hague and the SEC describing the
10 position that Shell was in, i.e., that they were
11 already having their own procedures for developing
12 Proved Reserves.

13 And they obtained an agreement with
14 the SEC, not a formal signed agreement, but at
15 least some form of acceptance by the SEC that
16 Shell would continue to use their own internal
17 methods, which the way it was seen by Shell were
18 fully in line to the new SEC definitions.

19 Q. What was the basis of your
20 understanding that there was this contact between
21 The Hague central office and the SEC?

22 A. Statements made by central office.

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1 There must have been some remarks made in the
2 announcing Telexes that were sent out to the
3 operating companies along the lines, and you found
4 this repeated, because since -- and I had some
5 various assignments in the central office and you
6 found these understandings repeated to you.

7 So it was just, if you like,
8 general accepted wisdom within Shell and within
9 the professional E&P community that this agreement
10 had been reached with the SEC and that Shell was
11 essentially following their own previous
12 guideline.

13 Q. And this, for purposes of
14 timeframe, is sometime after 1978 --

15 A. Yes. Yes.

16 Q. -- not too far from when the rule
17 was promulgated?

18 MR. TUTTLE: Objection to form.
19 You can answer your best recollection at that
20 timeframe.

21 THE WITNESS:

22 A. I believe it was the '79 reserves
0027

1 reporting that we first applied it throughout the
2 group.

3 BY MR. HABER:

4 Q. So all of the Telexes and the
5 communications would have occurred prior to the
6 1979 reporting?

7 A. If there were any between the
8 central office and the SEC, then they would have,
9 yes.

10 Q. Now, in your earlier answer, you
11 also said that regarding the SEC communications,
12 you said, "And they obtained an agreement with the
13 SEC, not a formal signed agreement, but at least
14 some form of acceptance by the SEC that Shell
15 would continue to use their own internal methods,
16 which the way it was seen by Shell were fully in
17 line to the new SEC definitions."

18 A. Yes.

19 Q. It's the last part of that answer
20 that I want to ask you a couple of questions. Who
21 had determined that Shell's guidelines were fully
22 in line with the new SEC rule?

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1 A. If you are asking for a specific
2 person, I can only speculate. I don't know. I
3 wasn't there in the center at the time, and that
4 is where of course in the center in The Hague, and
5 that is where all the discussions took place.

6 Q. Over time, during your tenure at
7 Shell, did that -- did that position ever change?

8 A. Not really, no.

9 Q. And I know I am jumping ahead now
10 in terms of your CV, but you became the Group
11 Reserves Auditor.

12 Correct?

13 A. (Nodding)

14 Q. And when did you become the Group
15 Reserves Auditor?

16 A. That was January/February 1999.

17 Q. And during that period, how long
18 did you hold that position?

19 A. I held that position 5 years.

20 Q. So sometime early in 2004?

21 A. Yes. Sometime early in January
22 2004.

0029

1 Q. During your tenure as Group
2 Reserves Auditor, did the view that you just
3 testified about that Shell's guidelines were fully
4 in line with the SEC rule, did that change?

5 MR. BEST: Objection.

6 Mischaracterization of his testimony.

7 MR. TUTTLE: Same objection.

8 BY MR. HABER:

9 Q. You can answer.

10 A. My view did change. I think you
11 can find it in various reports that no doubt you
12 have access to.

13 Not initially, but gradually, the
14 view did change to the extent that I felt that the
15 group guidelines needed corrections, needed
16 adjustments in order to become more closely
17 aligned with the then new SEC guidance as it had
18 been published in 2001.

19 Q. And that guidance, you are
20 referring to the staff interpretive guidance that
21 was released in March of 2001?

22 A. Correct, yes.

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1 Q. And when I say "staff interpretive
2 guidance", you understand that I am referring to
3 the staff of the SEC?

4 A. Yes.

5 Q. Now, up until this point, was it
6 the view within Shell that Shell's guidelines were
7 compliant with the SEC rule?

8 A. Absolutely, yes. And in fact,

9 there was some evidence to support that view. And
10 in 1997, a comparison was made between the
11 reserves bookings for some North Sea fields, both
12 on the UK side and on the Netherlands side. A
13 comparison was made with the Shell -- between the
14 Shell Proved Reserves bookings and those booked by
15 Exxon, who were the 50/50 partner in both of these
16 ventures.

17 And it turned out that Exxon's
18 Proved Reserves figures were higher and some of
19 them quite a lot higher than the Shell figures.

20 So that strengthened Shell in their
21 belief that their reserves estimation methods
22 were, if anything, more conservative than perhaps
0031

1 the SEC definitions would require.

2 Q. Do you know if, as a consequence of
3 this analysis that you just described, Shell
4 revised its guidelines?

5 A. Yes.

6 Q. And were those guidelines changed
7 in 1998?

8 A. They were.

9 Q. Do you have an understanding of the
10 circumstances as to how the guidelines came to be
11 revised?

12 MR. TUTTLE: Objection to form.

13 THE WITNESS: After this
14 comparison, it was felt that the group guidelines
15 could do with a sharpening and a change where
16 required of the method in which reserves were
17 calculated.

18 As I said before, since 1972, the
19 methods in which reserves and particularly Proved
20 Reserves were calculated was done on the basis of
21 probabilistics, which is a very appropriate method
22 for particularly new fields where uncertainties
0032

1 are large.

2 But what one tended to see in
3 practice is that a proved and expectation reserves
4 estimate was made for a field, a field would be
5 taken into production.

6 So over the years, the proved and

7 expectation reserves estimates of the field would
8 be reduced by the amount of production that was
9 taking place in that field.

10 But in some cases, what was not
11 done. What should have been done was that the
12 original proved and expectation reserve estimates
13 were changed, and particularly the proved
14 estimate, should grow with the amount of
15 cumulative production that was taken from the
16 field.

17 The net result was that remaining
18 Proved Reserves, which is total Proved Reserves
19 minus the cumulative production, in those fields
20 tended to be quite a lot smaller in comparison to
21 remaining expectation reserves.

22 And therefore the proved volumes

0033

1 in -- and we are dealing with mature fields here,
2 the Proved Reserves of mature fields tended to be
3 quite a lot more conservative.

4 Therefore the recommendation was
5 made that in those mature fields, we could move
6 towards what was called a deterministic
7 determination, deterministic evaluation of the
8 reserves, which was in fact more in line with the
9 practice still prevailing in the industry.

10 I mention the word deterministic as
11 opposed to probabilistic, which was the method
12 that Shell had introduced in 1972.

13 The industry, the rest of the
14 industry, the other major oil companies did follow
15 what Shell had done in the early '70s and they had
16 stuck with the deterministic method.

17 And that, like I said, led to
18 higher reserve estimates in more mature fields.

19 Q. Now, at or about this time in 1988,
20 do you know what method the SEC preferred, the
21 deterministic as opposed to probabilistic?

22 MR. TUTTLE: Objection to form.

0034

1 Foundation.

2 MR. BEST: Same objection.

3 BY MR. HABER:

4 Q. I will rephrase. Do you know if
5 the SEC had a preference for a methodology of
6 determining reserves?

7 A. The short answer is no. But did I
8 know whether the SEC had a preference.

9 All I can say is that the SEC had a
10 statement which certainly was published in their
11 additional guidance in 2001.

12 But even before, I think, they had
13 made their view public, that yes, they were aware
14 of the method of probabilistics reserve
15 estimation.

16 And in fact, and I am just
17 paraphrasing it now, but in fact they couldn't
18 care whether people use it or not as long as they
19 stuck or remained within the original guidelines.

20 And that, as I recollect from those
21 days, was the attitude of the SEC.

22 Q. When you say stick with the
0035

1 original guidelines, are you referring to rule --

2 A. The original SEC definition.

3 Q. So that would be Rule 4-10 of
4 regulation SX?

5 A. That's the one, yes.

6 Q. Now, a moment ago you mentioned
7 expectation reserves.

8 For the record, what do you mean by
9 expectation reserves?

10 A. Another way to describe them is
11 your best estimate, middle of the road estimate.
12 Taking all uncertainties into account, what would
13 be the most likely estimate of reserves that you
14 can come up with.

15 Q. Now, I have heard the term P50,
16 P85.

17 Does that relate to expectation
18 reserves?

19 A. Not strictly speaking, but in
20 practice, yes. P50 is in fact the point at which
21 the value is as likely to be exceeded or to be --
22 to be turning out to be less than that particular

0036

1 value.

2 And for a symmetrical
3 distribution -- we are talking technicalities now,
4 before the symmetrical distribution, they are one
5 and the same. But if they are not a symmetrical
6 distribution, they are different, but not a lot.

7 Q. Now, in your earlier answer, you
8 referred to a recommendation regarding mature
9 fields.

10 And what you said was, "therefore
11 the recommendation was made that those mature
12 fields, we can move towards what is called a
13 deterministic determination."

14 A. Yes.

15 Q. Who made the recommendation?

16 A. It was done by a value assurance
17 team, I believe was the name. I am not 100
18 percent sure whether that was the name. But
19 anyway, there was a team setup in 1997 after the
20 comparison with the Exxon fields to try and see
21 whether they could -- whether Shell should come up
22 with new reserves, guidelines in this respect.

0037

1 And that team made the
2 recommendation in 1998, and it was then
3 implemented in the Shell reserves guidelines at
4 the end of 1998.

5 Q. Now, this team, have you heard a
6 team referred to as a Value Creation Team?

7 A. That's the one, yes. Yes.

8 Q. And do you recall there being a
9 Value Creation Team whose purpose was to review
10 hydrocarbon resource maturation?

11 A. Yes.

12 Q. Were you a member of that team?

13 A. No, I was not. I was at that time
14 development manager in Lowestoft in charge of the
15 southern North Sea UK gas fields.

16 Q. That would be part of Shell Expro?

17 A. Yes.

18 Q. At the time the Value Creation Team
19 was created, were you aware of its creation?

20 A. Yes, I was, yes.

21 Q. And how is it you became aware of
22 its creation?

0038

1 A. In formal context, I think, with
2 people still in the central office; its first
3 creation. There was a formal announcement of a
4 workshop made by that team once it had been set
5 up, and that I took part in. That was a workshop
6 intended for reserves estimators and reservoir
7 engineers of the major E&P companies.

8 And that was held in The Hague and
9 I was attending that.

10 Q. And what --

11 A. But before that, I had heard about
12 the team being installed and I can't recollect
13 precisely how, but it must have been through word
14 of mouth.

15 Q. When was this workshop --

16 A. Held?

17 Q. Yes. Thank you. We get tongue
18 tied.

19 A. I believe it must have been
20 somewhat early in 1998.

21 Q. This workshop was conducted prior
22 to the guideline changes --

0039

1 A. Yes.

2 Q. -- the official changes?

3 A. Yes.

4 Q. How long was the workshop?

5 A. A few days, three days, maybe. I
6 can't be sure.

7 Q. Do you recall the sum and substance
8 of what was discussed during the workshop, at
9 least as to what you attended?

10 A. Again, it's a long time ago --

11 Q. I understand.

12 A. -- so I can't be too sure. But
13 what I remember is that at that time -- at that
14 time the group had already formed its opinion that
15 seeing the comparison with Exxon, and they were
16 thinking of, say, introducing a new way of

17 calculating reserves in mature fields.

18 And they held the workshop to see
19 whether they had perhaps overlooked something,
20 whether this introduction of this new way of
21 estimating reserves would lead to problems in the
22 various operating companies, and that's why they
0040

1 held the workshop to hear the views of the people
2 with the coal face, people in the field.

3 MR. TUTTLE: Coal or cold?

4 THE WITNESS: Coal face. It's a UK
5 expression.

6 MR. TUTTLE: Yes.

7 THE WITNESS: People who are
8 actually working at the point where it all
9 happened.

10 MR. TUTTLE: Right.

11 BY MR. HABER:

12 Q. Do you know if there was a sponsor
13 of the Value Creation Team?

14 A. There may have been. I can't
15 remember.

16 Q. Do you know a Hank Dijkgraf,
17 Dijkgraf?

18 A. Yes, I know.

19 Q. Who is Mr. Dijkgraf?

20 A. I expect you want me to answer the
21 question who was Mr. Dijkgraf at the time?

22 Q. Correct.

0041

1 A. I believe he was at that time in
2 charge of Shell International E&P new ventures. I
3 believe it was called SIPV, something like that.
4 And one of his responsibilities was to have
5 reporting to him a section that was in charge of
6 what was called group reporting, which included
7 reserves reporting externally and internally, as a
8 matter of fact.

9 Q. Do you know if Mr. Dijkgraf had any
10 involvement in the creation of the guideline
11 concerning resource maturation?

12 A. The short answer is I don't know.
13 I wasn't there. I don't know precisely how it was

14 instituted.

15 Q. Do you know who Philip Watts is and
16 what his role was at the time?

17 A. Yes. He was the chief executive of
18 E&P at the time.

19 Q. Do you know if Mr. Watts sponsored
20 the VCT, the Value Creation Team?

21 A. I can't tell you that. I don't
22 know it.

0042

1 Q. Do you know if there were any
2 recommendations made by the Value Creation Team
3 concerning hydrocarbon resource maturations?

4 MR. TUTTLE: Objection. Asked and
5 answered.

6 THE WITNESS: Yes. They made
7 recommendations. Like I said earlier, they made
8 recommendations regarding the determination of
9 reserves to the group that was responsible for
10 issuing the Shell guidelines.

11 (Barendregt Exhibit No. 1 was
12 marked for identification).

13 BY MR. HABER:

14 Q. We have just handed what we have
15 just marked as Barendregt Exhibit 1. It's a
16 multipage document that says as a subject, if you
17 will, at the top of the page it says, "Creating
18 Value Through Entrepreneurial Management of
19 Hydrocarbon Resource Volumes."

20 And then underneath it, there is a
21 Shell logo, and it says, "Volumes to Value."

22 There are two Bates ranges, the

0043

1 first is V00101293 through V00101317, and the
2 second range is GUI 000398 to GUI 000422.

3 Mr. Barendregt, have you seen this
4 document before today?

5 A. I must have, although I don't
6 specifically remember.

7 Q. Do you recognize this document as
8 -- well, withdrawn.

9 What do you recognize this document
10 to be?

11 A. I see the title, and I -- it seems
12 to be the report that was produced by the Value
13 Creation Team that was looking into resource
14 reporting.

15 Q. Do you know who the members were
16 that were responsible for this document?

17 A. Only the Chairman, who was Stuart
18 Evans.

19 Q. Who was Stuart Evans at the time?

20 A. He was the head of group, and the
21 name of that group escapes me. The group that was
22 set up in 1996 consisting of a group of senior E&P

0044

1 consultants and a group of IT -- IT specialists.

2 Q. Did you ever work with Mr. Evans?

3 A. Yes, I did, for a year before I
4 went to Lowestoft in end of 1996.

5 Q. Do you know if Exhibit 1 was
6 reviewed by Shell's external auditors?

7 A. No, I don't.

8 Q. Do you know who Shell's external
9 auditors are or who they were at the time?

10 A. I was aware of KPMG at that time
11 sitting where I was in Lowestoft, and I may have
12 been aware of PriceWaterhouseCoopers, but I don't
13 remember that.

14 Q. And are you aware of a process
15 called the ARPR?

16 A. Yes.

17 Q. What is the ARPR?

18 A. Annual review of petroleum
19 resources.

20 Q. And what's the purpose of this
21 process?

22 A. It's a name that is given to the

0045

1 process at the end of the year when every company
2 has to put together its estimates of produceable
3 reserves and report these to the center. It's an
4 activity that peaks or it used to peak, at least,
5 in those days in the month of January.

6 Q. When you say produceable reserves,
7 are you referring to Proved Reserves for external

8 reporting purposes?

9 A. Yes, and internal purposes as well.

10 Q. Now, when you were at Shell Expro,
11 did KPMG have any involvement in the ARPR process
12 that was engaged in by Shell Expro?

13 A. In order for you to understand my
14 answer to that question, you must understand that
15 our office in Lowestoft was a subsidiary office to
16 the main office of Shell Expro in Aberdeen.

17 And the way it was that we
18 essentially -- or not essentially. We reported
19 our reserve estimate to Aberdeen, and Aberdeen
20 then put all the estimates together also from
21 staff in Aberdeen themselves and reported that to
22 The Hague.

0046

1 So the answer to your question is
2 no, I do not remember having seen any personally
3 or my staff having seen any staff from KPMG or any
4 of the external auditors in Lowestoft.

5 And I wouldn't have expected that
6 to have been the case. I would have expected that
7 any contact would have been up in Aberdeen.

8 Q. I was just referring to your prior
9 answer where you said, "I was aware of KPMG at
10 that time sitting where I was in Lowestoft."

11 And I was just inquiring, and what
12 I wanted to know is whether or not you were aware
13 of it?

14 A. Well, yes. I mean, it's not as if
15 we talked to each other and we have heard of KPMG.

16 Q. No. No. I just wanted to explain
17 to you what I was following from that inquiring
18 whether or not your knowledge came from working
19 with KPMG while you were in Lowestoft?

20 A. The short answer is no.

21 Q. Okay. Now, again, with regard to
22 Exhibit 1, do you know if PriceWaterhouseCoopers,

0047

1 anyone from that organization, had reviewed this
2 document?

3 A. I don't.

4 MR. ADLER: Objection. Asked and

5 answered.

6 BY MR. HABER:

7 Q. During the time that you served as
8 Group Reserves Auditor, do you recall any
9 communications with KPMG concerning the guideline
10 changes in 1998?

11 A. In passing through and during
12 discussions that we had with them from time to
13 time.

14 Q. When do you recall having such
15 discussions?

16 A. I can't be sure. They must have
17 happened. We saw KPMG staff typically three to
18 four times a year, and the subject must have come
19 up, but I can't recall precisely when.

20 Q. Do you recall the sum and substance
21 of what was discussed?

22 A. Again, the short answer must be no.

0048

1 I know that these issues must at some stage have
2 led to either a question or a remark from their
3 side. But I cannot remember it being a -- an item
4 for say prolonged discussion. There might have
5 been a clarifying question from the side of KPMG
6 that I would have answered. But it doesn't stand
7 out in my memory as an issue that we debated at
8 length, far from it.

9 Q. When the guidelines were changed to
10 implement the recommendations, did it have any
11 impact on the amount of reserves that Shell
12 reported in the following year?

13 A. Yes, it did.

14 MR. TUTTLE: Objection to form.
15 Foundation.

16 MR. BEST: Same objection.

17 BY MR. HABER:

18 Q. And how -- how did the changes to
19 the guidelines impact on reported reserves?

20 A. They tended to increase the
21 reserves in the mature fields pretty much as had
22 been the expectation when the new guidelines were

0049

1 issued.

2 And following, of course, the

3 comparison between the Exxon and the Shell
4 reserves that I mentioned earlier.

5 But the increase in reserves was
6 almost exclusively in what we call the mature
7 fields, which were the fields that were in
8 production, and fields therefore that had already
9 been developed and the large contingent of their
10 wells already drilled with all the ensuing
11 information.

12 Q. With regard to this increase, do
13 you recall having any discussions with KPMG about
14 the increase?

15 A. Not specifically. But like I said,
16 we talked with KPMG three to four times through
17 the year, and more intensively at the end of the
18 year during the ARPR exercise that we talked
19 about.

20 So yes, the subject will have come
21 up, but it doesn't stand out as a specific subject
22 that we discussed.

0050

1 Q. What about with regard to PWC,
2 PriceWaterhouseCoopers, do you recall having any
3 discussions with them about the increase?

4 A. Not during the year, but at the end
5 of the year, they were there in those discussions.
6 I think at this point it's useful to bear in mind
7 -- to remember that my role -- one of my roles was
8 to report to E&P management and to external
9 auditors at the end of the year just before the
10 external reserves were going to be published.

11 I would prepare a report on my view
12 and the reasonableness to the extent that I could
13 -- that I had this position of the relevant
14 details on the reasonableness of these reserve
15 estimates.

16 I would prepare a report which KPMG
17 and PriceWaterhouseCoopers did receive, and I
18 would prepare a presentation that they attended to
19 and at which they could ask as many questions as
20 they liked.

21 Q. In the report that you prepared, is

22 this the annual report?

0051

1 A. Yes, indeed, yes. My annual
2 report, yes.

3 Q. When you first started as Group
4 Reserves Auditor, looking back at the changes in
5 '98 to the guidelines, do you recall any
6 discussion as to whether the changes complied with
7 SEC Rule 4-10?

8 MR. BEST: Discussions with whom?

9 MR. HABER: With the auditors.

10 THE WITNESS:

11 A. Not specifically.

12 BY MR. HABER:

13 Q. How about generally?

14 A. Generally, the discussion is likely
15 to have come up. And I am only -- I don't
16 remember it specifically, but I can tell you that
17 I would have expected them to have come up.

18 And our explanation at the time,
19 which was abundantly documented, is that these
20 changes were in mature fields. And that there was
21 good evidence that we were conservative there for
22 the reason that I have already highlighted here,

0052

1 and therefore that there was full justification
2 for implementing them.

3 Q. Did you ever perform an analysis of
4 whether the guideline changes in 1998 complied
5 with Rule 4-10 when you first started as the Group
6 Reserves Auditor?

7 MR. TUTTLE: Did he ever, but
8 limited to when he first started in, so you got
9 two timeframes.

10 MR. HABER: When he first started.

11 MR. TUTTLE: Okay.

12 MR. HABER: Let me rephrase it so
13 it's clear.

14 Q. When you first started as Group
15 Reserves Auditor in 1999, did you perform an
16 analysis of the guideline changes in 1998 to
17 determine whether those changes complied with Rule
18 4-10?

19 A. Not formally as you put it, and I
20 will tell you why I saw no reason to do that. As
21 I said, the changes were introduced in reaction to
22 -- in reaction to a comparison between Shell and
0053

1 Exxon reserves where Shell was found to be
2 conservative for reasons that had been identified.

3 And the changes related to
4 developed and mature developed fields.

5 The changes that were proposed were
6 to move away from probabilistic reserves estimates
7 which had been yielding too conservative -- had
8 been proven to yield too conservative figures to a
9 more deterministic way of determining those
10 reserves, which was the practice in the industry
11 at large.

12 So we knew that we were aligning
13 ourselves more closely with the industry at large.
14 That itself did not raise the suspicion that we
15 would have been falling foul from the SEC
16 definitions; far from it, in fact.

17 Q. Did anyone -- withdrawn.

18 Did you undertake an analysis to
19 determine whether the industry at large was
20 compliant with the Rule 4-10?

21 A. No.

22 Q. I asked you if you had any

0054

1 discussions with compliance with the -- compliance
2 with Rule 4-10 with the auditors.

3 Did you have discussions with
4 anyone at EP concerning the guideline changes,
5 again in '98, and their compliance with Rule 4-10?

6 A. No, certainly not at that time.

7 Let me remind you here that the
8 reserves changes were in the mature fields. Now,
9 during the coming days, we will no doubt reach the
10 point in 2002/2003 when Shell came to its reserves
11 restatement.

12 I think it is as well to bear in
13 mind now that the reserves changes or the method
14 changes that were introduced in 1998 related to
15 those mature fields. Of those mature fields and

16 of those reserves, very, very few in fact got
17 restated in 2003.

18 The large majority of the reserves
19 restated in 2003 related to new fields.

20 So the changes that were introduced
21 in 1998 were, and I still believe that and
22 everybody believes that, that they were reasonable
0055

1 and certainly in compliance to a very large extent
2 with the SEC definitions as they were known at
3 that time.

4 Q. You said a few were restated. Do
5 you recall the fields where the reserves that were
6 booked as a consequence of the guideline changes
7 were then restated as part of the
8 recategorization?

9 A. Not individually, no. No. I don't
10 have those.

11 Q. Do you remember the operating units
12 for which those fields were restated?

13 A. Yes. We all know those. SPDC was
14 a big one, Oman, and various others.

15 MR. TUTTLE: His question was those
16 fields that he said where the reserves that were
17 booked as a consequence of the guideline changes
18 were then restated. Do you know if, and then he
19 picked up on those fields.

20 MR. HABER: I want to make sure
21 that.

22 MR. TUTTLE: I want to make sure
0056

1 that your response is to the question and not if
2 you know if field reserves in general were
3 restated.

4 THE WITNESS: The short answer is
5 no. When the restatement was made, it was made on
6 the basis of studies largely done in the operating
7 units themselves.

8 And I didn't overlook the
9 individual studies that were carried out, and I
10 certainly didn't look at details of fields.

11 I am thinking now of a company like
12 SPDC where of course a large volume of restatement

13 was made.

14 What I understand is that a lot of
15 these changes related to -- in fact, I know that a
16 lot of these changes related to new fields or
17 possibly new areas in existing fields where
18 development was not imminent.

19 Q. Just taking the timing a little bit
20 forward, my original questions with regard to any
21 analysis or comparison was restricted to when you
22 first became Group Reserves Auditor.

0057

1 A. Mm-Hmm.

2 Q. Now, I want to know once you were
3 firmly in that position from the middle of 1999
4 until the conclusion, do you recall having any
5 discussions with anyone at EP concerning the
6 guideline changes and their compliance with Rule
7 4-10?

8 A. Not these particular guideline
9 changes, no. No.

10 Q. The same question with regard to
11 the external auditors.

12 Do you recall having any
13 discussions with them?

14 A. Not specifically, no.

15 Q. Did the issue come up -- withdrawn.

16 Were you involved in a project
17 called "Project Rockford?"

18 A. Yes.

19 Q. What was Project Rockford?

20 A. Project Rockford was set up in the
21 end of 2003 when it became clear that we were
22 heading towards a -- what was amounting to a

0058

1 crisis situation regarding our reserves reporting.

2 It was set up, I believe, at the
3 end of September, maybe early October in 2003
4 after we saw first evidence, first real evidence
5 emanating from Nigeria that large amounts of
6 reserves were likely to be in need of restatement.

7 Q. Did you have any involvement in
8 Project Rockford?

9 A. Yes, I was. The name Project

10 Rockford or the project was set up to ensure
11 confidentiality, because this was sensitive
12 information obviously, and people only needed to
13 take part on a need-to-know basis.

14 And that therefore the taking part
15 in this project meant that you had to sign a
16 specific confidentiality agreement, more specific
17 and certainly more binding than the general one
18 that any Shell staff would sign, including myself
19 as a consultant.

20 So the reason why this was put
21 together, the way I perceived it, as a means of
22 controlling confidentiality of information.

0059

1 Q. My question was: Did you have any
2 involvement in the project?

3 A. Yes.

4 Q. And what was your involvement?

5 A. My involvement was that as Group
6 Reserves Auditor who of course had a shall we say
7 a very direct participation in any reserves
8 reporting or in any restatement of reserve.

9 Q. During your involvement in Project
10 Rockford, did the guideline changes in 1998 come
11 up as a topic of discussion?

12 A. They must have been. I don't
13 specifically recall any discussions. If there had
14 been, then my answer would have been pretty much
15 on the lines of what I just told you, that the
16 short answer to your question would have been no.

17 MR. TUTTLE: Jeff, we have been
18 going a little over an hour. Do you want to take
19 a couple of minutes?

20 BY MR. HABER:

21 Q. I just want to be clear in the
22 record with regard to the record. Is your answer

0060

1 no, you have no recollection of the guideline
2 changes being discussed during Rockford? Or no,
3 they were not discussed?

4 A. When I said "no" just now, my final
5 no, what I meant is that if anybody had asked me a
6 question: Do you see the 1998 reserves changes as

7 having any impact on these restatements? My

8 answer to that question would have been no.

9 MR. HABER: All right. Why don't

10 we go off.

11 THE VIDEOGRAPHER: Going off the

12 record at 12:00 noon.

13 (Recess taken)

14 THE VIDEOGRAPHER: Returning to the

15 record at 12:14 from 12:00 noon.

16 BY MR. HABER:

17 Q. Mr. Barendregt, a few moments ago,

18 you had testified that you met with the external

19 auditors three to four times a year?

20 MR. TUTTLE: Objection.

21 Mischaracterization.

22 BY MR. HABER:

0061

1 Q. Let me go back and make it clear.

2 Was it KPMG?

3 A. KPMG, yes.

4 Q. Did you meet with

5 PriceWaterhouseCoopers during that same three to

6 four times a year?

7 A. No.

8 Q. What were the reasons for meeting

9 with KPMG three to four times a year?

10 A. It was mostly at their request.

11 They usually took the initiative of asking for a

12 meeting. And just -- let me rephrase that.

13 The main reason, as I saw it, you'd

14 really have to ask KPMG of course to get the

15 correct answer to that question, but the main

16 reason as I saw it was for them to be able to ask

17 me for any clarification of any audit reports, of

18 any company audit reports that I sent them

19 throughout the year as these audits occurred.

20 So typically, I would take anything

21 between six and ten audits a year, and they

22 appeared, as I wrote them, as they were published,

0062

1 and copies were directly sent to KPMG and

2 PriceWaterhouseCoopers, and KPMG felt that it

3 would be useful for them to ask for any

4 clarifications from these reports, if they had any
5 questions.

6 And in addition, they wanted to
7 touch base with myself, Remco Aalbers, and his
8 successors, to talk about any new developments,
9 any major reserves changes that might be coming
10 about, that sort of thing.

11 Q. Were these meetings scheduled?

12 A. In a sense that they were noted in
13 our diaries, yes.

14 Q. I guess what I am asking: Were
15 they scheduled for certain days throughout the
16 year? For instance, one during the ARPR, one say
17 during the summer, one in the fall?

18 A. No, not in that sense. Only that
19 in the end of the year, during the January period,
20 would be and particularly the final one on that
21 which was end January or early February, that was
22 really the only one that was scheduled in advance.

0063

1 Q. So the other three or so, those
2 would be more impromptu during the year?

3 A. Yes. We would get an E-mail and we
4 would fix the date, sort of a weekend, something
5 like that.

6 Q. Is it your recollection that they
7 initiated, KPMG that is, initiated these meetings?

8 A. By and large, yes. They took the
9 first initiative in getting a date together. It
10 wasn't because we didn't want them. It just so
11 happened that they initiated at a time that it
12 suited them.

13 Q. Now, what other type of
14 communications did you have with KPMG?

15 A. Other than the two types of
16 meetings that I mentioned to you, none.

17 Q. Do you recall having any E-mail
18 communications with KPMG during the year?

19 A. Oh, I am sure I must have. Again,
20 from what I remember and I don't remember specific
21 instances, clarifications of questions.

22 Q. What type of questions would you

0064

1 see clarification from KPMG?

2 MR. TUTTLE: Objection to form.

3 Mischaracterization of the testimony.

4 MR. BEST: Same objection.

5 THE WITNESS: It's difficult to
6 say. I can't remember any specific questions that
7 they had asked. And that indicates that none of
8 these questions led to any major discussions
9 about the results of my report.

10 Q. Did you ever initiate any
11 communication with KPMG during the years?

12 A. I probably did, but I can't
13 remember any specific instance.

14 Q. Do you have any recollection as to
15 the reasons why you initiated communications with
16 KPMG?

17 A. Like I said, no.

18 Q. I'd like to go back to your CV. I
19 believe -- I think we were -- the last position
20 that we were talking about was your position as a
21 Reservoir Engineer in Malaysia which I believe you
22 said concluded in late 1981.

0065

1 A. Yes.

2 Q. Where did you go after Malaysia?

3 A. I went to central office, Shell
4 central office in The Hague.

5 Q. And what did you do there?

6 A. I was -- by that time, I was senior
7 Reservoir Engineer attached to the senior area
8 Reservoir Engineer in The Hague overlooking the
9 operations in the Middle East.

10 Q. What were your responsibilities in
11 this position?

12 A. Specific responsibilities were
13 coordinate and minute regular meetings, quarterly
14 meetings that we used to have with staff from
15 petroleum development Oman, where at that time a
16 sizeable program of various studies in relation to
17 improved oil recovery were being done by at that
18 time the Shell laboratory in Rijswijk that needed
19 regular liaison.

20 And one of the ways that liaison

21 was being maintained was through central office,
22 but more specifically through these quarterly
0066

1 meeting as that we had with them. Another
2 important player in that meeting was the Oman
3 government.

4 Now, these meetings needed to be
5 set up, minutes needed to be written, and that was
6 my responsibility.

7 I wasn't chairing the meeting
8 obviously. There was a senior Reservoir Engineer
9 in The Hague that was doing that.

10 Q. Why was the Omani government
11 important?

12 A. Because the Oman government are a
13 major shareholder -- not shareholder, but a major
14 stakeholder in the Oman fields. And yeah, they
15 have an interest, and they are paying -- they were
16 paying a large amount of the costs of the research
17 program and they felt that they needed to be made
18 more aware of precisely what the program was about
19 and what the results were.

20 Q. Now, during your tenure as Group
21 Reserves Auditor, do you recall if there were oil
22 recovery efforts being conducted in Oman?

0067
1 A. I am not quite sure what you mean
2 by "oil recovery efforts." If you mean efforts at
3 recovering oil, then that's essentially what
4 petroleum development Oman was doing all the time.
5 So...

6 Q. That's a fair point. I was
7 referring to the studies similar to the ones that
8 you just testified about that you said were being
9 conducted out of Rijswijk?

10 A. There were always some studies,
11 some of them small, some of them slightly bigger,
12 but one specific one that stood out was a study
13 that was initiated I believe late 2002, early
14 2003.

15 Q. Who was principally responsible for
16 that study?

17 A. The Shell laboratory in Rijswijk.

18 The leader of that team was Stein Christiansen.

19 Q. And what was the purpose of that
20 study?

21 A. As I remember it, it was instigated
22 at perhaps not the request, but certainly after
0068

1 some concern had been expressed by the Oman
2 government, about the recent, sudden decline in
3 production in the Oman fields.

4 And I must say that the unexpected
5 and sudden decline that had occurred I believe in
6 the course of 2001, 2002.

7 Q. Do you know who was paying the
8 costs for this study?

9 A. No is the short answer. I can
10 guess, but I do not know.

11 Q. Do you have an understanding?

12 A. Well, like I said earlier on, the
13 Oman government was to pay a significant amount of
14 all costs relating to studies and the like.

15 So extrapolating from that, it
16 would be reasonable to expect the Oman government
17 to pay for the study as well.

18 However, it may well be seeing the
19 sensitivities of the case vis-a-vis the Oman
20 government for whom also this sudden decline was
21 also a disappointment, it may well have been that
22 Shell may have offered to carry out a study at
0069

1 their cost, but I don't know. I have no
2 indications, nor have I ever asked questions in
3 that direction.

4 Q. Now, going back to your position at
5 The Hague, how long were you there?

6 MR. TUTTLE: Why don't you start in
7 1981.

8 MR. HABER: That's right. I was
9 just going to make that clear. Thank you.

10 THE WITNESS: That was until May
11 1985 when I was transferred to become head
12 Reservoir Engineer with Maersk Oil and Gas in
13 Denmark.

14 Q. And what was your position in

15 Denmark?

16 A. Like I said, it was the senior --
17 the senior, the lead Reservoir Engineer, so the
18 most senior Reservoir Engineer in that
19 organization with a staff of -- on the order of I
20 believe it was 10 to 12 people, reservoir
21 engineers and assistants.

22 And we were in charge of the Danish
0070

1 chalk, offshore oil fields, mostly oil fields, one
2 gas field, in which Shell had a 40 percent
3 interest, as I remember it.

4 Q. Did you -- I am sorry. Go ahead?

5 A. Maersk Oil and Gas were the
6 operator, and they had an agreement with the other
7 major industry shareholders, one of them was Shell
8 and the other one was Chevron and Texaco, the
9 other two at the time, and each of these three
10 major oil companies had secondees working in the
11 Maersk oil and gas operation.

12 Q. Did you have any responsibility for
13 reserve reporting in this position?

14 A. No. Well, sorry. I am jumping
15 ahead. By your asking the question, I assumed
16 external reserves reporting, and there the answer
17 is no. But certainly we were responsible for
18 reporting reserves for the center.

19 Q. As part of the ARPR?

20 A. Yes.

21 Q. Now, how long did you remain in
22 this position?

0071

1 A. Until end December 1987.

2 Q. Where did you go next?

3 A. I went to Brunei to be the head of
4 the department at reservoir engineering.

5 Q. What were your responsibilities as
6 head of reservoir engineering?

7 A. Responsibilities was to carry out
8 studies in the Brunei fields and reservoirs, to
9 produce forecasts, and to contribute or to develop
10 development plans -- to produce development plans
11 specifically about proposals for the Brunei

12 offshore fields.

13 Q. How long were you in this position?

14 A. I was in that position for four

15 and-a-half years, so that would lead me to '92,

16 somewhere the second half of '92.

17 Q. Now, during your time in Brunei, do

18 you recall there being any concerns about --

19 expressed about legacy reserves?

20 A. Yes.

21 Q. And what do you recall?

22 A. In fact, it was a very big item in

0072

1 our relations with the Brunei government.

2 Before my arrival in the end of

3 1996 --

4 MR. TUTTLE: '96 or '86?

5 THE WITNESS: '86, beg your pardon.

6 In 1986, there had been a major change introduced

7 in Brunei Shell's expectation and also proven

8 reserves.

9 The reason why this was introduced

10 is because it came about that there were an

11 increasingly large number of reservoirs, and

12 particularly -- but even fields in some cases,

13 where we had negative reserves, and in particular

14 negative Proved Reserves.

15 Now, that may sound strange to

16 somebody who is not closely involved in the

17 business. But what it means is that the way the

18 reserves were and still are calculated is that you

19 have an estimate of what they call an ultimate

20 recovery, and that can be both on an expectation

21 basis or on a proven basis.

22 You have an estimation of the

0073

1 ultimate recovery in the fields, and from that you

2 deduct the cumulative production that has been

3 taken away out of that particular part of the

4 field.

5 And it was found that if the books

6 weren't maintained -- weren't maintained or were

7 kept in line with continuing production, that in

8 quite a large number of reservoirs, cumulative

9 production in fact will overtake even the
10 expectation reserves estimates, and that of course
11 is wrong.

12 It's clear that you have produced
13 more on those fields than what you carry on the
14 books, which is clear an indication that the books
15 are wrong.

16 Now, the handicap that we had in
17 those days is that there were about 3,000
18 reservoirs, some of them small but some of them
19 big, but particularly the large amount of small
20 reservoirs were very difficult to study for a
21 number of reasons. And I will have to make it
22 technical now, for a number of reasons.

0074

1 These reservoirs you would have to
2 think of as stratified. Oil reservoirs tend to be
3 in stratified, essentially sealed from each other.
4 These reservoirs are then caught through in a
5 phenomenon called fault, which is a major shift in
6 the earth structure and therefore they are also
7 laterally, not only vertically, but laterally they
8 are also sealed from other reservoirs.

9 In some cases they are sealed, in
10 other cases they are not sealed. You don't know.
11 In fact you don't know until you actually start
12 putting wells on either side of the fault. And
13 you are lucky if you see the fault in seismic, and
14 there is either pressure communication or there
15 isn't. That's fine if you have five reservoirs;
16 but if you have 3,000, it's a major task, believe
17 me.

18 Particularly because in those days,
19 the tools that we had in simulating and trying to
20 understand the reservoir performance were fairly
21 crude still. They were improving but they were
22 still fairly crude, particularly the setting up of

0075

1 what we later called the geological model of the
2 model describing the precise 3D dimensions of the
3 reservoirs, and the possible relation with each
4 other, the possible pressure communication with
5 each other. The tools there were primitive.

6 And it is only in the last ten

7 years or so, counting back from now, from where we
8 are now, that these tools have improved
9 enormously. So we had a big problem. We had
10 reservoirs that we knew where the wells that had
11 been completed on it, that significant amounts of
12 oil had been produced but we had no way of
13 explaining that.

14 Okay. The easiest would have been
15 perhaps to just set all of these reserves to set a
16 value so that each year you end up with zero
17 proven reserves, remaining reserves in those
18 fields.

19 But that meant that you just
20 updated your books each year with cumulative
21 production without actually showing any foresight
22 about what reserves might ultimately be produced.

0076

1 That was the situation that Brunei
2 Shell was in at the end of 1986.

3 So together with advice from
4 central office, the decision was made to apply a
5 large correction to all of these fields
6 essentially based on an estimate of what would be
7 a realistic recovery factor in each of these
8 reservoirs.

9 What is the recovery factor? It is
10 the quotient between recoverable reserves,
11 ultimate recoverable reserves and the in-place
12 volume in those reservoirs.

13 So what was said is that these are
14 clean reservoirs, light oil, that means that you
15 have a recovery factor -- you can expect a
16 recovery factor, 35, 40, 45 percent.

17 And the recovery factor that was
18 postulated was adapted to the type of reservoir
19 that was seen. Larger reservoirs probably got a
20 higher recovery factor because you have more room
21 to play with additional wells.

22 So on that basis, a reasonably

0077

1 sound estimate was made of those -- of those
2 reserves on a bottom line basis, lastly on a

3 bottom line basis without looking in detail to
4 each of the individual reservoirs. And what do I
5 mean by "in detail"? I mean actually carrying out
6 a simulation study.

7 That increasing reserve was made
8 without consulting the government.

9 Now, as it happened just before
10 that, the government had imposed on Shell, on
11 Brunei Shell, a production ceiling. They said you
12 shall not produce more than 200,000 barrels a day,
13 200,000 barrels a day.

14 And in the eyes of the government,
15 Shell had introduced this large reserve change in
16 reaction to this -- to this imposition of a
17 production ceiling. And they were not happy with
18 it, and that is putting it mildly.

19 So that was the start of a very
20 lengthy and at times acrimonious debate between
21 Brunei Shell and the government. And it was right
22 at the start of that period that I entered on the
0078

1 scene.

2 So here I was needing to field the
3 questions and accusations from the government, not
4 personally, not myself, by myself alone but with
5 my staff, obviously.

6 I think I am happy to say that we
7 managed to -- to provide some structure in the
8 discussions that we had with the government. We
9 set up a -- or I set up with the government a
10 schedule of which fields we will go through,
11 detail by detail, and to describe to them why the
12 new estimate was at least a reasonable estimate
13 given the amount of information that we had
14 available.

15 And that series of discussions
16 continued throughout the years that I was there,
17 and it hadn't even finished when I left in 1992.

18 What had become clear by that time
19 is that of those reserves -- which by that time we
20 started to call legacy reserves, because they were
21 a legacy from a previous period -- about
22 two-thirds were justified or had in fact already

0079

1 been in those years, because production of course
2 continued, had in fact been taken or overtaken by
3 production.

4 About two-thirds of those
5 originally booked volumes were reasonable, and
6 about one-third had to be debooked, and they were
7 debooked after we had done the proper studies.

8 Q. Do you recall when the reserves
9 were debooked?

10 A. As when the studies of when those
11 particular reservoirs had occurred. So you could
12 see a gradual reduction in ultimate recovery for
13 these reservoirs over the years starting in
14 1987/88, over the years. And it continued, but at
15 a slower pace, because obviously what we addressed
16 first were the larger fields and the larger
17 reservoirs, so the corrections were larger
18 initially, and they were gradually getting smaller
19 in the later years after I had left.

20 Q. Do you recall how much volume that
21 one-third reserves that you just spoke about
22 represented?

0080

1 A. Not off-hand. The only figure that
2 sticks in my mind was a figure of 600 million
3 barrels reserves being added to expectation
4 reserves. Now, how much is translated to proven
5 reserves, I don't remember.

6 I can expect that it would be
7 something on the order of 400 million barrels or
8 something. So that was the total figure that we
9 started with.

10 Q. When this calculation that you just
11 talked about was performed, 600 million barrels
12 were added to expectation?

13 A. To proven.

14 Q. To proven?

15 MR. TUTTLE: Wait, you said 600
16 million were added to expectation or proven.

17 THE WITNESS: 600 million barrels
18 were added to expectation, as I remember it. And
19 I can't remember the exact figure, but I would

20 guess 400 million barrels proven.

21 BY MR. HABER:

22 Q. And the two-thirds that you

0081

1 testified were justified, that would be two-thirds

2 of the 600 million?

3 A. Expectation.

4 Q. And then of course the balance

5 being the one that were the legacy that needed to

6 be addressed over time?

7 A. Yes.

8 Q. I think that since we are on

9 Brunei, when you became Group Reserves Auditor,

10 did you have an opportunity to audit the Brunei

11 operating unit for Shell?

12 A. Yes, I did.

13 Q. Do you recall when you conducted

14 the audit?

15 A. As I remember, it was in 2002.

16 Q. Do you recall what you had found?

17 A. I had found that considerable

18 progress had been made. This was of course ten

19 years after I had left from my previous assignment

20 there in Brunei.

21 Considerable progress had been

22 made, in particular the issue of the legacy

0082

1 reserves, and particularly caused by the use of a

2 new tool that took care of much more realistic

3 geological modelling, and that as a result, most

4 of these legacy reserves had been either matured

5 in actual supported reserves or have been taken

6 off the books. There was only a very small

7 fraction of that left.

8 Q. When you say a small fraction, do

9 you recall the volume?

10 A. Not off-hand. Ten, 20,000,000

11 barrels, something like that, I honestly can't

12 remember the precise figure.

13 Q. Do you recall when you conducted

14 the audit?

15 A. It was combined with a similar

16 audit in Sarawak across the border, and I believe

17 it was late April or early May that I was there.

18 Q. Do you recall how long the audit
19 took?

20 A. A week.

21 Q. When you conducted the audit, did
22 you have anyone assisting you?

0083

1 A. No. I never did on any of these
2 audits anyway.

3 Q. So throughout your entire tenure as
4 Group Reserves Auditor, you never had assistance
5 in conducting the audits?

6 A. Correct.

7 Q. Did you ever ask for help?

8 A. No. No.

9 Q. Did you ever consider it
10 appropriate to have additional people to assist
11 you in performing the audits?

12 MR. TUTTLE: Objection to form.

13 THE WITNESS: Not until --

14 BY MR. HABER:

15 Q. You can answer.

16 A. Not until the very end of my tenure
17 in late 2003 when it -- well, when the imminent
18 reserves changes, reserves recategorizations
19 became clear.

20 Q. And what was it about these reserve
21 changes that caused you to re-think seeking
22 assistance?

0084

1 A. Well, we are jumping ahead, you
2 know, and I am sure that we are going to cover a
3 lot of ground between those two events with my
4 earlier stay in Brunei and later.

5 But in essence, what has happened
6 during the last two, three years of my tenure as
7 Group Reserves Auditor was that the SEC had come
8 up with additional guidance, which in turn led us
9 to a gradual tightening of reserves and to
10 additional introduction of criteria which hitherto
11 hadn't been included in the reserves guidelines
12 and therefore hitherto hadn't been included in my
13 estimates -- in my audits.

14 That meant that my audits initially

15 -- while my audits initially were, to a large
16 extent, process audits in the sense that I would
17 sit together with selected groups of staff, and I
18 would make the selection.

19 We would sit together with groups
20 of staff and we would talk about specific fields,
21 particularly starting with larger fields. And in
22 a session of an hour or so, they would tell me --

0085

1 they would explain to me what the -- they say the
2 dimensions of the field were, what the problems
3 were, and what the current production performance
4 of this field is.

5 With my experience and with the
6 trust that I know I had and the trust that I
7 placed also with the staff, that allowed me a
8 pretty good idea about the way in which the
9 reserves were calculated in that field.

10 And therefore, the soundness of the
11 basis of those fields. Typically in my audits I
12 would cover in this way anything between half,
13 maybe three-quarters of the total reserves
14 portfolio of that company.

15 So that's how I used to work. You
16 take a few examples, representative examples and I
17 would select them carefully beforehand, and on
18 that basis, you would form an opinion about the
19 soundness of the reserves basis.

20 Back to 2003. With the gradual
21 tightening of the group reserves, it became clear
22 that there were a lot more aspects that we needed

0086

1 to take into account for each of the smaller
2 units, smaller fields, and that therefore are more
3 comprehensive review of the company's portfolio
4 was going to be required.

5 And that therefore, my efforts
6 would have been taken over by at least two, if not
7 more people. And that's what I made in the
8 recommendation in my final report at the end of
9 2003.

10 And of course, since then, my

11 auditorship has been taken over by in fact not
12 just a couple of people, but by teams consisting
13 of up to six, seven people.

14 Q. Prior to 2003 -- withdrawn.

15 So it's your understanding that
16 your recommendation was accepted by senior
17 management?

18 A. Which recommendation?

19 MR. BEST: Which recommendation?

20 BY MR. HABER:

21 Q. The recommendation to have
22 additional staff perform audits?

0087

1 A. Yeah. In fact, they had already
2 made up their minds that a much larger effort was
3 going to be required. At that time in particular,
4 it was felt that a detailed field by field review
5 of the entire group portfolio was going to be
6 required as part of the recategorization of
7 reserves. And that is what happened.

8 Q. Prior to 2003 when you made the
9 recommendation for more staff, had you inquired of
10 any of Shell's competitors of how they staffed
11 their audit -- their internal audit program?

12 A. Not inquired, no.

13 Q. Were you aware of, let's say, how
14 Exxon was staffing their internal audit group?

15 A. By word of mouth, by hearsay, yes.

16 Q. And what had you heard?

17 A. That Exxon had a team of 10, 12
18 people that were overseeing the process of
19 reserves reporting in Exxon.

20 Q. And when had you heard this?

21 A. I cannot remember. It must have
22 been 2001, something like that, 2002, I don't

0088

1 know.

2 Q. But it was between the time you
3 started in your position in 2003?

4 A. It was certainly after my starting
5 in the position, yes.

6 Q. Had you heard anything with regard
7 to staffing of an internal audit team at other of

8 Shell's competitors, such as Chevron, Texaco

9 Chevron?

10 A. No. No.

11 Q. Was Exxon the only one that you had
12 heard about?

13 A. The only one that I can remember
14 right now, yes.

15 Q. Was -- to your knowledge, was Exxon
16 the company that people within Shell looked to
17 with regard to how things were being done in the
18 industry?

19 MR. TUTTLE: Objection to form.
20 Calls for speculation.

21 THE WITNESS:

22 A. As I explained earlier on, Shell

0089

1 had their own way of reporting Proved Reserves
2 right from the start when the SEC came about with
3 the request of proof of that.

4 And that led to -- and that with
5 the agreement that or the understanding at the
6 very least that was reached with the SEC, led to
7 Shell staff throughout the organization being
8 aware that yes, there was this need to report
9 reserves to the SEC.

10 But Shell had their own method, and
11 they relied on the center in The Hague coming
12 forward with detailed instructions on how to
13 prepare Proved Reserves.

14 So in other words, Shell staff,
15 throughout the organization in the operating
16 companies, were not directly concerned with things
17 like the SEC definitions. They were aware of
18 them, they aware at the end of the guidelines that
19 were issued, but they saw the reporting of
20 external Proved Reserves as the responsibility of
21 The Hague. They prepared the estimates, but
22 that's as far as it went.

0090

1 Now, as far as comparing ourselves
2 with Exxon, we didn't see any reason for it, any
3 comparison of numbers that may have been heard,
4 and the 10, 12 people that I mentioned to you, it

5 wasn't clear at all whether those were in fact
6 ten, 12 senior engineers or two senior engineers
7 and a lot of clerical staff.

8 I mean, and anyway the subject
9 didn't interest us, because we saw and we were
10 aware that Shell had their own method, which by
11 all accounts was in conformance with the original
12 SEC definition and that therefore any comparison
13 with staffing levels would be irrelevant.

14 On top of that, it wasn't just me
15 going around from the center checking reserves.
16 There was a whole system in place of what, by that
17 time in the -- say in the early 2000s, what was
18 called Value Assurance Reviews.

19 Now, those would typically consist
20 of a number of senior experienced individuals in
21 the organization. It would go around two
22 operating companies and review projects, status of

0091

1 projects, status of uncertainties, status of
2 development, and they would also look at project
3 reserves.

4 In other words, there was also a
5 very tight level of control through that system of
6 Value Assurance Reviews.

7 And that was another reason why it
8 was felt that there was no point in comparing
9 Exxon's organization against ours. It was felt
10 throughout the organization that the controls that
11 we had in place, both through myself and through
12 the VAR reviews, were adequate.

13 Q. We will talk about the VAR reviews
14 sometime later.

15 In your answer, you had mentioned a
16 couple of things: One, you mentioned conducting
17 process audits. Were there any other type of
18 audits that you conducted?

19 MR. TUTTLE: Objection to form.
20 Characterization of the testimony.

21 THE WITNESS:

22 A. There was only one audit that I can

0092

1 remember that was specifically called a process

2 audit, and that was the one carried out for
3 Nigeria, for SPDC Nigeria in 2003. All the others
4 were regular audits.

5 I use the word process audit, just
6 now in describing them, in the sense that -- and
7 what I meant by that is that I didn't actually go
8 and check with the team.

9 With the field teams that I would
10 gather around the table, I didn't actually go and
11 check, okay, which wells did you drill, what sort
12 of porosities did you see there, and how did you
13 translate those porosities into your assumptions
14 for your reservoir simulation models.

15 That is the sort of detail that I
16 would expect the supervisor of those engineers
17 would do. Mine would be at a higher level, saying
18 okay, how many wells have you got, show me a
19 typical cross-section of the reservoir simulation,
20 how you applied it, how did you calculate the
21 average porosities from your averages in the
22 wells. Do you take any -- say any preference to
0093

1 any particular well, that sort of thing.

2 So my review would be on a higher
3 level than the detailed review that I would expect
4 the supervisor to carry out.

5 Q. Now --

6 A. And that's what I mean by process.
7 I looked at the process in which they came up with
8 the reserves estimates. And from that space, if I
9 like the process, then I had no reason to doubt
10 the validity of the reserves estimate that came
11 out of that work.

12 Q. And the staff and engineers that
13 you just mentioned, these are staff and engineers
14 who are working in the operating unit?

15 A. Correct, yes.

16 Q. And earlier, you had said that --
17 you had said, "with my experience and with the
18 trust that I know I had and the trust that I
19 placed also with the staff," in conducting your
20 audits. Did you ever come to, after the fact,
21 question whether that trust was properly placed?

22 MR. TUTTLE: Objection to form.

0094

1 Calls for speculation.

2 MR. HABER: It calls for his
3 determinations after the fact.

4 THE WITNESS:

5 A. The short answer is no, certainly
6 not for the Shell operated companies, for the
7 Shell-staffed companies. There were one or two
8 question marks that I had for non-Shell staffed
9 companies. BEB stands particularly to mind, where
10 later on I found that not all of my questions had
11 been answered.

12 I forget what particular instances,
13 so if you ask me for examples, I can't give them
14 to you. But other than that, those were
15 definitely exceptions within the Shell companies.

16 No. I have never had reason to
17 doubt say the straightforwardness of the staff and
18 the openness of the staff that they displayed in
19 front of me.

20 Q. Did you ever have questions about
21 the experience of the staff?

22 A. Not really, no. No. Don't forget

0095

1 that I knew many of these companies either because
2 I had been working there myself, or because I had
3 been visiting them there during a previous
4 assignment in the early '90s when I was senior
5 consultant in the organization in The Hague.

6 MR. HABER: Okay. I think we are
7 running out of tape and this is probably a good
8 time to break for lunch.

9 THE VIDEOGRAPHER: Going off the
10 record at 12:59. This is the end of tape number
11 1.

12 (Lunch recess taken)

13 THE VIDEOGRAPHER: This is the
14 beginning of tape number 2 returning to the record
15 at 1:40 from 12:59. Go ahead.

16 BY MR. HABER:

17 Q. Good afternoon, Mr. Barendregt.

18 A. Good afternoon.

19 Q. Before we broke, we were talking
20 about audits generally and reliance on operating
21 staff and engineers.

22 I just want to ask you one

0096

1 follow-up question on that topic. During the
2 audits that you conducted, did you ever find that
3 the rotation of positions within the operating
4 units caused you some concern about the
5 reliability of the information that you were
6 receiving?

7 A. Not as a structural complaint. I
8 mean, sometimes you might be aware of some
9 engineer around the table being fairly new on the
10 subject and therefore he or she would be a bit
11 more quiet than the others.

12 But the thing is that with these
13 teams, with these field teams, it would be very,
14 very rare indeed if all of them were new and
15 hardly knew what they were talking about, so to
16 speak.

17 So between them, you would always
18 have a number of people that would actually
19 remember things as they had been done the year
20 before or something like that.

21 Even then, people that were new
22 were, I always found, were certainly sufficiently

0097

1 knowledgeable about their subject to be able to
2 contribute to the conversation if it came their
3 way.

4 Q. Now, going back to the Brunei audit
5 that you had conducted, I am going to ask you a
6 couple of questions about the audit report that
7 you had prepared. Actually, first on, I am going
8 to ask you about a draft report.

9 (Barendregt Exhibit No. 2 was
10 marked for identification)

11 We are marking as Barendregt
12 Exhibit 2 a draft note which is dated May 5, 2002.
13 It's a report, and the title of the report is "SEC
14 Proved Reserves Audit, Brunei Shell Petroleum SDN
15 BHD 29 April-3 May, 2002".

16 The Bates number is RJW01001167

17 through RJW01001170.

18 Mr. Barendregt, have you seen this
19 document before today?

20 A. Obviously, yes. It looks like the
21 draft report that I left with or shortly after my
22 departure and sent over to Brunei Shell.

0098

1 Q. Now, do you recall -- in that
2 answer, do you have any recollection if you
3 prepared this draft while you were in Brunei Shell
4 or immediately thereafter?

5 A. Before I answer that question, I
6 think it's useful if I explain my procedures when
7 carrying out with audits like these.

8 Q. Sure.

9 A. I liked to strive before leaving,
10 on the last day of my audit, a complete draft of
11 the report that I was going to issue on the
12 auditing question. That didn't always happen.
13 For obvious reasons I was very busy right until
14 the very last day.

15 But usually, we then a few days
16 after the end of the audit, I managed to get out a
17 draft report to the company in question for their
18 comments.

19 With that report, I always left
20 instructions to the extent that I said, "Look,
21 this is my draft report. I want you to go through
22 it and check it on facts -- on matters of factual

0099

1 detail; in other words, "Did I get any of the
2 facts wrong? Then please let me know".

3 "Secondly, you can give me your
4 opinion about opinions that I have expressed and I
5 will certainly read them. But what I will
6 ultimately do is issue a report that expresses my
7 opinion and my opinion alone."

8 So these reports would typically
9 receive small corrections here and there, mostly
10 of facts that I had got wrong. And ones that had
11 been done and they would be typically between two
12 and three weeks after the end of my audit,

13 depending whether I was available in fact, because
14 I might have another audit immediately afterwards.

15 And then I would issue it as a
16 final note.

17 Q. Do you recall any instances where
18 an operating unit did challenge an opinion that
19 you had formed?

20 A. Not any specific instances. But I
21 am sure on once or two occasions that it happened,
22 yes.

0100

1 Q. On those occasions where it
2 happened, do you recall if you changed your
3 opinion, in light of what was being communicated
4 to you?

5 A. I am just really trying to think of
6 any particular examples here, which I can't.
7 Sometimes I might slightly change
8 the wording on the facts leading to my conclusion,
9 but I do not recollect any instances whereby I
10 basically reviewed my opinion.

11 The only example that might be an
12 exemption that I can think of, and I am thinking
13 of while I am going through it, that an audit in
14 Norway, where due to a very poor contribution by
15 one of the contributors and the absence of his
16 supervisor at the time, I ended up, without my
17 knowledge, with a totally wrong set of facts,
18 data, on which I based an opinion which later on
19 was found to be unfounded.

20 The absence of the supervisor in
21 question was sorely missed, and in the end on that
22 particular audit, I had to come back at some later

0101

1 stage and redo the audit or parts of that audit
2 again, this time with the supervisor present.

3 But that's an exception. That's
4 the one exception that I can think of. But by and
5 large in general, no, I would rarely find cause
6 for changing my opinion.

7 Q. With regard to Shell Norway, do you
8 recall when this event occurred?

9 A. 2000. The year 2000.

10 Q. Now, if you could look at Exhibit 2
11 for a minute.

12 (Witness complying)

13 I am sorry. I just want to check
14 one thing here.

15 (Pause)

16 Looking at Exhibit 2, I just want
17 to go back to my question that resulted in the
18 last exchange. I had asked you if you prepared
19 this draft while you were in Brunei Shell or
20 immediately thereafter, and you answered it by
21 giving me what your general practice was.

22 And I just want to know now, having
0102

1 said that, what's your recollection with regard to
2 when you prepared Exhibit 2?

3 A. Well, I look at the date, which is
4 a couple of days after the final day of my audit.
5 I know that that particular -- those particular
6 dates were a Monday through Friday. So this note
7 was prepared on a Sunday.

8 I suppose that the major part of
9 the text was prepared after my departure from
10 Brunei.

11 Q. Now, if you look at the fourth
12 paragraph, the one that begins "the audit found"?

13 A. Yes.

14 Q. There is a change that says,
15 "although the volume of 'legacy' reserves have
16 decreased substantially in the past few years, the
17 continued presence of 'legacy reserves' remains an
18 area of concern."

19 Is this a change that you made or
20 is this a change that you made in response to
21 information --

22 A. A change from what? I can only --
0103

1 Q. I am sorry. I just have to finish
2 the question.

3 A. Sorry. Sorry.

4 Q. Is this a change that you made or
5 is it a change that you made in response to
6 information learned during the audit?

7 MR. BEST: Objection to form.

8 MR. TUTTLE: Objection to form.

9 THE WITNESS:

10 A. When you say change, I do not
11 understand what you mean, a change -- I see only
12 one text and I do not remember what has changed.
13 This must be the preliminary report, and there
14 must be a final version obviously that you have
15 compared it against.

16 BY MR. HABER:

17 Q. Well, I am just looking at the part
18 that's underscored, and there appears to be an
19 addition.

20 This text appears to have been
21 added from an earlier draft?

22 A. An earlier draft?

0104

1 Q. Let me ask you so I can head off an
2 objection.

3 Do you recall preparing a draft
4 prior to May 5 --

5 A. No.

6 Q. -- 2002?

7 A. No, I don't. That doesn't mean
8 that I didn't do it, but I don't recall it.

9 Q. Now, looking at the text that we
10 just focused on, do you recall which fields were
11 -- that you were referring to in this text?

12 A. They would have been in the major
13 fields Southwest Ampa, A-M-P-A, and Champion.

14 Q. Now, if you look at the paragraph
15 above it, it says "the last previous SEC proved
16 reserves audit for BSP was carried out in 1998."

17 Do you know if that was carried out
18 prior to the changes in the guidelines that we
19 talked about earlier today?

20 A. Probably. Probably. The
21 guidelines were at the -- issued towards the end
22 of 1998. I would imagine that these were being

0105

1 ahead of that, but I don't know.

2 Q. And the audit was carried out by
3 your predecessor?

4 A. Yes.

5 Q. Who was your predecessor?

6 A. Ad de la Mar. A-D D-E L-A M-A-R.

7 Q. Now, if you look at the third
8 sentence in this paragraph, and it I believe
9 refers to the current audit. It says, "It
10 included a verification of the technical and
11 commercial maturity of the reported reserves, a
12 verification that margins of uncertainty were
13 appropriate, that Group share and net sales
14 volumes had been calculated correctly, and that
15 reported reserves changes were classified
16 correctly. It also included a verification that
17 the annual production (sales) submission through
18 the Finance system was consistent with the reserve
19 submission."

20 A. Yes.

21 Q. How did you verify these items that
22 you had written in this Exhibit?

0106

1 A. Before I answer that, I think it's
2 useful to bear in mind that this is a pretty much
3 a standard sentence that I included in all of my
4 -- all of the summaries of my sentence.

5 Now, when it comes to --

6 MR. TUTTLE: So you want for each
7 of the items that you read? So --

8 MR. HABER: Well, if there is
9 something that he can talk about in a summary; if
10 not, then in each, yes.

11 THE WITNESS:

12 A. Essentially, as you will have seen
13 in my report, the method that I used in checking
14 each of these items, is by means of a spreadsheet
15 that I included in my -- in full in my report
16 which gives the various criteria that were
17 dependent -- that were important for assessing the
18 quality of the reserves estimates in that
19 particular company.

20 And that would allow me then to add
21 in comments to each of these criteria where they
22 had not be good. I also allowed it to score the

0107

1 company on that particular item.

2 Yeah. If you want to know how I
3 did it, then I can only refer to the -- to the
4 list, to the checklist that I included in each and
5 every report.

6 (Barendregt Exhibit No. 3 was
7 marked for identification)

8 BY MR. HABER:

9 Q. We are marking as Barendregt
10 Exhibit 3 a note dated May 31, 2002. In the
11 subject the title line reads "SEC Proved Reserves
12 Audit, Brunei Shell petroleum, SDN BHD, 29 April -
13 3 May 2002." The Bates range is RJW00061605
14 through RJW00061620.

15 (Witness reading document)

16 Mr. Barendregt, have you seen
17 Exhibit 3 before today?

18 A. Yes. It looks like my final report
19 of the Brunei audit.

20 Q. And if you look at the lower
21 left-hand corner, there is a signature. Is that
22 your signature?

0108

1 A. Yes, it is.

2 Q. Now, if you look at the
3 attachments, a moment ago you mentioned a
4 spreadsheet.

5 And I think you might be referring
6 to one of the attachments in this document?

7 A. Yes. Attachment 3.

8 Q. Now, in terms of verifying, let's
9 say for argument's sake, technical maturity, and
10 in answering the questions that are listed in the
11 left-hand column, did you make your comments which
12 are in the right column based on information that
13 was provided to you by staff, in this case, Brunei
14 staff?

15 A. Yes.

16 Q. Did you do anything independent of
17 what was communicated to you to verify the
18 information that was being communicated to you?

19 MR. TUTTLE: Object to form.

20 BY MR. HABER:

21 Q. You can answer.

22 A. I am not sure what you are meaning

0109

1 there. I was independent when I made the new
2 review. I listened to the staff giving the
3 explanation of what the field was like.

4 But as I made clear before, what I
5 did not do was to check and see whether, on a very
6 detailed level, staff had transferred the correct
7 values from wells and well data and what not into
8 the models.

9 Q. And so when you say in the -- we
10 could look at Exhibit 2, that your audit included
11 a verification of all those various pieces of
12 information, that verification then is based upon
13 the information that was provided to you from the
14 operating unit staff.

15 Correct?

16 MR. TUTTLE: Objection to form.
17 Characterization of the testimony.

18 BY MR. HABER:

19 Q. You can answer.

20 A. It -- my opinions were based on the
21 information that I was given, together with
22 interpretations and opinions by myself.

0110

1 Q. You can put these aside for the
2 moment.

3 Actually, I am sorry. I apologize.
4 I am sorry. Can you pick up Exhibit 2 again for a
5 moment?

6 A. Okay.

7 Q. If you can turn to page two of
8 attachment 1?

9 MR. BEST: Bates number?

10 MR. HABER: I am sorry. This is
11 1169.

12 (Witness complying)

13 THE WITNESS: Okay.

14 BY MR. HABER:

15 Q. I am looking at the second sentence
16 of number 6. It says, "Any incomplete hydrocarbon
17 column penetrations are thus also addressed

18 probabilistically, i.e." and then it's underscored
19 "proved areas", and it's also in quotes, "(ref.
20 SEC definitions) are not adhered to rigidly."

21 Do you recall what the issue was
22 that was reflected in what I just read?

0111

1 A. This seems to refer to what we
2 later referred to as the LKH issue, lowest known
3 hydrocarbons.

4 A reservoir is rarely a flat
5 pancake. And particularly in the case of Brunei,
6 you would always found that the reservoir would be
7 tilting, would be running at the slope. That
8 meant that across that reservoir, you could see
9 various what we called fluid levels.

10 Typically in Brunei you would have
11 a gas cap, i.e. the top of the reservoir would be
12 filled with gas. You would get a layer of oil,
13 and then underneath that water.

14 When you first drill a well through
15 that reservoir, you might see early gas if you
16 were really high up in the reservoir. You might
17 see gas and oil if you were halfway. You might
18 see pure oil, you might see oil and water, or you
19 might in fact see nothing but water, depending on
20 where you were, and in some cases it was difficult
21 to determine beforehand where you were.

22 Typically this is the case in

0112

1 exploration and appraisal wells. Appraisal well
2 is a well that you drill in a stage where you are
3 still exploring and trying to define the actual
4 content of the reservoir.

5 One of the instances where the
6 original SEC definition of Proved Reserves is
7 specific is about this issue of fluid levels.
8 They say that if you drill, for instance, gas and
9 oil, then you can only assume for Proved Reserves
10 that the oil that you find as its deepest
11 penetration is where you saw it deepest in the
12 well.

13 That may still mean that there is
14 some oil underneath that all the way down to the

15 oil water contact as we call it, that is therefore
16 not seen by the drill bit.

17 And that oil, even though you can
18 interpret it perhaps by other means, either from
19 seismic or from pressure measurements or whatever,
20 there are various means of having at least a very
21 good cast of that, that oil could not go into the
22 SEC definition, be included in the Proved Reserves
0113

1 estimate.

2 Q. And the SEC definitions that you
3 reference here, these are now with regard -- with
4 reference to the staff interpretive guidance or --

5 A. No. The other ones.

6 Q. SX, regulation SX Rule 4-10?

7 A. Yes. Correct.

8 Q. So it's Rule 4-10?

9 A. Correct.

10 MR. WEED: Counsel, if I might make
11 a quick note just for the clarity of the record,
12 sometimes the Shell engineers from Europe refer to
13 S-E-C as SEC, and that will occasionally come up.

14 I think the court reporter got it
15 right this time. I just want to make it clear
16 that because we usually in the States refer to it
17 as strictly S-E-C. If you hear SEC, that's the
18 same thing.

19 MR. HABER: Okay. Thank you.

20 MR. WEED: Thank you.

21 BY MR. HABER:

22 Q. Now, the next sentence says,
0114

1 "Although accepted Group practice in the past,
2 this is no longer in line with Group guidelines."

3 Had the group guidelines been
4 revised to address this proved area issue or the
5 LKH issue that you mentioned?

6 A. Yes. I remember that in 2001, I
7 had a fairly strong hand in revising the
8 guidelines.

9 And this is one of the areas that I
10 addressed more specifically in the guidelines.
11 That was in the reaction to a similar instance

12 that they found in an earlier -- in an earlier
13 audit in 1999 with SNEPCO in Nigeria.

14 Q. Now, the next sentence says, "This
15 should be addressed."

16 Did you provide BSP with advice on
17 how to address the issue?

18 A. No. Because it was abundantly
19 clear what they needed to do.

20 The fact that this doesn't feature
21 prominently in, for instance, the summary on the
22 first page, is that the effect of this in the BSP

0115

1 context was small. In most of these cases, the
2 reservoirs have been penetrated by many, many
3 wells because most of these fields are very
4 mature.

5 And that therefore there are very
6 few areas where we have the situation where we
7 haven't actually seen all of what we call the oil
8 column, and therefore very few areas where we
9 haven't actually seen an oil water contact and the
10 gas oil contact.

11 Q. Now, if you look at number 7 on
12 Exhibit 2, which is also on 1169, same page. The
13 recommendation, it says, "The auditor's opinion is
14 that probabilistic addition of reservoirs to field
15 level is not to be recommended."

16 What was the basis for that
17 recommendation?

18 A. Can I read it first? Because the
19 explanation is in the following paragraph
20 obviously as you can see.

21 Q. Please go ahead.
22 (Pause)

0116

1 MR. FERRARA: Excuse me. What
2 paragraph are you on again, Jeffery?

3 MR. HABER: This is paragraph
4 number 7.

5 THE WITNESS:

6 A. There I give three reasons for my
7 opinion, as you well have seen: First, these are
8 mature fields. I already made that point on

9 several occasions.

10 And in mature fields in 1998, we
11 had the recommendation that rather than do a
12 probabilistic reserves estimate, we would do a
13 deterministic estimate, i.e. based on a specific
14 realization, as we called it, of the reservoir
15 model and determine that against the performance
16 of that reservoir, i.e., at the fluid level -- the
17 fluid production, the gas production, the oil
18 production, and water production; and thereby
19 compose a picture, a historical picture trying to
20 match the performance against the model results.

21 And this is entirely different from
22 the probabilistic reserves estimating that had
0117

1 been used before '98 in mature fields.

2 And what I am saying is just simply
3 repeating that particular -- that particular
4 premise.

5 Then the other two points: They
6 are rather technical. What it says is that if you
7 have various reservoirs in one field, and you add
8 these up probabilistically, then it is very
9 important whether you assume the individual
10 reservoirs and the assessment of the recovery in
11 the individual reservoirs is independent of that
12 of the other reservoirs.

13 Now, if it's independent, that
14 means that the total reserves estimate becomes
15 narrower, i.e. the Proved Reserves, and the high
16 estimate of reserves become closer and therefore
17 closer to the expectation reserves.

18 That is -- yeah. You will have to
19 take it from me, but that's a technical fact.

20 BY MR. HABER:

21 Q. That's one of the reasons that I
22 asked if you could sort of put the technical into
0118

1 layman's terms so I can understand it.

2 A. Well, in order to do that, I would
3 have to explain to you, and I am more than happy
4 to explain to you a method what the Monte Carlo
5 analysis is.

6 You have a situation -- you have a

7 situation where you have a distribution describing
8 the various outcomes of a reserve in a particular
9 reservoir, say.

10 And typically, we tend to describe
11 it by some sort of a bell-shaped curve. I am sure
12 you have seen these bell-shaped curves elsewhere,
13 and the bell-shape curve has its peaks somewhere
14 around the expectation, as we call it.

15 And somewhere on the left, you have
16 a lower value, and that depending on whether you
17 take 90 percent or 95 percent is then your proven
18 estimate. And then on the other side is a high
19 estimate which we are not concerned with. You
20 have a bell shape like this for each and every
21 reservoir.

22 Now, there is one technique called

0119

1 the Monte Carlo analysis, which tries to establish
2 a probabilistic sum of all these reservoirs
3 together.

4 And you do that effectively by
5 throwing a set of dice and deciding on that basis
6 whether you take for a reservoir a low value or a
7 medium value or a high value or any value in
8 between.

9 You set it aside and take the next
10 reservoir and you do a similar thing, and the next
11 reservoir and the next reservoir.

12 And you do that through all of the
13 reservoirs in succession, then you add up all
14 these various estimates. And as you well have
15 seen, some of the reserves in some of the
16 reservoirs will have come out in the low side,
17 some of them will have come out on the high side.

18 It's a matter of, what is called in
19 the UK, swings or roundabout. You come up with a
20 result that is fairly narrow, some low estimates
21 chances of estimates will be compensated by
22 chances of estimates on the high side.

0120

1 That is the case where you assume
2 that these reservoirs are independent of each

3 other.

4 Now, there is also a possibility
5 and a fairly strong possibility that the reserves
6 estimate in these reservoirs are in fact
7 dependent.

8 What do we mean by that? It's that
9 if you have a low outcome in one reservoir, then
10 it's likely that your misguess, your -- say your
11 estimate has been caused by a particular
12 assumption that is -- may not be clear at that
13 time, but that also affected all of the other
14 reservoirs because you have applied the same
15 method of calculation to each of these bell-shaped
16 curves.

17 Now, that means that you really
18 have to be more careful that if you go through the
19 process again of taking one realization, one value
20 out of the bell-shaped curve for each reservoir
21 and you come out with a low one, then you must
22 also take a low one from the other reservoirs

0121

1 because there is some dependence, yeah?

2 And that means -- as I hope you can
3 see, means that the total bell shape of all the
4 reservoirs together will be wider, because you
5 will more get a situation of low values being
6 added to low values and et cetera, and on the high
7 side the same.

8 And therefore, if your reservoirs
9 are dependent, and to some extent that will always
10 be the case if it's in the same field, and they
11 are say modeled by the same method, you have to be
12 careful, because the effects might be that your
13 total range is too narrow, therefore your proved
14 is too close to your expectation and effectively
15 is too high. And that's what I am saying.

16 Q. Okay. I appreciate it. Thank you.
17 If you turn to the final note which is Exhibit 3,
18 I would like you to take a look at number 6 in
19 attachment -- I believe it's attachment 1, on page
20 61607?

21 MR. BEST: I am sorry. Did you say
22 a paragraph?

0122

1 MR. HABER: Yes. Paragraph 6. I

2 am sorry.

3 (Pause)

4 My question, you will see there,

5 the words "economically robust" are underscored
6 there.

7 Q. What did you mean by that?

8 A. Shell did and still do screen their

9 projects. And by "their projects," I mean

10 activities which generate a certain amount of oil

11 or gas activities like drilling a well or

12 developing a whole field, such projects will be

13 screened economically.

14 And one of the parameters that

15 would be used would be what the Shell called a

16 screening value oil price, which around this

17 period was something in the order of 14 or 16

18 dollars a barrel, so conservative even for those

19 days.

20 "Economically robust" meant that

21 the result was economical for a range of

22 parameters, for a range, for instance, for the

0123

1 typically for the proven reserves, the expectation

2 reserves, et cetera.

3 Economically robust was one of the

4 conditions that was introduced in -- back in 1993

5 in the reserve guidelines in 1993. The other one

6 was technically robust.

7 And okay. That's meant -- that is

8 what was meant with economically robust.

9 Q. And why was it that undeveloped

10 reserves in a number of fields and reservoirs

11 needed to be economically robust in order to be

12 certain of their future development?

13 A. This is five years ago and I don't

14 remember the individual field instances in -- on

15 which this remark was based.

16 But I can only speculate that a

17 number of these activities may have been

18 associated with the legacy reserves, legacy

19 reserves which were identified as reserves but not

20 really associated with identified -- identified

21 activities like drilling a well.

22 But further on that, I'm afraid I

0124

1 can't tell you.

2 Q. Okay. Is there a difference
3 between commercial maturity and economic
4 robustness?

5 A. For all practical purposes, no.

6 No.

7 Q. Now, when you concluded the audit,
8 I believe you said earlier that you met with the
9 staff of the operating unit.

10 Is that correct?

11 A. During the audit, yes. Yes.

12 Q. Just take me generally speaking,
13 not necessarily with Brunei, but generally
14 speaking.

15 When you finished the audit, did
16 you have a meeting with people or staff, engineers
17 at the operating unit to discuss your findings?

18 A. Yes. Yes.

19 Q. And was that a standard practice
20 you had during your tenure as Group Reserves
21 Auditor?

22 A. Yes. Yes.

0125

1 Q. Now with regard to Brunei, do you
2 recall conducting such a meeting at the conclusion
3 of your audit?

4 A. Not specifically, but I must have
5 done, yes. Yes.

6 Q. Let me take this to the general
7 again. When you met with the staff and engineers
8 at the conclusion of the audit, did you make a
9 presentation?

10 A. Mostly, yes. Not always, but
11 mostly. It depended on the time squeeze that I
12 was in. Sometimes I was in more of a time squeeze
13 than other times.

14 Q. When you did have the time to make
15 the presentations, did you prepare Powerpoints or
16 view graphs for the staff to review?

17 A. I am sure you know the answer to
18 that, yes.

19 Q. I have to ask them.

20 So okay. Do you recall preparing
21 such a Powerpoint presentation for Brunei at the
22 conclusion of your audit?

0126

1 A. Short answer is no, I don't
2 specifically view it. Your question was did you
3 view it? I cannot tell you. I would have to look
4 through my files.

5 Q. At the meeting that you had in
6 Brunei, do you recall having any discussions about
7 a clean sweep of the legacy reserves?

8 MR. TUTTLE: Objection to form.
9 Characterization of the testimony.

10 MR. HABER: I am just asking him a
11 new one.

12 MR. TUTTLE: You said at the
13 meeting do you recall, and he testified he doesn't
14 recall, but he must have had one.

15 BY MR. HABER:

16 Q. Do you recall at any time during
17 your -- I will rephrase.

18 Do you recall at any time during
19 your audit discussing a clean sweep of the legacy
20 reserves with BSP staff or engineers?

21 A. Not specifically, no. No.

22 I think just further on that, I

0127

1 think it's useful to that in mind that the legacy
2 reserves by that time were a very small portion of
3 the Brunei reserves, so therefore they didn't
4 feature very highly or very prominently in my
5 report.

6 (Barendregt Exhibit No. 4 was
7 marked for identification)

8 Q. Let me show you what we have just
9 marked as Barendregt Exhibit 4.

10 (Witness reviewing document)

11 And in particular, I am going to be
12 asking you questions about slide six, which is
13 1176. And let me identify this document for the

14 record.

15 This is a Powerpoint. It's
16 dated -- it's hard to say. There is a date on the
17 bottom which is February 15, 2004. In the upper
18 right-hand corner it says, "SEC reserves Audit
19 BSP, 27 April - 3 May, 2002."

20 The title of the document is "2002
21 SEC Reserves Audit Brunei - conclusions."

22 The Bates number is RJW01001171
0128

1 through RJW01001177.

2 A. Just a remark there, you mentioned
3 the date of February 15, what it is in my
4 Powerpoint I have got an automatic feature or I
5 had an automatic feature which could take the
6 current date as the date of printing.

7 Q. Okay.

8 A. Somebody must have printed it off
9 in February 15, 2004, so it says that date.

10 Q. So do you recall preparing this
11 document in or about May of 2002?

12 A. Like I say, not specifically. But
13 obviously I have prepared it, and I will accept
14 that this is what I prepared.

15 (Witness reviewing document)

16 Q. Does this refresh your recollection
17 about discussing a clean sweep of the legacy
18 reserves in Brunei?

19 A. Not totally, but I am getting
20 there.

21 Q. Do you need a little more time to
22 get there?

0129

1 A. No. No. Fire off the questions.

2 Q. Well, I am interested in the last
3 bullet point on slide 6, which is Bates numbered
4 1176. You say, "Recommend to make the 'clean
5 sweep' when we upgrade proved developed reserves."

6 Do you recall why you were making
7 that recommendation?

8 A. As far as I recall, no. I would
9 have to reconstruct it from what it is that I have
10 said here.

11 But I would have -- I would guess

12 that the reason why I made it is that this was a
13 suggested way of getting rid of the final small
14 percentage of proved legacy reserves.

15 Q. And by "clean sweep," what did you
16 mean?

17 A. Making sure that anything that
18 wasn't fulfilling the guidelines, as we had it
19 then, was taken off the books.

20 Q. So that would be a complete
21 debooking --

22 A. Yeah.

0130

1 Q. -- of whatever reserves fell into
2 that category.

3 Correct?

4 A. Yes.

5 MR. TUTTLE: Objection.

6 Characterization of the testimony.

7 THE WITNESS: If I refer to the
8 same expression clean sweep in point 2 of that
9 paragraph, what was -- and this is the historical
10 situation, what was meant with the clean sweep
11 there is that all of the reserves, the 600 million
12 barrels that I talked to you about earlier, the
13 600 million barrels Expectation Reserves that were
14 added in 1986 -- as I have already explained to
15 you before that there has been some pressure,
16 particularly from the government, to take away all
17 of those 600 million barrels except the
18 reservoirs, that meanwhile we had been making
19 studies in, to just strike those off the books.

20 And we had always resisted to make
21 such a clean sweep because we felt that certainly
22 a sizeable portion of those reserves were in the

0131

1 end justified, except we just didn't know yet how.

2 So the clean sweep that we made
3 there is sweep it all off the board, take it all
4 out.

5 This is the same sort of clean
6 sweep that we -- that I may have been referring to
7 there.

8 Q. Okay.

9 A. Yes.

10 Q. Okay. You can put this aside.

11 A. Okay.

12 (Witness complying)

13 MR. TUTTLE: Are we on a new topic?

14 Want to take a couple of minutes?

15 MR. HABER: Just a couple of
16 follow-up and then we can break.

17 Q. Do you know if BSP in fact engaged
18 in a clean sweep and debooked the reserves that
19 were not in compliance with the guidelines?

20 A. The only one that I am aware of is
21 the one that was done at the end of 2003 where the
22 companies, the major companies, including BSP,
0132

1 were instructed to take out all those Proved
2 Reserves that weren't in fact covered by a firm
3 plan yet, either FID, or in the case of Brunei
4 where they could be small activities, typically an
5 additional well or a sidetrack of a well, all of
6 the Proved Reserves that were not covered by these
7 confirmed activities were taken off the books.

8 So there was a lot more than just
9 as any legacy reserves that we were talking about
10 here.

11 Q. So you were -- I will spit this
12 out. I am sorry. You are referring to Project
13 Rockford?

14 A. Yes. Yes.

15 Q. Now, prior to Rockford, do you know
16 if your recommendation about a clean sweep was in
17 fact taken up by BSP and implemented?

18 A. No, I do not. And it would be too
19 small to see me appearing at the end of the year
20 for the total reserves submissions, from what I
21 remember.

22 Q. One other question: In one of your
0133

1 earlier answers, you had said that you were
2 involved in the 2001 revision to Shell's
3 guidelines?

4 A. Yes.

5 Q. What was your involvement?

6 A. A pretty strong one. The
7 preparation of the updates of the guidelines was
8 the responsibility of the group reserve's
9 coordinator, which until the end of 2000, was
10 Remco Aalbers. Remco was replaced by Leigh Yaxley
11 who was an ex Shell employee and who had reapplied
12 for a job again and was nominated to be the group
13 reserves coordinator.

14 Lee -- I knew Lee from earlier
15 years from his previous assignment, we had both
16 served in The Hague together. Lee wasn't very
17 happy mostly for family reasons, yet meanwhile
18 married a second wife from Indonesia, who brought
19 her mother-in-law with her, and they had a child
20 in between.

21 And the mother had to go back to
22 Indonesia because she couldn't get a residence

0134

1 permit, which made his wife particularly unhappy,
2 which put him under a lot of domestic stress.

3 Therefore, Lee was by no means as
4 effective as Remco was. And towards the end of
5 the year, he quit before the end of the year
6 ultimately.

7 But even before then, he didn't
8 really take an active role in the things that, in
9 my view, he should have done. And one of them was
10 the preparation of the updated guidelines, which
11 would typically happen over the middle of the
12 year, to be issued September/October timeframe.

13 Since there were a number of issues
14 that I felt had to be included or at least to be
15 put in to make the guidelines more precise, I took
16 it upon myself after checking with Lee, that shall
17 I have a first go at updating the guidelines? And
18 he agreed, so I did.

19 Q. When you had made -- withdrawn.

20 Did anyone in EP question whether
21 it was appropriate for you to be revising the
22 guidelines?

0135

1 MR. TUTTLE: Objection. Calls for

2 speculation.

3 MR. HABER: I will rephrase that.

4 Q. Did anyone communicate from EP to
5 you whether it was appropriate for the Group
6 Reserves Auditor to be revising the guidelines?

7 A. Nobody present in The Hague at the
8 time that I remember. The one who was very vocal
9 about it was Remco Aalbers, who I occasionally got
10 in touch with. He was by that time in his new job
11 up in Assen, and he made it clear to me that that
12 would have never happened under his reign, and I
13 agreed with him.

14 But there it was. I felt that new
15 guidelines, new good quality guidelines needed to
16 be issued. And if there was nobody else around
17 who could do them, then I would be prepared to do
18 them. And unless somebody actually stopped me
19 doing it, I just went ahead and did it.

20 Q. Did you consider at the time
21 whether it was a conflict for the Group Reserves
22 Auditor to be revising Shell's guidelines?

0136

1 A. Not really, no. No.

2 MR. HABER: All right. This is a
3 good time to break.

4 THE WITNESS: Okay.

5 THE VIDEOGRAPHER: Going off the
6 record at 2:37.

7 (Short recess taken)

8 THE VIDEOGRAPHER: Returning to the
9 record at 2:52 from 2:37.

10 BY MR. HABER:

11 Q. Mr. Barendregt, I am going to jump
12 back to your CV again. I believe we were in
13 Brunei, which sort of led us through this whole
14 discussion.

15 I believe you said that you were
16 the head Reservoir Engineer from '87 to sometime
17 in the latter half of 1992 --

18 A. Correct.

19 Q. -- is that correct?

20 A. Correct. Yes. That's correct.

21 Q. Where did you go after Brunei?

22 A. After Brunei, I went to The Hague

0137

1 where I became one of the reservoir engineering
2 consultants, and this particular area of
3 responsibility being Southeast Asia and Africa,
4 below the sub Sahara Africa as it was called.

5 Q. And what were you responsible for
6 doing as a reservoir engineering consultant?

7 A. I was responsible for reviewing
8 plans by the various operating companies, for
9 reviewing particular projects.

10 And that would often mean me going
11 out together with a number of colleagues from the
12 other petroleum engineering disciplines like
13 production, geology, petrophysics, et cetera, to
14 operating companies if they had a particularly
15 difficult project on their books.

16 And we would go out and review
17 those plans, make recommendations regarding any
18 changes to those plans as appropriate, and also
19 advise Shell central office management about the
20 soundness of the projects that would come out of
21 the operating companies.

22 Q. Which operating units fell within

0138

1 this category of sub Sahara Africa?

2 A. That would be Southeast Asia, so
3 Malaysia, Brunei, Philippines, Australia, New
4 Zealand, and then Africa, sub Sahara Africa would
5 be Nigeria, Gabon, and a very, very high tiny
6 holding of Congo in Zaire.

7 I am not sure whether that's a
8 comprehensive list, but those are the major
9 players.

10 Q. How long were you a consultant in
11 this capacity?

12 A. That was until the end of 1996 when
13 I was transferred to Lowestoft, that we mentioned
14 earlier.

15 Q. And what were your responsibilities
16 at Lowestoft?

17 A. I was a development manager there.
18 And that effectively equates to being the head of

19 petroleum engineering, petroleum engineering
20 manager in charge of a group of approximately 40
21 people, engineers and staff, and responsible for
22 preparing development plans for the southern gas
0139

1 fields, making our proposals and the like, and
2 also for maintaining liaison with Shell Gas
3 Marketing in London, who would make the sales gas
4 nominations with the gas customers.

5 We would prepare the forecast and
6 say this is for the next year or for the next
7 quarter, this is how much gas you can make
8 available because we think or we see that this is
9 the gas that we can make available in the next --
10 in the next month, in the next few months.

11 Q. What is a development plan?

12 A. Development plan is a plan
13 describing the activities that are needed in order
14 to bring a field or a reservoir into production.
15 It consists of a number of -- of a number of
16 things: First, very importantly, it consists of a
17 description of the surface facilities, how many
18 platforms, how many wells.

19 Also targets of these wells,
20 whether they were just simple wells or whether
21 they were wells with what we call sidetracks.

22 You go in through one whole in the
0140

1 surface, and then somewhere in the subsurface it
2 splits into 2, 3, 4, 5, 6, 7, different bore
3 holes, each penetrating different parts of
4 reservoir, so it would describe that.

5 So it would describe the setting up
6 of a model which invariably at that time we would
7 set up in order to assess the future performance
8 of that field. It would describe the assumptions
9 that went into that model. It would include a
10 comparison with original data, particularly log
11 data from the wells.

12 And it would finally include an
13 economic evaluation of the project or the set of
14 activities that was being proposed.

15 Q. What did the economic evaluation

16 entail?

17 A. It would be based on a forecast
18 which was going to be generated by people in my
19 jurisdiction, under my -- in my group. And it
20 would -- that forecast would be translated with
21 certain assumptions regarding future oil price or
22 gas price that would be related to a cash flow.

0141

1 And that cash flow would be set
2 against the cash flow, the initial development
3 cash flow, i.e., the costs of building the
4 platform and installing the platform, drilling the
5 wells.

6 And that will give a certain
7 monetary forecast. And that forecast will be
8 evaluated to see whether it fulfilled the economic
9 criteria that Shell was hitting against.

10 Q. Now, the development plan that you
11 just described, is that different from a field
12 development plan or is that one and the same?

13 A. No. It's one and the same, yes.

14 Q. Now, is it necessary to have field
15 development plans in place before an operating
16 unit can book reserves, Proved Reserves that is?

17 A. Not before 2003, according to our
18 guidelines.

19 Q. And when you say not before 2003,
20 are you referring to guideline revisions in 2003
21 or after Project Rockford?

22 A. They appeared both at the same

0142

1 time.

2 Q. When were the guidelines revised
3 and disseminated in 2003?

4 A. I can't remember off-hand, but it
5 must have been again in the period October
6 November, thereabouts.

7 Q. Now, any of the information that
8 you just mentioned that goes into development
9 plan, are these items considered in determining
10 technical and commercial maturity?

11 MR. TUTTLE: Objection to form.
12 Foundation.

13 THE WITNESS:

14 A. Ultimately, yes.

15 BY MR. HABER:

16 Q. So is it fair to say that in
17 determining whether a particular project is
18 technically mature or commercially mature, it
19 would be a good practice to have a development
20 plan in place?

21 A. Yes.

22 MR. TUTTLE: Objection to form.

0143

1 BY MR. HABER:

2 Q. I am sorry. The answer is yes?

3 A. The answer is yes.

4 Q. Now, you were -- withdrawn.

5 How long were you in that position?

6 A. This is the consultant position?

7 Q. Yes. The Lowestoft?

8 A. The Lowestoft. That was December
9 '96 through January '99, so just over two years.

10 Q. And after this position, you became
11 the Group Reserves Auditor?

12 A. Yes.

13 Q. How did you come to become the
14 Group Reserves Auditor?

15 A. In the late -- in the period late
16 1998, Lowestoft was going through a reorganization
17 where it became clear to me that because of, say,
18 lack of compatibility between myself and my boss,
19 who was the head of Lowestoft, it was clear that
20 there was not going to be a position for me in the
21 new organization, which was vertically different;
22 rather than by discipline, which is what it was in

0144

1 my time, it would be by area unit, with the
2 disciplines sort of integrated into each of these
3 three area units.

4 It was clear that there wasn't
5 going to be a position for me there. So I went
6 back to The Hague and said, "This is the
7 situation. What -- is there anything you have for
8 me? And if not, then I'll be willing to take
9 early retirement."

10 Because by that time, I had clocked

11 up something like 32, 33 years of service, and
12 that would give me a comfortable pension that I
13 could live on.

14 Q. Now, who did you speak to at The
15 Hague with regard to getting this whole works in
16 process to move on from Lowestoft?

17 A. Primarily, Hans Bouman.

18 Q. And who is -- I am sorry. Hans
19 Bouman?

20 A. Bouman, spelled B-O-U-M-A-N. He
21 was in charge of career planning of petroleum
22 engineers at the time.

0145

1 Q. And when you went to Mr. Bouman,
2 did he say that he was going to try to find
3 something for you, a position for you?

4 A. No. It didn't quite go that way.
5 In fact, I had heard on the grapevine that Ad de
6 la Mar was poorly.

7 THE REPORTER: Can you repeat that,
8 please?

9 THE WITNESS: He was ill. Sorry.
10 English expression. He was just.

11 MR. BEST: Let me just state while
12 he is talking that this, as we all understand, is
13 hearsay.

14 So I am going to object to the form
15 that's requiring him to answer this in double --
16 in single and double and if not triple hearsay.
17 But you can continue to answer.

18 BY MR. HABER:

19 Q. You can answer.

20 A. What I knew was that Ad de la Mar
21 was having health problems and it was likely that
22 he was going to retire from the job around the end

0146

1 of the year.

2 I was interested in the job, so I
3 specifically inquired about me taking that job.
4 And if that wasn't an option, then what else did
5 he have available for me?

6 Q. And what did Mr. Bouman say to you?

7 MR. BEST: Same objection. Go

8 ahead. You can answer.

9 THE WITNESS:

10 A. That he saw me as an excellent
11 candidate for the job and that he was going to
12 propose that I take the job.

13 BY MR. HABER:

14 Q. And how did you -- did you apply
15 for the position?

16 A. In those days, a new system had
17 been set up whereby everybody, upon a transfer,
18 had to apply specifically themselves. In the old
19 days, before 1998, transfers was essentially
20 arranged by Senior Personnel Planners in the
21 center.

22 But from 1998 onwards, each of us

0147

1 had to make specific applications for jobs with
2 the new company that we sought as an employer.

3 Now, this job was somewhat
4 different, because this job wasn't a regular
5 career job. This job meant -- and I knew that
6 beforehand, meant that one had to take early
7 retirement in order to return as an independent
8 consultant doing the reserves auditor job.

9 So when you say: Did you make a
10 formal application? No. I didn't fill in any of
11 these computerized sheets. But I did make clear
12 to Hans Bouman that yes, I was interested in the
13 job.

14 Q. How did you learn that you had the
15 position?

16 A. Early December, there was a meeting
17 of the BusCom, I think it was called, that was the
18 meeting of the top level of managers of Shell
19 International E&P, and the proposal of Hans Bouman
20 to make me Group Reserves Auditor was discussed
21 and accepted.

22 So after that meeting I was

0148

1 informed that I could indeed have the job.

2 Q. This was in early December of 1999?

3 A. Yes. Yes. 1998, I beg your

4 pardon.

5 Q. I am sorry. 1998?

6 A. Yes.

7 Q. I was just jumping ahead to when
8 you started.

9 And you said you started in January
10 of or early February of 1999?

11 A. Yes. In fact, my assignment in
12 Lowestoft ended formally on the last day of
13 February in '99, but most of the months of January
14 and February I already spent in The Hague still
15 formally being on the payroll in Lowestoft.

16 But I was effectively lent out by
17 Lowestoft to The Hague. And then on the 1st of
18 March, I formally took my leave from Shell and
19 reentered my service as effectively a consultant
20 contractor in doing the audit job.

21 That meant that from then on, my
22 pension was fixed, my pension had been built up
0149

1 over the previous 32, 33 years, and it was by all
2 accounts a good pension that I could expect to
3 live on without any problem.

4 Q. Now, when you became the Group
5 Reserves Auditor, was this a full-time position
6 or?

7 A. No, it was not.

8 Q. It was a part time position?

9 A. Yes.

10 Q. How many hours were you expected to
11 put into the position on a yearly basis?

12 A. In the order of 40 to 50 percent of
13 my time.

14 MR. BEST: And when you say your
15 time?

16 THE WITNESS: Oh, the normal office
17 time that one would have available, which is 40
18 hours a week times 52 weeks minus the amount of
19 holiday. It was something in the order of 1800 --
20 yeah. 1800 hours in a year, something like that.

21 So divide that by the percentage
22 that I told you.

0150

1 BY MR. HABER:

2 Q. Now, a moment ago you said that the
3 Group Reserves Auditor position was not a regular
4 career job.

5 Do you have an understanding as to
6 why?

7 A. In order to maintain independence.
8 The position in principle could make
9 recommendations that would not have been to the
10 liking to management in the company or management
11 of the central office.

12 And humans being what they are,
13 that could then be feared to be having an effect
14 on my future career, which incidentally is
15 precisely what is happening to the auditors that
16 are working for Shell now.

17 But leave that aside.

18 So that was a very sound basis on
19 which to set a candidate up as a independent
20 reserves auditor.

21 Q. Now, was there a transition period
22 between you and Mr. De la Mar?

0151

1 A. No, effectively not, no. He was
2 too ill.

3 Q. Did you have any communication with
4 him before you began concerning what the job
5 entailed, what the responsibilities were?

6 A. I had a telephone conversation with
7 him. And he sent me -- as a result of that
8 telephone conversation, he sent me an E-mail with
9 some hints and tips.

10 Q. Do you recall the general sum and
11 substance of what that E-mail said?

12 A. No is the short answer. What I do
13 recall that particular E-mail didn't really
14 contain information that was totally new to me.

15 Because I think it's also useful to
16 bear in mind that this job of Group Reserves
17 Auditor wasn't new to me in the sense that I knew
18 what it was about.

19 I had experience in my successive
20 positions as Senior Reservoir Engineer and

21 reservoir engineering manager, I had been the
22 subject of a group reserves audit both in my time
0152

1 in Sarawak and Brunei. So Sarawak in the late
2 '70s and in Brunei in around 1990.

3 My two different then group
4 auditing incumbents, one of them was Ad de la Mar,
5 when I was in Brunei, and the previous one was
6 Jaan Nesselaar who was the predecessor --
7 predecessor of Ad de la Mar.

8 Q. And were both predecessors to you
9 reservoir engineers?

10 A. Yes.

11 Q. Now, other than the E-mail that you
12 had with -- E-mail communication that you had with
13 Mr. De la Mar, did you receive any training from
14 Shell on how to perform the duties and
15 responsibilities of the Group Reserves Auditor?

16 A. No. And I must say I didn't expect
17 that, nor indeed did I feel in any way
18 uncomfortable with that.

19 Because you must be reminded, by
20 that time I had clocked up something like 25 years
21 as a Reservoir Engineer. I had seen many, many
22 Shell operations. I had built up a lot of

0153
1 expertise myself.

2 I had in fact in 1993 actively
3 participated in issuing the set of reserves
4 guidelines that were put up then. There was a
5 major new release so to speak of the guidelines,
6 which I had factored after.

7 So I felt fully qualified to take
8 on this particular job, as held also by my
9 predecessors who were of similar qualifications
10 when they took up that particular job.

11 Q. When you had started the position
12 or just prior to starting that position, had you
13 received any training on the requirements under
14 Rule 4-10, regulation SX?

15 A. I think in answering that, I must
16 refer you again to the background of the
17 understanding that Shell had reached with the SEC

18 when Rule 4-10 was first published, and that is
19 that Shell essentially made their own
20 interpretation of Rule 4-10 to a large extent
21 based on probabilistic reserves estimating, which
22 was a method that had been used in Shell for quite
0154

1 some considerable time.

2 That doesn't mean of course that we
3 weren't and that I wasn't -- was not aware of the
4 SEC Rule 4-10.

5 We were, because they were included
6 as an appendix in the successive reserve
7 guidelines that were issued by Shell to operating
8 companies and to staff in the operating companies.

9 Q. When you started as Group Reserves
10 Auditor, were you a member of any professional
11 organization, such as the SPE?

12 A. I was a member of SPE, yes.

13 Q. Do you recall at or about the time
14 you started as Group Reserves Auditor, attending
15 any meetings of the SPE?

16 A. Yes. I attended a -- in the course
17 of '99, a workshop on probabilistic reserves
18 estimates organized by the SPE in Houston.

19 Q. Do you recall if there were any
20 representatives from the SEC at that workshop?

21 A. I am fairly certain there were, but
22 I can't be sure.

0155

1 Q. Do you recall at the time you
2 started as Group Reserves Auditor, reviewing any
3 articles in journals that were published by the
4 SPE concerning SEC reserves reporting
5 requirements?

6 A. No. Short answer, no. By this, I
7 mean no, I can't remember. I may have done, but
8 it doesn't stand out in my memory.

9 Q. Do you recall reviewing any
10 publication that was published by the SPE during
11 your membership?

12 A. Again there, no. I can't remember.

13 Q. Do you recall when you became a
14 member of the SPE?

15 A. Yes. That was way back in Sarawak.

16 That was in 1978.

17 Q. And did you maintain your
18 membership through your tenure as Group Reserves
19 Auditor?

20 A. Yes. I am still a member.

21 Q. Now, again, going back to the
22 beginning of your tenure as Group Reserves

0156

1 Auditor, did you review Shell's guidelines when
2 you first started?

3 A. I certainly read through them.

4 Q. Do you recall having any
5 discussions with anyone about the requirements
6 that were in the guidelines for Proved Reserves
7 reporting?

8 MR. BEST: I am sorry. Can you
9 repeat the question?

10 MR. HABER: Sure.

11 BY MR. HABER:

12 Q. Do you recall having any
13 discussions with anyone about the requirements
14 that were in the guidelines for Proved Reserves
15 reporting?

16 MR. BEST: Inside or outside of
17 Shell or anyone?

18 MR. HABER: Inside or outside of
19 Shell.

20 MR. TUTTLE: Limiting to that time?

21 MR. HABER: Yes. This is at the
22 time he started.

0157

1 THE WITNESS:

2 A. I can't remember specifically. But
3 I am sure I must have -- Remco and I.

4 Remco, who was the reserves
5 coordinator at the time when I started the job,
6 must have had from time to time had some
7 discussions about specific points in the -- in the
8 guidelines.

9 BY MR. HABER:

10 Q. Do you recall at any time, when you
11 first started as Group Reserves Auditor, comparing

12 Shell's guidelines against Rule 4-10 to see if
13 Shell's guidelines were compliant with Rule 4-10?

14 A. Yeah. In fact, this had already
15 been done before me as I am sure you are aware,
16 that there was at that time, and there still is, a
17 comparison, or there still was at my time, a
18 comparison between the SEC guidelines and the SEC
19 definition and the interpretations by Shell.

20 So yes.

21 Q. Had you done that?

22 A. No. It was already there

0158

1 beforehand.

2 Q. Did you ever review that analysis
3 to determine if that analysis was correct?

4 A. Not immediately. I mean, I read
5 through it and I didn't see anything that struck
6 me as being inappropriate.

7 But in the course of the year 2000,
8 and particularly as a result of an audit in SNEPCO
9 in Nigeria, I began to realize that these
10 guidelines could be improved.

11 Q. And this realization, did this
12 involve an analysis of SEC definitions?

13 A. Yes is the short answer. Now, I
14 would submit that an analysis of SEC definitions
15 sounds a rather grandiose term of what is in all
16 fairness a fairly oblique, fairly vague set of
17 rules.

18 The most important word in the
19 original SEC definitions, the original Rule 4-10
20 definitions is the word "reasonable certainty."
21 And it gives one or two specific examples, one of
22 them is this LKH issue that we touched on earlier.

0159

1 And there are one or two other
2 examples of as it happened for the portfolio of
3 Shell of relatively minor importance.

4 But the rest of the rule was vague
5 such that it was felt -- already as early as 1978,
6 that it was felt that it was insufficient to just
7 send out to the troops.

8 It had to be accompanied by a more

5 xt

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22 _____
Signature Date

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1 I, Anton Barendregt, am a deponent in
2 the foregoing video deposition, Volume I. I have
3 read the foregoing video deposition, and having
4 made such changes and corrections as I desired, I
5 certify that the transcript is a true and accurate
6 record of my responses to the questions put to me
7 on Monday, February 19, 2007.

8
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19
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21 Signed _____

22 ANTON BARENDREGT

0163

1 CERTIFICATE OF COURT REPORTER
2 I, Frederick Weiss, CSR, CM, do hereby

3 certify that I took the stenotype notes of the
4 foregoing deposition and that the transcript
5 thereof is a true and accurate record transcribed
6 to the best of my skill and ability.

7 I further certify that I am neither
8 counsel for, related to, nor employed by any of
9 the parties to the action in which this deposition
10 was taken, and that I am not a relative or
11 employee of any attorney or counsel employed by
12 the parties hereto, nor financially or otherwise
13 interested in the outcome of the action.

14

15

16

17

18 _____
FREDERICK WEISS, CSR, CM

19

20

21

22 _____
DATE

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1 IN THE UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY
2 Civ. No. 04-3749 (JAP)
Hon. Joel A. Pisano
3

4 _____)
IN RE ROYAL DUTCH/SHELL)
5 TRANSPORT SECURITIES)
LITIGATION)
6 _____)
7

VIDEOTAPED DEPOSITION UPON
8 ORAL EXAMINATION
OF

9 ANTON BARENDREGT

10 VOLUME II

11 Taken on:

12 Tuesday, 20 February, 2007
Commencing at 10:02 a.m.

13 Taken at:

14 The Hague Zurich Tower
15 Muzenstraat 89
2511 WB The Hague
16 The Netherlands
17
18
19
20
21

22 REPORTED BY: FREDERICK WEISS, CSR, CM

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1 A P P E A R A N C E S

2 On behalf of Peter M. Wood, lead Plaintiff, and
the Class:
3

JEFFREY HABER, ESQUIRE

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I N D E X

2 DEPONENT
3 ANTON BARENDREGT
4 Examination Page No:
5 Examination by Mr. Haber (continued) 171

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9 EXHIBIT Page No:
10
Barendregt Exhibit 5 - 218
11
SIEP B.V. document entitled "Petroleum
12 Resource Volume Guidelines Resource
Classification and Value Realisation" bearing
13 Bates Nos. PER00070810 - PER00070880
14 Barendregt Exhibit 6 - 219
15 SIEP document entitled "Petroleum
Resource Volume Guidelines Resource
16 Classification and Value Realisation" dated
September 2000 bearing Bates Nos.
17 PER00081330 - PER00081360
18 Barendregt Exhibit 7 - 219
19 Document marked "Shell Confidential" entitled
"Petroleum Resource Volume Guidelines Resource
20 Classification and Value Realisation" bearing
Bates Nos. RJW01000924 - RJW01000971

21
22
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EXHIBIT INDEX

3 EXHIBIT Page No:
4
Barendregt Exhibit 8 - 220

5

Document marked "Shell Confidential" entitled

6 "Petroleum Resource Volume Guidelines Resource
Classification and Value Realisation" dated

7 April 2002 bearing Bates Nos. LON01470137 -
LON01470175

8

Barendregt Exhibit 9 - 220

9

Document marked "Restricted to Shell Personnel

10 Only" entitled "Petroleum Resource Volume
Guidelines Resource Classification and Value

11 Realisation" dated September 2003 bearing
Bates Nos. RJW00762369 - RJW000762415

12

Barendregt Exhibit 10 - 220

13

Document marked "Shell Confidential" entitled

14 "Guide for the Administration of Proved
Reserves and Production for External

15 Disclosure" bearing Bates Nos. RJW00122185 -
RJW00122208

16

Barendregt Exhibit 11 - 287

17

"Draft Note" dated 19 Oct 2000 including

18 Attachments 1, 2, 3 authored by Anton

Barendregt bearing Bates Nos. PER00070670 -

19 PER00070689

20 Barendregt Exhibit 12 - 296

21 "Draft Note" dated 21 Nov 2000 authored by

Anton Barendregt with Attachment 1 bearing

22 Bates Nos. PER00020307 - PER00020309

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1 I N D E X - continued

2 EXHIBIT INDEX

3 EXHIBIT Page No:

4

Barendregt Exhibit 13 - 299

5

"Note" dated 5 Dec 2000 authored by Anton

6 Barendregt with Attachments 1, 2 and 3

Bearing Bates Nos. RJW00060528 -

7 RJW00060538

8 Barendregt Exhibit 14 - 302

9 E-mail string from Anton Barendregt to
David Christie regarding Draft Audit

10 Note, and attached "Draft Note"

Dated 21 Nov 2000 authored by Anton

11 Barendregt with Attachments 1, 2, 3

Bearing Bates Nos. PER00081987 -

12 PER00081997

13 Barendregt Exhibit 15 - 316

14 "Note" dated 8 Feb 2000 authored by Anton

Barendregt with Attachments 1 - 7 bearing

15 Bates Nos. V00280131 - V00280144

16 Barendregt Exhibit 16 - 329

17 "Note" dated 31 Jan 2003 authored by Anton

Barendregt with Attachments 1 - 7 bearing

18 Bates Nos. V00010650 - V00010666

19 Barendregt Exhibit 17 - 331

20 Document previously marked as Darley Exhibit

25, the front page of which being an E-mail

21 From Jeroen Regtien to John Darley Subject

Gorgon Reserves bearing Bates Nos.

22 V00321087 - V00321104

0171

1 PROCEEDINGS --

2 THE VIDEOGRAPHER: This is the
3 beginning of Volume II, videotape number 3 in the
4 deposition of Anton Barendregt. Today's date is
5 February 20, 2007. The time on the record is
6 10:02 a.m.

7 Please proceed.

8 EXAMINATION BY MR. HABER - continued

9 BY MR. HABER:

10 Q. Good morning, Mr. Barendregt.

11 A. Good morning.

12 Q. I am going to continue with the
13 questioning that we left off with yesterday on
14 your audits and when you first began in the
15 position as Group Reserves Auditor.

16 So I just want to give you an idea
17 of where we are going to start.

18 Now, when you started, in that
19 period right before you started as Group Reserves

20 Auditor, did you review any documents to help
21 acclimate yourself to the position?

22 A. No, because I had no time for it.

0172

1 I had another job to do.

2 But of course, in the time that I
3 was in The Hague so to speak on loan from
4 Lowestoft to SEIP in January, I did read through
5 various documents, most notably the reserve
6 guidelines as they were available at that time,
7 the Shell reserve guidelines.

8 Q. In those guidelines, were they 1998
9 guidelines?

10 A. They would be, yes.

11 Q. Now, at any point when you first
12 got into the position, did you receive any
13 training on how to perform an audit?

14 A. Short answer is no, no. Not as
15 such, no.

16 Q. Did you meet with anyone from KPMG
17 when you first started in your position as Group
18 Reserves Auditor?

19 A. Yes. I met Egbert Eeftink,
20 E-G-B-E-R-T, E-E-F-T-I-N-K.

21 Q. And who is Mr. Eeftink?

22 A. He was at that time one of the

0173

1 partners of KPMG in the Netherlands.

2 Q. Do you recall when you met with Mr.
3 Eeftink?

4 A. Not the precise period, but it
5 would have been during that period in January.

6 Q. Do you recall the sum and substance
7 of what was discussed during that meeting?

8 A. There were several meetings, and
9 most notably of course the one at the end of
10 January or early February where I would make my
11 report on the process of getting together all
12 these -- all these reserves data.

13 But before that, I cannot remember
14 precisely when that was or what the subject was.
15 It must have been just general introduction and
16 getting to know each other, those sort of things.

17 Q. Do you recall Mr. Eeftink
18 providing you with any guidelines on how to
19 perform an audit?

20 A. No.

21 Q. Just so the record is clear, I just
22 want to make sure there is an understanding; when
0174

1 you say that there was several meetings, there was
2 an initial meeting, sort of get-to-know-you
3 meeting, and then there were other meetings in
4 connection with the ARPR process?

5 A. Yes.

6 Q. When you became the Group Reserves
7 Auditor, did you have to sign a contract with
8 Shell?

9 A. Yes.

10 Q. Do you recall how long a period of
11 time you were -- you would be contracted to
12 perform the duties as Group Reserves Auditor?

13 A. The contract was a contract that
14 Shell had with a number of people, typically
15 ex-employees or pensioned employees.

16 It would be best be described as a
17 call-off contract of their services at that time,
18 essentially providing for a daily rate or an
19 hourly rate and a duration which typically would
20 be one year, extendable by mutual consent.

21 Q. And so when you signed the
22 contract, it was for one year?

0175

1 A. It was initially for one year, yes.

2 Q. Was that contract extended?

3 A. Obviously, of course. Yes.

4 Q. Who did you negotiate the contract
5 with?

6 A. There wasn't any negotiation at the
7 time. At the time, those contracts were very
8 tightly controlled by the personnel function.

9 And in particular, what they didn't
10 want to see is that people who were laid off later
11 on came back being at what they feel was
12 extortionist rates. So they were very strictly in
13 control of these contracts. In fact they would

14 hold the contract so to speak.

15 And in particular, the rate was
16 tightly controlled as by its being a calculation
17 of my previous Netherlands salary divided by the
18 number of days that I would normally have worked
19 in the Netherlands at that time.

20 Q. Now, you say at the time those
21 contracts were tightly controlled.

22 Did that subsequently change over
0176

1 time?

2 A. I don't know what it is now. I do
3 know that in the last year, when I -- in my last
4 year which was in 2003, my pension had already
5 started. I initially or originally had said to
6 Remco and his boss, Wouter van Dorp -- I think his
7 name has come up before.

8 Q. I think it's W-O-U-T-E-R?

9 A. W-O-U-T-E-R.

10 -- that I was intending, I was
11 expecting to do this job for about four years, and
12 then my pension would start, and then we would
13 review the situation then.

14 So after these four years, I said
15 to Frank Coopman, who was by that time in charge
16 of reserves reporting, "I am ready to quit."

17 Frank Coopman was in finance. He
18 was the head of EP Finance. There had been a
19 change in the reporting relationships when he
20 arrived on the scene.

21 Instead of me reporting to the head
22 of the department that was doing the internal and

0177

1 external reporting of reserves and other matters,
2 I was now reporting to the head of finance, head
3 of EP Finance and that was Frank Coopman.

4 In that year, I said that I wanted
5 to continue one year, but at a higher rate, to
6 negotiate at a higher rate. I looked around me
7 and saw indeed the rates, the going rates in the
8 industry, and I negotiated the higher rate with
9 Frank Coopman for one more year.

10 But I made it clear then, this was

11 at the beginning of 2003, that this was going to
12 be my last year and they better start seeking a
13 replacement for me by the end of the year. So
14 that's what was happening.

15 And then so for that rate, which
16 was then clearly in excess of what personnel would
17 have liked me to take, they were overruled. I
18 would imagine I don't know what sort of discussion
19 took place.

20 Q. And the conversation that you had
21 with Mr. Coopman, that was in late 2002, early
22 2003?

0178

1 A. Correct, yes.

2 Q. Do you know who succeeded you in
3 your position as GRA, Group Reserves Auditor?

4 A. A whole group of people. The way I
5 understand it is now set up is that reserves
6 auditing is brought under the control of Group
7 Audit. And there are two teams of approximately
8 five or six people, so something like ten to 12
9 altogether, who go around and do a complete and a
10 comprehensive annual check of all the reserves in
11 the group.

12 They have external participation
13 but also internal -- mostly internal
14 participation.

15 Q. Is there a person who is in charge
16 or heads the Group Audit function?

17 A. Yes. I don't know -- don't
18 remember the name, no. You are talking now?

19 Q. Well, actually, my question really
20 is with regard to 2004 when you left?

21 A. Yes. There was a person in charge.
22 I forget his name.

0179

1 Q. Did you have any input into who
2 this person who would head the Group Audit
3 function would be?

4 A. No. No.

5 Q. Do you know if this person is a
6 full-time employee of Shell?

7 A. The head of Group Audit certainly

8 was a full-time employee, yes. Yes.

9 Q. Do you know who that person
10 reported to?

11 A. No. No.

12 Q. And --

13 A. It was an organization. I think it
14 was -- bear in mind it was an organization that I
15 had relatively little to do with.

16 Although, at the instigation of
17 Frank Coopman, I did start to send my reports to
18 Group Audit, somewhere during I believe it was
19 either late 2001 or in the course -- I am sorry,
20 late 2002 or in the course of 2003.

21 I am sorry. I would have to look
22 up from my reports who that person was, but he is
0180

1 clearly listed as one of the addressees in my
2 reports.

3 But other than that, I had very
4 little to do with them. So precisely how they
5 organized themselves, I honestly don't know.

6 Q. Have you heard of a Reserves
7 Committee?

8 A. Yes. Yes. That was set up by
9 Frank Coopman in the course of late 2002, early
10 2003, I think.

11 Q. And did you serve on the committee?

12 A. Yes.

13 Q. You were a full member or an
14 advisory member?

15 MR. TUTTLE: Objection to form.

16 MR HABER: I am sorry. Let me
17 rephrase.

18 Q. Were you a full member?

19 A. As far as I remember, yes. Yes.

20 Q. Did you serve as a member of a
21 committee in an advisory capacity?

22 A. Yes. Yes. I had no executive
0181

1 powers, so yes. Yes.

2 Q. Is there a difference between the
3 Reserve Committee function and the Group Audit
4 function that you just described?

5 A. No. I sat there as Group Reserves
6 Auditor, so in my capacity as Group Reserves
7 Auditor.

8 Q. No. My question is: Was the
9 committee, the Reserves Committee --

10 A. Yes.

11 Q. -- was that the same as the Group
12 Audit function?

13 A. Oh, beg your pardon. No. No.

14 Q. Was there any interaction between
15 the Reserves Committee and the Group Audit
16 function?

17 A. I am not really the person to ask.
18 You would have to ask the head of the Reserves
19 Committee, who was Frank Coopman, and he was
20 taking care of the dealings as far as I knew with
21 the group auditors committee.

22 Q. For the record, who was Frank

0182

1 Coopman and what was his position at the time?

2 A. Frank Coopman was the head of EP
3 Finance. He arrived, he took over from his
4 predecessor in somewhere in the middle of 2002, I
5 believe.

6 Q. Now, in terms of reporting, when
7 you first started as Group Reserves Auditor, who
8 did you report to?

9 A. To start with, I reported to Wouter
10 van Dorp, the name that we mentioned, who was in
11 charge of reserves and business reporting,
12 particularly in the reporting of the amalgamation
13 of financial and production forecasts and the
14 like. Remco Aalbers was reporting to the same
15 person at that time.

16 Q. Now, Mr. Aalbers was the Group
17 Reserves Coordinator?

18 A. Correct, yes.

19 Q. And Mr. Van Dorp, he was in EPB,
20 which I believe was EP Business Planning?

21 A. I forget what the reference
22 indicators were, but it could well be as you said.

0183

1 Q. Did your reporting change over

2 time?

3 A. Yeah. After a not too long period,
4 Wouter van Dorp left the company and he was
5 succeeded by Aidan McKay.

6 Q. And do you recall when you began
7 reporting to Mr. McKay?

8 A. Not precisely the dates, but it
9 must have been somewhere in either late '99 or
10 early 2000, something like that.

11 Q. And how long did you report to Mr.
12 McKay?

13 A. Until he left for the US and he was
14 taken over by -- he was succeeded by Jaap Nauta, I
15 believe.

16 Q. And how long did you report to Mr.
17 Nauta?

18 A. A year, year and-a-half, something
19 like that. I don't know the precise dates in my
20 head. The neatest trail is just to go and look
21 through my audit reports and then you can pretty
22 well see when one took over the year.

0184

1 Q. And do you know who succeeded Mr.
2 Nauta?

3 A. Yes. But I forgot his name.

4 Q. Is it Malcolm Harper?

5 A. No. No. It was a Dutch man. I
6 would have to look in my reports, sorry.

7 Q. Now, did you have -- I understand
8 in Shell, it's called a dotted-line report.

9 Was there someone who you also
10 reported to who wasn't a straight-line person
11 above you?

12 MR. TUTTLE: Objection to form.

13 THE WITNESS:

14 A. Not really, no. These were the
15 persons I had to deal with on a day-to-day basis.

16 BY MR. HABER:

17 Q. Other than your annual reports, did
18 people in the position that you just identified
19 for the record, did they require to you file any
20 other reports to them identifying the activities
21 and conduct of what you had performed throughout

22 the year?

0185

1 MR. TUTTLE: Objection to form.

2 THE WITNESS:

3 A. The reports that I issued were the
4 reports of the actual company audits, which are
5 well known and which all have full access to, and
6 the reports at the end of the year, which again
7 you have all seen.

8 Those were the two types of
9 reports. And then of course there were my monthly
10 statements regarding the number of hours worked
11 and et cetera. But that was separate.

12 BY MR. HABER:

13 Q. How would you describe the level of
14 supervision that these people that you reported to
15 gave to you during your tenure?

16 MR. TUTTLE: Objection to form.

17 MR. BEST: Objection to form.

18 MR. WARE: Objection. Foundation.

19 THE WITNESS:

20 A. I would more call it -- my
21 relationship with, say, the Group Reserves
22 Coordinator's supervisor was hands off. I would

0186

1 meet him irregularly and not too frequently,
2 mostly in the end of year period in January, then
3 we would have a number of meetings.

4 But my day-to-day contacts were
5 with the Group Reserves Coordinator.

6 Q. How would you describe your
7 interaction with the Group Reserves Coordinator?

8 A. I would more describe it as
9 cooperation. If I had for instance any concerns,
10 any questions, I would go and see him and he would
11 either share my concerns or give me an answer or
12 whatever.

13 Anyway, we had an effective and I
14 think even very cooperative way of working with
15 each other.

16 Q. Now, you have mentioned Remco
17 Aalbers and I believe yesterday you mentioned that
18 there was a gap after Mr. Aalbers.

19 A. Mm-Hmm.

20 Q. Do you recall who were the people
21 that filled that gap until a more permanent person
22 was placed in that position?

0187

1 A. Yes. Remco Aalbers was first,
2 succeeded by Leigh Yaxley. He did not last very
3 long. He came on the scene, I believe, on the 1st
4 of April, 2001. And he left somewhere in November
5 2001.

6 Q. Who --

7 A. As I mentioned yesterday, it was
8 because of personal and home problems that he felt
9 he could not continue his job with Shell.

10 Q. And who filled that space, that
11 void, after Mr. Yaxley left?

12 MR. TUTTLE: Objection to form.

13 THE WITNESS:

14 A. It was Jan Willem Roosch who was
15 helping out over the period of the end of 2001
16 reserves reporting, because at that time there was
17 no reserves coordinator; and the end of year
18 period is obviously a very busy period and they
19 needed someone, so it was Jan Willem Roosch.

20 Q. What was the level of interaction
21 you had with Mr. Roosch?

22 A. Slightly more at the distance than

0188

1 with Remco Aalbers, I would say. We knew each
2 other. We had met. In fact, we had even shared
3 an office at one stage in the distant past.

4 Let's just say that Jan Willem is
5 more of a people -- more of a man that keeps
6 people at the distance than Remco Aalbers is.

7 Q. Who succeeded Mr. Roosch? I am
8 sorry. Who succeeded him?

9 A. Oh, who succeeded him? There was,
10 after another interval, it was John Pay, who as it
11 happens, also started on the 1st of April, I
12 believe, in 2003 -- 2002, beg your pardon.

13 Q. And what was the level of
14 interaction you had with Mr. Pay?

15 A. Excellent, yes. Pretty much like I

16 had it with Remco Aalbers.

17 Q. Did you have to report --

18 withdrawn.

19 Did you report to KPMG during your

20 tenure?

21 MR. TUTTLE: Objection to form.

22 THE WITNESS:

0189

1 A. I sent all my reports to KPMG, so

2 yeah. In the strictest sense, yes, I did report

3 to KPMG.

4 BY MR. HABER:

5 Q. Other than through your reports,

6 was there any reporting that you had done with

7 KPMG?

8 MR. TUTTLE: Objection to form.

9 THE WITNESS:

10 A. No.

11 BY MR. HABER:

12 Q. Now, during your tenure as Group

13 Reserves Auditor, who paid your compensation?

14 A. The way I interpret that question

15 is on whose budget were my costs allocated. That

16 was distributed. The costs of my visits to the

17 operating companies were borne by the operating

18 companies. And I had set up a system whereby I

19 would keep tabs of how many hours I would have

20 worked for each of the successive audits.

21 The overhead activities during the

22 year and certainly the end-of-year activities

0190

1 would be charged to Remco Aalbers, his unit, i.e.

2 to his supervisor.

3 Q. What do you mean by "overhead

4 activities"?

5 A. Well, for instance, my involvement

6 with issuing the new guidelines, all the

7 activities that couldn't clearly be attributed to

8 a specific company audit would be what I called

9 overhead activities.

10 Q. So when you bill an operating unit,

11 that bill or that invoice would cover your hourly

12 rate and out-of-pocket expenses.

13 Is that correct?

14 A. Correct, yes.

15 Q. I believe yesterday you had said
16 that as Group Reserves Auditor, you were a
17 part-time employee.

18 Correct?

19 A. Yes.

20 MR. TUTTLE: Objection to form.

21 Characterization of the testimony.

22 BY MR. HABER:

0191

1 Q. Did you believe during your tenure
2 that you could devote sufficient time to
3 performing the duties and responsibilities of a
4 Group Reserves Auditor on a part-time basis?

5 A. I think we must realize that the
6 system of a part-time Group Reserves Auditor had
7 been in operation for Shell for 25 years at the
8 time. And there never had been any reason for
9 Shell to have second thoughts about a system.

10 And therefore, I hadn't come across
11 any instances where I felt that, say, a larger
12 amount of effort had to be spent on these audits.

13 As I explained earlier, my audits
14 were of a form where I would sit around the table
15 with a group of engineers describing a certain
16 field; and with my experience and with the
17 knowledge and the experience of the people around
18 the table, it would be very quickly possible for
19 me to get a good technical picture of the field in
20 question and of the way in which the reserves
21 estimate for that field was put together.

22 As I said, I didn't go checking

0192

1 individual details, like did they use the right
2 values of porosity or permeability or any of the
3 other parameters that you need in a simulation
4 model.

5 But I did ask them how, for
6 instance, they put together the various data that
7 had come in from, for instance, drilling wells,
8 how that had been put together into the simulation
9 model.

10 MR. FERRARA: I am sorry. Had he

11 finished his answer?

12 THE WITNESS: Effectively, yes. I

13 am just describing this process yet again, to say

14 that I felt a very effective transfer of knowledge

15 and data did take place during those audits, and

16 that I didn't need -- I didn't feel the need to

17 have a much more thorough detailed investigation

18 of those simulation models and whatever else the

19 company was doing.

20 BY MR. HABER:

21 Q. Over the course of your tenure, did

22 you come to have second thoughts about having

0193

1 sufficient time to perform your duties as a Group

2 Reserves Auditor?

3 MR. BEST: Objection. Asked and

4 answered.

5 MR. TUTTLE: Objection to the form.

6 Asked and answered.

7 BY MR. HABER:

8 Q. You can answer.

9 A. This question sounds very much like

10 a question you already asked me yesterday.

11 Towards the end of my tenure, towards the end of

12 2003 when it became clear that there was a large

13 proportion of our reserves that didn't fulfill the

14 requirements of having, say, a firm development

15 plan or even FID, it became clear to me that there

16 was certainly a whole area in the portfolio of our

17 reserves that needed a lot closer look.

18 So on that basis, I recommended

19 that we would have need at least a doubling of

20 manpower in the Group Reserves Auditor. That

21 recommendation was taken up -- more than taken up,

22 because now as I explained to you, they have two 5

0194

1 to 6 man teams, and they still have those.

2 Q. During the year, how many audits

3 did you perform of Shell operating units?

4 A. Everything between seven and ten.

5 Q. How did you determine which

6 operating units to audit?

7 A. There was a fixed schedule. The
8 principle was that every operating unit was
9 visited once every four years. There was an
10 exception to that when I started, when a large
11 backlog of these audits had been built up because
12 of the illness of my predecessor.

13 And it was felt that we had to
14 gradually catch up on that audit, on that backlog.
15 So initially, we had a system whereby the larger
16 operating companies would continue on their four
17 year schedule. I would just continue that with
18 the -- from the previous, the previous schedules,
19 and the smaller operating companies would be
20 delayed slightly by either once in five years or
21 once in six years.

22 But after a few years, that backlog

0195

1 had been cleared. I reported on those -- on that
2 schedule every year in my end of year report. So
3 you can see the details there.

4 Q. Now, you say that this was based on
5 a fixed schedule. Who created the schedule?

6 A. I maintained it and reported it or
7 proposed it rather for the coming year. So each
8 year, at the end of the year, I proposed a
9 schedule for the coming year and agreed that with
10 the external auditors and with the Group Reserves
11 Coordinator.

12 Q. So the proposal was made to the
13 Group Reserves Coordinator and the external
14 auditors?

15 A. Primarily to the external auditors.

16 Q. And was it KPMG that you made the
17 proposal to?

18 A. Both, KPMG and
19 PriceWaterhouseCoopers.

20 Q. Who at PriceWaterhouseCoopers did
21 you communicate with?

22 A. I am sorry. What?

0196

1 Q. I am sorry. Who at
2 PriceWaterhouseCoopers did you communicate with?

3 A. Steve Johnson.

4 Q. Was he the primary contact?

5 A. Yes. Bearing in mind that the
6 contact with PriceWaterhouseCoopers was mostly
7 concentrated -- in fact, was concentrated at the
8 end of the year. So at the end of January, a
9 meeting that we had with the external auditors was
10 in fact the only time in the year that I would see
11 Steve Johnson.

12 Q. Do you know a Brian Puffer?

13 A. He was Steve Johnson's predecessor
14 I believe.

15 Q. And he was also at
16 PriceWaterhouseCoopers?

17 A. As far as I remember, yes.

18 Q. And when you made the proposal for
19 the upcoming year schedule of audits, you sent it
20 to Mr. Johnson?

21 A. Yes.

22 Q. And before him, Mr. Puffer?

0197

1 A. I hope that's right. Brian Puffer
2 was before Steve Jones. I am sure somebody around
3 the room can tell me.

4 MR. TUTTLE : Just your best
5 recollection, that's all we're after.

6 MR HABER: That's all we're after.

7 Q. Now, did you ever make exceptions
8 to the schedule?

9 A. Exceptions to the rule of once
10 every four years --

11 Q. Yes.

12 A. -- you probably mean?

13 Q. That's correct.

14 A. Yes. There was one instance during
15 the end of 2002, I believe, when there was a
16 remark in one of the E-mails that we received from
17 SNEPCO in Nigeria, where there was a discussion
18 whether they could book a newly-discovered field,
19 a newly-discovered field for reserves, for proved
20 reserves.

21 And we, the Group Reserves
22 Coordinator and myself, effectively told them no,

0198

1 you can't do this, because the maturity is just
2 simply not sufficient to allow us to do that.

3 And they came back with the remark
4 saying, Oh, but we booked -- I believe it was
5 Erha, one of the other fields -- "We booked Erha
6 in this manner last year".

7 And indeed, they had. It had just
8 slipped through, or slipped through in the sense
9 that they had made a booking.

10 It was made clear that it was a new
11 field, but there was no reason for us to have any
12 opinion about that booking, not until I would come
13 and visit SNEPCO, which would be a couple of years
14 later.

15 So when he made this remark, that
16 really made us sit upright. We said: Clearly
17 there is something funny.

18 Now, I was due to visit SNEPCO in
19 2003. But because of this remark, I proposed that
20 we move the audit forward to 2002, and that is
21 what has happened.

22 Q. Other than the SNEPCO situation,
0199

1 can you recall any other instances where you made
2 an exception to the schedule of once every four
3 years for an audit?

4 A. Not off-hand, except perhaps for
5 Nigeria, my first visit to Nigeria as PDC was in
6 1999. And my predecessor had visited Nigeria in
7 1997 and had made the recommendation that Nigeria
8 be visited again in 1999.

9 So that in itself was a change from
10 the four-year rule.

11 Q. But once you got into the position,
12 did you audit SPDC sooner than four years?

13 A. Apart from my first audit, no. No.

14 Q. Did you do any follow-up with
15 operating units after you conducted an audit?

16 A. No. No. I considered that to be
17 the responsibility of the operating unit concerned
18 and of the reserves coordinator, and the general
19 reporting relationship that that company had with
20 the central office.

21 Q. If you made -- when you made

22 recommendations in your operating unit reports,
0200

1 did you follow up to see if those recommendations
2 were implemented?

3 A. Like I said, no. My responsibility
4 was to go out, find, and report. But I had no
5 executive powers directing companies to do this,
6 that or the other.

7 Q. During your tenure as Group
8 Reserves Auditor, did you ever come to question
9 the propriety of conducting audits of the
10 operating units on a four-year cycle?

11 MR. TUTTLE: Objection to form.

12 THE WITNESS:

13 A. Again, there, we must bear in mind
14 that this had been a system that had been in
15 operation with Shell without any complaints from
16 anywhere for 25 years.

17 Having said that, when in 2003,
18 which was my fifth year in the position of Group
19 Reserves Auditor, I went and visit some companies
20 that I had also visited in my first year, because
21 the four-year cycle.

22 And that's when I found that in

0201

1 cases where the reserves coordinator of that
2 particular company was still the same position,
3 was still held by the same person, there were very
4 few complaints or changes.

5 But in quite a number of companies,
6 you would find that that position had changed, and
7 that -- or the person holding the position had
8 changed.

9 And I was surprised by the amount
10 of change that a new person sometimes could and
11 would have introduced in the reporting procedures
12 in that company.

13 So that's when I began to -- that's
14 also when I began to realize that perhaps once
15 every four years is not enough, but it wasn't
16 until the fifth year.

17 BY MR. HABER:

18 Q. In preparing the schedule, did the
19 efforts of the operating unit reserves coordinator
20 factor into how you scheduled the audit for that
21 particular operating unit?

22 A. I am sorry. Can you rephrase the
0202

1 question?

2 Q. Yes. When you prepared your
3 schedule each year --

4 A. Yes.

5 Q. -- did the person who served as the
6 operating unit reserves coordinator factor into
7 how you scheduled the audits?

8 MR. TUTTLE: The identity of the
9 person?

10 MR HABER: Yes. Who the person
11 was.

12 THE WITNESS:

13 A. Yes. Typically, once I had agreed
14 the schedule with the external auditors and the
15 Group Reserves Coordinator at the end of January,
16 I would approach the operating companies and tell
17 them that they were due for an audit in the course
18 of the year, and I would explain to them -- pretty
19 much along standard text, I would explain to them
20 what the audit entailed, and what sort of measures
21 I would expect to be present, what sort of
22 information I would need; and first and foremost,

0203

1 of course what would be a suitable date for them.

2 Q. Did you have this communication
3 with them before the schedule was finalized with
4 the external auditors?

5 A. No. Usually it was the other way
6 around, usually. Sometimes I may have approached
7 a company beforehand.

8 Q. A moment ago I asked you about
9 recommendations that you would make after an
10 audit. Whose responsibility was it to implement
11 those recommendations?

12 A. The operating company.

13 Q. Now, as the Group Reserves Auditor,
14 were your duties and responsibilities written down

15 in any particular place in Shell?

16 A. Yes. There were two documents, one
17 of them was Terms of Reference for my audit.

18 They were published each year in
19 the Group Reserves Guidelines.

20 And there was a separate set of
21 Terms of Reference for the group reserve auditor
22 position.

0204

1 Q. And where was that separate set of
2 Terms of Reference?

3 A. It wasn't -- it was residing on my
4 computer for one, but it wasn't a set of formally
5 enshrined in any particular document, but it
6 certainly was available to all the persons
7 concerned, Group Reserves Coordinator, et cetera
8 et cetera.

9 Q. This document that you are
10 referring to that was on your computer, was this
11 something that you had created?

12 A. I would have put up the first draft
13 of it. It started with a similar Terms of
14 Reference that had already been in existence with
15 my predecessor, and I changed it.

16 There have been over the years a
17 number of changes, always agreed obviously with
18 the Group Reserves Coordinator and his supervisor,
19 and when Frank Coopman who came on the scene
20 agreed with head of EP Finance.

21 One particular change for instance
22 that came in was that when the group Reserves

0205

1 Committee was set up, and I had to take part in
2 that committee or I was asked to take part in that
3 committee as well, and then he added it to another
4 paragraph in my Terms of Reference.

5 Q. The Terms of Reference that were
6 attached to the group guidelines, did you draft
7 that Terms of Reference each year?

8 A. Yes. I drafted it and received
9 comments where applicable. It was finally an
10 agreed document that would go into the Reserves
11 Guidelines, yes.

12 Q. Now, when you say it was agreed, it

13 was agreed upon with the Group Reserves

14 Coordinator?

15 A. And his reporting relationship.

16 Ultimately the Group Reserves Guidelines had to be

17 agreed with and sponsored by the group reserves

18 coordinator's supervisor and his two managers

19 above that.

20 Q. When you first began as the Group

21 Reserves Auditor, did you create an audit program

22 that you followed with regard to conducting the

0206

1 audits of the various operating units?

2 A. Yes. I found that when looking at

3 the reports of my predecessor, that there seemed

4 to be an absence of a sort of a framework along

5 which he would generate or conduct these audits.

6 And even though, of course, I was

7 fully aware that reserves estimating is in the

8 last instance is a matter of opinion taking the

9 Reserves Guidelines as a guiding principle, I

10 still felt that some more structure could be

11 applied.

12 So what I did is I set up a

13 checklist spreadsheet along the -- along the

14 various points in the Reserves Guidelines which

15 would allow me to A, make sure that I had covered

16 all the subjects, all the relevant points in the

17 reserves estimates; but also to have an attempt at

18 scoring the company against that, and thereby get

19 some sort of an aggregate score.

20 I found that a very useful method

21 to be A, consistent, and B, comprehensive in doing

22 my audits.

0207

1 Q. Did anyone assist you in preparing

2 this checklist?

3 A. No.

4 Q. Did you pass the checklist over to

5 KPMG for their review before?

6 A. It was a part of my -- a full part

7 of my report that was sent out, so they received

8 the completed checklists.

9 Q. My question is before --

10 MR. TUTTLE: His question was
11 before you started using.

12 THE WITNESS:

13 A. Oh, I can't remember. Certainly if
14 -- I think in 1999, which was my first year, I set
15 up this checklist somewhere around February/March,
16 before I went out on my first visit.

17 I think the answer is no. I am not
18 100 percent sure, but I think the answer is no.
19 They didn't see my checklist until they saw my
20 first report, which would have been at the end of
21 April.

22 Q. Do you recall anyone at KPMG

0208

1 commenting on the checklist?

2 A. In any other sense than just
3 favorable and a good idea, no.

4 Q. Did anyone from KPMG ever pass
5 comment that the checklist was or was not
6 comprehensive enough?

7 A. No.

8 Q. Did anyone from KPMG ever make a
9 comment about whether the checklist captured all
10 of the elements of commercial maturity?

11 A. I don't recall that.

12 Q. Same question with regard to
13 technical maturity?

14 A. I don't recall that either.

15 Q. Do you recall anyone from KPMG
16 commenting on whether the checklist captured the
17 factors that go into a determination of reasonable
18 certainty?

19 A. I don't specifically recall that.

20 Q. Now, this checklist that you
21 created, did it vary from operating unit to
22 operating unit when you conducted an audit?

0209

1 A. It developed over the years. So if
2 you were to take my first report and compare it
3 against the last report, you will see that it has
4 indeed changed quite a bit over the year -- over
5 the years.

6 This was basically as a result of

7 instances -- no, first as a result of the changes
8 guidelines over the years, but also as a result of
9 specific instances, specific cases that came up
10 during my audits where I felt that yeah, this
11 would probably be another item that I would need
12 to check.

13 So yes, it did change, yes.

14 MR. BEST: I think the question was
15 did it vary from operating unit to operating unit?

16 THE WITNESS: Well, effectively,
17 yes, because it gradually grew.

18 MR. BEST: All right. But --

19 THE WITNESS: The operating units
20 in 2001 would have seen a different list than the
21 ones in 1999 and in 2003, not grossly different,
22 but yes, different, more extensive.

0210

1 BY MR. HABER:

2 Q. When you audited an operating unit,
3 did you review the audit reports from the prior
4 audits of that operating unit?

5 A. If I had them available, then yes.
6 And I say that because I did not have a complete
7 set of the audit reports of my predecessor. I had
8 -- I think I had the most recent audit reports,
9 but not a full set.

10 I didn't -- I didn't pay a lot of
11 attention to it. I would glance through it and
12 see whether there was any particular items that
13 would be relevant to those companies, and that was
14 for a number of reasons: A, I wanted to make my
15 own assessment of the company, my independent
16 judgment; but B, a lot of these companies I
17 already knew, either because I worked there myself
18 or because I had been visiting them on my previous
19 assignment as consultant.

20 Q. Now, in terms of items that would
21 be relevant to the companies, what sort of items
22 are you referring to?

0211

1 A. I am not sure I understand your
2 question.

3 Q. Well, let me go back to your
4 answer. You said, "I would glance through it and
5 see whether there was any particular items that
6 would be relevant to those companies."

7 A. Oh, I see. If there was any
8 particular finding in one of the previous reports
9 about something that wasn't entirely as it should
10 have been, then I would -- I would take that up.
11 I would register that and say, okay, this is
12 obviously something that I needed to check on.

13 But like I said, I didn't really
14 feature it very much, because as I mentioned
15 earlier, I didn't find the reports from my
16 predecessor to contain a lot of structure. I
17 didn't find them overly useful.

18 Q. Now, when you conducted audits,
19 were these audits performed in the field, that is,
20 in the operating unit itself?

21 A. Yes.

22 Q. Did you ever perform an audit of
0212

1 the operating company from The Hague?

2 A. Only when the effective working
3 unit of the working company was in fact located in
4 The Hague.

5 Q. And which operating unit or units
6 fall into that category?

7 A. Oh, I don't remember. Pakistan,
8 there was an exploration venture; Kazakhstan in
9 2003, I believe, yes. Those are the two that
10 spring to mind.

11 Q. When you conducted an audit of the
12 operating unit, did you ever send requests for
13 information in advance of the audit?

14 A. Yes, quite often I would.
15 Typically what I would ask is: Can you give me an
16 up-to-date list of all the field names and their
17 field reserves, like proven expectation reserves
18 of oil gas -- oil and gas.

19 And with that, I would prepare the
20 bubble plots that you will have seen appear in my
21 reports.

22 And I found this to be an excellent

1 way of picking out the exceptional fields, either
2 fields with high proven reserves or the large
3 fields because the size of the bubbles would
4 indicate whether it was a large field or a small
5 field.

6 Anyway, I found it an extremely
7 useful method of picking out the fields on which I
8 might want to ask some questions.

9 So on that -- on that basis, I

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20 reports which makes that comparison.

21 Q. Did you ever request information
22 from the operating units to give you a picture of
0215

1 the reserves position at the beginning of the year
2 and the end of the year so that you can do a
3 comparison of changes?

4 MR. TUTTLE: Objection to form.

5 THE WITNESS: Yes. That was --
6 that was certainly done by me at the end of the
7 year, in the end-year statement.

8 In my reports, there is a table
9 that expresses that as well, that gives that --
10 that gives the reasons for changes, a separate set
11 of tables, one for gas, one for oil. It gives
12 those changes as well with my comments.

13 Q. I am sorry. And when you said
14 end-year statements, you are referring to the
15 year-end report?

16 A. Yes.

17 Q. Now, at the operating unit level,
18 who is responsible for signing off on the reserves
19 that are reported to the center?

20 A. In my days, it was the chief
21 petroleum engineer, the head petroleum engineer,
22 the petroleum engineering manager, so typically
0216

1 the same position as I was holding in Lowestoft.

2 Q. When you conducted your audits, did
3 you have interaction with this person in that --
4 who was the chief petroleum engineer?

5 MR. TUTTLE: Do you want to ask for
6 each one? I mean --

7 MR HABER: I am speaking generally.

8 THE WITNESS:

9 A. Yes. Definitely. Absolutely. I
10 would -- during these audits, I would of course
11 have a close working relationship with the
12 reserves coordinator because he would be the one
13 to answer all my questions, other than the
14 questions that I would direct to the field teams
15 and his supervisor, so the head reservoir engineer
16 or the head petroleum engineering.

17 I would also, as a matter of fact,
18 always make a point of visiting the Managing
19 Director of that company when he was available,
20 and sometimes a technical director as well.

21 But those would be just courtesy
22 calls. And he would always -- he or she -- it's

0217

1 always a he as far as -- no. No. There only was
2 one she. They would always receive a copy of my
3 report at the very end.

4 BY MR. HABER:

5 Q. Who was the one woman that you are
6 referring to?

7 A. Canada. I am sorry. I forget the
8 name of the woman, I am sorry, for the moment.

9 Q. Do you know a Sheila Graham?

10 A. Yes, I know her.

11 Q. And who is she?

12 A. She was I believe the reserves
13 coordinator in Shell Development Australia.

14 Q. And was she someone that you had
15 interaction with when you audited --

16 A. Yes.

17 Q. -- SDA individual?

18 MR HABER: We can break now. This
19 is fine.

20 THE VIDEOGRAPHER: Going off the
21 record at 10:58.

22 (Short recess taken)

0218

1 THE VIDEOGRAPHER: Returning to the
2 record at 11:18 from 10:58.

3 BY MR. HABER:

4 Q. Mr. Barendregt, we are about to
5 mark a number of documents, six documents, I
6 believe. Five of them are the Petroleum Resource
7 Volume Guidelines from Shell. And they are from
8 1999 through 2003.

9 The last document is the guide for
10 administration of Proved Reserves and production
11 for external disclosure.

12 So we are going to mark these for
13 the record. We have handed these documents out.

14 So when you start getting these, if you could just
15 take a look at them, my questions are primarily
16 going to be devoted to the Terms of Reference.

17 (Barendregt Exhibit No. 5 marked
18 for identification)

19 The first document that we are
20 marking as Barendregt Exhibit 5 is the Petroleum
21 Resource Volume Guidelines Resource Classification
22 and Value Realization. It is a multipage

0219

1 document. Bates range is PER00070810 through
2 PER00070880, and this document is for the year
3 1999.

4 The next Exhibit, which we'll mark
5 as Barendregt Exhibit 6, is a Petroleum Resource
6 Volume Guidelines Resource Classification and
7 Value Realization for the year 2000.

8 It's Bates range is PER00081330
9 through PER00081360.

10 (Barendregt Exhibit No. 6 marked
11 for identification)

12 The next Exhibit, which will be
13 Barendregt Exhibit 7, is the Petroleum Resource
14 Volume Guidelines Resource Classification and
15 Value Realization for the year 2001, and this is a
16 multipage document. Its Bates range is
17 RJW01000924 through RJW01000971.

18 (Barendregt Exhibit No. 7 marked
19 for identification)

20 The next Exhibit, which will be
21 Barendregt Exhibit 8, is the Petroleum Resource
22 Volume Guidelines Resource Classification and

0220

1 Value Realization for the year 2002. And it's
2 Bates range is LON01470136 through LON01470175.

3 (Barendregt Exhibit No. 8 marked
4 for identification)

5 The next Exhibit, which will be
6 Barendregt Exhibit 9, is a Petroleum Resource
7 Guidelines Resource Classification and Value
8 Realization for the year 2003. The Bates range is
9 RJW00762369 through RJW00762415.

10 (Barendregt Exhibit No. 9 marked

11 for identification)

12 And finally Exhibit 10 will be the
13 Guide for the Administration of Proved Reserves
14 and Production for External Disclosure. The date
15 of issue is July 2003. It's Bates range is
16 RJW00122185 through RJW00122208.

17 (Barendregt Exhibit No. 10 marked
18 for identification)

19 MR. TUTTLE: Mr. Haber, I just note
20 for the record in Exhibit 5, that appears to be
21 actually two documents. Starting at PER00070842
22 is the "Petroleum Resource Volumes Submission

0221

1 Requirements for Internal and external reporting
2 (for Operating Units and New Venture Operations)."

3 MR HABER: Okay.

4 BY MR. HABER:

5 Q. Mr. Barendregt?

6 A. Okay.

7 Q. Have you seen each one of the
8 documents that we've marked as Exhibits 5 through
9 10?

10 A. Yes. And they appear to be the
11 documents that I have been working with, yes.

12 Q. Now, your counsel has noted on
13 Exhibit 5, if you turn to page 70843, there is a
14 document that says, "Petroleum Resource Volumes
15 Submission Requirements for Internal and external
16 reporting (for Operating Units and New Venture
17 Operations)."

18 Do you see that?

19 A. Yes.

20 Q. Do you know if this document is a
21 part of the resource volume guidelines that we
22 have marked as Exhibit 5?

0222

1 A. Yes. It is part of it. It's a
2 complement to it. The top document in Exhibit 5
3 are the actual guidelines, which is that -- which
4 are the guidelines that I for one, as a reserves
5 auditor, was using as my reference, and it was
6 intended to be used as a reference by all the
7 operating units in determining the actual volumes

8 of the fields in question.

9 The second part is the -- is

10 instructions for use of the tables that operating
11 units had to submit to the center at the end of
12 the year. So it's more of a how to input the
13 figures type of explanation rather than the method
14 used previous in determining the volumes of the
15 actual volumes of the reserves.

16 So that's the difference between
17 the two.

18 Q. When you conducted your audits, did
19 you use the guidelines that we've marked today as
20 Exhibits 5 through 9 as your reference?

21 A. Yes.

22 Q. When you conducted your audits, did
0223

1 you use SEC rule 4-10 as a reference to your
2 audits?

3 MR. TUTTLE: Objection to form.

4 THE WITNESS:

5 A. SEC rule 4-10 is included as an
6 Appendix, and is, say, an unremovable part of and
7 has been the resource volume guidelines that we've
8 used.

9 So that goes also for this
10 document.

11 BY MR. HABER:

12 Q. When you conducted your audits, did
13 you refer to rule 4-10, which is an Appendix, and
14 I believe if you look at Exhibit 5, that would be
15 Appendix 3, which is on page 22 of the document,
16 or Bates range 836?

17 MR. TUTTLE: Objection to form.

18 THE WITNESS:

19 A. As I explained yesterday, the
20 original rule 4-10 wasn't really useable in the
21 form in which the SEC issued it in 1978.

22 And during discussions between
0224

1 central office at Shell and the SEC, it was
2 determined that Shell would continue to use their
3 own methods and would continue to use internal
4 guidelines that, by all concerns, were deemed to

5 yield the same if not actually more conservative
6 results than rule 4-10.

7 In my audits, I therefore referred
8 primarily, only by way of exception and now
9 specifically -- sorry. I referred primarily to
10 the internal Shell guidelines, to this document
11 (indicating) and only on occasion specifically to
12 rule 4-10, as you will see in my reports.

13 BY MR. HABER:

14 Q. Can you think of any specific audit
15 report where you made that specific reference to
16 rule 4-10?

17 A. Not off-hand. Let me think.
18 Kazakhstan, maybe. That's the only one that
19 springs to me at the moment, but I am sure that
20 there were more, there were occasional remarks in
21 the text.

22 Q. Now, if you can look at the Terms

0225

1 of Reference, which is on -- and I am looking at
2 Exhibit 5 now, page 24 of the document, the Bates
3 range ends 838.

4 And I believe earlier in your
5 testimony, you said that you had drafted the Terms
6 of Reference.

7 Is that correct?

8 A. Drafted and then agreed with the
9 reserves coordinator and his supervisors, yes.

10 Q. So with regard to Exhibit 5, the
11 Terms of Reference that we're looking at, you
12 drafted this document?

13 A. That particular page, yes. Yes.
14 And agreed after discussion, like I said. Which
15 meant that they might have come up with slight
16 changes of wording or additional comments.

17 Q. Did you --

18 A. So it was an agreed document.

19 Q. No. I understand that. And
20 actually that's my next question.

21 Do you recall any comments that
22 were given to you by the Group Reserves

0226

1 Coordinator and whoever they had reported to, such

2 as let's say Mr. McKay?

3 A. Not specifically, but I know that
4 there were. But like I said, I can't remember
5 specifically what those comments were.

6 Q. Do you recall if the comments were
7 substantive in nature?

8 A. From my recollection, which is
9 vague -- after all, it's seven, eight years ago.

10 From my recollection, they came up
11 with perhaps additional points that were relevant
12 during those -- during those audits. So they felt
13 that my original draft was maybe a little bit on
14 the brief side and they felt that it could be
15 expanded with one or two additional ones.

16 But if you ask me which ones are
17 these, I cannot tell you.

18 Q. Now, do you know if KPMG had
19 approved of this Terms of Reference?

20 A. They certainly had seen the draft
21 of it, of the whole document.

22 Q. Right.

0227

1 A. And it was discussed between
2 ourselves, so between myself and the Group
3 Reserves Coordinator and KPMG.

4 Q. Do you recall if PWC participated
5 in those discussions?

6 A. No. Not in that discussion.

7 Q. Do you recall if KPMG provided any
8 comments to the Terms of Reference?

9 A. Yes, they did. But again, I cannot
10 remember specifically which comment that would
11 have been. But yes, that they would have asked
12 questions and then on the basis of that, they may
13 or may not have had comments.

14 Q. Do you recall if the comments or
15 questions were substantive?

16 A. There is one comment that I can
17 remember, specifically on this one, on this year.

18 In the previous year, there was a
19 comment saying that KPMG -- or no, external
20 auditors had approved of the -- of the guidelines.
21 And we got a comment, or the Group Reserves

22 Coordinator got a comment or a question from KPMG

0228

1 saying, "Did we approve that? How did we approve
2 that? Can you tell us how that went?" And
3 ultimately that particular sentence in a
4 successive guidelines was taken out.

5 Q. So did KPMG approve of the
6 guidelines that are -- that have been marked as
7 Exhibit 5, for 1999?

8 A. They saw it and they had no further
9 comments to it.

10 Q. Do you recall any written document
11 that evidenced their approval of the guidelines?

12 MR. TUTTLE: Object to the form.
13 Foundation.

14 MR. BEST: Object.

15 MR. ADLER: Object to the form.

16 THE WITNESS:

17 A. No, I do not remember that.

18 BY MR. HABER:

19 Q. Now, I would like you to take a
20 look at Exhibit 7. And also have handy Exhibit 6.

21 I am sorry, please turn to --
22 forgive me, Exhibit 8. If you can look at Exhibit

0229

1 6 and Exhibit 8.

2 And what I would like you to do is
3 turn to page 28 of Exhibit 6, which ends 357 the
4 Bates range. This is the Terms of Reference for
5 the year 2000 and if you can now turn to Exhibit
6 8, page 27 of the document which ends 167 in the
7 Bates number, which is the Terms of Reference for
8 the guidelines which were issued in April of 2002.

9 Now, if you take a look at the --
10 looking at Exhibit 6, if you look at the first
11 paragraph of the document, there is a reference to
12 FASB Statement of Financial Accounting Standards
13 no. 69; however, in Exhibit 8, which is 2002, the
14 reference to FASB FAS 69 has been removed.

15 Do you have an understanding as to
16 why in 2002 the reference to FAS 69 was omitted?

17 A. Yes. We took out the explicit
18 reference to FASB statement number 69 which is the

19 same as 4-10, which I am sure you are aware,
20 because that particular document was included in
21 the internal Group Reserves Guidelines.

22 It was referred to it, and as I
0230

1 have explained to you, the way the reserves
2 estimation process in Shell went is that in the
3 first instance, reference was made to the internal
4 group guidelines, which in turn were made to
5 conform with requirements, external requirements
6 like rule 4-10.

7 So my reference in these audits I
8 found had to be the internal guidelines.

9 The statement as it was in the year
10 2000 was a statement that had been carried over
11 from previous versions. And I felt that since
12 reference was primarily made to the Group Reserves
13 Guidelines, there was no point in explicitly
14 referring to the FASB statement of accounting
15 standards.

16 So that was the reason why that was
17 taken, just to align with the then prevailing
18 practice.

19 Q. Now, again if you look at Exhibit
20 6, number 1, which begins to verify the technical
21 maturity --

22 MR. BEST: Can you give a Bates
0231

1 number?

2 MR HABER: I am sorry. This is
3 still 357.

4 MR. BEST: Thank you.

5 BY MR HABER:

6 Q. And if you compare that to Exhibit
7 8, which is 167, you will notice that the language
8 which appears on page 1357, which is Exhibit 6,
9 "and by verifying that undeveloped reserves are
10 based on identifiable projects that can be
11 considered technically mature" has been omitted in
12 the 2002 guidelines, which is Exhibit 8.

13 What is your understanding of the
14 omission of that portion of number 1?

15 MR. MORSE: Objection to form and

16 characterization of the document.

17 MR. TUTTLE: Same objection.

18 THE WITNESS:

19 A. I cannot remember what the reason
20 was that that particular sentence was removed.

21 All I can say is that in my reports and in my
22 audits, I continued to specifically look at

0232

1 undeveloped reserves and ask the question whether
2 they were based on identifiable projects.

3 So even though that particular
4 sentence or part of the sentence has been taken
5 out of the Terms of Reference, there was
6 absolutely no change in my practice, as you will
7 see from my checklist in all my successive
8 reports.

9 BY MR. HABER:

10 Q. I would like you again to do a
11 comparison now. If you look again at the 2000
12 guidelines, and the Bates number is 357, number 2,
13 and compare that with the 2002 guidelines, which
14 ends Bates number 167?

15 A. So comparing the number 2s of both
16 of these pages?

17 Q. Correct.

18 A. Yes.

19 (Pause)

20 What had happened in between those
21 two volumes is that in the year 2000/2001, under
22 the direction of Aidan McKay, the group had

0233

1 instituted a much more formalized way of operating
2 companies having to submit their proposals for
3 future projects, whereas before it would be
4 largely as a written document.

5 It now had to be formalized pretty
6 much like the reserve system had been formalized
7 through spreadsheets that had to be submitted to
8 the center, which were then amalgamated in
9 spreadsheet fashion, and which then provided a
10 much more thorough and consistent manner of
11 comparing various operating companies' plans.

12 Those submissions regarding their

13 plans -- and these were separate from the
14 submissions of the NT reserves. Those submissions
15 would be production forecasts where necessary by
16 individual wells if they were to be drilled in the
17 coming years, and otherwise they would be of
18 specific projects like field developments or field
19 extension developments with additional platforms
20 with new wells.

21 And so it would be broken down to
22 the lowest level of detail that was realistic.

0234

1 And all of that data would be submitted centrally
2 so that Shell could then carry out its evaluation,
3 its economic evaluation of these projects and
4 thereby rank them and thereby assign available
5 capital to each and every one or none of these
6 projects.

7 Now, with that in place, people
8 felt that it was important for me to check the
9 consistency of those forecasts and those used for
10 reserves estimating.

11 In other words, in cases where a
12 production forecast is important, like in the case
13 of an end-of-license situation, it was felt that I
14 needed to look into the forecasts that were used
15 and to ensure that they were the same as the ones
16 that were submitted to the center.

17 And that is indeed what I did.
18 There was a specific question added in my
19 spreadsheet, and that explains the difference, the
20 more extensive reference to production and sales
21 forecasting. And that is included in that
22 particular point.

0235

1 Q. Why was the words on Exhibit 6
2 "economic robustness" removed in the guidelines in
3 2002?

4 MR. TUTTLE: Objection.
5 Characterization of the document.

6 BY MR HABER:

7 Q. If you look at number 2, it says
8 that, "by assessing the robustness of project
9 economics".

10 Why was that portion of the
11 guidelines in 2000 not included in the 2002
12 version of the guidelines?

13 MR. TUTTLE: Same objection.

14 THE WITNESS:

15 A. By -- commercial maturity is a
16 notion or is -- yeah, is a notion that is
17 explained in the text of the document. And I
18 cannot remember specifically why those words were
19 taken out at the time.

20 But I would not consider -- and in
21 fact, in my audits I did not consider that to be a
22 material change of process. I continued to assess

0236

1 the commercial maturity of projects in exactly the
2 same way as you saw before.

3 BY MR HABER:

4 Q. What I would like to you do now is
5 to keep Exhibit 8 open to again the same page,
6 167?

7 A. Yes.

8 Q. And turn to Exhibit 9, which is the
9 guidelines that were issued on September 2003.

10 (Witness complying)

11 And if you will turn to page 36 of
12 the document, under Bates number that ends 408?

13 A. Mm-Hmm.

14 Q. I would like you to take a look at
15 number 3 of Exhibit 9 and number 3 of Exhibit 8.

16 And what I would like you to focus
17 on is the last sentence of Exhibit 9 in number 3,
18 which reads, "The audit also verifies that applied
19 future development is indeed likely to go ahead".

20 And you will see that that sentence
21 is not included in number 3 --

22 A. Yes.

0237

1 Q. -- on Exhibit 8.

2 And if you could explain why that
3 sentence was added?

4 A. As we discussed previously, the
5 Group Reserves Guidelines over the years,
6 particularly the years after 2001, gradually

7 became more precise about the hurdles, the
8 economic hurdles and, say, the business hurdles
9 that needed to be taken by new projects before
10 they could be booked as reserves.

11 In other words, there was a gradual
12 tightening over the years. And this sentence is a
13 very brief way of describing that gradual
14 tightening.

15 The tightening was such that it was
16 inspired by the additional guidance that was
17 issued by the SEC in 2001, although even
18 beforehand it became clear to me that some
19 tightening in this respect was necessary.

20 But anyway, the tightening happened
21 during these successive years. And like I said,
22 that particular sentence is a brief way of

0238

1 representing that particular tightening.

2 Q. When you refer to the additional
3 guidance that was issued by the SEC in 2001, you
4 are referring to the interpretive guidance by the
5 staff of the SEC?

6 A. Indeed the one that was published
7 on the 1st of March, yes.

8 Q. Now, this tightening that's
9 reflected by this language, from the audits of the
10 operating units that you had conducted, did you
11 have a sense that the people in the field in the
12 operating units understood what was being referred
13 to in this sentence?

14 MR. TUTTLE: Object to form. Calls
15 for speculation.

16 THE WITNESS:

17 A. In this particular sentence?

18 BY MR. HABER:

19 Q. Yes.

20 A. I can't comment on the perception
21 of this particular sentence, but I do know that
22 staff in the operating units each year did receive

0239

1 their own copies of the Reserves Guidelines. And
2 I do know that even in my introduction, while I
3 was out on audits, I made sure that they realized

4 what the latest additions to the guidelines were.

5 Q. When you visited the operating
6 units for the audits, did you get a sense that the
7 operating unit staff understood the information
8 that was set forth in the guidelines?

9 A. Yes. Yes.

10 Q. Did you ever, throughout your
11 tenure as Group Reserves Auditor, did you ever
12 come to a conclusion that the operating units and
13 the staff working at the operating units needed
14 education with regard to the Shell guidelines?

15 A. Staff that I spoke to I think
16 understood the changes in the guidelines.

17 And I didn't feel -- at that time,
18 I didn't see any evidence that led me to the
19 conclusion that the staff at the working level
20 needed further education in the guidelines at that
21 time.

22 Q. Now, you say "at that time".

0240

1 First of all, when are you
2 referring to?

3 A. Generally to the period, say, from
4 2001 onwards.

5 Q. And prior to --

6 A. And I am dealing here with the
7 staff whose responsibility it was to prepare the
8 reserves estimates, or the staff that I would meet
9 and work closely with during my audits.

10 Q. Prior to 2001, did you see any
11 evidence that led you to believe that the staff
12 did need education with regard to the guidelines?

13 A. No is the short answer to that.
14 No.

15 Q. Now, if you can turn to Exhibit 10
16 for a moment, and in particular --

17 MR. BEST: Before you go on, do you
18 want him to compare with --

19 MR HABER: No. No. No. We are
20 done.

21 MR. BEST: Okay.

22 MR HABER: Just look at Exhibit 10.

0241

1 Q. I would like to direct your
2 attention to Appendix F, the Bates number that
3 ends 206.

4 A. Yes.

5 Q. This is titled "Group Reserves
6 Auditor: Terms of Reference."

7 Did you prepare this document?

8 A. Yes. Similar to the previous Terms
9 of Reference for the audit that we looked at, this
10 one was drafted by myself and commented on and
11 discussed with at that time Frank Coopman and John
12 Pay, who was the Group Reserves Coordinator.

13 Q. Do you recall receiving any
14 comments from Mr. Coopman?

15 A. Yes, he did. But if you ask me
16 specifically which comments, maybe. Can I read
17 through it --

18 Q. Yes, please. Please do.

19 A. -- and see whether the memory is
20 jogged.

21 Yes. I believe and again I have to
22 point to the fact that this is by now four years
0242

1 ago.

2 I believe that he added or he
3 suggested that I add the third point, i.e. the
4 first two points being that I carry out audits and
5 I do the end of year review of the reserves
6 accumulation process.

7 And thirdly, he was making use more
8 and more of my advice and views during the year,
9 most importantly in setting up the group Reserves
10 Committee, but also in other respects.

11 He would talk with me quite
12 regularly, so that's why this third point was
13 added.

14 Q. Was this Terms of Reference meant
15 to supplant the Terms of Reference that we looked
16 at in the various guidelines?

17 A. No. They are separate. These are
18 the Terms of Reference for the Group Reserves
19 Auditor. These are the things that he is expected
20 to do.

21 The SEC audit guidelines are Terms

22 of Reference. There is a distinct difference

0243

1 between these two guidelines. The ones you are
2 having me to look at are the Group Reserves
3 Auditor Terms of Reference.

4 There are three activities that the
5 Group Reserves Auditor carries out, and these
6 three are enumerated here. The first one is carry
7 out group reserves audits in the operating
8 companies.

9 The second one is to witness and
10 audit the process of accumulating reserves at the
11 end of the year, and that is taking place in the
12 center.

13 And the third one is providing
14 general advice to management of SIEP.

15 Now if you go back to the Terms of
16 Reference in the guidelines, those are Terms of
17 Reference of the reserves audits that are carried
18 out in operating companies only, and they describe
19 the methods that are used in carrying out those
20 audits.

21 Therefore, they relate only to
22 point 1 of the general Group Reserves Auditor

0244

1 Terms of Reference.

2 Q. Now, with regard to number 2, it
3 says, "Witnessing and verifying the accumulation
4 of the Group's Proved Reserves at the end of the
5 year for inclusion into the Group Annual Reports
6 and the SEC Form 20-F report on the basis of
7 information supplied by Regions/Asset Holders."

8 Were you performing those duties
9 prior to this document being drafted?

10 A. Yes, I was present during the month
11 of January when these reserves would be coming in.

12 Q. Other than being present and
13 witnessing the information coming in, did you
14 verify the information that came in?

15 A. Yes. I would look at them, because
16 the spreadsheet gave a lot of detail about where
17 the specific changes came from; and I would pick

18 out the -- I would pick out some projects where I
19 had a question mark where I wanted to know more
20 about why that particular change had been made,
21 and I would pose those questions to the Group
22 Reserves Coordinator: Okay, can you please
0245

1 provide me with some more background data here.

2 Q. Did you do anything other than that
3 to get behind the numbers to check for their
4 accuracy?

5 MR. TUTTLE: Objection to form.

6 THE WITNESS:

7 A. The activity that I carried out at
8 the end of the year in January, looking at all the
9 groups' reserves changes, of course could not
10 compare itself with actually going out into an
11 operating company and carrying out at the end of
12 the year.

13 So it was never the idea that I
14 checked the validity of those reserves changes to
15 the extent and to the detail that I would do in an
16 actual operating company visit.

17 Having said that, if a company
18 would come and propose a new reserves booking for
19 a new field, a field that had been discovered by
20 that company, it would be relatively easy to ask
21 that company to give us reasons for that reserves
22 booking, and in particular to give us a

0246

1 description of the maturity of that particular
2 project.

3 Quite often, if it was indeed a
4 project on which field development plans had been
5 prepared, then those field development plans would
6 have been available already in The Hague, and so
7 it would be possible to refer to that.

8 But in some cases, that information
9 would not have reached The Hague yet. And in that
10 case, we would -- we would ask for some more data
11 and pass our judgment on the maturity of those
12 projects.

13 Q. In the instances where the
14 development plans were prepared and available, did

15 you do anything to check the validity of those
16 plans?

17 MR. TUTTLE: Object to form.

18 THE WITNESS:

19 A. Yes. Where necessary, I would talk
20 also to or with the Group Reserves Coordinator,
21 and in some instances, with the Regional Business
22 Directorate as it was called, who would be the
0247

1 group in SIEP overlooking the activities of a
2 particular area that the operating company was in.

3 That didn't happen too often, but
4 it did happen.

5 Q. When you say "where necessary,"
6 what circumstances would make it necessary for you
7 to?

8 A. If the Group Reserves Coordinator
9 couldn't provide me with the answers that I
10 needed.

11 Q. Can you think of any instances
12 where that occurred?

13 A. It started to occur on Angola.
14 That's one specific instance that I remember. The
15 other one was in Sakhalin, which would have been
16 in 2003. No. There are no others that I can
17 think of just right at this moment.

18 Q. With regard to Angola, what year
19 are you thinking of?

20 A. That would have been the end of
21 2000.

22 Q. Now, you mentioned a comment that
0248

1 you received from Mr. Coopman, which you say is
2 reflected in number 3 of Exhibit 10.

3 Do you recall any comments that you
4 received from Mr. Pay to the draft, which is now
5 reflected in final form in Exhibit 10?

6 A. Not specifically, no. No.

7 Q. Do you remember if Mr. Pay had any
8 substantive comments to the draft?

9 A. He certainly had a close interest,
10 and I am sure he would have given me some
11 comments. But whether they were such that they

12 turned the whole document around, I am certain
13 that they weren't of that sort.

14 Q. Okay. You can put this document
15 aside.

16 MR. TUTTLE: Is this a good time to
17 take a break?

18 MR HABER: Yes.

19 MR. TUTTLE: If you are going to
20 start a new section, then.

21 MR HABER: That's fine.

22 THE VIDEOGRAPHER: Going off the
0249

1 record at 12:04.

2 (Short recess taken)

3 THE VIDEOGRAPHER: Beginning tape
4 number 4 and returning to the record at 12:18 from
5 12:04.

6 BY MR. HABER:

7 Q. Mr. Barendregt, just one follow-up
8 question with regard to Exhibit 10. Prior to
9 drafting the Terms of Reference that we were just
10 talking about, was there a Terms of Reference that
11 existed previously?

12 A. Yes, there were. Like I mentioned,
13 I had on my computer, as I said, Terms of
14 Reference ever since the early, the beginning
15 period of my group auditorship, reserves
16 auditorship back in 1999.

17 Q. Do you know if those versions of
18 the Terms of Reference for the Group Reserves
19 Auditor were ever printed and then disseminated to
20 the Group Reserves Coordinator?

21 A. I know that whenever I changed, I
22 came up with changes to the Terms of Reference.

0250

1 Or whenever somebody else, like for
2 instance Frank Coopman instituted changes in Terms
3 of Reference, they were certainly discussed with
4 them, with the Group Reserves Coordinator and his
5 supervisor or Frank Coopman.

6 But they weren't, as far as I
7 remember, formally enshrined in some maintained
8 document, not until the issue of Exhibit 10.

9 Q. So then the 2003 document, which is
10 Exhibit 10, is the first time that they were
11 included in a formal document, to your knowledge?

12 MR. TUTTLE: Objection to form.
13 Characterization of the testimony.

14 THE WITNESS:

15 A. As far as I remember, yes.

16 BY MR. HABER:

17 Q. Now, just going back to your audits
18 of the various operating units, generally
19 speaking, how much time did you spend on an audit?

20 A. Typically two or three to five or
21 six days, depending on the size of the company.
22 The largest one was six days and that was Shell
0251

1 Expro. The smallest one would have been small
2 ventures like Shell at the Port of Brunei, where I
3 was for two days.

4 Q. Now, during your audits, what type
5 of materials data did you review?

6 A. I would start -- as I mentioned, I
7 would start about beforehand actually requesting a
8 list of reserves, Proved Reserves and expectation
9 reserves of oil and gas on the basis of which I
10 would select the fields on which I wanted to have
11 a closer discussion with -- on.

12 In those discussions, I would
13 typically ask for maps, geological maps, any log
14 data, any panels of log data, which would mean
15 that you put the log data in graphical form next
16 to each other.

17 And as far as those were relevant,
18 I would definitely ask for the mature projects,
19 the producing projects, I would ask for the
20 production performance data, either by field or by
21 reservoir. And normally they would have those
22 available by any -- by any unit that I would
0252

1 request.

2 So it's those sort of data that I
3 would ask for detailed data; and then I would ask
4 them to explain the field to me, to give a
5 description of the field, tell me where the

6 challenges of the fields lay, was it low porosity
7 permeability, or was it wells watering out or
8 gassing out, any of those things.

9 And what was being done to combat
10 these challenges, and what then ultimately was the
11 way in which they had evaluated the reserves.

12 Q. When you made the request for
13 information, did your request -- withdrawn.

14 When you made the request for
15 information, was your request made directly to the
16 operating unit?

17 A. Yes.

18 Q. Did you ever memorialize these
19 requests in writing?

20 A. They were E-mails. They were in
21 E-mail form, yes.

22 Q. Were these E-mails copied to the

0253

1 Group Reserves Coordinator?

2 A. Not normally, no. They would be
3 just my dealings with the operating company, yes.

4 Q. As the Group Reserves Auditor, how
5 did you view yourself in the reserves reporting
6 process?

7 MR. TUTTLE: Objection to form.

8 THE WITNESS:

9 A. Pretty much as implied by the word
10 "auditor," I would review the procedures and
11 methods in which the reserves estimates have been
12 -- would have been prepared, and compared those
13 against the group guidelines, specifically through
14 the spreadsheet that I used in my reports, as you
15 well have seen.

16 And on the basis of that, come to a
17 composite judgment on the company in question.

18 BY MR. HABER:

19 Q. Did you ever tell anyone that you
20 had formed a view that senior management viewed
21 the role of the Group Reserves Auditor as a
22 ceremonial position?

0254

1 A. I think I know where your question
2 is coming from. I may have used that word in the

3 first interview for the Davis Polk study, and that
4 interview was carried out in February 2004.

5 I think it's important for us all
6 to realize that the period of December 2003 to --
7 through January/February 2004 was an emotional
8 period for all those concerned with the Group
9 Shell Reserves, and I don't need to expand on
10 that.

11 But that means that when I was
12 first interviewed by the Davis Polk staff, and I
13 must hasten to add that I was interviewed without
14 any preparation, without any briefing by legal
15 representative, it was just straight off the cuff.

16 And given the still rather
17 emotional circumstances of that period, I may have
18 used expressions that are fine in colloquial
19 parlance, but that when written down are very easy
20 to be taken out of context and out of meaning.

21 And I believe that that's -- that
22 is what happened here.

0255

1 What I was referring to when I made
2 comments like that was that indeed there had been
3 very little -- I got very little reaction to my
4 reports from senior management in Shell, in fact,
5 so little that I never saw Philip Watts, for
6 instance.

7 The last time I saw Philip Watts
8 was when he was in that totally different and more
9 junior position overseeing the operations in
10 Denmark and when I was in Denmark myself. That
11 was back in 1987.

12 But I never saw Philip Watts, I
13 never got any reaction, and the same must be said
14 of Walter van de Vijver when he arrived on the
15 scene.

16 So I wasn't particularly perturbed
17 by it. I was surprised, particularly because when
18 I went out on my audits to the operating
19 companies, I always made a point myself and
20 admittedly I took the initiative there, I made a
21 point myself of seeing the M.D. or at least the
22 technical director.

0256

1 But that contact I did not have in
2 The Hague.

3 Also, I found that other -- that as
4 far as the external auditors was concerned, I
5 found that yes, of course there was a good
6 cooperation with particularly KPMG and at the end
7 here meeting with PriceWaterhouseCoopers.

8 But it was -- certainly initially,
9 it was completely oblivious to me -- I was
10 completely oblivious about the process that would
11 follow after that and, in particular, about the
12 external auditors taking the conclusions of my
13 report to, for instance, the Group Auditors
14 Committee.

15 To put it even more bluntly, when I
16 started the job and during the first few years of
17 my job, I wasn't even aware of what the Group
18 Audit Committee was about.

19 Thinking back on it, I think it
20 would have been better if the reserves matter had
21 been reported more directly, particularly by
22 players by myself in the Group Audit Committee.

0257

1 And that is precisely what is happening now, but
2 of course that is after the event.

3 So it's these two factors combined
4 that sometimes tended to create a situation where
5 I felt completely separate from the totally
6 cooperative manner in which I worked with the
7 Group Reserves Coordinator.

8 I felt like working a bit in a
9 vacuum. I never got any response back from senior
10 circles within -- within SIEP. That was the basis
11 of that particular remark expressed a bit more
12 emotionally than I normally would have done it.

13 Q. Other than Philip Watts and Walter
14 van de Vijver, were there other members of senior
15 management that you would have expected you would
16 have received feedback from?

17 MR. TUTTLE: Objection to form.
18 Characterization of the testimony.

19 THE WITNESS:

20 A. Yes. At the end-of-year meeting
21 that we had with the external auditors, I remember
22 that initially at the end of '98, at the end of
0258

1 '99, in fact there would be very few people
2 present from Shell themselves. There would be of
3 course the Group Reserves Coordinator. There
4 would be his supervisor, although at one
5 particular meeting, even then he wouldn't be
6 there.

7 And that would be just about it.
8 There would be no senior management present.
9 There would be a short briefing I remember with
10 EPB, the head of the EPB.

11 That's the new business -- the
12 director of the new business venture unit in SIEP,
13 or not part of SIEP, it was in fact a separate
14 company, SEPIV, S-E-P-I-V. But that was the
15 extent of the interest that was expressed by
16 senior Shell management in those days.

17 Q. Did the members of senior
18 management who attended these meetings change over
19 time?

20 A. Yeah. The organization changed.
21 EPB became something else. It changed from being
22 SEPIV, S-E-P-I-V, that's Shell E&P International
0259

1 Ventures, which back in 1998, it would be set up
2 as a separate company.

3 That was phased out and that
4 organization became part of SIEP, and I forget
5 when that was. And yes, the organization and the
6 organogram would change, and that would be --

7 Q. But the number of people who
8 attended, did that change?

9 A. That increased over the years.
10 Gradually over the years, there was more and more
11 interest shown; I say the supervisors of group
12 reserve coordinator and their managers.

13 And of course at the end of 2003,
14 everybody was there.

15 Q. But other than 2003, when do you
16 recall the shift from less to more?

17 A. It was gradual, it was gradual.

18 Each year a few more people would turn up.

19 Q. Now, a moment ago you mentioned a
20 Group Audit Committee. Did you make any
21 presentation to the Group Audit Committee as the
22 Group Reserves Auditor?

0260

1 A. Never.

2 Q. Were you ever invited by the group
3 reserve -- the Group Audit Committee to make a
4 presentation?

5 A. No.

6 Q. And again, this is during your
7 tenure as Group Reserves Auditor?

8 A. Yes.

9 Q. Did you ever inquire as to the
10 reasons why the Group Audit Committee had not
11 invited you to make a presentation to them?

12 A. Not in so many words, no. No.
13 Like I said, I didn't really become aware of the
14 role of the Group Audit Committee effect -- until
15 after the arrival of Frank Coopman.

16 And I believe that he -- from time
17 to time, he would make suggestions that perhaps I
18 would come along to one of his presentations. He
19 would be called upon now and again to make
20 presentations, and then they would be put off
21 again at the very last minute.

22 But he suggested at one stage that

0261

1 I might come along, but then I believe the word
2 came from above that that wouldn't be necessary.

3 Q. Do you know if your annual reports
4 were presented to the Group Audit Committee?

5 A. The short answer is no, I don't. I
6 don't know precisely in what form, if they ever
7 were.

8 Q. Did anyone from EP ever report to
9 you one way or the other with regard to the
10 presentation of your annual report?

11 A. Sometimes we would receive some
12 comment back, mostly from the external auditors,
13 as a matter of fact, who would have been present

14 in that presentation.

15 Initially, I believe, but I may
16 have got it wrong there, but I believe that
17 initially it was only the external auditors who
18 would attend that Group Audit Committee meeting,
19 and that changed again, I believe, only after
20 Frank Coopman took over a more directing role in
21 the reserves reporting process. And he certainly
22 -- he would be attending those sort of meetings.

0262

1 Q. I take it from what you've just
2 testified to, you believed at the time that you
3 could add value to the process by being in
4 attendance at these meetings?

5 MR. TUTTLE: Object to form.
6 Characterization of the testimony.

7 THE WITNESS:

8 A. Certainly not initially. And in
9 fact, it wasn't until very, very late in the
10 process towards the end of 2003 when I -- when it
11 became clear to me precisely what the various
12 roles and responsibilities had been that I thought
13 by myself: It would have been useful if I had
14 been given an opportunity to report back to this
15 committee.

16 I don't think we would have been
17 able to avoid the recategorization of reserves. I
18 mean, that was something that as soon as the
19 additional guidance of the SEC came about in 2001,
20 that was just waiting to happen; even when we
21 didn't know it until 2003.

22 Q. Why do you say that it was just

0263

1 "waiting to happen"?

2 A. Well, the successive events that
3 led up to the end of 2003, could it have been
4 avoided? Even though we didn't know it, but it
5 was unavoidable with hindsight, that the
6 recategorization was what was necessary.

7 Most specifically, we discussed
8 earlier, I described to you earlier, that one
9 specific comment that was introduced at the end of
10 2003 in the reserve guidelines that were going to

11 be used for the end 2003 reserves estimate was
12 that FID was going to be required for major
13 projects and certainly full field development
14 plans for anything even slightly smaller than
15 that.

16 That in itself turned out -- and we
17 found out in 2000, end of November 2003, that in
18 itself removed at least 700,000,000 from the
19 Nigerian portfolio at a stroke, which turned out
20 to be even more than that afterwards.

21 So that in itself set in train a
22 number of changes to the reserves that were

0264

1 unavoidable. So in other words, we changed the
2 guidelines and we made them so tight that
3 ultimately, we had to debook this large amount of
4 reserves, even though at the time when we were
5 using them so in 2000, 2001, 2002, we weren't
6 aware that there was so much reserves potentially
7 exposed.

8 That realization became vaguely
9 known in the course of 2000 -- end of 2002, 2003,
10 and the full magnitude did not become clear until
11 the end of 2000 -- November of 2003. And the rest
12 we know.

13 Q. Now, when you say that awareness of
14 exposures became known in the course of 2002,
15 2003, what caused that awareness?

16 MR. BEST: Objection to form and
17 characterization.

18 MR. TUTTLE: Objection to form and
19 characterization.

20 MR. BEST: That's not what he said.

21 MR. HABER: I'll rephrase.

22 Q. You said that realization became

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1 vaguely known in the course of 2000, end of 2002
2 and 2003?

3 MR. TUTTLE: I am sorry. The
4 sentence above it says, "We weren't aware that
5 there was so much reserves potentially exposed.
6 That realization became vaguely known in the
7 course of 2000 -- end of 2002, 2003". So...

8 BY MR HABER:

9 Q. I still want to know what is the
10 basis of that realization, what caused that
11 realization.

12 A. We have to go back to the original
13 SEC definition. As I think I have explained
14 before, the original SEC definition was vague in
15 many material respects. It was specific in one or
16 two respects, but it was vague in many material
17 respects.

18 And the only notion that was firm
19 from that was the statement that reserves needed
20 to be reasonably certain to be produced.

21 Now, reasonably certain can mean a
22 lot of different things to different people.

0266

1 Some of the them interpret that
2 there is 100 percent certainty, although to me
3 that would be absolute certainty; some of them
4 interpret it as 98 percent certainty, 85 percent
5 certainty. Various levels of certainty can be
6 mooted if you can quantify certainty, which in
7 itself is a chance.

8 Now the situation changed and
9 improved somewhat, somewhat, with the additional
10 SEC guidance in 2001.

11 And the most important change that
12 was introduced was the notion of commitment. The
13 SEC expected to see a commitment by the company
14 concerned to go and develop the reserves before
15 they could be booked. And they gave similar
16 examples like it could be signed contracts or
17 whatever.

18 But the word commitment is really
19 the operative word there. In addition, the SEC --
20 but those are side issues -- the SEC changed
21 surreptitiously -- I find one of the wordings on
22 the LKH issue that we touched upon earlier.

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1 But those were not significant in
2 the context of the restatement of reserves. The
3 restatement of reserves was ultimately emanating
4 from the use of the word commitment and the way we

5 interpret that in our successive guidelines.

6 MR HABER: This is probably a good
7 place for us to stop for lunch.

8 THE VIDEOGRAPHER: Going off the
9 record at 12:43.

10 (Lunch recess taken)

11 THE VIDEOGRAPHER: Returning to the
12 record at 1:27.

13 BY MR. HABER:

14 Q. Good afternoon Mr. Barendregt.

15 A. Good afternoon.

16 Q. I am going to start my questioning
17 around your audit of SDA. And in particular, my
18 questions are going to be focused on the Gorgon
19 booking.

20 Okay?

21 A. Yes.

22 Q. Did you perform an audit of SDA

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1 during your tenure as group reserve auditor?

2 A. Yes, I did. That was in the year
3 2000.

4 Q. Do you recall when?

5 A. I believe it was October.

6 Q. Do you recall how long the audit
7 took?

8 A. I think it was four days.

9 Q. And when you performed the audit,
10 was reference made to Shell's guidelines?

11 A. Yes. Yes.

12 Q. Do you recall making any specific
13 reference to rule 4-10?

14 MR. TUTTLE: In the report or just
15 at any time during the audit?

16 MR HABER: At any time during the
17 audit.

18 THE WITNESS:

19 A. In answer to your question do I
20 recall, no I do not.

21 BY MR. HABER:

22 Q. Just so the record is clear, is it

0269

1 do you recall? Or no, you do not?

2 A. I may have done it, but I do not
3 recall specifically.

4 Q. Did you -- in particular with
5 regard to the Gorgon booking, did you review any
6 audit trail that supported the booking?

7 A. Not really. There -- the booking
8 and the history behind it were verbally explained
9 to me, but I did not dig into the files or ask
10 people to dig into the files to tell me precisely
11 where the documents were that they had shown me.

12 The predominant reason for that is
13 that I tend to go on my audits in the frame of
14 mind that I want to make my own opinion, I want to
15 express my own opinion, I want to make my own
16 judgment against the validity of that booking as
17 against the Group Reserves Guidelines.

18 Q. Who was the person who verbally
19 explained the history behind the Gorgon booking?

20 A. I expect that would have been
21 Jeroen Regtien.

22 Q. What was Mr. Regtien's position at
0270

1 the time, if you recall?

2 A. I believe he was senior reservoir
3 engineer of SDA at the time.

4 Q. Do you recall the sum and substance
5 of what he had told you?

6 A. In respect of Gorgon or in general?

7 Q. Yes.

8 A. In respect of Gorgon, I do not
9 recollect the conversation as such. But he will
10 have told me that Gorgon was booked whenever it
11 was first booked, I think a couple of years
12 earlier, even three years earlier.

13 And that it was based on the
14 evaluations as they were made at that time, the
15 details of which just simply escape me.

16 Q. Do you recall if Mr. Regtien said
17 anything about a market for the Gorgon gas?

18 A. We certainly discussed it. I think
19 it is useful to bear in mind that Gorgon wasn't
20 new to me when I was there. It wasn't as if I was
21 faced with a totally new field to me. I knew

22 Gorgon quite well. I had been attending work

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1 shops organized by the operator who was Robert, a
2 branch of Chevron, back in the early '90s when I
3 was the representative of -- or one of the
4 representatives of SEIP on partner workshops, as
5 they were to be called then, discussing the
6 development opportunities for the large field of
7 Gorgon.

8 Even then in those early days in
9 199 -- in the early 1990s, Gorgon had already
10 received a considerable amount of appraisal and a
11 large number of wells, something in the order of
12 ten to 15 wells, I seem to remember, had been
13 drilled in the greater Gorgon area.

14 And from an appraisal point of
15 view, it seemed like the field was getting more
16 and more mature, and this is what I was expecting
17 when I came back in 2000, which was something like
18 five or six years after my previous visit there,
19 my last previous visit.

20 And indeed, it turned out exactly
21 like I expected. Meanwhile, a lot more work had
22 been done on making and preparing a development

0272

1 plan for Gorgon by Chevron.

2 And meanwhile, a lot more work had
3 been done by Shell on the, as we called it,
4 downstream facilities that were required to bring
5 the gas to market.

6 Gas that was found like Gorgon on
7 the Northwest shelf, which is the Northwestern
8 shore and against the Timor Sea in Australia, that
9 gas did have no sizeable market in its near
10 vicinity, and that meant that in order to bring
11 that gas to a market, that gas had to be
12 liquified, with which there was nothing wrong.
13 That was quite an established method in the
14 Southeast Asia area in bringing gas to market.

15 The market for that gas was most
16 likely to be what we call the Pacific Rim. In
17 principle, the western Pacific Rim, i.e., Japan,
18 Korea, Taiwan.

19 But at the instigation of Chevron

20 in particular, or Chevron/Texaco as they became to
21 be known in early 2000, that Pacific Rim extended
22 itself also to the US West Coast.

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1 So the market -- it was clear that
2 the market was there, there was plenty of
3 opportunities. Various marketing studies had been
4 done and indeed were shown to me on my audit visit
5 in the year 2000, showing up that from the second
6 half of the first decade of the second Millennium,
7 third Millennium, it was clear that market
8 opportunities would open up.

9 But precisely when it was in that
10 stage, not certain. But nobody that I spoke to
11 and knowing the area and the background myself,
12 there was no evidence to suggest that Gorgon would
13 not become developed in the future.

14 Q. But at the time you conducted your
15 audit, were there existing market opportunities
16 for the sale of Gorgon gas?

17 A. I am not sure what you mean by
18 existing. There certainly wasn't a gas contract
19 in place or anything like that.

20 Q. That's certainly one aspect?

21 MR. TUTTLE: Objection to form.

22 THE WITNESS:

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1 A. It's an aspect but not a relevant
2 one for reserves, because the reserves definition
3 and also the SEC guidance does not talk about
4 contracts or the requirement that you must have a
5 sales contract. It requires a market to be
6 available. The market was there, there was no
7 doubt about it.

8 What was uncertain at that stage
9 was the -- say the opening of the market for the
10 Gorgon area. But the market was there, and it was
11 definitely continued to be there, and it still is
12 there.

13 BY MR. HABER:

14 Q. So within the rule 4-10, if I
15 understand your answer, the market you say is

16 there, but it wasn't open.

17 Is that correct?

18 MR. TUTTLE: Objection.

19 Characterization of the testimony.

20 MR. BEST: Same objection.

21 THE WITNESS:

22 A. I don't know what you mean by

0275

1 "open." You don't develop a gas field from one
2 day to the other when suddenly there is an opening
3 in the gas market. It doesn't work that way.

4 You achieve an opening in a gas
5 market by negotiating a contract with some buyers,
6 certainly in those days.

7 Even in that nowadays is less
8 formal, because more and more of LNG gas gets sold
9 on the spot market, just like oil does.

10 You don't get that opportunity
11 until you have actually built an LNG plant and put
12 the field on stream through a development with
13 platforms and wells and like that.

14 So you need to have a clear idea
15 about how and where it is that you are going to
16 sell the gas and who you are going to sell the gas
17 to before you start actually developing a field.

18 BY MR. HABER:

19 Q. At the time that Gorgon was booked,
20 did Gorgon have the facilities to sell the gas
21 from the Gorgon fields?

22 A. No. No. The field was

0276

1 undeveloped.

2 Q. And at the time you conducted your
3 audit, was the facility developed for the sale of
4 the Gorgon gas?

5 A. No, it wasn't.

6 Q. Where was this facility supposed to
7 be built?

8 A. The development plan that was
9 considered at the time would be an off-shore
10 construction consisting of several platforms and a
11 pipeline to an onshore location where the LNG
12 plant would be, and that would be on the Barrow

13 Island.

14 I must add that one of the other
15 developments would be of the other occurrences
16 that had happened over the years when I hadn't
17 looked at Gorgon was that the LNG -- the LNG
18 costs, the costs of constructing an LNG plant had
19 come down quite significantly, thanks to work
20 done, among others, by a Shell group, a group in
21 Shell called Global Solutions.

22 The costs of building an LNG plant
0277

1 and in bringing gas in liquified form to market
2 had come down considerably.

3 And that meant that the economic
4 prospects for a field like Gorgon had improved
5 enormously and there was absolutely no doubt that
6 the field was economic to produce.

7 Q. Where was Global Solutions
8 headquartered?

9 A. In The Hague.

10 Q. What did Global Solutions do?

11 MR. TUTTLE: Just generally?

12 MR HABER: Yes. Just generally.

13 THE WITNESS:

14 A. I don't know. I know that this is
15 one of the things that they did, but I don't know
16 what else that they did. It's part of exploration
17 and production.

18 BY MR. HABER:

19 Q. Now, with regard to Barrow Island,
20 did Shell -- withdrawn.

21 Were regulatory approvals required
22 in order to build the facilities on Barrow Island?

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1 A. Undoubtedly, yes. Yes. They would
2 have been.

3 Q. And at the time that the reserves
4 were booked in Gorgon, do you know if the
5 regulatory approvals had been obtained?

6 A. I believe not, but they were not
7 believed to be any serious hindrance at that time.

8 Q. At the time you conducted your
9 audit, had required approvals from the government

10 been obtained for Barrow Island?

11 A. No. But there were certain rights,
12 development rights enshrined in Australian law.
13 And again, it was a matter of the Australian
14 government not being able to withhold on
15 unreasonable grounds any development.

16 Q. Do you know if Barrow Island was an
17 environmentally protected area?

18 A. Yes it was. Yes it was. But it
19 wasn't -- this LNG plant wouldn't be the first
20 facility that was going to be built on Barrow
21 Island. There were already facilities for an oil
22 field in fact called Barrow Island that had

0279

1 already been in existence.

2 Q. Whose facility was that facility
3 that you were referring to?

4 A. It would have been an oil
5 production facility and an oil export facility of
6 some sort. I cannot remember the precise detail,
7 but it certainly was an oil facility together with
8 oil wells.

9 Q. When -- withdrawn.

10 Do you know if the regulatory
11 approvals had been obtained past the time that you
12 had conducted your audit, so that is, from 2000
13 forward?

14 A. I am sorry. Can you rephrase the
15 question?

16 Q. I will rephrase. Do you know if
17 after the time you conduct your audit in 2000, the
18 regulatory approvals had been obtained?

19 MR. TUTTLE: To the present?

20 MR HABER: To the present.

21 THE WITNESS:

22 A. No, I don't. I haven't -- I

0280

1 haven't followed that. But not a lot of change
2 had happened since I -- when I was auditor, and I
3 have stopped taking interest when I quit the
4 auditor job.

5 BY MR. HABER:

6 Q. At the time that you left the

7 position, do you know if the required approvals
8 from the government had been obtained?

9 A. That had --

10 MR. TUTTLE: Objection. Asked and
11 answered.

12 BY MR. HABER:

13 Q. I am sorry. You can answer.

14 A. That particular detail I cannot
15 remember.

16 Q. Now, earlier, you mentioned that
17 there was not a gas contract at the time of the
18 booking.

19 At the time that you conducted your
20 audit, was there any gas contract through the sale
21 of the Gorgon gas?

22 A. No, I don't --

0281

1 MR. TUTTLE: Objection. Form,
2 speculation, characterization of the testimony.

3 THE WITNESS:

4 A. No. There was not. There was no
5 contract in place.

6 BY MR. HABER:

7 Q. At the time that you conducted the
8 audit, had anyone presented a signed contract for
9 the sale of the Gorgon gas?

10 A. No.

11 Q. Between the time that you conducted
12 your audit and project Rockford in late 2003, do
13 you know if there was a signed contract for the
14 sale of the Gorgon gas?

15 A. I know that there wasn't. But
16 again, I think I want to clarify here that since
17 you are continuing to refer to a signed contract,
18 the signed contract was a sufficient condition for
19 the booking reserves, but it was not a necessary
20 condition for booking reserves.

21 That was made clear in, for
22 example, the SEC additional guidance in 2001, even

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1 though that was after the period of this
2 particular audit. But it was also clear in the
3 guidelines as they were issued by Shell before

4 that time.

5 MR. FERRARA: I am sorry. As a
6 point of clarification for the reporter, for the
7 past several answers this witness has been
8 referring to a signed, S-I-G-N-E-D, contract and
9 it's appearing in the transcript as side, S-I-D-E.

10 THE REPORTER: Thank you.

11 MR HABER: Thank you.

12 BY MR. HABER:

13 Q. Was obtaining all required
14 governmental approvals a necessary condition for
15 the booking of gas reserves?

16 A. It was not explicitly mentioned for
17 contracts -- for projects of this type, as far as
18 I recollect in the Group Reserves Guidelines.

19 The Group Reserves Guidelines,
20 which was the only reference of importance at the
21 time of the audit, insisted on a clear way visible
22 towards obtaining a market entry, i.e., having a
0283

1 market already in existence, plus a clear way of
2 obtaining a path into that market.

3 And that, in this particular case,
4 meant having an undoubtedly economic way of making
5 the gas into liquified gas and transporting it to
6 market, which was a method that had been -- as I
7 explained, had been well established over the
8 previous 20 years in that area.

9 And the third one is: Is there any
10 doubt that the field in question is not going to
11 be developed for reasons of economic viability,
12 whatever; and that doubt was simply not there.

13 Whoever I talked to made it very
14 clear to me there was in nobody's mind was there
15 any doubt that Gorgon at one stage was going to be
16 developed, or indeed that any of the partners,
17 Shell, Chevron, would walk away from Gorgon and
18 decide not to develop the field.

19 In fact, later on when the
20 requirement of commitment was mentioned in the
21 additional SEC guidance, I could see evidence of
22 that commitment.

0284

1 In particular, the attitude by

2 Chevron/Texaco that came to pursue the project, to
3 go ahead with the project, they had set up a
4 dedicated team with a senior manager that it had
5 to pursue the development of Gorgon.

6 Now, that to me is a serious
7 commitment. You don't spend money on setting up a
8 team, paying all the salaries, et cetera, et
9 cetera, doing all the data gathering, that is
10 required to start a project of this size.

11 Q. Well, going back to my question,
12 which was: "Was obtaining all required
13 governmental approvals a necessary condition for
14 the booking of gas reserves?" In your answer, you
15 said, "it was not explicitly mentioned for
16 contracts."

17 So was it an understanding that
18 such approval was needed before?

19 A. Yes, indeed. Yes. Yes.

20 MR. TUTTLE: Objection to form.
21 Characterization of the testimony.

22 BY MR. HABER:

0285

1 Q. Now, you mentioned just a moment
2 ago Chevron/Texaco.

3 Were they the operator of the
4 project?

5 A. Yes, they were.

6 Q. And this commitment that you talked
7 about, do you recall when this came to light?

8 A. It was after the -- after the
9 audit, one, maybe two years later.

10 Q. So that would be some time in 2001,
11 2002?

12 A. 2002 more likely I think, yes.

13 Q. Do you recall who the partners were
14 with Shell and the project? And again, I am
15 referring to Gorgon?

16 A. Chevron/Texaco obviously. I am
17 hesitating because there was BHP at one stage, but
18 I am not sure whether they were still in, or
19 whether they had in fact sold out, so that I don't
20 know. I don't know.

21 Q. Well, at the time that Shell
22 initially booked the reserves in Gorgon, do you
0286

1 know if any of Shell's partners booked Proved
2 Reserves in the Gorgon project?

3 A. I didn't pursue that information.
4 So the direct answer is I don't know. I certainly
5 hadn't seen that any of its partners did, but...

6 Q. From the time that you conducted
7 your audit to Rockford, did you ever become aware
8 of whether Shell's partners booked or did not book
9 reserves at the Gorgon?

10 A. No, I did not -- I did not become
11 aware.

12 MR. TUTTLE: Plus let him finish
13 getting his question out before you start your
14 answer.

15 THE WITNESS: Yes. Yes. Yes.
16 Yes. I am too eager.

17 BY MR. HABER:

18 Q. Now, when you conducted your audit,
19 did you meet with the staff at SDA?

20 A. Yes.

21 Q. Other than other than Mr. Regtien,
22 was there anyone else that you recall meeting?
0287

1 A. Well, yes. We mentioned her name
2 before, Sheila Graham, but there were others, the
3 regular acting supervisor. The name escapes me,
4 but it can be found on the addressees of my audit
5 report.

6 Q. Do you recall if that was Mark
7 Chittleborough?

8 A. That name does not ring a bell.

9 Q. Does Sarah Bell come to mind as
10 something that you may have met with?

11 A. No. I think that was after my
12 time. I met Sarah Bell for the first time in
13 Bangladesh.

14 Q. And when was that?

15 A. Around the same period, 2001 maybe.
16 I would have to look it up.

17 (Barendregt Exhibit No. 11 marked

18 for identification)

19 Q. For the record, we are marking as
20 Barendregt Exhibit 11 a draft note dated October
21 19, 2000. The title of the document is "SEC
22 Proved Reserves Audit, Shell Development
0288

1 Australia, 9-13" October "2000."

2 The Bates range is PER00070679
3 through PER00070689.

4 (Handing)

5 Now, Mr. Barendregt, have you seen
6 this document Exhibit 11 before today?

7 A. It would appear to be a draft
8 version of my audit report.

9 Q. Do you recall preparing the draft
10 note?

11 A. Well, I always did ahead of
12 finalizing the report, yes.

13 Q. Now, you'll notice that a number of
14 people are copied on this note. Is Alan Parsley
15 the person that you were thinking of a few moments
16 ago?

17 A. No, it was Robert Blaauw; that was
18 the name I was trying to remember. I see now also
19 that Jeroen Regtien, but he was in fact
20 development manager of the SDA.

21 Q. Now, did you provide a copy of this
22 draft to all of the people identified on this
0289

1 list?

2 A. No, I never did. I sent my draft
3 report to the primary auditee, who in this case
4 would have been Jeroen Regtien, expecting him to
5 take care of appropriate distribution of this
6 report in their organization.

7 Q. Do you recall providing a draft to
8 anyone else?

9 A. I usually gave a draft copy also to
10 the reserves coordinator.

11 Q. At this time, was that Remco
12 Aalbers?

13 A. Yes, it would have been. Yes.

14 Q. Now, if you could just look to the

15 paragraph on page 1. That begins, "The audit
16 commended the high quality technical work that had
17 been carried out by Woodside"?

18 A. Mm-Hmm.

19 Q. If you go in a little bit further,
20 the sentence that begins "Maintaining the
21 preliminary booked volume of Gorgon gas." It
22 would be the second sentence of that paragraph.

0290

1 A. Yes. Okay. What was the question?

2 Q. There is a reference in that
3 sentence to a 5-year retention lease.

4 What does that refer to?

5 A. I am sorry. I must have been
6 looking at the wrong paragraph. Which paragraph
7 are you reading?

8 Q. I will reread it. It's the same
9 paragraph that begins once the audit?

10 A. The second audit.

11 MR. TUTTLE: The fourth paragraph.

12 MR HABER: The fourth paragraph.

13 THE WITNESS: Oh, I am sorry. I
14 missed that.

15 BY MR. HABER:

16 Q. And it would be the second sentence
17 that begins "Maintaining the preliminary booked."

18 A. Can I read that, because I was in
19 the second paragraph still?

20 Q. Yes.

21 (Pause)

22 A. Yes.

0291

1 Q. There is a reference in that
2 sentence to a 5-year retention lease?

3 A. Yes.

4 Q. What does that refer to?

5 A. Fields under Australian law, as I
6 remember it -- and of course I am far from an
7 expert and also my memory to that day is getting
8 dim.

9 But as I remember it, a field that
10 was in its predevelopment stage, in other words,
11 that was still in a stage of being studied by its

12 operator and shareholders, was the subject of a
13 retention lease, which would allow the operator to
14 continue to do studies on the fields, to carry out
15 additional appraisal drilling if necessary, and to
16 further mature the fields towards the stage of
17 development.

18 And from what I seem to remember,
19 is that such a lease would be granted on a 5-year
20 basis.

21 And it would be renewable
22 effectively as a matter of course, provided that

0292

1 the operator could show that it was working the
2 project, that it was spending effort and money on
3 further maturing that -- of the project.

4 And in the case of the Australian
5 government, there had never been any incidence in
6 the past where such a retention lease was
7 unreasonably withheld.

8 Q. And do you know if the retention
9 lease was -- the extension was granted?

10 A. I don't remember off-hand. But if
11 it wasn't, then the field would no longer be in
12 Shell's position, so it must have been.

13 Q. Now, if you could look at the
14 Attachments for a moment to this document, earlier
15 you testified about a spreadsheet and also a
16 checklist.

17 The attachment 3 appears to be a
18 checklist?

19 A. Yes.

20 Q. Is this the -- I realize that it's
21 relating to SDA. But was this the checklist the
22 type of checklist that you were referring to

0293

1 earlier --

2 A. Yes.

3 Q. -- this morning?

4 A. Yes, it was. Yes, it is.

5 Q. Now, were the questions that are
6 identified in the left-hand column of the
7 attachment, were these form questions that you
8 used for each audit that you performed throughout

9 the year?

10 Or were they specific to a
11 particular operating unit?

12 MR. TUTTLE: Objection to form.

13 THE WITNESS:

14 A. No. This was part of a standard
15 list that I would take with me with blank answers,
16 obviously. And I wouldn't in fact take a
17 checklist and sit around the table with the people
18 concerned.

19 I would first instance sit around
20 with the people concerned and gather all the data
21 that was necessary and then later on typically at
22 the evening of the first day, I would take out and
0294

1 tick these boxes myself.

2 Invariably, I would find that there
3 was one particular question that hadn't come to be
4 discussed during the day, and I would then take
5 that up and come up with follow-up questions the
6 following day, the second day or whatever.

7 And that is precisely what I did
8 here.

9 BY MR. HABER:

10 Q. So did you ever add or subtract
11 from the standard questions that were included in
12 the checklist?

13 A. It would sometimes occur that there
14 were questions which, for whatever reason, were
15 not available. And I think there is one here, for
16 instance, 118, then I would just simply say that
17 it was not applicable.

18 It talks here about improved
19 recovery estimates. Well, neither Gorgon
20 initially, nor the Woodside fields had any
21 improved recovery project installed in it.

22 By improved recovery in this sense,
0295

1 I meant either water injection or a gas injection
2 project.

3 So since that wasn't in operation,
4 that particular sentence was not applicable.

5 Q. I am not sure that you've addressed

6 the question I asked, which is: Well, if these
7 questions were standard, did you ever add
8 additional questions throughout the year as you
9 were conducting your audits?

10 A. Yes. I think I explained that to
11 you earlier, that each audit provided me an
12 opportunity to check also and see whether I -- the
13 range of questions that I had here was indeed a
14 comprehensive one or whether I couldn't add to it.

15 Q. I see.

16 A. And more likely than not, over the
17 years, more questions were asked or questions were
18 rephrased as a result of these audits.

19 Q. Now, the previous attachment two
20 appears to be a spreadsheet, or at least
21 spreadsheet form.

22 I believe you addressed this a

0296

1 little earlier today.

2 A. Correct.

3 Q. And is this representative of what
4 you were referring to earlier today?

5 A. Yes, it is.

6 MR. TUTTLE: Objection to form.

7 BY MR. HABER:

8 Q. So this spreadsheet would be filled
9 in by the operating unit during the course of the
10 audit?

11 A. No. I would fill it in myself.

12 (Barendregt Exhibit No. 12 marked
13 for identification)

14 (Handing.)

15 Q. Mr. Barendregt, I am marking as
16 Barendregt Exhibit 12 a draft note dated November
17 21, 2000.

18 And the title is "SEC Proved
19 Reserves Audit, Shell Development Australia, 9-13"
20 October "2000."

21 The Bates range is PER00020307
22 through PER00020309.

0297

1 Have you seen this document before
2 today?

3 A. Again, it would appear to be a
4 draft note, and I am somewhat surprised to see
5 that this appears to be a second draft note that I
6 prepared.

7 Q. Why are you surprised?

8 A. Well, I wasn't normally in the
9 habit of issuing more than one version of a draft
10 note. Now, there could be two explanations here.
11 One of them is that this was in fact my final note
12 where I omitted to take out the word draft. It
13 happened once or twice.

14 Or indeed it was another draft
15 note --

16 Q. Do you --

17 A. -- for reasons that I do not
18 remember.

19 MR. TUTTLE: Mr. Barendregt, let me
20 note for the record that the PER indicated that
21 this document was produced from Perth from a
22 collection of documents in Australia.

0298

1 So I don't want the witness to be
2 misled in terms of the source of the document in
3 speculating here on the origin of it.

4 So if you want to pursue that line,
5 Mr. Haber, that's fine. But I just want to make
6 sure that he understands what the production code
7 suggests.

8 MR. HABER: It may be what the
9 production code suggests, but the issue is whether
10 he prepared a second draft note?

11 MR. TUTTLE: Then you can ask him
12 if he recalls doing so.

13 BY MR. HABER:

14 Q. And that's the question. Do you
15 recall preparing a second draft of a note?

16 A. The answer to the question is no, I
17 do not.

18 Q. Now, do you recall with regard to
19 the draft note? And since you recall Exhibit 11,
20 do you recall receiving any comments to the draft
21 from Mr. Regtien?

22 A. Not specifically. But I am sure I

0299

1 must have received some comments.

2 (Barendregt Exhibit No. 13 marked
3 for identification)

4 Q. I am going to hand you what we have
5 just marked as Barendregt Exhibit 13. And this is
6 what I believe to be the final note?

7 A. Yes.

8 Q. It's dated 5 December, 2000. The
9 title line reads "SEC Proved Reserves Audit, Shell
10 Development Australia, 9-13" October "2000."

11 The Bates range is RJW00060528
12 through RJW00060538.

13 Do you recognize this document?

14 A. It would appear to be my final
15 note, yes.

16 Q. Do you recall preparing this
17 document?

18 A. Yes.

19 Q. And if you look at the bottom
20 left-hand corner, there is a signature.

21 Do you recognize that signature?

22 A. My signature.

0300

1 Q. Do you recall if the final note was
2 distributed to the people who were identified at
3 the top of page 1 of the Exhibit?

4 A. Separate copies were put together
5 in an envelope with each of these names
6 highlighted and sent in the mail to SDA.

7 So I don't know whether they
8 actually received it, but certainly they each were
9 sent their own individual copy.

10 Q. Now, if you look in the copy
11 portion in parenthesis on the left-hand side, it
12 says "circulation"?

13 A. Mm-Hmm.

14 Q. At the right it says "SIEP - EPF:
15 Gardy, van Nues," is it?

16 A. Van Nues.

17 Q. Van Nues.

18 Other than those two people, was
19 there anyone else that you had intended within EPF

20 for the note to be circulated to?

21 A. There was the business advisor in
22 SIEP who received his separate copy.

0301

1 Q. Who is Mr. Van Nues?

2 A. Gardy was the -- say the
3 predecessor of Frank Coopman, so the head of EP
4 Finance. And van Nues was, as I remember it --
5 but I am certainly not 100 percent certain, was in
6 charge of financial reporting, external financial
7 reporting.

8 And by financial, I mean the
9 financial results of E&P, so not say Group
10 reporting, but E&P reporting as far as the
11 financial results were concerned.

12 For instance, he was not
13 responsible for reserves reporting. That was in
14 the stream of Bell, McKay, and Aalbers.

15 Q. Do you recall if any of the people
16 who are identified as recipients, either direct or
17 as copied recipients, had commented on the report?

18 A. Not specifically, no.

19 Q. How about generally?

20 A. I would expect that Remco Aalbers
21 would have given a number of comments, but the
22 character of that I just do not know. I do not

0302

1 remember.

2 Q. And in terms of timing, do you have
3 a recollection if you had received comments from
4 Mr. Aalbers after this note was circulated?

5 A. I would have been surprised if he
6 did, because he certainly had an opportunity to
7 look at it beforehand.

8 Q. So he was one of the people that
9 you distributed your draft note to?

10 A. Normally, yes. Yes.

11 Q. Now, is there anything in the final
12 note -- withdrawn.

13 Do you recall receiving any
14 comments from Mr. Regtien that were incorporated
15 into the final note?

16 A. Do I recall a specific instance

17 where he did? No, I do not. I am not saying that
18 he didn't.

19 (Barendregt Exhibit No. 14 marked
20 for identification)

21 Q. Mr. Barendregt, I am going to hand
22 you what we are marking as Barendregt Exhibit 14.

0303

1 It's two E-mails with attachments, and I will note
2 that the attachment is a draft note which is dated
3 November 21, 2000, which we marked as Exhibit 12.

4 The last E-mail which appears on
5 the top of the page is from you. It's dated
6 November 22, 2000 to David Christie, Jeroen
7 Regtien, with a CC to Shiela Graham and Robert
8 Blaauw. The subject line reads "DRAFT AUDIT
9 NOTE."

10 And the Bates range is PER00081987
11 through PER00081997.

12 Have you seen this E-mail before
13 today?

14 A. Well, since I sent it, I must have,
15 yes.

16 Q. And looking at this E-mail, does it
17 refresh your recollection sending out a second
18 draft of this note of your audit?

19 A. Not a lot, but it's clear that
20 there were some issues that gave reason for a
21 second -- for a second draft.

22 Q. In looking at your E-mail to Mr.

0304

1 Christie and Mr. Regtien, I'd like to direct your
2 attention to the middle bottom of the E-mail, the
3 one that -- the sentence that begins "Gorgon
4 losses."

5 Do you see that?

6 A. Yes.

7 Q. What did you mean by "again, a
8 victim of the hurry to get the report out?"

9 A. I don't know what it refers to,
10 what Gorgon losses refers to. Can I look back at
11 my final report --

12 Q. Yes.

13 A. And see whether I can seek to

14 unearth what I meant? I simply do not know what I
15 meant by "Gorgon losses." It obviously refer to
16 say a particular item in the report.

17 MR. FERRARA: Perhaps you would
18 consider directing the witness's attention to the
19 second page of Exhibit 14, the second page of
20 Exhibit 14, and then you may wish to look at that
21 and then consult the audit report.

22 MR HABER: That's fine.

0305

1 THE WITNESS: Oh, there we are,
2 okay. "A 2% correction was made for Gorgon
3 losses", 6.03.

4 Oh, yes. This is this matter of
5 own use fuel and losses.

6 In reporting gas volumes and
7 particularly gas volumes as reserves, Shell had
8 adopted the method of correcting the actual
9 produced gas volumes as they came from the field
10 for own use and losses, as I recall.

11 Various parts of the facilities,
12 for bringing the oil and gas to surface and to
13 shore, required fuel. And most of the time, this
14 fuel used was taken -- or is taken from the gas
15 stream, for instance to drive compressors, gas
16 compressors and other facilities.

17 As a matter of fact, as an aside
18 issue, the SEC guidelines we have later
19 established do not actually require this
20 deduction to be made. The reason why Shell
21 adopted it is because the finance function
22 reported gas sales, which effectively would have

0306

1 been gas produced minus gas lost in operation or
2 used as fuel; fuel flared and losses is what that
3 was called.

4 And in order to arrive at a
5 situation whereby the annual production -- and
6 this is all in existing fields, where the annual
7 production was comparable between the submissions
8 of the reserves and the submissions of the finance
9 function, this deduction was made.

10 In order to be consistent with this

11 practice for existing fields, a similar projection
12 needed to be made for future fields.

13 So in other words, the calculation
14 of future recoveries in the Gorgon field, future
15 gas recoveries, needed to be corrected for
16 anticipated use for fuel, flare, and other losses,
17 and that is what this is about.

18 Q. The next paragraph says the un --
19 and this is in paren -- I am sorry. In quotes,
20 "The 'unsatisfactory' rating for the mismatch in
21 1999 gas production/sales figures: I hope you can
22 understand that I can hardly rate this as 'good'.

0307

1 Trust that" quote, "'satisfactory'", close quote,
2 "is a good compromise. I did check with EPF here
3 and it seems that the old Ceres guidelines left an
4 integrated OU like SDA with no option but
5 reporting the way you did."

6 And it appears you are responding
7 to a comment that Ms. Graham had made, again on
8 the second page of the E-mail which is I believe
9 referencing a new checklist 6.07.

10 My question is: Can you explain
11 what this issue is about?

12 MR. TUTTLE: Just object to the
13 characterization of the document, the comments
14 from Ms. Graham.

15 You can answer.

16 THE WITNESS:

17 A. Yes. One of the activities that I
18 carried out at the end of the year was to check
19 the consistency of the reported oil and gas
20 production figures as reported by the reserves
21 reporting stream, on the one hand, which would be
22 organized by the Group Reserves Coordinator, and

0308

1 the finance function on the other hand.

2 Finance would report separately
3 sales of gas and oil during the year.

4 As a check, it was introduced I
5 believe somewhere in the '80s, early '80s, that
6 these two reported volumes, annual production and
7 sales volumes, needed to be consistent between the

5 believe at 6.07, that's where it is noted as an
6 unsatisfactory grade?

7 A. Yes. I believe the cross was an
8 unsatisfactory, yes.

9 Q. And in your draft note of November
10 21, which is Exhibit 12 or which is attached to
11 the E-mail we were just talking about, it's now
12 reflected as a satisfactory grade?

13 A. The November 21?

14 MR. FERRARA: I am sorry. This is
15 Exhibit 12?

16 MR HABER: No. I am sorry,
17 Exhibit --

18 THE WITNESS: The final copy.

19 MR HABER: Or just let's look at
20 the Exhibit 14.

21 MR. FERRARA: I think we are in a
22 jumble.

0311

1 MR HABER: Yes. No, I am going to
2 correct it. Exhibit 14, which has November 21
3 note attached to it.

4 THE WITNESS: Oh, I see.

5 BY MR. HABER:

6 Q. And if you look at the last page of
7 the document, that reflects now a satisfactory
8 grade.

9 Correct?

10 MR. FERRARA: I am sorry. What
11 page are you referring to?

12 MR HABER: 1997.

13 THE WITNESS:

14 A. Yes. Item 6.07 in Exhibit 14, it's
15 an "O", which stands for satisfactory, yes.

16 BY MR. HABER:

17 Q. In terms of your grading system, in
18 terms of which one is better, is good better than
19 satisfactory?

20 A. (Nodding)

21 Q. I am sorry. You have to verbalize
22 the answer?

0312

1 A. Yes.

2 Q. And I see in the final note, the
3 final report, you graded SDA, the audit,
4 satisfactory.

5 If you look on Exhibit 13, the
6 bottom of the page?

7 A. Yes. Yes.

8 Q. Do you recall any instance when you
9 performed an audit during your tenure as Group
10 Reserves Auditor where you did not give a
11 satisfactory or good grade to an operating unit?

12 A. There was one where it was for Abu
13 Dhabi. And that was I believe somewhere in 2000,
14 where in my draft report, I came up with an
15 unsatisfactory answer.

16 And this was the situation where
17 there was one person in Rijswijk, which is the
18 research laboratory of Shell, there was one person
19 made responsible for coordinating the reserve
20 submission for Shell Abu Dhabi.

21 Shell Abu Dhabi -- Shell Abu Dhabi
22 had themselves a very small office with hardly any
0313

1 staff in Abu Dhabi, obviously, and the operation
2 there would be run by ADCO, Abu Dhabi -- Abu Dhabi
3 Company. I forget what it stands for.

4 Anyway, it was referred to as ADCO,
5 who would be a joint venture company between
6 ADNOC, who are the government oil company, and
7 Shell. They would be the actual operators.

8 Now, because they were the actual
9 operators but because there was a mixture there
10 between Abu Dhabi government staff and Shell
11 petroleum staff, petroleum engineering staff, it
12 was deemed not necessary for me -- for me to visit
13 that company in Abu Dhabi. But in fact it was
14 deemed that it was sufficient for me to visit the
15 person in Rijswijk who was responsible for putting
16 their reserves together.

17 And I found that there were serious
18 flaws in their -- in his submission, basically
19 because he didn't get the data, and the ADCO
20 company wouldn't make it available to him, so it
21 wasn't his fault. But nevertheless, as an audit

22 trail it was unsatisfactory.

0314

1 What we agreed then was that he
2 would yet again go back to ADCO and seek the
3 additional information that I was looking for,
4 which I allowed him to do, and then a few months
5 later we did the audit again and it came out at
6 just satisfactory, but it always remained the
7 lowest score as far as the audit that we had.

8 Now, as far as your question as to
9 were there any audits that we gave that were
10 unsatisfactory rating, the short answer is no. It
11 wasn't until the year 2003 that the two audits of
12 SPDC and of Oman were given an unsatisfactory
13 rate.

14 Q. We will probably discuss those two
15 tomorrow.

16 MR. FERRARA: We have gone for a
17 little over an hour.

18 MR HABER: Yes. I was just going
19 to say this is a good breaking point.

20 THE WITNESS: Okay.

21 MR. HABER: So we will take five
22 minutes.

0315

1 THE VIDEOGRAPHER: Going off the
2 record at 2:31.

3 (Short recess taken)

4 THE VIDEOGRAPHER: Beginning tape
5 number 5 and returning to the record at 2:45 from
6 2:31.

7 BY MR. HABER:

8 Q. Mr. Barendregt, in 2000, do you
9 recall there being an effort by SDA to book
10 reserves additions in Gorgon?

11 A. Yes.

12 Q. When do you recall that occurring?

13 A. I don't know the precise date, but
14 it was sometime before the -- before the audit, as
15 I remember it.

16 Q. Do you recall how much SDA was --
17 how much volume SDA was trying to book as
18 reserves?

19 A. No, I do not. But it was small.

20 Q. Do you recall discussing the issue
21 with Remco Aalbers?

22 A. Not specifically. But it must have
0316

1 come up in discussions that we had at that time,
2 yes.

3 Q. Do you recall what position Mr.
4 Aalbers was advocating with regard to the booking
5 of additional reserves in Gorgon?

6 A. I do not remember that, but I know
7 that my position was that whatever they propose,
8 we'll see when I get there.

9 In other words, people would give
10 me perhaps opinions on this or not, but whether or
11 not, they didn't in any way influence me. I had
12 always made quite clear to Remco and to others
13 that I would go out there, I would come to an
14 opinion, and I would express that.

15 Q. Do you know if the ExCom considered
16 the issue of whether it was appropriate to book
17 reserves addition in SDA for Gorgon?

18 MR. TUTTLE: Objection to form.
19 Foundation.

20 THE WITNESS:

21 A. I do not remember that.

22 (Barendregt Exhibit No. 15 marked
0317

1 for identification.)

2 BY MR. HABER:

3 Q. We are marking as Exhibit 15,
4 Barendregt Exhibit 15, the "Review of Group
5 End-1999 Proved Oil and Gas Reserves Summary
6 Preparation."

7 It's a note dated 8 February, 2000.
8 The document is multipaged. It bears two Bates
9 ranges, the first one is V00280131 through
10 V00280144, and the other range is DB 25123 through
11 DB 25136.

12 Now, Mr. Barendregt?

13 A. I am sorry.

14 Q. That's okay. Have you seen this
15 document before today?

16 A. Yes. It would appear to be my end

17 1999 report.

18 Q. And if you look in the bottom
19 left-hand corner, there is a signature there. Do
20 you recognize that signature?

21 A. Yes. That's mine.

22 Q. That's yours? I would like you to

0318

1 turn to the attachment 1, which is 133 or the DB
2 range 125. Under number 3, "In Australia", if you
3 just take a look at that for a moment.

4 A. Yes.

5 Q. Now, do you recall when, having
6 looked at this, when SDA was proposing to add the
7 reserves?

8 A. Well, obviously from the date of
9 this report, it would have been somewhere in the
10 course of 1999.

11 Q. Now, in your report, it says, "The
12 most likely market for this gas would be LNG.
13 However, customers for this additional gas cannot
14 at this stage be readily identified and the
15 incremental volumes, (some 20 10⁹ Nm3 Group
16 share) have not been included in externally
17 reported Proved Reserves at this stage. This is in
18 line with Group guidelines and is therefore
19 supported."

20 What is your understanding as to
21 why these reserves were not included in the
22 externally reported Proved Reserves at that time?

0319

1 A. As I remember it, my understanding
2 at that time, not having been to visit SDA yet,
3 was that Gorgon had been the subject of an update
4 of the field development study, presumably by the
5 operator, and that that had yielded a slight
6 increase in the amount of reserves proved and
7 expectation that were identified in the field.

8 So that is the nature -- as far as
9 I remember it now, that was the nature of the
10 slight increment, slight meaning in comparison
11 with what was -- what -- the total size of Gorgon
12 at that stage.

13 Q. Now, my question, thought, was what
14 was your understanding as to why the reserves were
15 not included in externally reported Proved
16 Reserves at that time?

17 A. I cannot remember that. I cannot
18 remember that precisely what the reason was, and I
19 regret that I didn't specifically report that
20 here. Normally I do that, but I didn't do that.

21 Q. Well, if you notice there is a
22 reference to "customers", not, I am quoting,
0320

1 "mere, readily identified."

2 Was that an issue that you
3 considered?

4 A. Yes. This comes back to the
5 earlier subject that I mentioned that in order for
6 gas to be carried as reserves a market -- a path
7 to markets needs to be identified. In other
8 words, there needs to be an existing market, and
9 there needs to be a path identified to that
10 market.

11 And in this case, that was an LNG
12 plant and LNG shipment to the western Pacific Rim.

13 Q. Did you consider at the time
14 whether those conditions which caused you to agree
15 with not booking these reserves addition required
16 you to consider whether to debook the reserves at
17 Gorgon that had already been on the books?

18 MR. TUTTLE: Object to form.
19 Characterization of the document, characterization
20 of the testimony.

21 BY MR. HABER:

22 Q. You can answer.

0321

1 A. First, I regret that this
2 particular paragraph hasn't been more extensive.
3 That normally I try to write my reports in a lucid
4 fashion such that people first, foremost people
5 understand what it is I mean there, but also that
6 I later on remember myself what I have written
7 here.

8 And I regret to say that I cannot
9 remember precisely what went through my head here.

10 When I say that "approved gas

11 volumes are economic to develop and a market is
12 readily available and the license duration is"...

13 (Reading) I am sorry. Still reading, too.

14 (To the Reporter) Strike what I

15 would have said because I was reading from the
16 wrong paragraph.

17 "The most likely market for this

18 gas would be LNG, although customers for this
19 additional gas cannot be readily identified."

20 As I said, that in fact is not,

21 say, a necessary condition for booking reserves,
22 if you haven't additional customers.

0322

1 And linking it as I did with the

2 incremental volumes has not really any substance.

3 I should have written that much clearer than I did
4 have.

5 Q. Well, when you say "it's not a

6 condition," is it a factor that's considered?

7 A. It's a factor that I must have

8 considered at the time.

9 Q. Do you recall considering whether

10 it was appropriate to debook the Gorgon gas in
11 light of this condition, this factor?

12 A. What I knew about Gorgon when I
13 compared it against what the guidelines said, it
14 fulfilled the guidelines. The Shell guidelines
15 said that a market needs to be in existence, and
16 this is in fact what I believe rule 4-10 said.

17 But that I am not 100 percent sure

18 of. But anyway, a market needs to be in

19 existence, and a robust way of developing that gas
20 and bringing it to market must be identified and

21 it must be economic to do so.

22 Now, all of these conditions, as I

0323

1 understood it, were present in Gorgon. Not

2 having, and I repeat, not having been there yet

3 myself, I couldn't assure the validity of each of

4 these arguments, certain arguments as they were

5 presented to me seem to be sufficient to book that

6 gas.

7 Q. Now, in that last sentence of
8 number 3, you say, "This is in line with Group
9 guidelines", this being referenced to not booking
10 the additional reserves.

11 Is that correct?

12 A. Yes. That's what obviously the
13 text refers to.

14 Q. So my question is, then, the
15 guidelines did not support the booking of the
16 reserves additions.

17 Correct?

18 MR. TUTTLE: Objection to form.
19 Characterization of the document, characterization
20 of his testimony.

21 MR. MORSE: Same objection.

22 BY MR. HABER:

0324

1 Q. You can answer.

2 A. Again there, this is not clear. As
3 I think back of it now, I think it was wrong for
4 me to say it as I did.

5 What you must bear in mind is that
6 it's always possible to agree with something not
7 being booked. If you look at the SEC definitions
8 and through 4-10, at the additional guidance at
9 their own general guidelines, any of these
10 guidelines never force you to book reserves. It
11 effectively sets a limit to what you can book as
12 reserves.

13 And that is very important, and
14 that meant that whenever a proposal is made not to
15 do -- not to book a certain volume, it's very easy
16 to, as an auditor or as a regulatory body, to
17 agree with that.

18 If you go to the SEC, and you say
19 we propose not booking this, then they are bound
20 to say okay, because their concern is reserves
21 being overstated, not being understated.

22 And that is where I was coming from

0325

1 when I was saying that I supported it. And I
2 regret that I didn't write it -- write it down
3 right. This is one of the very -- I think very

4 few instances where I could have been a lot
5 clearer in my -- in writing down my
6 considerations.

7 That's about as far as it goes.

8 Q. Okay. Did there come a time during
9 your tenure as Group Reserves Auditor that you
10 started to think about whether Gorgon should be
11 debooked?

12 MR. TUTTLE: Objection to form.

13 THE WITNESS:

14 A. Yes. I can think of a particular
15 instance or particular instances after --
16 particularly after Frank Coopman came on the scene
17 and took over from his predecessor.

18 And when Frank Coopman instructed
19 the Group Reserves Coordinator, John Pay, to put
20 up what we framed or what we called a group
21 reserves exposure register -- I am sure we are
22 going to be talking about it in the next couple of
0326

1 days -- and Gorgon featured on there. And the
2 times when we discussed the exposure register, of
3 course the question did come up, do we continue
4 booking Gorgon?

5 The issue became -- and I
6 maintained the attitude that the reasons why I
7 supported the booking of Gorgon at the time of the
8 audit had not changed.

9 And therefore in my opinion -- and
10 I repeat that in my annual report. In my opinion,
11 Gorgon can continue to be maintained on the books.

12 Now, in the course of 2003, of
13 course, we were introducing in the guidelines the
14 requirement for FID for a major -- for a major
15 project like Gorgon.

16 And that meant that at the end of
17 2003, it was becoming inevitable to take Gorgon
18 off the books. But then so many other reserves
19 corrections were becoming apparent from November
20 onwards that there were -- there was plenty of --
21 there were plenty of reserves corrections that
22 were asking for our attention.

0327

1 But it was clear from then on that

2 Gorgon was going to be debooked and together with
3 a lot of other reserves.

4 Q. Did you reflect this thinking in
5 any of your written annual reports?

6 A. Well, in 2000, the end of 2002 --
7 so before this letter of occurrence that I
8 described to you -- I gave reasons why I still
9 supported a booking of Gorgon.

10 Q. And into 2003 opinion for year-end
11 2002, is there anything that you recall you said
12 in your report that questioned the Gorgon booking?

13 A. Well, the end of 2003, it had been
14 taken out. Gorgon had been taken out.

15 Q. Gorgon was debooked as a
16 consequence of Rockford?

17 A. As a consequence of Rockford, yes.

18 Q. I am saying prior to Rockford, when
19 you prepared your report for year-end 2002, which
20 comes out I believe in January or February 2003,
21 is there anything in that report that reflects
22 your thinking that Gorgon may no longer be

0328

1 supportable?

2 MR. TUTTLE: Objection, form.
3 Characterization of his prior testimony. He just
4 testified what was in his year-end 2002 report.
5 So I maybe even misunderstood that.

6 MR. BEST: I join in the objection.

7 MR HABER: Maybe I didn't
8 understand; maybe if you can just repeat your
9 answer.

10 THE WITNESS:

11 A. In my report at the end of 2002, I
12 did discuss Gorgon, as a whole paragraph devoted
13 to Gorgon, and I gave my reasons there of
14 maintaining Gorgon on the books.

15 And the reasons were essentially
16 the same as the reasons I put forward in my audit
17 in the year 2000.

18 MR. BEST: We had a gentleman's
19 agreement in the generic sense to cut this off at
20 3:00 clock. And this was done specifically

21 because of considerations for Mr. Barendregt.

22 So how much longer do you think you

0329

1 need?

2 MR HABER: Absolutely. And I did,

3 just so you know, did inquire at the break --

4 MR. BEST: Oh, you did.

5 MR HABER: -- to find out how long.

6 I think I will probably be about another ten

7 minutes --

8 MR. BEST: Great.

9 MR HABER: -- if that's acceptable

10 to you and Mr. Barendregt.

11 MR. BEST: That's fine.

12 THE WITNESS: Thank you.

13 (Barendregt Exhibit No. 16 marked

14 for identification)

15 BY MR. HABER:

16 Q. Mr. Barendregt, I am showing you

17 what we have just marked as Barendregt Exhibit 16.

18 It's a note dated January 31, 2003. It's "Review

19 of Group End-2002 Proved Oil and Gas Reserves

20 Summation Preparation." The Bates range is

21 V00010650 through V0001066.

22 Mr. Barendregt, if I can direct

0330

1 your attention to item 7, your main observations,

2 which is on page 654. Halfway down the page,

3 there is a reference to Gorgon.

4 Is this what you were just

5 referring to, this?

6 A. Yes, indeed it was. Yes.

7 Q. And this document, do you recognize

8 this document as your annual report for year-end

9 2002?

10 A. It would appear to be that

11 document, yes.

12 Q. And you drafted this document?

13 A. Yes.

14 Q. And if you look in the bottom

15 left-hand corner, it bears the signature.

16 Do you recognize the signature as

17 your own?

18 A. Yes, I do.

19 Q. Now, prior to the time of Rockford,
20 do you recall anyone from SDA advising you that
21 they were prepared to recommend a debooking of the
22 Gorgon reserves?

0331

1 A. I remember that the issue was
2 debated between SDA and Remco Aalbers, the Group
3 Reserves Coordinator at the time.

4 When I heard about it -- and I
5 don't remember precisely who told me, whether it
6 was Jeroen Regtien in an E-mail or Remco verbally.

7 But when I heard about it anyway, I
8 discussed it obviously with Remco. And I made
9 clear to him that okay, all very interesting, but
10 I am going to go out there, do my audit, and I
11 will make up my own opinion.

12 I hear what the various plans are,
13 but I will make -- I will express an opinion when
14 I go out for the audit.

15 (Barendregt Exhibit No. 17 marked
16 for identification)

17 Q. I have marked as Barendregt Exhibit
18 17?

19 A. We are done with 16?

20 Q. Yes.

21 An E-mail with attachments. It's
22 multipaged, this was previously marked as Darley

0332

1 Exhibit 25.

2 The last -- the E-mail that appears
3 on the first page of the Exhibit is from you to
4 Jeroen Regtien. It's dated January 9, 2004. It's
5 to John Darley. And as I said, there are a number
6 of attachments.

7 The Bates range is V00321097
8 through V00321104.

9 And Darley 1097 through Darley 1104
10 and I would like to direct your attention to the
11 second and third page of this document, which is
12 an E-mail from Jeroen Regtien dated May 25,
13 2000 -- I am sorry, to you, with a CC to Robert
14 Blaauw and Sheila Graham, the subject line reads,

15 "SEC reserves audit - Australia".

16 And in particular, I would like you
17 to look at the last page of this E-mail, the top
18 of the page, the second bullet point. And this
19 will be the last series of questions for the day.

20 A. So it's the bullet point with
21 respect to Chevron-operated assets?

22 Q. Correct.

0333

1 (Witness reviewing document)

2 A. Yes.

3 Q. Do you recall receiving this
4 E-mail?

5 A. Not specifically. But it's clear
6 that I did receive it.

7 Q. Do you recall having direct
8 communications with Mr. Regtien about possibly
9 debooking the Gorgon gas?

10 MR. TUTTLE: Objection to form.
11 Characterization of the document.

12 THE WITNESS:

13 A. Again, not specifically. As I said
14 earlier, I did discuss the subject with Remco,
15 and -- well, it's obvious from this, I must have
16 sent him a reply. I sent Jeroen a reply that I
17 discussed the issue with him as well. I don't
18 know whether in the reply, in fact, I did mention
19 Gorgon. I can't remember that.

20 BY MR. HABER:

21 Q. Just for the record, if you look at
22 what Mr. Regtien says, he says, "With respect to

0334

1 Chevron operated assets, the giant Gorgon field is
2 classified as proved undeveloped and we intend to
3 downgrade that to SFR".

4 What is your understanding of what
5 that means?

6 A. Precisely what it says there, that
7 they wanted to reclassify it as SFR, Scope For
8 Recovery, which is the Shell term for volumes that
9 are identified, are known to be there, but cannot
10 yet be booked as Proved Reserves.

11 Q. So then by moving it from proved

12 undeveloped to SFR, that would effectively debook

13 the Gorgon --

14 A. Yes.

15 Q. -- gas reserves as proved.

16 Correct?

17 A. A Shell preferred term, that is

18 recategorize it.

19 MR HABER: Thank you very much, Mr.

20 Barendregt. I appreciate your indulgence for the

21 extended time.

22 THE WITNESS: Okay.

0335

1 MR HABER: That concludes today.

2 THE VIDEOGRAPHER: Going off the

3 record for the day at 3:14. This is the end of

4 tape number 5.

5 (Whereupon, the deposition recessed

6 at 3:14 p.m.)

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1 ERRATA

2 CORRECTION PAGE

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Signature

Date

1 I, Anton Barendregt, am a deponent in
2 the foregoing video deposition, Volume II. I
3 have read the foregoing video deposition, and
4 having made such changes and corrections as I
5 desired, I certify that the transcript is a true
6 and accurate record of my responses to the
7 questions put to me on Tuesday, 20 February, 2007.

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Signed _____

ANTON BARENDREGT

CERTIFICATE OF COURT REPORTER

1 I, Frederick Weiss, CSR, CM, do hereby
2 certify that I took the stenotype notes of the
3 foregoing deposition and that the transcript
4 thereof is a true and accurate record transcribed
5

6 to the best of my skill and ability.

7 I further certify that I am neither
8 counsel for, related to, nor employed by any of
9 the parties to the action in which this deposition
10 was taken, and that I am not a relative or
11 employee of any attorney or counsel employed by
12 the parties hereto, nor financially or otherwise
13 interested in the outcome of the action.

14

15

16

17

18 _____
FREDERICK WEISS, CSR, CM

19

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21

22 _____
DATE

0339

1 IN THE UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

2 Civ. No. 04-3749 (JAP)

Hon. Joel A. Pisano

3

4 _____)
IN RE ROYAL DUTCH/SHELL)
5 TRANSPORT SECURITIES)
LITIGATION)

6 _____)

7

VIDEOTAPED DEPOSITION UPON
8 ORAL EXAMINATION
OF

9 ANTON BARENDREGT

10 VOLUME III

11 Taken on:

12 Wednesday, 21 February, 2007

Commencing at 10:08 a.m.

13

Taken at:

14

The Hague Zurich Tower

15 Muzenstraat 89

2511 WB The Hague

16 The Netherlands

17

18

19

20

21

22 REPORTED BY: FREDERICK WEISS, CSR, CM

0340

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BERNSTEIN, LIEBHARD & LIFSHITZ, LLP

6

7 Deponent: Anton Barendregt

8 The Videographer: Richard Bly

9 Court Reporter: Frederick Weiss

10

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I N D E X

DEPONENT

ANTON BARENDREGT

Examination Page No:

Examination by Mr. Haber - continued 345

EXHIBIT INDEX

EXHIBIT Page No:

Barendregt Exhibit 18 - 345

Document entitled "NOTE - 31 Aug, 1999"

Authored and signed by Anton Barendregt

Bearing Bates Nos. LON00820516 - LON00820527

Barendregt Exhibit 19 - 345

Document entitled "DRAFT NOTE - 23 Sept 2003"

Authored by Anton A. Barendregt bearing Bates

Nos. RJW00890491 - RJW00890500

Barendregt Exhibit 20 - 345

Document entitled "NOTE - 30 Sept 2003"

Authored by Anton A. Barendregt bearing Bates

Nos. V00010772 - V00010781

I N D E X - continued

EXHIBIT INDEX

EXHIBIT Page No:

4

Barendregt Exhibit 21 - 359

5

Document entitled "NOTE - 30 January 2001"

6

Authored and signed by A.A. Barendregt
Bearing Bates Nos. LON01260652 - LON01260652

7

Barendregt Exhibit 22 - 435

8

Document entitled "NOTE - 30 January 2002"

9

Authored and signed by A.A. Barendregt
Bearing Bates Nos. V00300308 - V00300320

10

Barendregt Exhibit 23 - 450

11

Copy of handwritten notes with the title "SPDC

12

Resvs Discussion" bearing Bates Nos.
RJW00112775 - RJW00112786

13

Barendregt Exhibit 24 - 487

14

Copy of three pages of E-mail string from John
Pay/Anton Barendregt, and copy of document
entitled "Oil & Gas Reserves in Nigeria" bearing
Bates Nos. RJW0092077 - RJW00920787

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1 PROCEEDINGS --

2 (Whereupon, Barendregt Exhibit No.

3 18 was marked for identification)

4 (Whereupon, Barendregt Exhibit No.

5 19 was marked for identification)

6 (Whereupon, Barendregt Exhibit No.

7 20 was marked for identification)

8 THE VIDEOGRAPHER: This is the

9 video operator speaking. We are beginning volume

10 III, videotape number 6 of the continuing

11 deposition of Anton Barendregt. Today's date is

12 February 21, 2007. The time on the record is

13 10:08 a.m.

14 Please proceed.

15 EXAMINATION BY MR. HABER - CONTINUED

16 BY MR. HABER:

17 Q. Good morning, Mr. Barendregt.

18 A. Good morning.

19 Q. Today, as I mentioned yesterday, we
20 were going to start talking about SPDC in Oman.

21 And just again as a marker so you know what we are
22 going to start with, I am going to start asking

0346

1 you about SPDC.

2 A. Okay.

3 Q. Where is SPDC located?

4 A. In Nigeria, Western Africa.

5 Q. What is the ownership structure of
6 SPDC?

7 MR. BEST: If you know.

8 THE WITNESS:

9 A. The precise ownership structure I
10 am not aware of, but I know it's effectively a
11 50/50 deal with the government.

12 BY MR. HABER:

13 Q. With the Nigerian government?

14 A. With the Nigerian government, yes,
15 indeed.

16 Q. Now, are you aware of any
17 arrangement with regard to the payment of costs
18 that the Nigerian government had committed itself
19 to provide?

20 A. I am not quite sure that I
21 understand the question.

22 Q. Well, if there were costs for

0347

1 investment in SPDC, who was to bear those costs?

2 A. The costs of development of the
3 SPDC fields would be shared 50/50 between Shell
4 and the government; and by most costs of
5 development, I mean the costs of installing the
6 facilities, drilling the wells, et cetera.

7 Q. Have you heard of a reserves
8 addition bonus?

9 A. Yes, I have.

10 Q. What is that?

11 A. It was an agreement that was made
12 with the Nigerian government who, at one stage,
13 wanted Shell to increase the portfolio of reserves
14 regarding the areas in their -- in their
15 concession, regarding the fields in their
16 concession.

17 It was aimed both at inducing or
18 encouraging SPDC to carry out more exploration
19 and, therefore, come to a more complete inventory
20 of what was available in the Nigeria subsurface,
21 but also to look at existing fields, or known
22 fields at least, and try and come up with

0348

1 development schemes that would maximize the
2 recovery there as well.

3 Q. Now, was there a formula that was
4 set up to calculate what that reserve addition
5 would be?

6 A. I don't remember the details of the
7 deal. I know what direction it went in, but I
8 don't remember the details.

9 Q. And the direction it went in would
10 be a payment to the Nigerian government?

11 A. Yes indeed. For every million
12 barrels, they would receive a certain sum of
13 money.

14 MR. TUTTLE: I am sorry. Did you
15 say a payment to the Nigerian government?

16 MR. HABER: Yes.

17 THE WITNESS:

18 A. I am sorry. I misunderstood that.
19 In actual fact, SPDC would come up with additional
20 reserves, be it either through exploration or
21 through additional developments, and those
22 reserves additions would be discussed and

0349

1 ultimately agreed with the Nigerian government.

2 And as a result of that, SPDC would
3 receive from the Nigerian government a sum of
4 money. I am sorry. I misunderstood your
5 question.

6 BY MR. HABER:

7 Q. Thank you. And with regard to the
8 development that you just referred to, as the
9 group reserves auditor, did you ever reach a
10 conclusion that the reserve -- excuse me, addition
11 bonus influenced SPDC in the booking of reserves
12 or the attempted booking of reserves?

13 MR. TUTTLE: Objection to form.

14 THE WITNESS:

15 A. I think before I answer that
16 question, I think it's important to say that the
17 reserves addition bonus in the first instance was
18 directed at expectation reserves, not at proven
19 reserves.

20 You find and Shell finds that in
21 dealings with the government, they are not really
22 interested in improved reserves and in external

0350

1 reporting. They see that as a matter for Shell
2 because they see that they themselves don't have
3 that responsibility and -- for instance, the
4 Nigerian state and the Oman state.

5 They are not interested in proven
6 reserves, they are only interested in what Shell
7 phrases expectation reserves. So the reserves
8 expectation bonus was primarily awards based on
9 expectation reserves. That's one.

10 The -- I am sorry. This
11 explanation, I forgot the question again. What
12 was it?

13 Q. Well, the question was whether the
14 reserves addition bonus, if you had reached a
15 conclusion with regard to the bonus of whether the
16 bonus influenced the booking approved reserves at
17 SPDC?

18 MR. BEST: I am going to object to
19 the form. It's a compound question.

20 MR. TUTTLE: Object to the form.

21 THE WITNESS:

22 A. A lot -- when I arrived on the

0351

1 scene when I went to Nigeria on my first audit,
2 the reserves addition bonus had already been in

3 place for ten years. I believe it was started in
4 the early 90s.

5 And it was beginning -- the
6 discussions were beginning to fizzle out. The
7 reason being that even though reserves addition
8 bonus had been agreed in the early 90s, the
9 Nigerian government was very slow in paying, and
10 so it was beginning to be realized that the whole
11 effort wasn't really worth while because the
12 Nigerian government weren't paying anyway, or
13 very, very slow indeed.

14 But certainly initially it had the
15 result that fields were studied, because a field
16 development study was made, fields were studied,
17 which were not yet due for development.

18 Those fields might -- without the
19 reserves addition bonus as I understand it, those
20 fields might otherwise have lain on the shelf
21 until they were due to be developed without
22 carrying any reserves with them.

0352

1 But since those fields were studied
2 and since defensible and agreed reserves estimates
3 had been prepared for these fields, SPDC quite
4 naturally decided that since they had expectation
5 reserves and since there was a good development
6 plan and it was economic and past all the hurdles,
7 there was no reason why they shouldn't book proved
8 reserves as well.

9 Q. And those bookings, were they done
10 pursuant to the changes in the guidelines in 1998?

11 MR. TUTTLE: Object to form.

12 THE WITNESS:

13 A. No, they were not, because as I
14 tried to explain, most of these reserves were in
15 immature fields. They were either exploration
16 discoveries, or they were in fields that were
17 discovered but weren't due for development for a
18 very long time.

19 So in other words, they were
20 totally at the beginning end of the spectrum;
21 whereas the '98 reserves changes, as I've
22 explained to you, primarily dealt with the fields

0353

1 at the end of the maturity spectrum, fields that
2 were in production.

3 BY MR. HABER:

4 Q. Under Shell's guidelines, was a
5 mature field a defined term?

6 A. A mature field -- I am trying to
7 think whether there was actually a definition of a
8 mature field. Everybody knew at least what a
9 mature field was.

10 A mature field was a field that had
11 been developed, that had been in production for
12 sometime, but there wasn't a, say, a hard
13 definition saying that it must have produced at
14 least 30 percent, or whatever, a certain
15 percentage, a fixed percentage of the ultimate
16 recovery in that field.

17 I don't believe that that was laid
18 down.

19 Q. So in essence, it was subject to
20 subjective determination of engineers and
21 geologists?

22 MR. TUTTLE: Objection to form.

0354

1 Characterization of the testimony.

2 MR. BEST: Same objection.

3 BY MR. HABER:

4 Q. You can answer it.

5 A. If there was a difference in the
6 interpretation, it certainly wasn't instrumental.
7 It wasn't as if somebody would judge a field that
8 had been in production for a half of a year and
9 had been producing -- three percent of their
10 ultimate recovery was regarded or defined or
11 viewed upon as a mature field.

12 I mean, that sort of thing never
13 happened. Everybody knew pretty well what a
14 mature field was.

15 Q. Now, did SPDC have a scorecard?

16 A. I don't know for certain, but I
17 expect there must have been, together with the
18 rest of the organization, yes.

19 Q. And what are Score Cards, for the

20 record?

21 A. Score Cards were introduced
22 somewhere in the late 90s. I forget which

0355

1 particular year. They would set a number of
2 targets to, for instance, a company or a division
3 within a company.

4 They would set a number of
5 quantified targets for annual production at the
6 end of the year, reserves additions, specific
7 targets like coming to certain agreements or --
8 with the government or producing field development
9 plans.

10 And these targets would then be
11 reviewed, and the performance against these
12 targets were reviewed at the end of the year.

13 Meaning that for each, resulting in
14 an assessment on each of these points, typically
15 there would be something like anything between
16 five and ten of these points, whether the targets
17 had been met or not met or exceeded.

18 And for each of these scorings, one
19 would get a number of points and the average of
20 these -- or they would be totalled up to a certain
21 weighting. And that meant that there was an
22 overall score on the targets, on the scorecard

0356

1 that determined, for instance, the bonus of
2 individuals concerned, starting from the Managing
3 Director of a company down to individual people.

4 Q. Did you ever review SPDC's
5 scorecard?

6 A. No, I did not.

7 Q. Now, in your answer, you said that
8 the targets would be reviewed.

9 Who reviewed the targets?

10 A. It depended on the level. If it
11 was a scorecard for a company, then the targets
12 will be reviewed in The Hague.

13 Q. Who at the Hague?

14 A. The Regional Business Director for
15 that particular company; for SPDC, it would be the
16 business director for Africa.

17 Q. Do you recall who the Regional
18 Business Director was in SPDC during your tenure
19 as group reserves auditor?

20 A. I know that it changed. But if you
21 ask me for names, no, I would have to dig back in
22 the file.

0357

1 Q. Is Brian Ward someone that rings a
2 bell?

3 A. Brian Ward was certainly a business
4 director at one stage. He may have been for
5 Africa. I honestly don't know. I can't remember.

6 Q. How about Tim Warren?

7 A. Could have been.

8 Q. Were you a proponent of the
9 scorecard system?

10 MR. TUTTLE: Object to form.

11 THE WITNESS:

12 A. Initially, I was neutral about it.
13 But later on, and most notably because of the year
14 2000, I began to see possible effects on a
15 particular reserves bookings that I considered
16 undesirable.

17 And from then on, I wasn't in favor
18 of Score Cards where it related to setting
19 reserves addition targets.

20 BY MR. HABER:

21 Q. What happened in the year 2000 that
22 caused you to change your position?

0358

1 A. It was particularly the booking for
2 Shell Angola.

3 Q. And what was it about the booking
4 of Shell Angola that raised your awareness about
5 Score Cards?

6 A. The -- when Shell Angola wanted to
7 propose a reserves addition for their Block 18
8 fields, there was some doubt expressed, in the
9 first instance by Remco Aalbers, who was the group
10 reserves coordinator, as you know, supported by
11 myself. I had my doubts too.

12 And we were both taken aback by the
13 aggressive reaction that we received from the

14 organization, particularly from staff in Shell
15 Development Angola, even more so in the regions,
16 in the regional business directorate in The Hague.

17 Q. Who at SDAN are you referring to?

18 A. Mm-Hmm.

19 Q. I am sorry. Who?

20 A. Oh, who. My memory of names -- I
21 have always been able to rely on my reports to
22 look up names, but Grigoire Simon was one of them,
0359

1 but he wasn't the most vocal.

2 I think on balance, the most vocal
3 were probably the people in the regional business
4 directorate.

5 Q. And who were they?

6 A. There we go.

7 MR. TUTTLE: If you remember.

8 THE WITNESS:

9 A. The names appeared on, say, the
10 notes that I made or that were made during the
11 discussions at the end of the year. If I could
12 have a look at those, then I could point out whose
13 names they were.

14 BY MR. HABER:

15 Q. We are getting a little out of
16 order in what we are marking, but this is going to
17 be Barendregt Exhibit 21.

18 MR. TUTTLE: 21.

19 (Whereupon, Barendregt Exhibit No.
20 21 was marked for identification)

21 MR. TUTTLE: Jeff, do you just want
22 to put on the record 18, 19, and 20 so we don't
0360

1 confuse every further, future reader of the
2 transcript?

3 MR. HABER: Yes. That's fine. Let
4 me identify Exhibit 21, and then I will note, as
5 counsel has just noted, that we premarked some
6 exhibits.

7 Exhibit 21 is a note dated January
8 30, 2001. Its title is, "Review of Group End-2000
9 Proved Oil and Gas Reserves Summary Preparation."

10 Its Bates number is LON01260652

11 through LON01260666.

12 (Handing)

13 And while the witness is looking at
14 that, I will note for the record that we premarked
15 three documents. The first one, Exhibit 18, is a
16 note dated 31 August, 1999. Its title is, "Shell
17 Proved Reserves Audit - Shell Petroleum
18 Development Co (SPDC) Nigeria, 18-26 Aug 1999".
19 Its Bates number is LON00820516 through
20 LON00820527.

21 Barendregt Exhibit 19 is "Draft
22 Note - 23 Sept 2003". The title reads, "Proved
0361

1 Reserves Process Audit - SPDC (NIGERIA), 18-19
2 Sept 2003". Its Bates range is RJW00890491
3 through RJW00890500.

4 And the third document that was
5 premarked was Barendregt Exhibit 20. It's "NOTE"
6 dated 30 September, 2003. The title is, "Proved
7 Reserves Process Audit - SPDC (NIGERIA), 18-19
8 Sept 2003". Its Bates range is V00010772 through
9 V00010781.

10 (Handing Exhibits to witness)

11 Q. Mr. Barendregt, if you could take a
12 look at Exhibit 21.

13 Do you recognize this document?

14 A. Yes. It would seem to be my end
15 2000 report.

16 Q. And if you look in the bottom
17 left-hand corner, there is a signature there.

18 Do you recognize that as your own?

19 A. Yes, I do.

20 Q. And do you recall preparing this
21 note?

22 A. Yes, I do.

0362

1 Q. Now, if you would turn to
2 Attachment 6, which ends 664.

3 (Witness complying)

4 Do you recognize Attachment 6?

5 A. Yes, I do.

6 Q. And what is Attachment 6?

7 A. Attachment 6 is a note reflecting

8 my findings regarding the Angola Block 18
9 attempted reserves bookings and ultimate reserve
10 booking as it had developed over the last -- over
11 the last months of year 2000 and the beginning of
12 2001.

13 Q. Now, you see in the second
14 paragraph -- or yes, in the second paragraph and
15 in the first paragraph as well, there is a
16 reference to Shell Deepwater Services?

17 A. Yes.

18 Q. What is Shell Deepwater Services?

19 A. Shell Deepwater Services was a
20 group of experts that had been set up in Houston
21 to carry out studies effectively as some sort of a
22 contractor for operating companies with deep
0363

1 water, with fields in deep off-shore water.

2 The group was set up as a center of
3 expertise, particularly Deepwater Services that
4 didn't therefore relate so much to the subsurface
5 as well as the surface or subwater facilities,
6 which were and had been a frontier area of
7 development, where Shell had made quite some
8 progress.

9 Since most of the progress in
10 developing that technology had been in the Gulf of
11 Mexico, Houston was the logical place to have
12 locate this center of expertise.

13 I say that the emphasis was on
14 surface and subsea facilities. In addition to
15 that, the type of fields that one tends to find in
16 the deep off-shore are called -- what geologists
17 call turbidites, which are sand slumps off the
18 continental shelf, so from the shallow inshore sea
19 to the real deep water.

20 And these fields have specific
21 qualities that, again, the American operation had
22 quite some experience in.

0364

1 So that was felt to be another
2 reason to bring that together in this Shell
3 Deepwater Services Group in Houston.

4 Q. Now, if you look at -- if you look

5 at the third paragraph that begins "prior to
6 preparation of the present Stage 1 development
7 plan."

8 A. Yes.

9 Q. It says, "Two meetings were held
10 late in 2000 between SDS/SDAN and SIEP/SEPCo
11 advisors, including myself."

12 Do you recall where the first
13 meeting was held that's referenced here?

14 A. I believe that the first meeting
15 was held in The Hague. I am just recalling from
16 recollection. Let me read the paragraph.

17 Q. Sure.

18 (Pause)

19 A. As I read it here, I am not too
20 sure which two meetings specifically referred to;
21 certainly, at least, one meeting at which Remco
22 Aalbers and myself attended, which was held in
0365

1 Houston. And I believe that was early in
2 December.

3 Prior to that, I happened to be in
4 Houston for an audit of the Shell oil reserves
5 bookings, so nothing to do with Angola or SDS in
6 early move, and I believe I had an early
7 pre-meeting with one or two staff of SDS, because
8 at that time it was beginning to be clear that
9 Shell Angola were wanting to book some reserves.

10 And Remco even at that stage was
11 beginning to express concern that this might be
12 too early.

13 So I had a brief preliminary
14 discussion with one or two staff there. And in
15 addition, Remco and I had discussions with Shell
16 Development Angola staff in Rijswijk somewhere in
17 the course of late November, early December,
18 together with the Regional Business Director,
19 whose names I forget, except that I believe one of
20 the names was called Barry. He's not listed in
21 one of the names here, but Barry is a name that
22 comes to mind.

0366

1 Q. And there is a reference to a

2 SIEP/SEPCo advisor.

3 Who were you referring to there?

4 A. That would be Gordon Barry.

5 Q. Do you recall meeting with Rod

6 Sidle at that time in December of 2000?

7 A. Oh, SEPCo advisor, yes. Rod Sidle
8 was -- I cannot remember whether Rod Sidle was
9 present in the big meeting that Remco and I had in
10 December.

11 Somehow, I seem to remember that he
12 wasn't there, but I cannot be sure.

13 Q. Now, if you look at the next
14 sentence, it says, "In the face of prevailing
15 uncertainties, marginal to poor economics, plus a
16 failed VAR2 review in October 2000, SDS were
17 advised to look for a 'creaming' development
18 plan."

19 Under the VAR system, was it
20 permissible to book Proved Reserves if a project
21 did not pass VAR2?

22 MR. TUTTLE: Objection to form,

0367

1 foundation, time period.

2 BY MR. HABER:

3 Q. At the time of the booking.

4 A. The short answer is yes.

5 Q. And why is that?

6 A. I believe that at the end of
7 2000 -- remember that the reserves guidelines
8 gradually tightened over the years. And I believe
9 at the end of 2000, that the requirement was
10 preferably for our review to have been passed. I
11 forget precisely what the requirements were.

12 Q. Do you recall if it was a VAR3?

13 MR. TUTTLE: Objection to form.

14 Foundation.

15 THE WITNESS:

16 A. No, I do not.

17 BY MR. HABER:

18 Q. The reference to "marginal to poor
19 economics," what were you referring to there?

20 A. Yes. Let me -- I think at this
21 stage, it's useful to describe the project in more

22 detail to you.

0368

1 There were six small fields
2 discovered in the two years preceding this point
3 in time. There were small fields that were
4 typically something like ten -- no, 30 to 50
5 kilometers apart from each other.

6 BP were the operator; in other
7 words, BP was doing the drilling and was making
8 the development plan.

9 Shell decided to have their own
10 shadow study being done, and in this case by SDS.

11 BP were quite keen on the project.
12 They had been pushed along by their chairman, and
13 they were committed to go and develop the fields
14 as soon as possible.

15 Now, of these six small fields,
16 small accumulations, invariably there were a
17 couple that were larger and the rest of them were
18 smaller.

19 But each of them need their own
20 individual platform because they were too far
21 apart from each other to even reach with
22 long-reach wells.

0369

1 So each of them needed their own
2 separate facilities, and that meant a separate
3 facility already in deep water, and that with
4 distances of 40, 50, 60 kilometers, and that meant
5 expensive development.

6 Some of these smaller fields were
7 in fact not big enough to really make that an
8 effective proposition. And indeed, with Shell's
9 screening criteria, and I stress Shell's screening
10 criteria, which were done against a conservative
11 oil price of in the order of 14 to 16 barrels -- I
12 am sorry, 14 to 16 dollars per barrel,
13 particularly the outlying fields, these smaller
14 outlying fields did not seem attractive.

15 That was against Shell's own
16 internal conservative estimates. However, it
17 would appear that if you were to look at a smaller
18 scale development of only the largest two, maybe

19 three fields, then you might get a project that
20 would yield less oil but certainly oil that was
21 more economical to produce than the larger amount
22 of oil, when you take the development as a whole.

0370

1 The Shell guidelines in those days
2 quite clearly stated that in order to book
3 reserves, one needed to demonstrate technical
4 maturity and commercial maturity.

5 And the minimum requirement for
6 that was at least a plan, a field development plan
7 that could, if that was the case, it could be
8 based on a notional development.

9 In other words, the prime purpose
10 of that plan would be to demonstrate that this
11 field could be produced economically, that the
12 reserves that were quoted could be produced
13 economically.

14 And that seemed to be the only way
15 of booking reserves for Angola Block 18 rather
16 than going for the full development that Shell
17 development Angola were pushing for.

18 Q. Was it permissible to use notional
19 development plans under SEC Rule 4-10?

20 A. Rule 4-10 never mentions anything
21 like development plans. Rule 4-10 in this respect
22 only talks about reasonable certainty and nothing

0371

1 else.

2 Like I mentioned on several
3 occasions before, there are one or two other more
4 specific items that Rule 4-10 addresses.

5 But as far as the concept of
6 development plans is concerned, all it refers to
7 is reasonable certainty. Shell had interpreted
8 that along the lines as has been described in our
9 guidelines.

10 Therefore, the accepted reserves
11 bookings were fully in line with those internal
12 Shell guidelines, which had been put up because
13 Rule 4-10 wasn't specific enough.

14 Q. Did anyone -- withdrawn.

15 Did Rod Sidle ever express a view

16 that was contrary to the booking of approved

17 reserves in Block 18 Angola?

18 MR. TUTTLE: Objection to form.

19 THE WITNESS:

20 A. Rod Sidle did express concern about
21 the bookings, and his concern focused primarily on
22 the proved areas that were used in the development
0372

1 plan.

2 Now, what do I mean by "proved
3 areas"? Proved areas are a notion in -- in Rule
4 4-10 that determines which areas around a well you
5 can use for basing Proved Reserves on.

6 The most significant parts where it
7 related to Angola Block 18 was this LKH issue,
8 lowest known hydrocarbons, where the question was:
9 Could we book oil that was seen below the
10 penetration by the -- by the drill bit?

11 I think on the first day I
12 explained to you that you may have a situation
13 whereby you drill and you find oil in the
14 reservoir, but you don't see any water, so you
15 don't know where actually the transition between
16 oil and water is.

17 And there are various tools that
18 you can use to infer where that oil/water contact
19 is, as we call it.

20 But Rule 4-10 says that in
21 principle, you should stick -- in determining the
22 proven volume of oil, you should stick to what
0373

1 you've seen in the drill bit.

2 And the precise words are "in the
3 absence of information on a fluid contact, you
4 will stick to this proven oil."

5 Now, Shell, and in particular Rod,
6 had interpreted this as follows: Seismic --
7 seismic techniques had improved enormously in the
8 previous ten, 15 years, and it was now possible to
9 detect in fact the outline of the oil/water
10 contact from seismic.

11 You could follow the outline of the
12 oil/water contact. And together with the known

13 depth of those structures and of those outlines
14 that you could see on seismic, it was therefore
15 possible to infer where the oil/water contact was
16 even though you hadn't seen it with the drill bit.

17 That was seen to be a sufficient
18 basis, and it was seen as a sufficient basis to
19 qualify it as information on a contact.

20 So Rule 4-10 said that in the
21 absence of information on a fluid contact you
22 cannot do it, but the inference is if that there

0374

1 is information on the fluid contact and its
2 arrival information, then you can use it. And
3 that's what Shell Oil had developed as a method.

4 And Rod, who was quite instrumental
5 in developing this -- this technique, this method,
6 was concerned that we should stick to that in
7 determining the proved areas in these Angola
8 fields.

9 Q. Now, was this method implemented
10 through appraisal wells?

11 A. It was based or it was coupled with
12 results from appraisal wells, yes. But the prime
13 source of the information was from seismic
14 studies, seismic -- seismic surveys having been
15 taken and interpreted.

16 Q. Now, do you know if Shell had
17 drilled appraisal wells in Block 18?

18 A. Oh, yeah. Definitely. Yes.

19 Yeah. All the blocks were approved
20 areas were delineated were all blocks that
21 actually -- that had been penetrated by an
22 appraisal well. So that was the primary example.

0375

1 If there was a particular block that we could see
2 on seismic, a fault block, you can see those, you
3 can see the faults run, if it was a block that
4 hadn't been penetrated, then it couldn't be
5 classified as proved.

6 Q. At this meeting, had you seen that
7 data to show that wells had been drilled and that
8 the block had been penetrated?

9 MR. TUTTLE: Objection to form.

10 Just a reference to "this meeting."

11 BY MR. HABER:

12 Q. I am sorry. The reference is to
13 the December 2000 meeting.

14 A. Yes. We had all the maps out on
15 the table and all the locations of the wells. So
16 yes, we were shown that.

17 Q. Now, is there a difference between
18 an exploration well and appraisal well?

19 A. Not really. The function is the
20 same, except the exploration well is typically the
21 first well that you drill on a structure, and
22 therefore you are less certain of what the outcome

0376

1 is going to be.

2 Quite often, you always begin with
3 shooting seismic, trying to see what is happening
4 in the subsurface. But what you cannot see with
5 seismic without well data, what you cannot see
6 there is whether we actually have a structure that
7 is oil or gas filled; or at least it's very
8 difficult. You are very lucky if you can actually
9 see it.

10 Q. Now, are there wells that are
11 drilled after the exploration appraisal wells?

12 A. Yes. Those are called appraisal
13 wells.

14 Q. And after the appraisal well, is
15 there a well that's drilled -- let me ask that
16 again. I am sorry.

17 After you drill an appraisal well,
18 is there another type of well that's drilled?

19 A. Yes, development well. That's what
20 you have when you start drilling wells for targets
21 for producing oil, which you then plan to or will
22 hook up to facilities and therefore produce the

0377

1 oil.

2 Q. So is a development well a well
3 that one would create a development plan around?

4 MR. TUTTLE: Objection to form.

5 THE WITNESS:

6 A. No. It would be the other way

7 around. You create a development plan that
8 determines where development wells are going to be
9 drilled.

10 BY MR. HABER:

11 Q. I see. Okay. Now, in the next
12 part of this sentence, it says, "SDS were advised
13 to look for" quote -- I am sorry -- "a 'creaming'
14 development plan."

15 What is a creaming development
16 plan?

17 A. A creaming development plan would
18 be a descriptive term for the plan that I just
19 described to you; i.e., even though it was clear
20 that BP was going ahead with their development of
21 all the structures, this creaming development
22 would only address part of the structures and

0378

1 thereby allow only a portion of the ultimate
2 project reserves to be booked as reserves.

3 So it would be a creaming of the
4 more juicy bits in the development plan and put
5 together -- and put those together as a plan.

6 The effect of this is that if you
7 only book the reserves of such a creaming
8 development, that in fact what you are doing is
9 you are taking the best part of the total reserves
10 and only book those, rather than the total
11 reserves, which would contain a portion that were
12 less attractive.

13 Q. Now is a creaming development
14 compliant with Rule 4-10?

15 A. Rule 4-10 doesn't say anything
16 about creaming development. All Rule 4-10 says is
17 that it must be reasonably certain that it will
18 get developed. One of the conditions for that is
19 that it must be economical.

20 Q. When you say it will get developed,
21 are you talking about the entire field?

22 MR. TUTTLE: Object to form.

0379

1 THE WITNESS:

2 A. Fields.

3 BY MR. HABER:

4 Q. You can answer.

5 A. Fields. I remember we were talking
6 about five or six fields.

7 Q. And so a creaming plan only
8 addresses a certain portion of the fields?

9 A. Yes.

10 Q. Now, we got on to Angola in
11 response to a question I asked about Score Cards.

12 Do you recall any discussion at
13 this December 2000 meeting concerning Score Cards?

14 A. No. No.

15 Q. Then what is it about the booking
16 of Block 18 that raised your awareness about the
17 effect of Score Cards?

18 MR. TUTTLE: Objection to form.
19 Characterization of the testimony.

20 MR. BEST: Object to form.

21 THE WITNESS:

22 A. I mentioned strongly challenging
0380

1 the reaction, shall we say, of Shell Development
2 Angola staff and of the Regional Business Director
3 in The Hague when Remco, supported by myself, was
4 beginning to make noises that he considered it too
5 early to book reserves here.

6 And we saw a similar reaction with
7 SDS staff. My interpretation of that is that
8 Shell Development Angola and Regional Business
9 Directorate staff in the Hague were on scorecard
10 with reserves additions, but SDS staff seem to
11 have been on Score Cards as well.

12 Q. Did anyone from Shell Angola
13 express to you that booking Angola would favorably
14 impact the scorecard?

15 A. I cannot remember that, whether
16 anybody did.

17 Q. Was it --

18 A. I mean the subject was discussed
19 between Remco and myself. Nobody -- I don't think
20 anybody actually mentioned it in my face. It was
21 just in a discussion with Remco. But having said
22 that, it was quite clear that people were pushing
0381

1 it.

2 Q. Pushing?

3 A. For the original proposal of
4 reserves, for the whole field, for the whole
5 project to be -- to be booked.

6 Q. And that was because it would have
7 a favorable impact on their scorecard?

8 A. Yes.

9 MR. TUTTLE: Object to form.
10 Foundation.

11 BY MR. HABER:

12 Q. Now, when did you have this
13 conversation or conversations with Mr. Aalbers?

14 A. Late November.

15 Q. Of 2000?

16 A. Of 2000, yes.

17 Q. And do you know if the reserves in
18 Angola were recategorized as a consequence of
19 project Rockford?

20 A. I believe ultimately that they were
21 not. Because at the time of project Rockford, the
22 FID had been taken and the field had been -- the
0382

1 fields had been moved in the maturation cycle in
2 Shell.

3 And BP had put up a development
4 plan which had been discussed, and Shell had
5 agreed to go ahead with the development, and the
6 money had been made available.

7 And that meant that the reserves
8 were going to be produced and that the project was
9 going to go ahead. So there was no reason to
10 debook that, as far as I remember.

11 Q. Now, at the time that Shell booked
12 the reserves in Block 18, had BP booked any Proved
13 Reserves?

14 A. Not 100 percent sure, but I believe
15 they hadn't. Not at that time, no.

16 Q. Do you recall how much volume was
17 originally planned to be booked in Block 18?

18 MR. TUTTLE: Object to form.
19 Foundation.

20 THE WITNESS:

21 A. Not specifically. I believe it was
22 about three times the volume that was ultimately
0383

1 booked at that time.

2 BY MR. HABER:

3 Q. And how much was ultimately booked?

4 A. It's here in the notes, I am sure.

5 Two figures, 11017 come to mind. Something like
6 11,000,000 cubic meters.

7 Q. Is that approximately 74,000,000
8 BOE? And I am referring to Shell's share.

9 A. Yes. 12,000,000 cubic meters Shell
10 share, so times six, roughly that's 70 something
11 or other, yes.

12 Q. Now, going back to what I told you
13 we were going to talk about, which was SPDC?

14 A. Are we done with this?

15 Q. Yes. We are done with the
16 document.

17 I think you mentioned yesterday
18 that your predecessor, Ad de la Mar, had audited
19 SPDC before you took over the position.

20 Correct?

21 A. Yes.

22 Q. And when was that audit?

0384

1 A. In 1997.

2 Q. Do you recall what Mr. De la Mar
3 had found when he had audited SPDC?

4 A. Short answer is no, I do not recall
5 specifically. I believe it was something to do
6 with the audit trail, which indeed is -- I found
7 to be a problem as well.

8 Q. And why did you find that to be a
9 problem?

10 A. SPDC are in charge of a large
11 number of fields, altogether an enormous amount of
12 oil, far more than is required for their immediate
13 needs for production, because Nigeria was a part
14 of OPEC, still is a part of OPEC.

15 They were therefore on a
16 self-imposed country off-take constraint, and that
17 meant that the SPDC part of Nigerian production

18 couldn't exceed a certain -- a certain threshold,
19 around the level of I believe nine -- at the time,
20 900,000,000 barrels a day --

21 Q. How did --

22 A. -- 900,000 barrels a day. Beg your
0385

1 pardon.

2 Q. So in effect, the OPEC constraint
3 was a cap on how much SPDC could produce.

4 Is that correct?

5 A. Yes. On a daily basis, indeed.
6 Yes.

7 Q. I think my original question was:
8 What was it about the audit trail that you found
9 to be a problem?

10 A. As I said, SPDC had a large amount
11 of fields in their portfolio, more than they
12 needed for their, say, immediate needs.

13 The total number of fields was in
14 the order of 100. I found that a built up -- what
15 you would require in a case like this, you would
16 require a reconciliation between the total amount
17 booked built up from individual field estimates.

18 And in most of the companies, that
19 estimate was no problem -- no problem. And you
20 would expect that both for the expectation and for
21 the Proved Reserves level.

22 In Nigeria, there was the
0386

1 complication that Proved Reserves declared needed
2 to be produced before the end of license, which
3 was at that time perceived to be in 2019.

4 And therefore, it wasn't just
5 simply a matter of totaling up what you see as
6 Proved Reserves in each and every individual
7 field. You needed to process it, put it together,
8 and then a combined forecast which you would then
9 cut off at 2019.

10 All of that work hadn't been done
11 or at least wasn't available. But I am sure it
12 hadn't been done either.

13 One of the reasons was that SPDC is
14 located in three different areas. There is the

15 head office where the persons responsible for SPDC
16 reserves reporting to the center were located.
17 And there are the two operating areas, one in a
18 place called Warri, W-A-R-R-I, and Port Harcourt,
19 P-O-R-T, H-A-R-C-O-U-R-T.

20 And the coordination between these
21 two, particularly in the 90s, was not good.

22 Nigeria is a country that's
0387

1 struggling with its infrastructure, and it
2 certainly has taken longer in that country to get
3 things like E-mail, et cetera, off the ground; and
4 that therefore, historically, communication
5 between the head office in Lagos Warri and Port
6 Harcourt had been difficult.

7 And Ad de la Mar could still see
8 effects of that, and I also could, coupled I think
9 with a lack of interest by the reserves
10 coordinator that had been preparing the last
11 reserves estimate at the end of 1998.

12 Q. And who was the reserves
13 coordinator at the end of 1998?

14 A. Again, I would have to verify. He
15 is not even mentioned on my note.

16 Q. Which note are you looking at?

17 A. On the -- on Exhibit No. 18, which
18 is my Proved Reserves audit report of August 1999.

19 Q. And this is the note that you
20 drafted?

21 A. No. It seems like this is the
22 final note. It has my signature on it, Exhibit

0388

1 18.

2 Q. All right. And just for the
3 record, did you prepare this note?

4 A. Yes, I did, and it's my signature.

5 Q. Thank you.

6 A. So no, I cannot tell you what the
7 name was. He was Nigerian. End of 1998 was his
8 first submission by himself. He had been the
9 assistant of an expatriate, a reservoir engineer
10 in previous years.

11 I think he had been left to his own

12 devices for too long.

13 SPDC had acknowledged that, even
14 before my doing the audit, and had already decided
15 that a dedicated unit for reserves reporting,
16 internal reserves reporting -- and as a matter of
17 fact, I believe also for general business
18 reporting to the Hague -- would be set up, and
19 that would be set up in Port Harcourt under the
20 direction of Bram Sieders.

21 Therefore for all practicalities, I
22 sent my report to Bram Sieders because he was the
0389

1 one who was going to do something with my report.

2 Q. And again, just for the record, I
3 want to make sure when we were talking about the
4 reserves coordinator, you were referring to a
5 local reserves coordinator?

6 A. Correct.

7 Q. You were not talking about the
8 reserves coordinator in The Hague.

9 Is that correct?

10 A. No, indeed. I was talking about
11 the local reserves coordinator.

12 MR. HABER: We have been going at
13 it for about an hour. Why don't we take a break.

14 MR. TUTTLE: Yes. Take a break.

15 THE VIDEOGRAPHER: Going off the
16 record at 11:06.

17 (Short recess taken)

18 THE VIDEOGRAPHER: Returning to the
19 record at 11:25 from 11:06.

20 BY MR. HABER:

21 Q. Mr. Barendregt, before I continue
22 with SPDC, there is a couple of follow-up
0390

1 questions from our prior discussion that I'd like
2 to ask you.

3 You mentioned SDS having some
4 expertise with turbidite fields?

5 A. Yes.

6 Q. Are turbidite fields located in
7 deep water only?

8 A. Not always, but it is the, say, the

9 geological setting under in which they originate.

10 In other words, turbidites are always generated at
11 the time that they were beginning to exist by sand
12 slumps rolling off the continental shelf into the
13 deep sea many, many millions of years ago.

14 So yes, typically you would find
15 those on the edges of continental shelves, and
16 that by definition almost means that they are in
17 deep water.

18 Q. Were there any turbidite fields in
19 SPDC?

20 A. Onshore, not. Most of the field
21 settings that were there were fields of the type
22 -- with sands of the type that are deposited in
0391

1 deltaic -- what the geologists call deltaic
2 environments, which again is similar in the
3 setting where you see now where the Niger river
4 has a large Delta depositing sands that are eroded
5 from upstream from that river and deposited
6 downstream in the near shore area.

7 Q. Did Shell have any fields or
8 projects in SPDC in the Delta water area?

9 MR. TUTTLE: Objection to form.

10 THE WITNESS:

11 A. I am not sure whether I understand
12 the question.

13 BY MR. HABER:

14 Q. Well, the Delta region that you
15 just referred to?

16 A. Yes.

17 Q. Did Shell have any projects?

18 A. Oh, yeah. Yeah. Virtually 100
19 percent of their fields are in that environment.

20 MR. FERRARA: I am sorry. That's
21 not what he asked. You mean projects with
22 turbidite fields? Is that what your question was?
0392

1 MR. HABER: No. He said turbidite
2 -- let's go back.

3 Q. These fields in the Niger Delta?

4 A. Yes.

5 Q. Do they include turbidite fields?

6 A. No, they do not.

7 Q. Okay.

8 A. In fact, the way Shell split up
9 their business was that SNEPCo would be the off --
10 would be looking at the off-shore fields, which
11 was a different concession, a different terms, and
12 those fields would contain some turbidite fields.

13 But the onshore fields or
14 near-shore fields, which would be operated by
15 SPDC, would all be of a different type.

16 Q. Now, the technology that's used
17 with regard to turbidite fields, does that have
18 any application in nonturbidite fields?

19 MR. TUTTLE: Objection to form.
20 Foundation.

21 MR. BEST: If you know.

22 THE WITNESS:

0393

1 A. It depends on the type of
2 technology that you are referring to you. If you
3 are referring to subsea and surface technology,
4 the answer is no, they are not. These fields are
5 not all located on deep sea but they are located
6 on land, and that means an entirely different type
7 of surface facilities.

8 The -- as far as the subsurface is
9 concerned, i.e., the geological setting of these
10 fields, no. Any knowledge specific to turbidites
11 is not knowledge that you require -- other than
12 general petroleum engineering knowledge that you
13 always need, is not knowledge that you require for
14 developing the typical fields in relation with
15 SPDC.

16 BY MR. HABER:

17 Q. You have heard of the EA field in
18 SPDC?

19 A. Yes. It's one of the shallow
20 off-shore fields.

21 Q. Do you know if SDS provided any
22 technical support at the EA field?

0394

1 A. I do not know. I would be
2 surprised if they had.

3 Q. But you have no knowledge of it?

4 A. I have no knowledge of it.

5 Q. Now, just one other question about
6 Angola. After the booking was made in December of
7 2000, did you have any discussions about the
8 booking with the external auditors?

9 A. Yes. They saw all my reports. We
10 must have discussed it, and they must have asked
11 some questions about it.

12 Q. Do you recall when you had these
13 discussions?

14 A. That would be in the latter half of
15 January.

16 Q. As part of the closeout?

17 A. The January as part of the closeout
18 of the year, yes.

19 Q. And do you recall who was present
20 during the year closeout?

21 A. The actual closeout, which is say
22 the important year-end meeting, would see presence
0395

1 from both KPMG and PriceWaterhouseCoopers.

2 And the persons present from
3 PriceWaterhouse would be for example Bert Eeftink,
4 initially, until he had been taken over by Han van
5 Delden and one or two of the KPMG engineers, whose
6 names escape me at the moment.

7 They were engineers that we used to
8 -- not engineers, but accountants that we used to
9 see in those meetings.

10 Q. Do you recall either KPMG or PWC
11 representatives challenging the Angola booking
12 during the closeout meeting?

13 MR. TUTTLE: Objection to form.

14 THE WITNESS:

15 A. Not challenging in the sense of
16 expressing disbelief; seeking clarification, I
17 think would be more the -- would be better
18 description of the sort of discussion that we had.

19 BY MR. HABER:

20 Q. Do you recall what clarification
21 they were seeking?

22 A. No. No.

0396

1 Q. Going back now to SPDC and your
2 audit, you had mentioned before the break some
3 concern that you had about the audit
4 documentation, the audit trail for SPDC.

5 Did you include that in your audit
6 note for SPDC?

7 MR. TUTTLE: Objection to form.
8 Characterization of the testimony.

9 BY MR. HABER:

10 Q. And you can --

11 A. I believe I did. I believe I did.
12 But with questions like these, I always refer back
13 to my note to see precisely what I have written.
14 It is, after all, seven years ago.

15 Q. And you can feel free to look at
16 Exhibit 18, if it will help you.

17 And if I can help you even further,
18 I note that there is a recommendation on the last
19 page of Attachment 1 which is 518, where this is
20 addressed in number 6.

21 (Witness examining document)

22 MR. BEST: Jeff, I want to note for

0397

1 the record that while he is looking at this
2 document, that on Exhibit 18, as well as many of
3 the exhibits that I have seen in the course of Mr.
4 Barendregt's interview, there are handwritten
5 notations on these documents which do not appear
6 to be Mr. Barendregt's handwriting.

7 Certainly we haven't talked about
8 that. But indeed, if ever these Exhibits are
9 introduced into evidence, there has been no
10 foundation laid for these handwritten notations.

11 And particularly on 18, there is
12 more handwritten notations than on other documents
13 I have seen.

14 MR. HABER: I will ask him after
15 this pending question.

16 THE WITNESS: Okay. I have
17 somewhat refreshed my memory. So would you --

18 BY MR. HABER:

19 Q. Is the recommendation portion of

20 Exhibit 18 the only place where you reference the
21 audit trail situation that you've just testified
22 about?

0398

1 A. No. I also refer to audit trails
2 in the previous findings, specifically in number
3 14 and 15.

4 Q. And what you have written in 14 and
5 15, do these reflect the issue that you just
6 testified about concerning the audit trail?

7 MR. TUTTLE: Objection to form.

8 THE WITNESS:

9 A. They provide the basis for my
10 recommendation to improve their procedures for a
11 comprehensive and consistent audit trail, for the
12 corporate submission.

13 They had the audit trail notes for
14 the two separate divisions, but now I would like
15 to see it being brought together for the
16 corporate. And that was particularly important
17 for the end year -- for the end license situation
18 where you -- where they needed to show a basis for
19 their proved reserves estimate.

20 All in all, I had no -- my concern
21 here was primarily a concern about making sure
22 that I could follow the reserves estimate building

0399

1 up from the individual field estimates.

2 I would typically, when I would do
3 my own building up, taking individual field
4 estimates that had been given to me separately, I
5 would come up typically just say one or two
6 percent below or sometimes higher than the figure
7 that they had submitted.

8 I couldn't reconstruct the exact
9 figure. I wanted to see an exact match between
10 what you built up and what you -- and what they
11 reported.

12 I had severe difficulty doing that.
13 And that is what the point that I am trying to
14 make here, that it's -- if you do your job
15 properly, then it's very easy -- I mean,
16 spreadsheets are very easy and comprehensive tools

17 to achieve exactly that.

18 And they saw that point and they
19 promised to improve.

20 Q. Now, at the time that you had
21 conducted the audit, did you think about whether
22 to give a grade to SPDC less than satisfactory,

0400

1 that is, unsatisfactory?

2 MR. TUTTLE: Objection to form.

3 THE WITNESS:

4 A. I did. In the end, I decided
5 against that -- can I just look further through
6 the notes --

7 BY MR. HABER:

8 Q. Please.

9 A. -- and see precisely? As I
10 explained before, my scoring of an audit would be
11 also based on the scoring that I did in the
12 checklist.

13 (Pause)

14 Okay. It's not printed here, no.
15 So I don't have access to that. On my computer
16 you can see what the actual scoring numerically
17 comes out.

18 I know or I remember that SPDC was
19 quite close to getting an unsatisfactory, but they
20 were just above the cutoff level that I normally
21 maintained for unsatisfactory audits.

22 But in response to your question

0401

1 did I consider it, yes, I did. In the end, I was
2 happy to leave it as just satisfactory, even
3 though it was on the lower range of the
4 satisfactory basically, because I could see that
5 there was a new team in place. They were eager to
6 get on with it.

7 And like I said, I knew the person
8 in charge of that unit, and I knew that he was
9 more than capable of putting it together.

10 And on that basis, I decided to
11 leave it -- to leave it as a satisfactory -- just
12 satisfactory audit.

13 Q. Now, was the absence of this audit

14 trail an issue that recurred following your audit
15 in 1999?

16 MR. TUTTLE: Objection to form.
17 Foundation.

18 THE WITNESS:

19 A. The next audit that I carried out
20 was in 2003, by which time the guidelines had
21 changed considerably.

22 So the set of criteria that were

0402

1 used in looking at those fields was vastly
2 different than the method of putting together a
3 proved reserves estimate, was vastly different.
4 So there really was no comparison.

5 So as far as my involvement as an
6 auditor was concerned, the focus was no longer on
7 or less so on audit trail. The focus over the
8 coming years, as you will no doubt come and see,
9 has been on the relevance of the end of license in
10 2019.

11 That's where much of the focus lay
12 in the coming years, not so much the audit trail.

13 BY MR. HABER:

14 Q. We will get to the end of license
15 in a moment.

16 A. But the point that I really made is
17 that the effect of, say, an absolutely spotless
18 audit trail has been small.

19 Like I said, I did my own audit
20 trail if you like, and I always came up with an
21 answer that was just off it, from what I remember
22 typically, on the order of one or two percent.

0403

1 But it wasn't significant.

2 Q. Now, do you know if the absence of
3 an audit trail was an issue that was considered
4 during Project Rockford with regard to SPDC?

5 MR. TUTTLE: Objection to form.
6 Foundation.

7 THE WITNESS:

8 A. Not as such. The input of SPDC in
9 Project Rockford was -- entailed a major screening
10 review of all of the portfolio against all of the

11 portfolio of SPDC, all of the field portfolio of
12 SPDC, a major screening review of say the maturity
13 of the fields in that portfolio and the maturity
14 requirements that by that time we had in the -- in
15 the Shell guidelines.

16 Like I mentioned before, SPDC had
17 built up a large portfolio of reserves in fields
18 which were not due to be developed shortly as a
19 result of the reserves addition bonus discussions
20 with the government.

21 So in other words, they had
22 accelerated their activities in relation to

0404

1 exploration drilling and subsequent appraisal
2 drilling, and thereby got a large number of fields
3 and significant volumes of oil on the shelf and,
4 therefore, also on the books.

5 And there was nothing in Rule 4-10
6 that forbade that, that did not allow the well
7 volumes to be there. They were proved, they were
8 demonstrated by wells, and they were certain to be
9 developed in due course because they were all
10 attractive as well, economically attractive.

11 But the screening that was carried
12 out in 2003, towards the end of 2003, was much
13 more critical on the issue of how likely is this
14 field going to be developed and, ultimately, is
15 there a field development plan or at least an area
16 development plan with a timetable.

17 And in many of these fields
18 naturally, for the reasons I've explained to you,
19 there wasn't.

20 And therefore, ultimately, there
21 was something like a thousand million barrels that
22 had to be taken off the SPDC portfolio as a result

0405

1 of Project Rockford.

2 But I am painting to you the
3 picture that Rockford was four years later than
4 this here, and there had been a significant shift
5 in the conditions in our reserves guidelines.

6 Q. I understand that. And what I
7 guess I am asking is a follow-up to what you just

8 testified to.

4 1 carrifieout in 2003, diiedhoseTjhat conductfiedhato.45 9

MR. BEST: Objecnati. Formto.4(8

5 somebody's cupboard and yes, the fields weren't
6 needed for development so they just sat there.

7 And by the end of 2003, SPDC
8 undertook to carry out a comprehensive review of
9 not the simple addition building up from the
10 individual fields, but also trying to reconcile
11 the field data with the reserves estimate that
12 they had in place, trying to find documents on
13 which those reserve estimates are based.

14 And that is what took them a lot of
15 effort.

16 Q. Now, this review that was conducted
17 in the end of 2003, who, if you know, led that
18 review?

19 A. Names are beginning to fade in my
20 memory very quickly, but it's also because of a
21 lack of discipline at trying to remember them. I
22 always go back to my notes and say who it was.

0408

1 Is there --

2 Q. Well, let me ask you, does David
3 Kluesner sound familiar to you?

4 A. Yes. David Kluesner was somebody
5 from Rijswijk.

6 Q. Does John Hoppe sound familiar?

7 A. John Hoppe, that was the man that I
8 was referring to. He was the one that was in
9 charge in Nigeria. He was based in Nigeria. Dave
10 Kluesner was a consultant in Rijswijk helping him
11 with that study.

12 Q. Now, do you know if they were able
13 to find the documentation on which those reserves
14 estimates were based?

15 A. I don't know. I don't remember.
16 They certainly didn't give us a full review of
17 which fields they found documentation and what
18 not, although there was a large spreadsheet made
19 highlighting -- no. Let me start again.

20 What SPDC did is that for all their
21 fields, they made a huge spreadsheet showing
22 precisely where they had problems in finding a

0409

1 reconciliation between the well data and the --

2 and any field development plan and a reserves
3 estimate.

4 And it would highlight for instance
5 whether there was any uncertainty regarding a
6 field development plan, uncertainty regarding well
7 data that had been use, whether there had been in
8 fact sufficient appraisal wells drilled.

9 So it was an enormous patch sheet
10 showing checkpoints against checklists against
11 various criteria and hurdles that you need to pass
12 in order to come up with a field development plan.

13 So yes, there had been information
14 given to us that showed where they struggled or
15 not with getting really together the entire audit
16 trail.

17 Q. I just want to go back for a moment
18 and then we are going to come back to this review.
19 If you could look at Exhibit 18 for a moment, your
20 counsel did mention there is handwriting and other
21 type of notations, markings on the document.

22 Do you recognize those, on Exhibit
0410

1 18?

2 A. Well, the top right-hand corner, it
3 says "spare," that's my handwriting. Somebody
4 noted a "new Ind. Auditor", independent, "since
5 '97." That's wrong.

6 MR. BEST: But more importantly, is
7 that your handwriting?

8 THE WITNESS: No, it isn't.

9 MR. BEST: Okay.

10 THE WITNESS: And the "1999 audit
11 satisfactory" wasn't my handwriting either.

12 BY MR. HABER:

13 Q. How about the line markings next to
14 the text?

15 A. No. No. They are certainly not
16 mine, no.

17 Q. So the only handwritten note that
18 you recognize as your own is the word "spare" in
19 the upper right-hand corner?

20 A. Yes, correct. And my signature.

21 MR. BEST: And so for the purposes

22 of at least putting the objection on the record,

0411

1 if any documents are ever going to be used in any
2 foreseeable trial, I am going to object to them to
3 the extent that Mr. Barendregt cannot authenticate
4 the document that is being shown to him as regards
5 these independent and unknown handwritten
6 drawings.

7 If you want to redact them for the
8 trial, so be it, but I have a standing objection
9 for this and every other document that we haven't
10 authenticated his handwriting on a document.

11 MR. HABER: As a matter of order,
12 of course, these type of issues are reserved, and
13 we certainly believe that the document itself has
14 been authenticated. And certainly where he has
15 identified his handwriting is authenticated for
16 purposes of trial.

17 Q. Mr. Barendregt, if you could turn
18 to Exhibit 16. This is the group end-2002 annual
19 report, which is dated January 31, 2003.

20 Now, I'd like to direct your
21 attention to page 3 and 4 of the document, and
22 it's Bates number 654 to 655.

0412

1 In particular, under number 8,
2 which is the heading "Production licence duration
3 constraints."

4 A. Yes. Can I read it first before
5 you ask any questions?

6 Q. Please.

7 A. Okay.

8 (Witness reading document)

9 Q. With regard to SPDC, what message
10 were you trying to convey to the recipients of
11 Exhibit 16?

12 MR. BEST: Objection to the form.

13 MR. TUTTLE: Objection to the form.
14 Foundation.

15 BY MR. HABER:

16 Q. With regard to number 8, the
17 production license constraints?

18 MR. TUTTLE: Same objection.

19 MR. BEST: Same objection.

20 THE WITNESS:

21 A. I was indicating that it was
22 difficult to reconcile the proved oil volumes that
0413

1 were carried by SPDC with, on the one hand, the
2 end of license in 2019 and the current off-take
3 rates.

4 And for all that we could see,
5 constrained off-take rates which, if assumed to
6 continue until 2019, would not leave enough
7 production to cover the current -- the carried
8 proved reserved.

9 Now, SPDC had been aware of it, and
10 they had been assuming a significant upturn in
11 future off-take rates such that before 2019, they
12 would have produced all of the currently carried
13 Proved Reserves.

14 I had already hinted that this was
15 the case or that this might pose a challenge to
16 increase the production rate in 1999, in my audit
17 report.

18 And when it was clear that for
19 several years, SPDC had not been able to increase
20 that off-take rate, it was also becoming clear
21 that they would have a problem in making those
22 proved reserves by the end of 2019.

0414

1 The situation now was different to
2 that in 1999. In 1999, there had been a period
3 when the Nigerian government found themselves
4 incapable of putting forward their share of the
5 capital expenditure required for installing new
6 facilities.

7 And because of that, Shell had
8 refused to put in any significant amount of money
9 in developing new field facilities.

10 And that meant that with time, the
11 off-take rates would gradually be declining.

12 However, in or around 1999, I don't
13 remember the precise date, an agreement had been
14 struck with the government whereby they would now
15 make more money available for development.

16 So that meant that, in principle,

17 SPDC could look forward to a gradual increase in
18 off-takes, because there was also the implied
19 promise by the Nigerian government that OPEC
20 constraints would be gradually lifted for as far
21 as it related to the SPDC off-take.

22 BY MR. HABER:

0415

1 Q. But -- I am sorry. Go ahead.

2 A. So in 1999, there was an outlook
3 that the future off-take rates might well
4 increase.

5 There was a promise by the
6 government, and it seemed not unreasonable to
7 assume an upturn in the off-take, particularly
8 because SPDC management committed themselves to
9 that promise in the implied promise that they made
10 to the central office by putting that off-take
11 rate in their development plan, in their business
12 plan for the years '99.

13 Q. And had you reviewed SPDC's
14 business plan at the time that this document was
15 written?

16 A. "Reviewed" is too grand a word. I
17 had somebody show me the relevant pages in the
18 business plan.

19 MR. TUTTLE: By "this document,"
20 you are talking about the --

21 MR. HABER: Exhibit 16.

22 MR. TUTTLE: -- Exhibit 16, to the

0416

1 January 2003 note on the year end-2002 period?

2 MR. HABER: Correct.

3 MR. TUTTLE: I want to make sure --
4 you looked at the '99 business plan before you did
5 your year-end 2002.

6 THE WITNESS:

7 A. What I was referring to was the
8 SPDC business plan, which is a document that
9 companies were required to submit to the Center
10 describing a forecast in principle for five years
11 but also with a long-term forecast included,
12 describing their foreseen costs and productions

13 and providing a general state of the union, so to
14 speak, type of information from the operating
15 company to the center.

16 Now, that is a document that is
17 nowhere here contained, and that I don't -- I
18 wouldn't normally receive. But if I ask for it,
19 then I could have a look at it.

20 BY MR. HABER:

21 Q. Do you recall looking at it, so the
22 record is clear, another business plan from SPDC
0417

1 when you conducted your audit in 1999?

2 A. Briefly, yes. Yes.

3 Q. Again, as you said before, relevant
4 portions were shown to you?

5 A. Yes, particularly graphs. I mean,
6 I want to see graphs.

7 Q. After 1999, did you look at SPDC's
8 business plan as it was revised?

9 MR. TUTTLE: Objection. Form.

10 MR. HABER: I will withdraw the
11 question.

12 Q. Did you, after 1999, did you look
13 at SPDC's business plan?

14 A. Not in the year 2000.

15 At the end of 2001, I tried to get
16 hold of a copy. In the end, I didn't get it. I
17 tried to get hold of the information, particularly
18 in relation to the long-term forecasts. I didn't
19 get it. In 2002, I finally did get something, and
20 I didn't like what I saw.

21 Q. And why didn't you like what you
22 had seen?

0418

1 A. Because there was still, in spite
2 of disappointments in the off-take rate, the
3 off-take rate in fact from 1999 had gone down
4 rather than up. And yet there was in the business
5 plan still this assumption of an upturn.

6 And I felt at that time in a
7 position to say: Well, look, there is an
8 inconsistency. How the hell can you make us
9 believe that you are going to do that?

10 And that is precisely the message

11 that I put in -- put in here. My message in 1999
12 was still: Look, realize that your future -- your
13 reserves that you carry are critically dependent
14 on the future upturn of reserves. Make sure you
15 realize that, to which effectively the answer was,
16 Yes, of course we realize that, and we are
17 confident that we are going to make it.

18 Okay. Fine. But after these three
19 years when it became clear that they hadn't, for
20 all sorts of reasons, community disturbances,
21 governments not fulfilling their -- government not
22 fulfilling their promise, but it was clear that

0419

1 they were struggling to maintain even the rate,
2 let alone even increase it.

3 I said that it's very difficult for
4 me and for many others to believe that you are
5 actually going to make that upturn. And
6 therefore, your Proved Reserves to the end of 2019
7 are under serious question.

8 Q. When did -- when did you start
9 forming this view?

10 A. It was beginning at the end of
11 2001, so in the end-of-year process.

12 And I asked the stand-in reserves
13 coordinator, who at that time as I mentioned
14 earlier was Jan Willem Roosch, I asked him for
15 information for a comparison of the production
16 forecast assumed for the -- for the reserves
17 estimate with the latest business plan.

18 I asked him, I said, because that's
19 what he preferred me to do. He didn't want me to
20 either go directly to the company or indeed go
21 anywhere else. He wanted all my requests to go
22 via him. Fine. That was the way he wanted to

0420

1 play it.

2 And I asked for that information
3 somewhere early in January fairly shortly after
4 the first submission of the reserves came in from
5 the operating companies, which would have been the
6 second week of -- the end of the first week of

7 January.

8 And I didn't get a reply until two
9 weeks later. I was running out of patience. So I
10 told him that look, if you are not going to give
11 me that information, I am going to go out to SPDC
12 in E-mail and ask him then directly for that
13 information, to which he sort of shrugged his
14 shoulder.

15 I did, and there was a panic
16 reaction coming out of SPDC where they wanted to
17 suddenly change all of their reserve submissions
18 because of my question, which presented a great
19 problem for Jan Willem Roosch who at that time had
20 closed his books.

21 So he became rather cross with me,
22 and I decided not to pursue the issue any further,

0421

1 but list it as a possible concern for me.

2 I didn't have access to -- so in
3 the end, I hadn't access to any concrete evidence,
4 and that would support my concern that I had this
5 concern, and that's what I reported at my end 2001
6 report.

7 Come the end of 2002, my concerns
8 of course hadn't gone away, and that led to the
9 discussion that I have now got in front of me.

10 Q. When you say that SPDC wanted to
11 change their reserve submission, in what way?

12 A. I don't remember the details. I
13 honestly don't remember. He wanted to reduce it,
14 but he didn't say by -- well, he did say
15 implicitly by how much, but he didn't say what the
16 reason for it was. It was just, okay, we will
17 reduce it by whatever volume.

18 And he didn't give -- that was at
19 that time, that was I believe Ojo Sanni who, in my
20 view, was really getting out of his depth as far
21 as his ability to stand on top of the reserves
22 submission.

0422

1 Q. Who is Ojo Sanni?

2 A. He was the reservoir engineer in
3 charge. He had taken over in that by that time

4 from Bram Sieders as being in charge of reporting
5 reserves to central office. He was based I
6 believe in Port Harcourt.

7 Q. Now, in your prior answers, you
8 were referring to an off-take rate. And for the
9 record, can you explain what that is?

10 A. Yes. It's the production rate of
11 the Shell share part of production from the fields
12 that were operated by Shell.

13 Q. Is it fair to say then the
14 documentation that you were seeing was showing
15 that SPDC was not going to reach the forecasted
16 production for the year?

17 MR. TUTTLE: Objection to form.
18 Characterization of the testimony.

19 THE WITNESS: The forecasts that
20 SPDC showed in the document that I saw the end of
21 2002, i.e., their business plan, did not show the
22 upturn even on the five-year cycle that I deemed
0423

1 was necessary to cover all of the proved reserves.

2 I had made a plot, a graph giving a
3 pictorial presentation of my argument, which isn't
4 included in my end-year report but which was
5 included in the view graph presentation that I
6 made to external auditors at that time.

7 I am sure you have got access to
8 that.

9 Q. Now, the documentation that you
10 looked at in 2002, did this documentation show
11 historical production against forecasts in the
12 business plan?

13 A. I don't think so. That wasn't what
14 was normally done. What you would see would be
15 historical production and current projection of
16 the future.

17 Q. Did you ask for a comparison of
18 historical production against prior forecasts?

19 MR. TUTTLE: Time period?

20 MR. HABER: 2002.

21 THE WITNESS:

22 A. I can't be sure, but I don't
0424

1 believe I did. And the reason was that I was
2 aware of a gradual reduction in the off-take
3 because of various reasons, community
4 disturbances, and being certainly one of them that
5 I knew couldn't have been foreseen in previous --
6 in previous business plans.

7 So it was clear -- in other words,
8 that it was clear to me that the actual off-take
9 lagged behind whatever had been promised in the
10 past.

11 Q. In light of what you had seen by
12 the end of 2001, going into 2002, did you begin to
13 form an opinion of whether reserves should be
14 debooked in SPDC?

15 MR. TUTTLE: Objection to form.

16 THE WITNESS:

17 A. You should remember that at the end
18 of 2001, I didn't see anything. That was
19 precisely the point and the bone of contention.
20 So all the evidence -- the only evidence that I
21 saw was at the end of 2002.

22 BY MR. HABER:

0425

1 Q. And by 2002, did you begin to form
2 a view that the issue of a possible debooking
3 should be raised?

4 A. Strange the way it may sound, no.
5 I came to the view that certainly in the past, the
6 reserves had been overstated on the basis that the
7 implied forecasts, to be able to produce those
8 reserves by 2019, had been unrealistic. And that
9 point I made quite clearly.

10 But there was -- in the meantime,
11 there was another development and, as it turned
12 out, quite a significant development.

13 And the development was that partly
14 I think as a result of my pushing against this.
15 Since 2001, SPDC went and looked at the legal
16 basis of the assumption that the license would
17 expire by the end of 2019.

18 In 1999, I had spoken with the
19 legal advisor, the SPDC legal advisor in Lagos,
20 and he described to me that indeed the license was

21 going to expire in 2019.

22 And I asked him how likely is it

0426

1 going to be extended? And could you already
2 conclude an agreement with the government now to
3 extend it?

4 And his answer was no, there is no
5 point in doing that now. The government wouldn't
6 be interested in pursuing something which at that
7 time was 20 years in the future.

8 But anyway he, being the legal
9 representative, informed me that yes indeed the
10 license was expiring by the end of 2019.

11 I didn't review those documents, I
12 am not a lawyer, and I was happy to accept his
13 statement.

14 Now, back to 2002. After my
15 initial rattling of the cage, so to speak, that
16 there was something to be considered to the end of
17 license, lawyers in SPDC looked again at the
18 precise conditions of the license extension, and
19 they came to the conclusion that in fact, there
20 was a right to extend provided that SPDC fulfilled
21 certain conditions which were by no means onerous,
22 but just the sort of conditions that one would

0427

1 have expected any responsible operating company to
2 fulfill.

3 In other words, it was clear and it
4 was concluded from that review, from that legal
5 review that, in fact, there was a right to extend
6 the license.

7 Now with that conclusion, the whole
8 issue of whether the assumed forecast was
9 realistic dissolved into thin air.

10 So we -- the situation at the end
11 of 2002 was that on the one hand, we had seen that
12 something had been grossly amiss in the past, but
13 on the other hand the whole issue had suddenly
14 been dissolved and there was now no requirement
15 anymore to insist on any type of forecast in order
16 to defend the position that all the reserves were
17 going to be defended before the end of license,

18 which I believe was in 2029. I believe it was a
19 20-year extension.

20 Q. Who were the lawyers at SPDC that
21 looked at the issue?

22 A. I do not remember. I have seen the
0428

1 notes, but I do not remember.

2 MR. TUTTLE: You are talking about
3 2002?

4 MR. HABER: Yes.

5 Q. And do you know if any attorneys at
6 Shell EP looked at the issue in 2002? And again,
7 I am referring to license extension issue?

8 A. I do not remember that
9 specifically. But I am sure that an important
10 conclusion like this would not have been taken by
11 SPDC lawyers themselves, but they certainly would
12 have sought legal advice both with E&P in The
13 Hague and with Shell in London.

14 Q. And do you know if any legal advice
15 was sought by outside counsel to Shell?

16 A. Who do you mean by outside counsel?

17 Q. A law firm that was retained by
18 Shell to perform various services?

19 A. I do not remember that.

20 Q. Have you heard of a law firm by the
21 name of Cravath, Swaine, and Moore?

22 A. Yes, I have heard of them.

0429

1 Q. Do you know if Cravath, Swaine, and
2 Moore provided any legal services in connection
3 with the license expiry issue?

4 A. I don't.

5 MR. BEST: Objection. Asked and
6 answered.

7 THE WITNESS:

8 A. I do not remember that.

9 MR. HABER: I am told we have five
10 minutes on the video, and this is probably a good
11 time to break for lunch.

12 MR. TUTTLE: Okay.

13 THE VIDEOGRAPHER: Going off the
14 record at 12:20. This is the end of tape number

15 6.

16 (Lunch recess taken)

17 THE VIDEOGRAPHER: Beginning tape
18 number 7 and returning to the record at 1:10 from
19 12:20.

20 BY MR. HABER:

21 Q. Good afternoon, Mr. Barendregt.

22 A. Good afternoon.

0430

1 Q. If you could turn to Exhibit 18 for
2 a moment, I would like you to look at the
3 recipients of the note. In particular, I am
4 looking at two people. The first one is Linda
5 Cook.

6 Who is Linda Cook?

7 A. Linda Cook was the Director, i.e.,
8 the most senior person in the company called Shell
9 E&P International Ventures. This company was set
10 up as part of the reorganization that took part in
11 Shell in the late 1990s.

12 And this company was primarily in
13 charge of new business ventures which included
14 exploration activities throughout the world, and
15 included divestment and acquisition activities of
16 other oil companies or assets.

17 In addition, for reasons that I
18 have not been -- I have not been appraised of that
19 I am not aware of, the group that was responsible
20 for group reports of reserves and E&P financial
21 activities internally and externally was also made
22 part of that organization, of that SEPIV company.

0431

1 Q. Was Ms. Cook a member of the ExCom
2 at that time?

3 A. Yes. She was part of ExCom, yes.

4 Q. Do you know if she was a member of
5 the Committee of Managing Directors?

6 A. No, she was not at that time.

7 Q. Did there come a time when she did
8 become a member of the Committee of Managing
9 Directors or CMD?

10 A. I believe she is one of the
11 directors now.

12 Q. Now, underneath her name is a
13 gentleman by the name of Ron van den Berg.

14 Who is Mr. Van den Berg?

15 A. Mr. Van den Berg was at that stage
16 Managing Director of -- i.e. the most senior
17 person of SPDC in Lagos.

18 Q. And at this time, that is in 1999,
19 was Mr. Van den Berg a member of the CMD?

20 A. Certainly not, no.

21 Q. Was he a member of the ExCom?

22 A. I believe he was a member of the

0432

1 what was called the extended ExCom. I believe
2 that was the situation at that time; i.e., the
3 ExCom would consist of the most senior persons in
4 Shell E&P in The Hague consisting both of SEPIV,
5 Shell E&P International Ventures, and Shell
6 International E&P, SIEP. But in addition -- and
7 they would meet regularly.

8 In addition, there was a circle of
9 senior managers from large companies, SPDC being
10 one of them, that would partake in ExCom meetings
11 once a quarter, I believe, and in those meetings
12 they would formally be part of the ExCom circle.

13 Q. Was it your understanding at this
14 time that Mr. Van den Berg was a part of that
15 circle?

16 A. As far as I understood it, yes.

17 Q. Now, in terms of your dissemination
18 to the people identified on this document as the
19 direct recipients and the copied recipient, how
20 did you distribute your note to them?

21 A. Quite simply by putting the notes
22 in an envelope and putting it in the out tray.

0433

1 That in particular was the case for
2 the internal distribution, for distribution within
3 SIEP and SEPIV. As for the external distribution
4 and in this particular case, it would be for SPDC,
5 all the SPDC persons.

6 And also for the external
7 accountants, I would put all the SPDC in the
8 schedule. I would put all the SPDC copies and

9 each would have an identified copy to them, which
10 is highlighted. All the copies I would put in a
11 large envelope and just put it in the out-tray as
12 well, and then the Shell system would take care of
13 it being sent to Nigeria.

14 Q. Now, is this a practice that you
15 employed throughout your tenure as group reserves
16 auditor with respect to your operating unit
17 audits?

18 A. Pretty much so, yes. It was only
19 towards the very end of my tenure that I started
20 sending out copies by E-mail, because by that time
21 E-mail had been established as a reliable enough
22 means of communication that made it practical to
0434

1 send these documents through that medium rather
2 than the physical paper hard copy.

3 Q. Do you recall when, at the end of
4 your tenure, you started using E-mail as a means
5 of distribution?

6 A. Not precisely, but it must have
7 been somewhere early in 2003.

8 Q. So with regard to your practice
9 prior to the use of E-mail, did you use the same
10 means of distribution for your annual reports as
11 you did with the operating unit audit reports?

12 A. Yes.

13 Q. And then once you began using
14 E-mail, did you distribute the annual reports via
15 E-mail to the recipients of those reports?

16 A. Yes. If it -- if I did start doing
17 that during the course of 2003, then it would in
18 fact be the end of 2003 report that I sent out in
19 this way. But as I said before, I am not sure
20 whether I did start doing that early in 2003 or
21 even earlier than that, late in 2002. It was
22 somewhere around that period.
0435

1 Q. During your tenure as group
2 reserves auditor, did anyone ever communicate to
3 you that they had not received a report when they
4 were expecting one?

5 A. Not that I can recollect, no.

6 (Barendregt Exhibit No. 22 marked

7 for identification)

8 We are marking as Barendregt

9 Exhibit 22 a note dated January 30, 2002. It's

10 titled, "Review of Group End-2001 Proved Oil and

11 Gas Reserves Summary Preparation." There are two

12 Bates ranges. The first is V00300308 through

13 V00300320, and the second range is DB29057 through

14 DB29069.

15 (Handing)

16 Now, Mr. Barendregt, do you

17 recognize this document?

18 A. Yes. It would seem to be my

19 end-2001 report.

20 Q. Did you prepare this document?

21 A. Yes.

22 Q. And if you look in the bottom

0436

1 left-hand corner, there is a signature.

2 Do you recognize that signature?

3 A. Yes, I do, yes.

4 Q. Do you recognize it as your own?

5 A. Yes, I do.

6 Q. Now, before our lunch break, you

7 had testified that you had hinted in the 2001

8 report about the license expiry issue.

9 And I would like you to direct me

10 where that hint was located?

11 MR. TUTTLE: Objection to form.

12 Characterization of the testimony.

13 THE WITNESS:

14 A. Okay. I will have to scan through

15 it now, so bear with me.

16 BY MR. HABER:

17 Q. That's okay. If I can, I can

18 perhaps make it easier. I believe it's number 6

19 on page 311. But again, you tell me where it is.

20 A. Yes.

21 (Pause.)

22 Yes, indeed. That is the point. I

0437

1 don't think it is mentioned in subsequent points.

2 Let me just scan through those.

3 (Pause)

4 Yes. That is the -- point 6 is the

5 one that this particular issue is addressed in.

6 Q. Do you recall if there was any

7 reaction from any person who was identified as a

8 recipient, on the first page, to what's discussed

9 in number 6 on page 311 of Exhibit 22?

10 MR. BEST: Any reaction?

11 MR. HABER: To that point.

12 THE WITNESS:

13 A. I am fairly certain that of the

14 people copied there or addressed there, like Lorin

15 Brass, Dominique Gardy, ExCom members -- I am

16 sorry. Let me rephrase that.

17 I believe at that time, when I made

18 my end-year presentation to -- in particular to

19 KPMG and PriceWaterhouseCoopers, I had a session

20 with Lorin Brass together with the group reserves

21 coordinator who at that time was -- I certainly

22 did with Remco Aalbers, but I am not sure whether

0438

1 I did -- I am sorry. I am thinking aloud now. I

2 am trying to think back precisely how it went.

3 The previous year I definitely had

4 a session with the director of EPB, who I seem to

5 remember was Lorin Brass.

6 But on this particular one, when

7 Jan Willem Roosch was in charge, I am not sure

8 whether I had in fact a session with Lorin Brass;

9 certainly with the others, Walter van de Vijver,

10 Dominique Gardy, and all the others.

11 I am certain that none of them came

12 back with any comments or questions. John Bell

13 may have been present during some of the questions

14 that I gave to external auditors.

15 But again there, my memory doesn't

16 serve me in reminding me whether anybody actually

17 made any specific comments. If they did, and they

18 must have done, then I cannot remember precisely

19 what they were about.

20 BY MR. HABER:

21 Q. Now, you have mentioned people

22 within Shell. How about from the external

0439

1 auditors?

2 Do you recall any comments from
3 them?

4 A. We had an extensive discussion,
5 which I seem to remember did increase their
6 appreciation of the report and their understanding
7 of it. But I do not understand whether, on the
8 issue of SPDC, they made any specific comments.

9 They may have done, but I do not
10 remember that.

11 Q. This was at the closeout section?

12 A. Indeed, yes.

13 Q. And when you say that you recall
14 extensive discussion which increased their
15 appreciation of the report, is there anything in
16 particular that you recall?

17 A. Like I said, no. No. The details
18 are lost over those years.

19 Q. Now, if you turn the page for a
20 moment to page 312 under number 9, the discussion
21 of "Reserves Addition Targets in Score Cards".

22 Do you recall if anyone had a

0440

1 specific reaction to what you had written in
2 number 9 concerning Reserves Addition Targets in
3 Score Cards?

4 A. I do not recall any specific
5 reaction, at the time at least, at the time -- at
6 the -- say at the end of January.

7 I know that in the course of the
8 year, after John Pay had arrived, the issue was
9 discussed -- not in my presence, was discussed
10 among EP management, maybe in ExCom, but I am not
11 sure, but that was already much later.

12 Q. And how do you know that the issue
13 was discussed?

14 A. John Pay told me.

15 Q. When did you have this conversation
16 with Mr. Pay?

17 A. After his arrival, which was at the
18 1st of April, and it must have been sometime
19 during the summer of 2002.

20 Q. Was this -- was this communication
21 in The Hague?

22 A. Yes. Yeah.

0441

1 Q. When you were not conducting field
2 audits, where were your offices located?

3 A. I didn't have an office as such. I
4 shared a desk with -- well, in fact I had a hot
5 seat so to speak. I had a desk that most of the
6 time I could call my own, but not always.

7 I would, in the weeks that I would
8 not be traveling, I would generally tend to come
9 in one day a week on Tuesday, either to finalize
10 my reports, to have it properly prepared, because
11 at home I really didn't have proper print
12 facilities that could do that, and pick up on any
13 ongoing business and have a quick chat with the
14 Group Reserves Coordinator to see what's new if
15 there is anything we need to discuss.

16 And if there wasn't, after a half a
17 day, I would probably be home again.

18 Q. And this desk, this hot desk, was
19 it located on the same floor as EPB personnel?

20 A. It changed over various locations.

21 But at the time that John arrived,
22 it was located on one floor above.

0442

1 Q. One floor above Mr. Pay?

2 A. Yes. More or less directly above
3 him, but you had to walk around via the stair
4 well.

5 Q. And this was in the center?

6 A. Yes. Yes.

7 Q. Now, before our lunch break, we
8 were talking about a study that was -- a review of
9 a study that was conducted by Mr. Kluesner, Mr.
10 Hoppe.

11 Do you recall that?

12 A. Yes.

13 Q. Do you recall when that study
14 commenced?

15 A. Not precisely. The study was
16 committed by SPDC, sometime I guess around the

17 middle of the year, the year 2003.

18 Q. And do you recall if that study
19 commenced before or after your audit of SPDC?

20 A. Before.

21 Q. And just so the record is clear, we
22 are talking about 2003.

0443

1 Correct?

2 A. Absolutely, yes.

3 Q. And that audit in 2003 would be
4 reflected in Exhibits 19 and 20.

5 Is that correct?

6 MR. TUTTLE: Objection to form.

7 THE WITNESS:

8 A. Accepting for the moment that these
9 are indeed my reports, one of them is a draft
10 report and the other one is a final version or
11 what would seem to be the final version report,
12 yes.

13 BY MR. HABER:

14 Q. Well, for the record, let's
15 identify Exhibit 19.

16 You will see it says, "DRAFT NOTE"
17 September 23, 2003.

18 Did you prepare this note?

19 A. It would seem to be a draft copy of
20 my report, yes.

21 Q. Do you recall if you had prepared
22 another version or an earlier draft of the note?

0444

1 A. No. I do not recall that, no.

2 Q. And if you look at Exhibit 20, the
3 note is dated September 30, 2003.

4 Do you recognize this note?

5 A. Yes. It seems to be my final
6 report, except that I note that there is no
7 signature of mine on the top.

8 But I note that the draft has been
9 taken away from the heading, which would make it
10 seem to be the final version of the report.

11 Like I said, there is no signature
12 of mine, so I cannot really say that this is the
13 final version.

14 MR. TUTTLE: Can you ask him about

15 the underlining?

16 MR. HABER: I am going to get to

17 that, don't worry.

18 MR. TUTTLE: I just don't want him

19 testifying about a final report that has

20 handwriting on it.

21 MR. HABER: I understand. I will

22 get to it.

0445

1 Q. Do you recall preparing a final

2 note that was distributed to a number of people

3 such as those identified on this document, Exhibit

4 20?

5 A. Yes, I do.

6 Q. Now, if you look at Exhibit 20, you

7 will notice that there is underlining and some

8 markings on the margins of the document; and on

9 the third page of the document, text that's

10 circled.

11 When you look through the Exhibit,

12 can you tell me if you recognize any of these

13 markings as yours?

14 A. No, they are not mine.

15 Q. Just so the record is clear, on the

16 first page, 772, is that your hand markings?

17 A. No, they are not.

18 Q. And 774, are those your hand

19 markings?

20 A. No, they are not.

21 Q. 775, are those your hand markings?

22 A. No.

0446

1 Q. Now, at the time that you had

2 conducted your audit, which if you look at Exhibit

3 19 or Exhibit 20, it says, 18th and 19th of

4 September, were you aware that Mr. Hoppe and Mr.

5 Kluesner were conducting their study of SPDC?

6 A. Oh, yeah. Certainly. That's

7 precisely what they came -- this audit was held in

8 The Hague, so not in Nigeria. And Kluesner was of

9 course already based in The Hague, near Rijswijk.

10 And John Hoppe came specially to the Hague for the

11 purpose of this study.

12 Incidentally, can I make a remark
13 about the status of this note?

14 Q. Sure.

15 A. I see that in the enclosure there
16 is a date on the bottom, I think, which I
17 mentioned earlier I used to put in my reports, and
18 the date reflecting automatically the date that it
19 was printed. And this date seems to be the 5th of
20 December.

21 So somebody took my electronic
22 report and printed it out, which would explain why
0447

1 I haven't signed it and why this seems to be a
2 copy that is not formally endorsed by me.

3 Q. Do you have an understanding that
4 you disseminated or distributed this document to
5 the recipients electronically?

6 A. Oh, yes. Of course. That's what
7 it must have been, yes. Yes. I must have
8 originally -- in those days I wasn't as tight
9 enough to be able to use all the tools that we
10 have nowadays. Nowadays, if you print a copy, you
11 can make sure that people can't change it any
12 more.

13 At that time, in fact, there was a
14 utility which allows you to put it out in PDF
15 format. That utility was not available to us
16 throughout the group. It is now, but anyway -- so
17 I had to do with just the electronic copy, and
18 with a right to protect on it, and password
19 write-protect and people could read it. So that
20 was reasonably secure and free from possibilities
21 of dabbling.

22 But there were fairly easy means of
0448

1 copying it and then issuing it as an original
2 report after it had been doctored. It wasn't
3 foolproof, but it worked at the time.

4 Q. When did you become aware that Mr.
5 Hoppe and Kluesner were conducting their study?

6 A. It must have been sometime before
7 the actual date of this -- of this audit. I

8 cannot tell you when. I don't remember.

9 Q. During the study, were you
10 consulted at any time?

11 A. This audit was in fact a consulting
12 session at the same time. So indeed, I made some
13 recommendations, as you will have seen, in that
14 audit report.

15 And that indeed was the consulting
16 about the way forward.

17 Q. Can you explain why the audit took
18 place over a two-day period?

19 A. Yes. I think what you need to
20 understand is that an audit was due in SPDC
21 Nigeria because it was four years after the
22 previous one.

0449

1 And one was due to be held in
2 August of that year, which was going to be at
3 least a full week just like the previous one had
4 been.

5 And regrettably, I had to withdraw
6 from the audit on the very -- at the very last
7 moment because of -- because of cardiac problems.

8 So I had to apologize and say, I am
9 sorry, I can't come.

10 And my preference would have been
11 to tied over the audit to next year, but SPDC
12 themselves and I believe Frank Coopman said, "No,
13 we need to have at least some partial audit or at
14 least some type of consulting with you before the
15 year is out."

16 So that's why this visit was
17 organized of John Hoppe and Dave Kluesner.

18 Q. Now, do you recall --

19 A. And that's the reason why it was
20 only two days rather than a full week.

21 Q. Do you recall participating in any
22 meeting with Mr. Kluesner and others concerning

0450

1 the review that was being conducted?

2 A. Yes. Yeah. He was there.

3 Q. Do you recall taking any notes of
4 meetings that you participated in with Mr. Hoppe

5 and Kluesner?

6 A. Certainly.

7 MR. TUTTLE: Other than the audit?

8 MR. HABER: Other than the audit
9 concerning the review that they were conducting.

10 THE WITNESS:

11 A. I took notes of the discussions
12 during those two days. I always do that, because
13 that's what I use as a basis for my subsequent
14 reports.

15 (Barendregt Exhibit No. 23 marked
16 for identification)

17 (Hanging.)

18 BY MR. HABER:

19 Q. We have just marked as Barendregt
20 Exhibit 23 a multipage document of handwritten
21 notes. The first page the title reads "SPDC
22 RESVS" which I take to be reserves discussion. The
0451

1 Bates range is RJW00112775 through RJW00112786.

2 Mr. Barendregt, do you recognize
3 the handwriting on this Exhibit 23?

4 A. Yes, I do.

5 Q. And do you recognize this
6 handwriting as your own?

7 A. Indeed, yes.

8 Q. And do you recall when this
9 document was prepared?

10 A. That will be the 18th and the 19th
11 of September.

12 Q. And how is it that from this
13 document, you know that it was on those two dates?

14 A. I am sorry?

15 Q. I said how is it that you know from
16 looking at this document that the meeting that
17 these notes were taken from occurred on the 18th
18 and 19th of September?

19 A. I am not sure whether I understand
20 your question correct.

21 MR. TUTTLE: How do you know that
22 those are the dates.

0452

1 MR. HABER: Right.

2 THE WITNESS:

3 A. Oh, okay. Because I recognized the
4 people that were coming, it was the subject of
5 SPDC. If you asked me was this on the 18th or the
6 19th, then I would say probably the 18th, but
7 there is no way of telling.

8 BY MR. HABER:

9 Q. Now, if you look at the first page,
10 the middle of the document, I believe -- and
11 again, you can tell me if I am not reading your
12 handwriting correctly, it says, "Some volumes not
13 sufficiently mature for proved reserves."

14 Did I read that correctly?

15 A. Yes. That's what it says there.

16 Q. Do you recall what was discussed
17 around -- I am sorry -- what was discussed during
18 this meeting on this issue?

19 A. No, is the short answer. But I
20 think you must bear in mind that the study was
21 started with the express purpose of finding out
22 what the exact status of maturity was of the

0453
1 portfolio.

2 And you don't do that if you do not
3 have at least a question whether all the volumes
4 are sufficiently mature for proved reserves,
5 bearing in mind that the guidelines, as we
6 prescribed them to the operating companies, were
7 gradually getting more tight and requiring more
8 firmness in the development machine.

9 Q. Did you begin to question whether
10 the volumes in SPDC were sufficiently mature prior
11 to this study?

12 MR. TUTTLE: Objection to form.

13 THE WITNESS:

14 A. Let's put it this way: I found it
15 extremely useful when I heard that SPDC were going
16 to -- were going to do this, because I was aware
17 that the guidelines were tighter, and I would very
18 much like to know what sort of effect these
19 tightened guidelines would have upon the portfolio
20 of SPDC.

21 As to the result, I had an

22 absolutely open mind. I didn't claim that the

0454

1 SPDC portfolio was overstated in this respect, nor
2 did I discard the possibility that some of these
3 proved reserves might not be sufficiently matured.

4 So when I heard about the study, I
5 was quite happy to hear it.

6 BY MR. HABER:

7 Q. When you conducted your audit in
8 1999, did you find anything that raised any
9 concerns about the maturity of the volumes in
10 SPDC?

11 A. In answering that, we must remember
12 that the group guidelines, against which I carried
13 out the audit, were of course quite a bit
14 different from the ones that we were beginning to
15 be working with at this point in time.

16 Like I mentioned on several
17 occasions before, project maturity, other than the
18 requirements for technical maturity and commercial
19 maturity that were in the Shell guidelines -- but
20 project maturity in the sense of commitment to
21 develop, was not an issue in either Rule 4-10 and
22 for that matter in Shell guidelines at that time.

0455

1 Q. Could you have project maturity
2 without having technical maturity?

3 MR. TUTTLE: Objection to form.
4 Argumentative.

5 BY MR. HABER:

6 Q. You can answer.

7 A. The answer is yes, because by
8 "project maturity," I mean state of advancement in
9 the project development cycle, i.e., is it getting
10 close to development, has FID been taken, for
11 instance.

12 That is what I refer to as project
13 maturity, and it is a notion that's completely
14 different from what you mentioned, commercial
15 maturity and technical maturity.

16 You can have a field or a project
17 that is both commercially mature and technically
18 mature, and yet have very little in the way of

19 project maturity.

20 That is typically a field that had
21 been studied, for which a development plan would
22 have been developed, and that was shown to be
0456

1 economical to undertake. But that for any
2 particular reason, was chosen not to be undertaken
3 at that particular point in time.

4 And it was clear and it was known
5 that there were many of those fields in the SPDC
6 portfolio, but none of these were at that time of
7 any particular concern.

8 Q. Well, let me ask you this: Do you
9 have reasonable certainty if there was no
10 technical maturity?

11 A. I didn't say.

12 MR. TUTTLE: Objection to form.

13 MR. HABER: No. I know you didn't
14 say. I am asking you a different question.

15 THE WITNESS:

16 A. These fields, as I had explained
17 before, had been the subject of discussions with
18 the Nigerian government as part of the reserves
19 addition bonus cycle of events.

20 And that required that a field
21 development plan would have been drawn up for them
22 showing the economic viability of the project and
0457

1 showing the technical maturity of the project.

2 That field development plan, which
3 would have been documented because otherwise there
4 is no basis upon which to discuss this with the
5 government, was at that time a sufficient
6 condition to carry Proved Reserves and expectation
7 reserves.

8 BY MR. HABER:

9 Q. I guess my question was a little
10 bit more general. Independent of SPDC, could you
11 find a project to be reasonably certain if there
12 was no technical maturity?

13 MR. TUTTLE: Objection to form.

14 Vague. Characterization of the testimony.

15 MR. FERRARA: Sorry. It might help

16 if you sort between project and, you know,
17 individual fields, because you are kind of
18 confusing those issues, because he has made a
19 distinction.

20 Do you know what I mean?

21 MR. HABER: Is counsel's
22 distinction helpful to you?

0458

1 THE WITNESS: Umm --

2 MR. FERRARA: He has testified
3 about project maturity versus technical maturity
4 for particular fields. He has made that
5 distinction in his testimony.

6 MR. HABER: Okay.

7 MR. FERRARA: And if your questions
8 make that distinction, it may help him.

9 MR. HABER: And that's fair.

10 Q. In terms of the field, can you have
11 reasonable certainty with regard to booking Proved
12 Reserves if there is no technical maturity?

13 MR. TUTTLE: Same objection.

14 THE WITNESS:

15 A. I will go ahead and answer it in my
16 way, if I may.

17 The short answer is no, because the
18 guidelines state quite clearly that in order to
19 book expectation reserves or proved reserves in
20 the Shell system, you need commercial maturity and
21 you need technical maturity, and that I think is a
22 sufficient answer to your question.

0459

1 BY MR. HABER:

2 Q. Now, if you can turn to page 2 of
3 the document, 776, and you will notice in the
4 upper right-hand corner, you have the page 2
5 circled there.

6 Six lines from the bottom, and
7 again if I am not reading correctly your
8 handwriting, please correct me, it says, in
9 quotes, "Project is highest area of immaturity."

10 Do you recall to what this refers?

11 A. I think you must bear in mind that
12 these are, of course, handwritten notes which

13 aren't of the quality that I like to think my
14 final reports are in; in the sense that when you
15 read it, then it's immediately clear what is
16 meant.

17 So you must accept that in these
18 notes, there are things that even I have
19 difficulty understanding.

20 Okay. Having said that, how I
21 interpret this now, knowing what was broadly
22 discussed, is that the study that SPDC were
0460

1 carrying out was reviewing each of the fields in
2 their portfolio against successive stages of
3 maturity.

4 In other words, they would start by
5 asking, "Have we appraised a field sufficiently?
6 And if we have, have we drilled sufficient wells
7 to come up with a reasonable delineation of the
8 proved area? Has the proved area been able to be
9 defined on the basis of lowest known
10 hydrocarbons?" Et cetera, et cetera. "And if
11 that had been the case, has sufficient proved area
12 been identified to be able to come up with a
13 development plan for that field?"

14 And so it went on.

15 So there were checklists of
16 questions that described a successive stages in
17 coming to a development for that field against
18 which a field would be either ticked off or struck
19 off and say, No, this is how far as it went, but
20 this particular stage hasn't been reached.

21 So when you look at projects or at
22 fields, you first look at the subsurface -- you
0461

1 first look at the subsurface description of the
2 field, and then you go on and see whether there is
3 a description of the number of wells that are
4 required and whether in fact you are already in
5 the process of preparing what is called a project.

6 By "project" I meant a description
7 of the surface facilities and of course of the
8 wells to be drilled, and a description of the
9 activities that needed to be undertaken to

10 actually get all of this development in place.

11 Now, the project is therefore the
12 last stage. Defining a project is the last stage
13 in these successive checkpoints in order to assess
14 the maturity. And that I think is what is said by
15 this "project is" the "highest area of
16 immaturity."

17 You can imagine that when you have
18 the whole portfolio, that many of the fields will
19 have sufficient drilling, will have a proved area
20 defined, et cetera, and some of them may be as far
21 as having a field development plan.

22 But by no means all of them will

0462

1 have actually a project ready to be executed, and
2 that I think is what is meant here.

3 Q. If you can turn the page to page 3,
4 and the Bates number is 777. It's about a third
5 of the way down from the top.

6 And what I am looking at is the
7 portion of that top that reads in quotes, "sloppy
8 housekeeping" close quote.

9 And again, please correct me if I
10 am not correctly reading your note.

11 A. I am sorry. Which page are we on,
12 3?

13 Q. It's on page 3, 777?

14 A. Yes.

15 Q. It's the line that begins I think
16 "Reservoir Categories."

17 A. Oh, yes. Yes.

18 Q. And if you look down from that one,
19 two, three lines?

20 A. Yes. Okay. Sloppy housekeeping,
21 yes.

22 Q. And then it goes further and says s

0463

1 "concern is large, volumes is, quote,
2 "'marginal.'"

3 A. In marginal.

4 Q. I am sorry. "In 'marginal'".

5 A. Yes.

6 Q. Oh, okay. In paren, is that less

7 than 2,000,000 barrels, close paren, and I think
8 the rest says approximately 30 - 50%.

9 Is that correct?

10 A. Yes. I am not too sure about the
11 30, whether it's 20 or 30, but it's either of the
12 two for sure, yes.

13 Q. Can you tell me what is meant by
14 what I just read?

15 A. Remember my earlier remarks, yes?
16 These are -- this is a document that of course I
17 have not seen since the final issue of my note.

18 (Pause)

19 Yes. What I seem to be referring
20 to here is that the reservoirs and fields were
21 going to be categorized by SPDC in the study.
22 First, there was going to be a category of

0464

1 projects that were deemed to be marginal, then
2 there were fields that were apparently developed
3 and closed in for whatever reason.

4 So the facilities had been
5 installed, the wells had been drilled that had
6 been closed in, then there was a category that was
7 producing, then there was a category partly
8 appraised, and there was a category unappraised,
9 of which I say these are mutually exclusive.

10 And my assignment would be made by
11 individual reservoir block, and then it says, "Not
12 available as well, 'sloppy housekeeping'".

13 I do not know what that was
14 referring to. Yeah. I am sorry. I can't say
15 that. I don't understand that.

16 Q. Do you recall if this reference has
17 anything to do with the audit trail issue that you
18 testified about earlier?

19 A. No. My impression --

20 MR. TUTTLE: Objection to form.

21 THE WITNESS:

22 A. My impression is that we are

0465

1 referring here to fields that have been in some
2 form or another developed or that are either
3 producing or not producing. And if they are not

4 producing, then there may be various reasons why
5 they haven't been producing.

6 And one of them could be that their
7 production facilities are not available or -- and
8 that could have all sorts of meanings. One of
9 them may be sloppy housekeeping, i.e., if a well
10 wasn't maintained properly, they had left the
11 sliding side door opened which couldn't be closed
12 any more because they left it open for too long,
13 anything of that order.

14 My impression is that I am
15 referring to sloppy housekeeping in the fields,
16 but I cannot tell for sure whether that is the
17 case.

18 BY MR. HABER:

19 Q. Do you recall during this meeting
20 if there was discussion of how much volume was
21 exposed to debooking?

22 MR. TUTTLE: Objection to form.

0466

1 Foundation.

2 MR. HABER: Withdrawn.

3 Q. Was there a discussion concerning
4 whether there were volumes exposed?

5 A. Yes. There certainly was a
6 discussion, because there was -- in fact that was
7 what the whole of the discussion was about. We in
8 SPDC were trying to inventorize and see precisely
9 whether there were volumes exposed; and if so, to
10 what extent.

11 That was what the entire study that
12 they were undertaking was about. So yes,
13 certainly we were talking about the principle of
14 volumes becoming exposed.

15 Q. Do you recall how much volume was
16 exposed?

17 MR. TUTTLE: Objection to form.

18 BY MR. HABER:

19 Q. At the time of this meeting?

20 MR. TUTTLE: Objection to form.

21 Foundation.

22 THE WITNESS:

0467

1 A. I am looking now at Exhibit 22 and

2 I am trying to see if I can find an answer in
3 there.

4 I am sorry. I am looking at the
5 wrong -- I am looking at Exhibit 20. I beg your
6 pardon.

7 (Pause)

8 There is a table in that note of
9 this discussion, of this audit, process audit,
10 that is page V00010777, and that gives a very
11 preliminary estimates of the various categories in
12 which the fields would eventually be classed.

13 And that was as per the database of
14 September 2003.

15 BY MR. HABER:

16 Q. You are referring now to the table
17 at the bottom of 777?

18 A. Yes. I am, yes. I am trying to
19 see what we had there.

20 Q. And in total, how much was exposed
21 as represented in this table?

22 MR. TUTTLE: Objection to the form.
0468

1 Characterization of the document.

2 MR. BEST: Same objection.

3 THE WITNESS:

4 A. I am trying to see whether that
5 estimate is there because, if it was anywhere,
6 then it would be in this table.

7 (Long pause)

8 MR. FERRARA: Do you want to
9 withdraw this question?

10 MR. HABER: I am thinking about it.

11 MR. TUTTLE: Why don't you just
12 withdraw the question.

13 THE WITNESS: I am sorry about it.

14 MR. FERRARA: If you just withdraw
15 the question.

16 MR. HABER: Let me ask you a
17 different question. I will withdraw the question.
18 Let me ask you a different question.

19 MR. TUTTLE: Listen to the
20 question.

21 THE WITNESS: Okay.

22 BY MR. HABER:

0469

1 Q. The table -- at the time that you
2 participated in this meeting, had there been a
3 preliminary calculation of what -- of the amount
4 of volume that was exposed to debooking?

5 MR. TUTTLE: Objection to form. It
6 calls for speculation.

7 THE WITNESS:

8 A. From what I remember, and I regret
9 that even reading through those, my memory cannot
10 be sufficiently jogged of anything more precise,
11 there was at that time the large spreadsheet that
12 they are filling.

13 At that time there were only
14 certain criteria which fields had been checked
15 against. In other words, the spreadsheet table
16 was by no means complete.

17 And that seemed to suggest that the
18 category that was beyond any doubt as being
19 qualified for Proved Reserves was relatively small
20 in comparison with the total portfolio.

21 That meant -- by relatively small,
22 I mean out of the 1600 or so that was actually

0470

1 booked, less than half was completely beyond any
2 doubt clear proved reserves.

3 That left to something -- and I am
4 quoting from memory now, something more than half
5 of what was carried on the books had at least one
6 question mark against it.

7 And what was now needed to be done
8 was that SPDC would go ahead and refine the
9 scoring of all of these fields against the
10 successive stages that I've described to you, and
11 therefore come to an assessment of how many of
12 these would actually be in a stage whereby you
13 say, "Yes, with reasonable certainty and checking
14 against the conditions that we have in our
15 reserves guidelines, these can also be classified
16 as proved reserves".

17 BY MR. HABER:

18 Q. Now, when you are referring to
19 total portfolio, you are referring to the total
20 portfolio within SPDC.

21 Is that correct?

22 A. That's correct, yes.

0471

1 Q. And the table that you've pointed
2 us to, which is Attachment 2 on page 777 of
3 Exhibit 20, does that table convey --

4 A. Well, that's what I was struggling
5 with trying to understand. As you can see, that
6 in the database, they had quite a significant
7 number of fields with total volumes, proved
8 volumes of 2238, which was well in excess of what
9 was actually booked.

10 So that meant that in some stage in
11 the past, some stage of these fields were clearly
12 not -- were considered not worthy of booking.

13 And what this exercise was about
14 was trying to reconstruct or actually looking with
15 a fresh -- with a fresh eye into what out of this
16 total portfolio, which fields would indeed not be
17 worth or not fulfill the conditions of booking as
18 Proved Reserves.

19 Now, the top line would seem to be
20 fulfilling proved reserves requirements; in other
21 words, at first glance, immediately fulfilling the
22 requirements.

0472

1 You can see that there is two
2 columns here, three as a matter of fact, the third
3 one being the sum of the previous two.

4 First, there is proved developed
5 reserves. These are reserves which are developed
6 and in production, and there a portion of fields
7 fulfilling at superficial inspection all the
8 requirements is 377, which is somewhat less than
9 the 850 that were actually booked. That's the
10 figure then that sticks in my mind.

11 On the undeveloped reserves, the
12 picture is -- well, reflects a lot more
13 uncertainty. There only a relatively small
14 portion, less than ten percent of what is carried

15 in the portfolio, is at first glance is fulfilling

16 Proved Reserves.

17 And there are large reserves in
18 some of the other categories, and these were going
19 to be the subject of a further field study.

20 Q. Now, in the left column, there is
21 abbreviation, CA/BP.

22 What does that refer to?

0473

1 A. I don't know what the CA stands
2 for -- I don't remember. BP is business plan.

3 Q. Do you think CA -- or do you recall
4 CA referring to capital allocation?

5 A. Yes. Yes.

6 Q. And so what the middle box of this
7 chart on the left-hand column, what do these
8 convey?

9 A. That there are 319 reservoirs that
10 are not fulfilling, it would seem, requirements;
11 that there are unknown reservoirs. I am not too
12 sure what we meant by that. I guess because it's
13 not clear whether these reservoirs have been
14 sufficiently appraised, and that on the developed
15 reserves there were in fact -- no.

16 What it is, last two lines, one of
17 them, the first line of the -- sorry -- the second
18 line in that box is where it says in capital
19 allocation business plan, unknown reservoirs is
20 where they have an entry in the capital allocation
21 business plan.

22 An entry which in principle needed

0474

1 to be by field, but it wasn't clear where that
2 entry would be coming from.

3 Typically there would be a line in
4 the capital allocation saying Forcados-Yokri area.
5 I am just quoting an example, but Forcados-Yokri
6 is a name of a field, but then it wouldn't say
7 which particular field or even reservoirs in that
8 area would this be referring to.

9 But they were in the business plan,
10 and then there was a category that was not in the
11 business plan but where we were sure that they

12 were known reservoirs.

13 Okay. On the developed reservoirs,
14 there wasn't any identified. But certainly on the
15 undeveloped, there was a sizeable proportion
16 there.

17 Some of these would be -- could
18 become as in a state where they could be carrying
19 Proved Reserves, but they just needed further
20 study.

21 Q. Now, at the time you conducted your
22 audit in 1999, were you aware of this last

0475

1 category that is not in capital
2 allocation/business plan known reservoirs
3 unplanned?

4 MR. TUTTLE: Objection to form.
5 Foundation.

6 THE WITNESS:

7 A. Well, I was aware of it. I mean,
8 it's partly taken it up in my report.

9 MR. TUTTLE: In 1999.

10 MR. HABER: In 1999.

11 THE WITNESS: Oh, beg your pardon.
12 Sorry.

13 MR. HABER: It's okay.

14 THE WITNESS:

15 A. No. Because like I said, project
16 maturity at that stage was not a requirement in
17 the Shell guidelines nor in the Rule 4-10.

18 It was an issue that was part of
19 the lack of audit trail that I referred to in my
20 report then, where I said show me a list of
21 individual field volumes and show it to be built
22 up to the volume that you carry as proved

0476

1 reserves.

2 I think we must bear in mind that
3 in 1999, SPDC had and still have a significant
4 number of fields, well over a hundred. And some
5 of those fields would be big and those fields I
6 would review.

7 By that time, my selection
8 mechanism of fields wasn't as sophisticated as I

9 developed over the successive years, so I took a
10 random selection of fields that I discussed with
11 the engineers in the way that I described to you
12 earlier.

13 But certainly of the smaller
14 fields, hardly any in the timeframe allocated to
15 the audit, hardly any of those were presented to
16 me.

17 So a lot of these fields that would
18 be in these categories with question marks, they
19 would simply not be addressed during my 1999
20 audit.

21 Q. Okay. I think this is probably a
22 good place for us to take a break.

0477

1 THE VIDEOGRAPHER: Going off the
2 record at 2:18.

3 (Short recess taken)

4 THE VIDEOGRAPHER: Returning to the
5 record at 2:30 from 2:18.

6 BY MR. HABER:

7 Q. Mr. Barendregt, before we broke, we
8 were talking about the volume that was exposed.

9 Did there come a time where that
10 study that was being conducted by Mr. Hoppe and
11 Mr. Kluesner reached a conclusion on how much
12 volume was exposed?

13 A. Yes. The first time that
14 reasonably definitive answers were coming out of
15 that study was in November 2003. I forget the
16 precise date, but it must have been before the
17 23rd of November, because that's when I returned
18 from holiday. And by that time, the results have
19 come in.

20 Q. Do you recall having any
21 discussions with anyone on that maturation study
22 team before the definitive answers were given?

0478

1 MR. TUTTLE: Objection to form.
2 Other than what he has already testified?

3 MR. HABER: Yes.

4 THE WITNESS:

5 A. No. The study was carried out in

6 Nigeria, and I personally haven't had any contact
7 with John Hoppe or anybody else during that
8 period. Like I said, during part of it, I was
9 also on leave myself.

10 MR. HABER:

11 Q. Do you know how much volume was
12 exposed as found by that maturation team?

13 A. As I remember it, the volume that
14 was being talked about when I came back at the end
15 of November was in something in the order of
16 700,000,000 barrels, Shell share.

17 Q. Do you know what percentage that
18 represented of SPDC's total portfolio?

19 A. Well, I am sure we can find it out
20 by comparing it. Not off the top of my head.
21 Something approaching half, thereabouts.

22 Q. Do you know if that was the amount

0479

1 of volume that was recategorized as a consequence
2 of project Rockford?

3 A. I'm confident that virtually all of
4 that 700,000,000 barrels that was talked about at
5 that time was related to fields in the immature
6 end of the spectrum.

7 As we discussed on the first day,
8 the '98 reserves guideline changes related to the
9 mature end of the reserves spectrum, i.e., related
10 to fields that had already been taken into
11 development, that had already been developed, and
12 that had already been showing production
13 performance sufficient for -- sufficient to yield
14 a production trend that could be extrapolated into
15 the future.

16 These volumes in Nigeria, virtually
17 all of them came from a category that I described
18 earlier as laying on the shelf, not ready for
19 development.

20 Q. My question was: Do you know if
21 the amount, the 700,000,000, changed as a
22 consequence of the work that was done in project

0480

1 Rockford?

2 A. Ultimately, it became more. It was

3 something in the order of over a thousand. I

4 forget what the precise volume was.

5 Q. That would be a billion?

6 A. A billion, sorry. A thousand

7 million, yes.

8 Q. Now, if we can look at Exhibit 19

9 for a moment, which is your draft note of

10 September 23, 2003, did you circulate a draft of

11 this Draft Note to anyone?

12 A. Yes. Otherwise, there wasn't any

13 point in having a Draft Note.

14 Q. Who did you distribute the draft

15 to?

16 A. To -- certainly to Frank Coopman;

17 and in The Hague to John Pay; and to SPDC; and I

18 would have copied in first instance to John Hoppe,

19 relying on him to circulate it within SPDC as he

20 saw fit; and Dave Kluesner probably would have

21 received a copy as well, although he is not

22 mentioned here.

0481

1 Q. Of the people that you just

2 mentioned, do you recall receiving any comments to

3 the draft from them?

4 A. Not specifically, no.

5 Q. I see in your note you gave SPDC an

6 unsatisfactory grade.

7 Correct?

8 A. Yes.

9 Q. Did Mr. Coopman say anything in

10 response to the Draft Note? And in particular,

11 with regard to the unsatisfactory rating?

12 A. Not that I recall, nothing

13 specific.

14 Q. Do you recall having any

15 discussions with Mr. Pay concerning the Draft

16 Note?

17 A. I don't recall them as such, but I

18 must have done.

19 Q. Do you recall if Mr. Pay expressed

20 any concern about the unsatisfactory rating?

21 A. No, I do not recall that.

22 Q. Now, do you know if a draft of this

0482

1 report was provided to any member of the ExCom?

2 A. As I said, to Frank Coopman. Other
3 than that, I wouldn't know. It's possible, but I
4 don't know.

5 Q. Do you know if a copy of this draft
6 note was distributed to Walter van der Vijver?

7 A. I do not know. I certainly didn't
8 do that myself. It's possible that Frank Coopman
9 may have given him a copy.

10 Q. Did you ever speak to Mr. Van
11 deVijver with regard to the final note, which is
12 Exhibit 20?

13 A. No. Never.

14 Q. Did anyone communicate to you any
15 reaction that Mr. Van der Vijver had to the note?

16 A. I don't remember, sorry.

17 Q. Do you recall having any
18 discussions about the note with Han van Delden?

19 MR. TUTTLE: You are on the final
20 note now or the draft?

21 MR. HABER: The final note.

22 THE WITNESS:

0483

1 A. No. I do not remember, no. Sorry.

2 BY MR. HABER:

3 Q. Do you recall having any
4 communication with Brian Puffer about the final
5 note?

6 A. No. Highly unlikely, I would have
7 thought.

8 Q. Now, with regard to the final note,
9 Exhibit 20, of the people who are identified as
10 recipients, either direct or who are copied, did
11 you receive any reaction from any of these
12 individuals?

13 MR. BEST: In a comment?

14 MR. HABER: A comment to the note.

15 THE WITNESS: Nothing stands out in
16 my memory, and I wouldn't be surprised if there
17 wasn't any reaction.

18 BY MR. HABER:

19 Q. And is why wouldn't you be

20 surprised?

21 A. Because I very rarely did get
22 reactions to my notes.

0484

1 Q. Something that we haven't discussed
2 about SPDC has to do with a moratorium.

3 Have you heard about a moratorium
4 being placed on reserves addition in SPDC during
5 your tenure as GRA?

6 MR. TUTTLE: Objection to form.
7 Foundation.

8 THE WITNESS:

9 A. Yes, I have.

10 BY MR. HABER:

11 Q. And when did you first hear about
12 it?

13 A. I guess it must have been in the
14 course of the year 2000, particularly towards the
15 end of the year 2000. I may be a year out, but I
16 think it was at the end of the year 2000.

17 Q. And how did you hear about it?

18 A. SPDC wanted to book a small
19 additional slice of I believe it was oil reserves,
20 and the figure of something on the order of
21 50,000,000 barrels sticks to mind.

22 And Remco Aalbers had told Nigeria

0485

1 that -- or had at least questioned with Nigeria
2 the wisdom of doing it, taking into account the
3 fact that they had this license extension or this
4 lack of license extension, the end of license in
5 2019, and the fact that a rather significant
6 upturn in production was required to produce these
7 reserves.

8 Remco questioned the wisdom of
9 booking those additional volumes, even though for
10 the pro forma itself there was a specific study
11 that was done that would justify it on the basis
12 that, "Look, you are already capped by whatever
13 your possibilities seem to be, for producing
14 reserves." What is the point, or what is the
15 justification even for getting those reserves?
16 And I totally agreed with that.

17 Since then, SPDC have put a termed

18 as moratorium on increases in reserves; i.e.,
19 whatever they did in the way of additional
20 studies, it wouldn't yield additional bottom line
21 Proved Reserves on their books.

22 Q. How long did the moratorium remain
0486

1 in effect?

2 A. Until 2002 when it became clear
3 that the license extension was indeed a matter of
4 right, and that therefore the whole issue of being
5 boxed in by the end of license and the production
6 forecast was no longer relevant.

7 Q. Do you know if SPDC booked reserves
8 additions after the license expiry issue had been
9 resolved?

10 A. We can very quickly verify by going
11 to my end year-2002 report. Off-hand, nothing
12 stands out significantly in my memory.

13 Q. Now, just going back to Exhibit 20
14 for a moment, can I ask you if you had received
15 any reaction from the recipients of Exhibit 20,
16 had you received any reaction from Judith Boynton?

17 A. No.

18 Q. Do you know who Judith Boynton was
19 at the time?

20 A. Yes, I did.

21 Q. And who was she?

22 A. She was Director of Group Finance.
0487

1 Q. Had you heard any reaction from Tim
2 Morrison?

3 A. No.

4 Q. Who was Tim Morrison at that time?

5 A. I believe he was just new in the
6 position of Group Controller.

7 (Barendregt Exhibit No. 24 marked
8 for identification)

9 Q. We are marking, for the record,
10 Barendregt Exhibit 24, which is a series of
11 E-mails with an Attachment. The last E-mail is
12 from John Pay that's dated May 30, 2003, and it's
13 to Mr. Barendregt.

14 The subject line reads, "SPDC

15 Proved Reserves Booking Guidelines." The Bates
16 range is RJW0092077 through RJW00920787.

17 Mr. Barendregt, do you recognize
18 the E-mails and the Attachment?

19 A. I do not recognize the E-mails,
20 simply because I do not specifically remember
21 them. But on this particular sheet, I do remember
22 the -- or do recognize the handwriting, which is

0488

1 mine.

2 Q. Okay.

3 A. So I must have seen it, obviously.

4 Q. Now, the handwriting that you say
5 you recognize, just again so the record is clear,
6 the first page 777, do you recognize that as your
7 handwriting?

8 A. Mm-Hmm. Yes, I do.

9 Q. Do you recognize the markings on
10 778 as your handwriting?

11 A. Well, the tick marks could be
12 anybody's of course, but in the context, they are
13 likely to be mine, yes. And the text is mine.

14 Q. On page 779, do you recognize the
15 text as yours?

16 A. Yes, I do.

17 Q. And do you recognize the other
18 markings on this page as yours?

19 A. I recognize my exclamation mark,
20 yes.

21 Q. And on the next page, 780, do you
22 recognize this handwriting as your own?

0489

1 A. It must be.

2 Q. And again on page 781, do you
3 recognize the markings and text as your own?

4 A. The text, certainly, and the rest
5 must also be mine, yes.

6 Q. On page 782, do you recognize the
7 markings and the text which includes the numbers?

8 A. Yes. The same comment.

9 Q. So you recognize them as your own?

10 A. They are text and the writing, and

11 the rest must be mine, too.

12 Q. And on page 783, do you recognize
13 the text and writing as your own?

14 A. Yes, I do.

15 Q. And 784, do you recognize the text
16 and writing as your own?

17 A. Yes, I do.

18 Q. 785, do you recognize the text and
19 writing as your own?

20 A. It's only a few tick marks and some
21 underlinings, so...

22 Q. I am sorry. I apologize. Do you
0490

1 recognize those tick marks as your own?

2 A. I mean, in all likelihood, they
3 must be mine because the rest of the document was
4 mine.

5 Q. And the following page, page 786,
6 do you recognize the text as your own?

7 A. Yes, I do.

8 Q. And the underscore at the top of
9 the page?

10 A. Impossible to say. Likely.

11 Q. The handwriting is your own. Do
12 you recognize that?

13 A. Yes indeed.

14 Q. If you can turn back to the first
15 page of the document.

16 Actually, let me ask even a more
17 general question: Do you recall the context in
18 which this E-mail exchange occurred between you
19 and Mr. Pay?

20 A. No, I do not. I would have to read
21 the document before I could make any comments on
22 them.

0491

1 Q. Well, before we do that, let me ask
2 you if you can look at the last E-mail, which is
3 the first E-mail you see at the top of the page?

4 A. Mm-Hmm.

5 Q. It's from Mr. Pay to you dated May
6 30. He says in the second paragraph, "The minimum
7 objective" paren "(from my point of view)" close

8 paren "for the rest of the year is to ensure that
9 the base case is safeguarded:" Colon, "namely that
10 oil debookings are limited to an extent by which
11 they offset gas bookings, so that net reserves
12 changes for SPDC in 2003 are close to zero."

13 Do you see that?

14 A. Yes, I do.

15 Q. Do you have a recollection of
16 having a discussion with Mr. Pay surrounding what
17 he had written here in Exhibit 24?

18 A. To be honest, I do not specifically
19 remember this discussion. I remember me having
20 given John at some stage a fairly extensive note
21 with my comments scribbled on them, which is
22 obviously this note, but I would not have

0492

1 remembered before today what the subject of the
2 note was nor the subject of any discussions that
3 John and I may or may not have had.

4 I remember that I left this on his
5 desk, and we didn't discuss it for quite sometime,
6 not until several weeks later, and it was either
7 because John was away or I was away. That is as
8 much as I remember about this particular note.

9 Q. Do you recall any discussions with
10 Mr. Pay about offsetting gas bookings with -- I am
11 sorry -- offsetting oil debookings with gas
12 bookings with regard to SPDC?

13 MR. TUTTLE: Objection to form.
14 Characterization of the document.

15 THE WITNESS:

16 A. No is the -- I don't specifically
17 remember that. I can add to that, the comment
18 that any discussion like this, I would -- my
19 attitude to them would be that I would listen to
20 them, but it was not my job to ensure that at the
21 end of the year, SPDC -- SPDC reserves submission
22 would in any way be such that they would be

0493

1 offsetting any convenient targets.

2 That was just simply not my task in
3 life, so to speak.

4 It was at the specific request of

5 Frank Coopman that I would take a more active role
6 in these type of discussions. But I think that
7 even -- that John Pay would have agreed with me
8 that these sort of considerations would not be
9 mine to act on.

10 I could listen to them, but I would
11 not do anything with them until the end of the
12 year, and then I would see what the situation was
13 at that time and make a recommendation or a
14 comment.

15 Q. Who did you believe was responsible
16 for such considerations?

17 A. Well, it would seem that these are
18 -- this is an E-mail from John Pay, and I read
19 from this that these are his intentions or targets
20 or aspirations.

21 Q. Okay. One last question, or mini
22 series of questions: If you turn to page 779, the
0494

1 handwriting at the bottom, I am not sure I get all
2 of that.

3 So if you could, could you read
4 that for us, please?

5 A. "What about SIEP's" reserves
6 replacement ratio "management process (to avoid"
7 -- in between brackets -- "(to avoid major swings
8 from year to year?"

9 Q. Do you recall what you meant by
10 that?

11 A. In previous years, and I am going
12 back to end '98, end '99, as a result of the
13 introduction of the new guidelines, there were
14 significant reserves additions.

15 These significant reserves
16 additions led to additions that were in excess of
17 what was actually produced.

18 Now, one way of describing that
19 particular metric was to issue or to calculate a
20 ratio that was called the reserves replacement
21 ratio, which is in essence the increase in proved
22 reserves divided by the amount of production
0495

1 occurring during that year.

2 And the target, the aspired target

3 would always be 100 percent or more, in order that
4 there would be more than replacement of production
5 by additional reserves.

6 And if you looked at the profile,
7 as for instance Exxon would publish from year on
8 year, you would find that the reserves replacement
9 ratio was hovering just above 100 percent; one
10 year, 105, the next year 115, but just above 100
11 percent, very neat and tidy.

12 And we knew and everybody in the
13 industry would have known that that is partly
14 artificial, that that is the process of what I
15 have no other way of describing as the reserves
16 replacement ratio management.

17 It's probably done in such a way
18 that any new projects are added to reserves, and
19 then out of existing projects, existing production
20 fields, reserves are matured into -- into Proved
21 Reserves to such an extent that they end up with
22 replacement ratio just above 100 percent.

0496

1 It's crafty, it's good public
2 relations. Shell were at that time, I can only
3 say, more naive in the sense that they booked what
4 they got.

5 What we could have got, could have
6 done is spread out those reserves additions over
7 the years, saved some of them up for next -- for
8 following years, and achieve a reserves
9 replacement ratio of 100 percent.

10 As it was, we didn't. I believe
11 the reserves replacement ratio at the end of 1998
12 was close to 150 percent, and the following year
13 it was something similar. And then in the year
14 after, we were getting close to 100, and then we
15 were dropping below.

16 John Pay had recognized this, and
17 we had discussed it from time to time. And his
18 idea was that if we had any reserves additions
19 that would exceed the 100 percent, that we would
20 store those up and save those for a rainy year,
21 for the following year.

22 And that was an approach that I

0497

1 didn't object to and that I know that if, for
2 instance, somebody like the SEC had been asked
3 this, "Can we book something that, even though it
4 is justified as being Proved Reserves, can we
5 decide not to book that this year and keep it for
6 a later year?" They would have shrugged their
7 shoulders.

8 Their role in life -- and I think I
9 mentioned this an earlier day -- their role in
10 life was to ensure that reserves weren't
11 overbooked, but underbooking was of no concern of
12 theirs.

13 And I pretty much took that same
14 attitude. I would report it, and I would say to
15 management, "Look, you could have booked this, but
16 if you chose not to, then I will not further
17 comment."

18 That's what I was referring to the
19 reserves replacement ratio management.

20 Why I have this particular question
21 here with this, I cannot tell you without actually
22 going through the note and reading that.

0498

1 MR. HABER: Okay. I think this is
2 time for break for the day.

3 THE VIDEOGRAPHER: Going off the
4 record for the day at 3:00 p.m.. This is the end
5 of tape number 7.

6 (Whereupon the deposition was
7 recessed at 3:00 p.m.)

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ERRATA

CORRECTION

PAGE

Signature

Date

I, Anton Barendregt, am a deponent in the foregoing video deposition, Volume III. I have read the foregoing video deposition, and having made such changes and corrections as I desired, I certify that the transcript is a true and accurate record of my responses to the questions put to me on Wednesday, 21 February, 2007.

16
17
18
19
20
21 Signed _____

22 ANTON BARENDREGT

0501

1 CERTIFICATE OF COURT REPORTER

2 I, Frederick Weiss, CSR, CM, do hereby

3 certify that I took the stenotype notes of the
4 foregoing deposition and that the transcript
5 thereof is a true and accurate record transcribed
6 to the best of my skill and ability.

7 I further certify that I am neither
8 counsel for, related to, nor employed by any of
9 the parties to the action in which this deposition
10 was taken, and that I am not a relative or
11 employee of any attorney or counsel employed by
12 the parties hereto, nor financially or otherwise
13 interested in the outcome of the action.

14
15
16
17 _____
18 FREDERICK WEISS, CSR, CM

19
20
21 _____
22 DATE

0502

1 IN THE UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY
2 Civ. No. 04-3749 (JAP)
Hon. Joel A. Pisano
3

4 _____)
IN RE ROYAL DUTCH/SHELL)
5 TRANSPORT SECURITIES)
LITIGATION)
6 _____)
7

VIDEOTAPED DEPOSITION UPON
8 ORAL EXAMINATION
OF

9 ANTON BARENDREGT
10 VOLUME IV

11 Taken on:
12 Thursday, 22 February, 2007
Commencing at 10:10 a.m.

13 Taken at:

14 The Hague Zurich Tower
15 Muzenstraat 89
2511 WB The Hague
16 The Netherlands
17
18
19
20
21

22 REPORTED BY: FREDERICK WEISS, CSR, CM

0503

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BERNSTEIN, LIEBHARD & LIFSHITZ, LLP

6

Deponent: Anton Barendregt

The Videographer: Richard Bly

Court Reporter: Frederick Weiss

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I N D E X

2 DEPONENT
3 ANTON BARENDREGT
4 Examination Page No:
5 Examination by Mr. Haber - continued 509

EXHIBIT INDEX

9 EXHIBIT Page No:
10
Barendregt Exhibit 25 - 509
11
Document entitled "NOTE - 18 Nov, 1999"
12 Authored and signed by Anton Barendregt
Bearing Bates Nos. LON00010729 - LON00010741
13
Barendregt Exhibit 26 - 509
14
Document entitled "Draft Note - 3 Nov 2003"
15 Authored by Anton A. Barendregt bearing Bates
Nos. V00240172 - V00240180
16
Barendregt Exhibit 27 - 509
17
Document entitled "NOTE - 29 Nov 2003"
18 Authored by Anton A. Barendregt bearing Bates
Nos. V00300014 - V00300028

19
20
21
22
0507

I N D E X - continued

EXHIBIT INDEX

3 EXHIBIT Page No:

4

Barendregt Exhibit 28 - 520

5

Shell Exploration & Production document

6

Entitled "Petroleum Resource Volume
Guidelines Resource Classification and

7

Value Realisation" bearing Bates Nos.

RJW00770633 - RJW00770663

8

Barendregt Exhibit 29 - 555

9

Document previously marked as Aalbers

Exhibit D containing E-Mail string between

Thomas Meijssen and Anton Barendregt with

handwritten notes bearing Bates Nos.

RJW00151703 - RJW00151705

12

Barendregt Exhibit 30 - 555

13

Document previously marked as Aalbers Exhibit

E containing an E-Mail string bearing Bates

Nos. V00102056 - V00102059

15

Barendregt Exhibit 31 - 610

16

Copy of E-Mail String from Frank Coopman to

Frasier, Darley and Barendregt bearing

Bates Nos. V00101693 - V00101694

18

Barendregt Exhibit 32 - 615

19

Copy of E-Mail from Anton Barendregt to Frank

Coopman and John Pay, with attached document

Entitled "Rockford - A historical perspective"

Containing a total of ten pages

22

0508

I N D E X - continued

EXHIBIT INDEX

EXHIBIT

Page No:

4

Barendregt Exhibit 33 - 616

5

Document entitled "NOTE - 1 February 2004"

6 Authored by Anton Barendregt including
Attachments 1 - 8 bearing Bates Nos.

7 RJW01021058 - RJW01021076

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0509

1 PROCEEDINGS --

2 (Barendregt Exhibit Nos. 25, 26,
3 and 27 were marked for identification)

4 THE VIDEOGRAPHER: This is the
5 beginning of Volume IV, videotape number 8 in the
6 deposition of Anton Barendregt. Today's date is
7 February 22, 2007. The time on the record is
8 10:10 a.m.

9 Please proceed.

10 EXAMINATION BY MR. HABER - CONTINUED

11 BY MR. HABER:

12 Q. Good morning, Mr. Barendregt.

13 A. Good morning.

14 Q. Today I hope to be able to cover
15 the reserve situation in PDO Oman as well as
16 discuss a couple of documents with you concerning
17 Project Rockford.

18 And then if there is any
19 miscellaneous issues to tie up, we will finish
20 with that. But that's what I plan to cover today.

21 Before we went on the record, I had
22 premarked three exhibits which I will hand to you

0510

1 now, because these will be useful in our
2 discussion. I will identify them for the record
3 and then I will hand them off to you.

4 The first Exhibit, which is Exhibit
5 25, is a Note dated 18 November, 1999. The title
6 reads, "SEC Proved Reserves Audit - Petroleum
7 Development (Oman) and GISCO 23-27 October 1999."
8 The Bates range is LON00010729 through
9 LON00010741.

10 (Handing)

11 The second exhibit we premarked as
12 Barendregt Exhibit 26 is a Draft Note dated 3
13 November, 2003. "SEC Proved Reserves Audit - PDO
14 (Oman), 25-28 Oct 2003" is the title line. It has
15 two Bates ranges. The first one is V00240172
16 through V00240180. And the second one is VIJVER,
17 that's V-I-J-V-E-R, 2233 through VIJVER 2240.

18 (Handing)

19 The third document we premarked is
20 a Note dated 29 November, 2003. Its title line
21 reads, "SEC Proved Reserves Audit - PDO (Oman)
22 25-28 Oct 2003." Its Bates range is V0030014

0511
1 through V00300028, and that's Exhibit 27.

2 (Handing)

3 Now, Mr. Van de Vijver, before we
4 start --

5 A. Beg your pardon?

6 Q. I am sorry, Mr. Barendregt. I
7 apologize. As an aside, I tend to do that a lot.

8 A. I know we do look all alike.

9 (Laughter in the room)

10 Q. Not at all. My apologies, sir.

11 Before we get started into the
12 audit, prior to 1999, when you went to Oman to
13 perform the audit, had you reviewed any prior
14 audit notes from your predecessor Ad de la Mar?

15 A. I cannot remember. I can expect I
16 would have done.

17 Q. Do you recall any issues of note
18 being raised by your predecessor with regard to
19 Oman?

20 A. No.

21 Q. In 1999, what was your
22 understanding of how Oman was reporting its
0512

1 reserves?

2 A. The -- as I have explained on
3 various previous occasions, in Oman, the subject
4 of reserves and future forecasts was a continuous
5 subject of discussion with the government. The
6 government expressed a keen interest in reserves
7 carried. All of these discussions were at the
8 level of expectation reserves.

9 That being so had led to a good
10 system of expectation reserves and forecasts being
11 maintained by PDO.

12 In other words, there was a good
13 correspondence between individual field reservoir
14 estimates and the build-up to expectation
15 reserves.

16 Proved Reserves were not of any
17 interest to the government of Oman, nor indeed
18 were Proved Reserves of relevance to PDO
19 themselves.

20 Normally an operating company would
21 find that Proved Reserves need to be used for
22 items like depreciation, et cetera, in the books.

0513

1 Now, in the case of PD Oman, the
2 financial systems and the financial procedures
3 were different from those of many other Shell
4 companies. And the bottom line result was that
5 Proved Reserves had no influence on the financial
6 statements that PDO issued.

7 So that meant that we had a company
8 here that -- whose functional interest in Proved
9 Reserves were limited. The only reason why they
10 maintained something that looked like Proved
11 Reserves was for external reporting to the Center.

12 Q. Did -- oh, I am sorry. Go ahead.

13 A. And that was the situation that I
14 found in 1999.

15 Q. Now, did PDO report expectation
16 reserves to the Omani government?

17 A. Yes.

18 Q. How frequently did PDO make those
19 reports?

20 A. I don't know. I would imagine at
21 least annually. But I know that the subject was
22 discussed with representatives from the Oman
0514

1 Ministry of Petroleum at regular intervals. So...

2 Q. Do you recall anyone ever saying
3 that the intervals were on a four-year cycle?

4 A. A four-year cycle? No. That would
5 be highly surprising to me.

6 Q. Now, we talked, I believe it was
7 two days ago or maybe three days ago, about the
8 guideline changes in 1998.

9 A. Mm-Hmm.

10 Q. And by guidelines, I am referring
11 to Shell's internal guidelines.

12 A. Correct, yes.

13 Q. Do you recall if there was any
14 impact of the guidelines on the way in which PDO
15 was reporting its reserves thereafter; that is, in
16 the '98 ARPR which, as you know, was in '99 and
17 then forward?

18 A. I am sorry. Can you rephrase the
19 question?

20 Q. Sure. Do you recall if there was
21 any impact of the guideline changes on the way in
22 which PDO was reporting its reserves to the
0515

1 Center?

2 A. Not immediately, no. Not in 1998
3 or 1999.

4 Q. When -- if it was in '98 and '99,
5 when did the guideline changes in '98 impact the
6 way in which PDO was reporting Proved Reserves to
7 the Center?

8 A. That was at the end of 2000.

9 Q. And how did the guideline changes
10 impact the way in which PDO was reporting its
11 Proved Reserves?

12 A. I think we have to get a
13 representative answer to that question. We have
14 to go back to the situation that I found in 1999

15 with respect to Proved Reserves. So what I found
16 was a good deal of discipline and order in the way
17 reserves were built up and in the way, for
18 instance, field development plans were maintained,
19 et cetera.

20 And that in itself was good. The
21 only element that was lacking was a proper
22 representation of the bottom line Proved Reserves

0516

1 as they were built up from individual Proved
2 Reserves.

3 To start with, Proved Reserves had
4 been -- not been as diligently maintained as
5 expectation reserves for a number of fields.

6 Some fields even carried negative
7 Proved Reserves. This is what happens. If you
8 make an initial estimate when the field is put on
9 production, of proved and expectation reserves,
10 and then leave these to estimates unchanged after
11 production is started.

12 And from year on year, both the
13 proved and expectation reserves would be reduced
14 by the amount of production taking place in that
15 year.

16 And in some cases, the cumulative
17 amount of production had already overtaken the
18 Proved Reserves estimates, which of course is
19 unrealistic and should have been corrected.

20 In many cases also the Proved
21 Reserves, remaining reserves estimates, i.e. the
22 proved ultimate recovery for the field minus the

0517

1 cumulative production to date, the proved
2 remaining reserves would be unrealistically low in
3 comparison with the proved expectation reserves.

4 And this is what you get if you
5 have a proved initial estimate and initial
6 expectation estimates and you continue subtracting
7 from both of these estimates, then the remaining
8 reserves in the proved, of course, dwindle more
9 rapidly than the expectation reserves.

10 And therefore, the ratio between
11 the two is in fact going down; whereas, in

12 practice it should be going up with increasing
13 knowledge and certainty in the field.

14 So that was the situation that we
15 found; then came rule -- the reserves guideline
16 changes in 1998 pertaining in particular to the --
17 to mature fields, so fields that had been in
18 production.

19 And we found that Oman were slow in
20 coming up with the expected increase in reserves,
21 in Proved Reserves in the mature fields.

22 One of the problems that Oman had
0518

1 in doing that is that in order -- since Oman had
2 an end-of-license situation in 2012, and that
3 meant that in order to make a proper assessment of
4 the total company Proved Reserves, they needed to
5 have a forecast, a proven forecast based on Proved
6 Reserves stretching out into the future.

7 And that forecast would then be
8 added -- would then be accumulated for each and
9 every individual field and that combined forecasts
10 would then be cut off -- would then need to be cut
11 off at 2012 in order to assess the total Proved
12 Reserves for the company.

13 That was necessary. It wasn't just
14 simply a matter of totaling up and adding up the
15 individual Proved Reserves in the fields. It was
16 absolutely relevant to know along what profile,
17 what forecast, what production forecast those
18 Proved Reserves of the individual fields would be
19 produced.

20 And PDO did not have that sort of
21 situation in place. In my mind, it would have
22 been relatively easy with an experienced engineer,
0519

1 who would have been able to resolve that within a
2 few days.

3 And I left instructions appended to
4 my 1999 audit report to suggest how they might
5 have a -- or set up a convenient and accurate way
6 of arriving at a representative total Proved
7 Reserves estimates.

8 Now, I would have expected PDO

9 maybe not to have done that at the end of '99, but
10 I certainly would have expected them to have done
11 that at the end of 2000. And towards the end, it
12 became clear that they hadn't done that.

13 So then after a visit by Remco
14 Aalbers to PDO at the end of 2000, Remco, together
15 with staff in PDO, had set up a method of
16 increasing the Proved Reserves in the -- or making
17 more realistic the Proved Reserves in the mature
18 fields in Oman and bringing them more in line with
19 the expectation value that was carried for those
20 fields.

21 I overlooked that process and I
22 supported it, as I've documented in my end of 2000
0520

1 report.

2 Q. Before we follow up on a number of
3 questions, I just would like to mark another
4 document as Barendregt Exhibit 27 -- I am sorry.
5 28.

6 (Whereupon, Barendregt Exhibit No.
7 28 was marked for identification)

8 And Barendregt Exhibit 28 is titled
9 "Petroleum Resource Volume Guidelines Resource
10 Classification Value Realisation." Its date of
11 issue is August 1998. Its Bates range is
12 RJW00770633 through RJW00770663.

13 Mr. Barendregt, do you recognize
14 this document?

15 A. Yes. It would seem to be the end
16 '98 resource for Petroleum Resource Volume
17 Guidelines; in other words, the Shell internal
18 guidelines for reserves estimates.

19 Q. And throughout the last few days,
20 we have been talking about the '98 guidelines.

21 Are these the guidelines that you
22 have been talking about?

0521

1 A. They would be, yes.

2 Q. For the moment, you can put that
3 aside.

4 A. Okay.

5 Q. Now, earlier in your answer, you

6 had mentioned with regard to PDO that Proved
7 Reserves were not diligently maintained as
8 expected.

9 What did you mean by that?

10 A. Like I said, Proved Reserves
11 weren't a primary concern of PDO in -- both in
12 their dealings with the government and in their
13 day-to-day business and, in particular, their
14 financial reporting.

15 Yes. I think that's a complete
16 answer, that it wasn't a primary concern and it
17 didn't receive as much attention as expectation
18 reserves.

19 Q. Did you discuss this issue with the
20 people at PDO when you did your audit in 1999?

21 A. Yes, I did. And I am fairly
22 certain I commented on it in my audit report.

0522

1 Q. Okay. Why don't we take a look at
2 your audit report which we marked as Exhibit 25.

3 Do you recognize this report?

4 A. Yes. It would appear to be my
5 audit reports.

6 Q. Do you recall preparing this
7 report?

8 A. Yes, I do.

9 Q. If you look at the bottom left-hand
10 corner, there is a signature.

11 Do you recognize that signature?

12 A. Indeed I do.

13 Q. Is it yours?

14 A. Yes.

15 Q. Now, you say that this issue about
16 maintaining the proved reserve records is
17 reflected in your report.

18 Can you show us where in the
19 report?

20 A. Well, the first page on the summary
21 page, fourth paragraph, I say, "The most
22 significant comment concerns the generally

0523

1 conservative nature of the individual fields'
2 proved and proved developed reserves estimates."

3 Q. And it's that sentence that
4 captures the issue of Proved Reserves information?

5 A. Yes.

6 Q. Now, just so I am clear, when we
7 are talking about maintaining this information, is
8 this in the nature of an audit trail such as what
9 we talked about yesterday with SPDC?

10 A. Not quite, not quite. In SPDC, it
11 was, in the first instance, a matter of adding up
12 individual fields' Proved Reserves. And it would
13 appear that the register of individual field
14 Proved Reserves was somehow not complete.

15 In other words, when I added up a
16 register that was given to me during the audit in
17 SPDC, a register with all the Proved Reserves and
18 PDO Proved Reserves, I would add them up, and they
19 did not add up to what was actually reported. It
20 was close, but it did not add up precisely.

21 Here, when I did add up the Proved
22 Reserves, they certainly didn't add up to the
0524

1 declared Proved Reserves in the submission.

2 But that was entirely
3 understandable, because there was this issue about
4 the license expiring in 2012. In other words,
5 some measure of cutoff had to be applied, and Oman
6 knew that it had to be applied to each of the
7 individual -- each individual fields.

8 But they couldn't show me how the
9 end of 2000 -- the end of license in 2012 had been
10 reflected in the sum of the reserves estimate that
11 they had submitted.

12 The difference between Oman and
13 SPDC was that the end of license was quite
14 considerably closer than it was in the case of
15 SPDC. In SPDC, it was 20 years away, and in Oman,
16 it was just over ten years away.

17 Q. And if I understand correctly what
18 you just said in your answer, so with regard to
19 PDO, then you were not able to ascertain how much
20 volume would be exposed due to license expiry.

21 Am I correct?

22 MR. TUTTLE: Objection to the

0525

1 characterization of the testimony. Sorry.

2 MR. MORSE: Same objection.

3 THE WITNESS: Would you mind

4 repeating the question?

5 BY MR. HABER:

6 Q. I guess what I am trying to
7 understand is what was the effect of not having
8 that information given to you during your audit?

9 A. The effect is -- was that the
10 Proved Reserves estimate that was given to me,
11 that was submitted had been submitted at the end
12 of 1998, because that was the one that I was due
13 to audit in '99, had not been put together or at
14 least there was no evidence put before me that it
15 had been put together according to the proper
16 procedures.

17 The reason being that on the one
18 hand, the individual field estimates were too low
19 and, secondly, that the way of adding up these
20 reserves was not done in a proper fashion.

21 I suddenly realized that there was
22 one further mention why PDO was different from

0526

1 SPDC, and that has been well documented in my
2 reports, is that in addition that Oman had a
3 target overall uptake, overall production level of
4 850,000 barrels a day, that was the Oman
5 government imposed target.

6 And that meant that the at any day
7 at the time that I was there, Oman could in
8 fact -- the PDO operation could in fact produce
9 more than that 850,000 barrels a day, but didn't.

10 And that meant that they had to do
11 some sort of prioritizing, giving priority to
12 certain fields and that other fields had to be
13 held up.

14 Now, if you have a situation like
15 that, then it becomes even more complicated to
16 actually come up with a combined production
17 forecast.

18 It is not just sufficient to have a
19 proved production forecast for each and every

20 individual field and then add it up, because then
21 you would probably come up with a forecast that
22 would touch 900, 950,000 barrels a day initially

0527

1 at least.

2 And that of course was not
3 realistic. Some of these fields would have be
4 deferred.

5 And that procedure could have been
6 introduced fairly easy, and yet sufficiently
7 accurately, but it wasn't.

8 I left some instructions with my
9 audit report to deal with this particular problem,
10 but as it turned out later on, that it -- these
11 instructions weren't heeded. They weren't taken
12 up.

13 Q. Now, you are referring to
14 instructions to be taken up. Are those reflected
15 in Attachment 3 of Exhibit 25, which is page 736?

16 A. Yes. Under the heading "taking
17 account of production licence" -- "production
18 licence expiry."

19 Q. Just going back to my question
20 about the effect of not having the evidence before
21 you, that you said that, "there was no evidence
22 put before me that it had been put together

0528

1 according to the proper procedures."

2 As a consequence, were you able to
3 determine how much volume fell outside -- that is,
4 production fell outside the license, the end of
5 license period?

6 A. My conclusion was that the bottom
7 line Proved Reserves estimates submitted by PDO
8 for the end year amalgamation in SIEP had been too
9 conservative.

10 So I was expecting that a proper
11 calculation of A, both the individual fields
12 proved volumes, that I also leave some
13 instructions in my report as you have seen, and
14 taking account of the production license expiry
15 together with the fixed off-take of 850,000
16 barrels a day, those two factors combined would

17 have yielded a larger volume of Proved Reserves to
18 be produced within license.

19 So it wasn't the matter of me
20 suspecting that some of the Proved Reserves booked
21 would in fact become produced after the license.
22 It was the other way around. I was suspecting and
0529

1 in fact I was quite sure that the booked Proved
2 Reserves were too low.

3 Q. Now, looking at Attachment 3 for a
4 moment, under "Raising individual fields' proven
5 volumes" , you identified four suggestions for
6 reserves bookings.

7 Who asked -- withdrawn.

8 Did anyone ask you to provide these
9 suggestions on how to book reserves of PDO?

10 A. I cannot remember, sorry. This is
11 eight years ago.

12 Q. Do you recall if you had considered
13 at the time whether it was appropriate for the
14 group reserves auditor to provide guidance on how
15 to book reserves?

16 A. The short answer is no. The way I
17 carried out my audits was pretty much the same as
18 the way in which I went about my business when I
19 was a consultant for the group in my area of
20 responsibility in the early 1990s.

21 That meant that I would make
22 comment, I would be free to make comment, and I
0530

1 would also, as when necessary, make suggestions on
2 how they could improve estimates and improve their
3 procedures.

4 So I saw no conflict there with my
5 role as group reserves auditor, nor did anybody
6 else, as a matter of fact.

7 Q. When you say "nor did anybody
8 else," did anyone approach you and communicate
9 that to you?

10 A. The opposite. Nobody communicated
11 to me that it wasn't appropriate for me to do
12 that.

13 Q. Did you ever ask, for instance, the

14 external auditors if it was appropriate for the
15 group reserves auditor to be providing guidance
16 on --

17 A. Not as explicitly as you say, but
18 they saw my report.

19 Q. And you don't recall any comment
20 from them after reviewing the report?

21 A. No, I don't.

22 Q. Was there anyone at Shell's legal

0531

1 department that you liaised with?

2 A. No.

3 Q. Did you ever ask anyone at Shell's
4 legal department if it was appropriate for the
5 group reserves auditor to be providing guidance on
6 the estimation of Proved Reserves?

7 MR. BEST: I am going to object to
8 that question.

9 BY MR. HABER:

10 Q. You can just answer yes --

11 A. No.

12 Q. If you can look at Attachment 3.
13 And if you could just explain number 2, and in
14 particular, I am looking at the last sentence of
15 number 2.

16 It says, "in Oman" -- I'm sorry.
17 "In the Oman environment, where reservoirs tend to
18 be generally" quote "'proven'," comma, "but more
19 complex than in many other areas," comma, "a
20 suitable criterion for" in quotes "'maturity'
21 could be NP" greater than symbol "> 0.4*" -- I
22 think that's an asterisk, "expn" capital "UR."

0532

1 Can you explain what that means?

2 A. Yes. It's reservoir engineers'
3 jargon for expressing that cumulative production,
4 and that's what the NP stands for, is greater than
5 40% of expectation ultimate recovery in the field;
6 so in other words, if the field had produced,
7 physically produced in excess of 40% of what the
8 field was ultimately expected to yield in the way
9 of recoverable oil or gas.

10 But in the case of PDO, it was

11 purely oil. PDO didn't try to get gas.

12 Q. Now, do you recall if your
13 recommendations for, and I am just going to quote
14 the document here, raising individual fields'
15 proven volumes --

16 A. Mm-Hmm.

17 Q. -- was implemented by PDO?

18 A. No, it wasn't.

19 Q. How did you find out that it was
20 not implemented?

21 A. Well, I would have expected an
22 exercise or these two exercises to yield

0533

1 significantly higher Proved Reserves from PDO.
2 And when they came out at the end of 2000, so the
3 following year, they -- their first draft
4 submission did not appear to have this significant
5 increase that I was expecting.

6 So when we questioned that with
7 them, it became quick -- quickly clear that they
8 hadn't implemented either of these
9 recommendations.

10 Q. Yesterday, you testified with
11 regard to SPDC that your annual audit, which came
12 out in January 2000, hinted at the license expiry
13 issue.

14 Can the same be said for the
15 license expiry issue in PDO?

16 A. I am sorry. Would you repeat the
17 question?

18 Q. Well, do you recall if your annual
19 report for year 1999, which comes out I believe in
20 January --

21 A. Yes.

22 Q. -- of 2000 reflected your concerns

0534

1 about license expiry in PDO?

2 MR. MORSE: Objection to form.

3 THE WITNESS:

4 A. Okay. As I explained, my concern
5 wasn't so much that the license expiry was having
6 an effect on a particular -- a curtailing effect
7 on Proved Reserves.

8 In fact, my concern was going the

9 other way, that Proved Reserves were too
10 conservative.

11 However, I was making the point --
12 making the point here in my report that in order
13 to come up with a more realistic Proved Reserves
14 estimate, one needs to take into account the
15 license expiry.

16 So coming back to your question, at
17 the end of 1999, I have given a brief summary of
18 my conclusions of all the audits that the two --
19 in 1999 in my end-year report, and I am pretty
20 certain that this particular issue, although
21 brief, was mentioned in my end '99 report.

22 Q. If you take a look at Exhibit 15,
0535

1 that would be in this pile. (Indicating)

2 (Witness complying)

3 Is the reference that you just
4 described found on the first page of the Exhibit?

5 A. I am sorry.

6 Q. I am sorry. If you look at Exhibit
7 15?

8 A. Yes.

9 Q. The reference that you just made to
10 the conservatism and license expiry, is that
11 found on the first page which ends 131?

12 A. No. It wouldn't be, because this
13 is a total end-year report. And the conclusions
14 of the individual audits would be in an appendix
15 which in this note would be Attachment 6 on page
16 V00280143.

17 Q. And that would be under the heading
18 Oman?

19 A. Yes.

20 (Pause)

21 MR. TUTTLE: Is there a question
22 pending?

0536

1 MR. HABER: I don't believe there
2 is.

3 MR. FERRARA: Good.

4 MR. HABER: Let me ask one.

5 MR. TUTTLE: I think that's your

6 job.

7 MR. HABER: Let me ask one.

8 Q. Under the heading Oman in
9 Attachment 6, it says, "The generally conservative
10 nature of individual fields' proved and proved
11 developed reserves estimates was noted. However,
12 any scope for increase in Proved Reserves was
13 offset by the fact that the expiration of the
14 production licence in 2012 had not been properly
15 accounted for. The net result was that reported
16 Proved Developed entitlements were likely to be
17 some 15% overstated, whilst the total Proved
18 entitlement reserves were probably of the right
19 magnitude."

20 A. You will note that that is almost
21 literally the same text as I have at the front of
22 my -- of my audit report, which is Exhibit No. 25.

0537

1 Q. Do you recall how that 15%
2 overstatement was arrived at?

3 A. I think we have some embarrassment
4 here. I was -- one of the answers that I was
5 giving you previously were answers quoting off my
6 memory, not having read these particular documents
7 for a long, long time.

8 Clearly there were -- my impression
9 was that -- or my memory of that audit was that
10 the Proved Reserves were on the conservative side.

11 Yet I come to the conclusion that
12 at the end of my audit, and have documented my
13 conclusion, that proved development entitlements
14 were likely to be some 15% overstated.

15 I cannot remember why that is. I
16 am sure if I dig in my report, I would be able to
17 find that out. But I cannot see why that is the
18 case. I apologize. My memory just served me
19 badly here.

20 Q. Now, do you recall receiving any
21 reaction from any of the recipients of Exhibit 15
22 to this portion of the note that I just read into

0538

1 the record?

2 A. No, not specifically.

3 Q. Do you recall the reasons why the
4 proved developed entitlements were likely to be
5 some 15% overstated?

6 A. Not without reading the document,
7 no. I don't.

8 MR. TUTTLE: By "this document,"
9 you mean Exhibit 25?

10 THE WITNESS: I am sorry. That's
11 Exhibit 25, yes.

12 BY MR. HABER:

13 Q. At the time that the annual report,
14 Exhibit 15, was issued, Remco Aalbers was the
15 Group Reserves Coordinator.

16 Correct?

17 A. Yes, he was. Yes.

18 Q. Do you recall having any
19 discussions with Mr. Aalbers about this
20 overstatement in Oman?

21 MR. TUTTLE: Objection.
22 Characterization of the testimony.

0539

1 THE WITNESS: No. Not
2 specifically.

3 BY MR. HABER:

4 Q. Again, if you look at Exhibit 15,
5 the statement that says, "The net result was that"
6 proved -- I am sorry -- "that reported Proved
7 Developed entitlements were likely to be some 15%
8 overstated."

9 Do you recall having any discussion
10 with Roelof Platenkamp about that?

11 MR. TUTTLE: Objection.
12 Characterization of the document.

13 MR. HABER: Well, I read it
14 verbatim.

15 MR. TUTTLE: You need to read both
16 sentences.

17 MR. GOLDSTEIN: One sentence just
18 for the record.

19 MR. HABER: One sentence.

20 MR. GOLDSTEIN: But you didn't
21 finish the sentence.

22 MR. TUTTLE: "Whilst the Total

0540

1 Proved entitlement reserves were probably of the
2 right magnitude."

3 So you can ask him about proved
4 developed, but I am going to object as long as you
5 call it a blanket reserves overstatement.

6 MR. HABER: I believe I read
7 directly in the record the net result was that
8 "the reported Proved Developed entitlements were
9 likely to be some 15% overstated."

10 MR. TUTTLE: We are not quibbling
11 with your reading. We are quibbling with your
12 question about this overstatement.

13 BY MR. HABER:

14 Q. Do you recall having any
15 communications with Mr. Platenkamp concerning the
16 portion of the sentence that I just read?

17 A. No, I do not. I think it's
18 unlikely that I had it.

19 Q. The same question with regard to
20 Lorin Brass?

21 A. I do not recall.

22 Q. What was the level of interaction

0541

1 you had with Lorin Brass?

2 A. Once a year meeting just before the
3 end-of-year meeting with the external auditors, I
4 would present my draft report -- he would see my
5 draft report which I would have circulated to or
6 within SIEP, and there would be a brief discussion
7 of me together with the Group Reserves Coordinator
8 and probably his supervisor with Lorin Brass.

9 Q. I mentioned --

10 A. You mentioned Lorin Brass, but at
11 the time at the end of 1999 it was Linda Cook
12 still, not Lorin Brass. Lorin Brass came on the
13 scene, if I remember right, was just shortly after
14 that.

15 Q. What was your level of interaction
16 with Linda Cook?

17 A. As it happened, nil. Linda wasn't
18 around at the end '99 period. And as a result, I

19 have never actually attended a meeting in her
20 office or with her, for that matter.

21 Q. I mentioned Roelof Platenkamp, and
22 he is identified on Exhibit 15.

0542

1 What was your level of interaction
2 with Mr. Platenkamp?

3 MR. BEST: Generally?

4 MR. HABER: Yes.

5 THE WITNESS:

6 A. On the business level, extremely
7 infrequent. There may have been one meeting in
8 the end year, or one or two meetings perhaps at
9 the end year cycle, i.e., during January. I doubt
10 if it was more than one.

11 We greeted each other in the
12 corridor when we met.

13 BY MR. HABER:

14 Q. Now, did you receive any comment to
15 the discussion in Attachment 6 in Oman from Mr.
16 Watts?

17 A. No, certainly not, no.

18 Q. During the closeout session, do you
19 recall discussing the information that's set forth
20 in Attachment 6 under Oman?

21 A. Not specifically, no.

22 Q. Do you recall if the external

0543

1 auditors from KPMG or PWC asked any questions
2 concerning the information that's set forth in
3 Attachment 6 under Oman?

4 A. No, not specifically. No.

5 Q. Do you recall if the discussion
6 concerning the reported proved developed
7 entitlements came up during the closeout session
8 for year-end 1999?

9 A. They certainly would have come up,
10 because I made my presentation. It was mentioned
11 in my report and in my -- in my presentation. I
12 am fairly certain that a comment along these lines
13 would have been included. But I need to go back
14 to my actual presentation to be absolutely
15 certain.

16 Q. Now, earlier in your testimony, you
17 mentioned production forecasts.

18 Had you, at the time you conducted
19 your audit in 1999, reviewed PDO's production
20 forecasts?

21 A. At the -- I am trying to think.

22 No. I do not remember whether I had seen a
0544

1 forecast before I went there. If I did see one
2 forecast, then it must have been the general one
3 with just the 850,000 barrels a day flat plateau
4 of the aggregate forecast, but certainly not an
5 individual field-by-field forecast, no.

6 Q. When you conducted your audit, do
7 you recall who you met with?

8 A. Not everyone, but there was Neil
9 O'Neil (Phonetic) who was in charge of -- I think
10 he was the head reservoir engineer there. He is
11 the only name that springs to mind at the moment.

12 Q. Do you know a person by the name of
13 Said al-Abri?

14 A. Yes. And I am looking at Exhibit
15 25 now, he is the -- he was the reserves reporting
16 coordinator in PDO, so indeed he would have been
17 my daily contact during the audit.

18 Q. Do you know who Stuart Evans is?

19 A. Yes, I do.

20 Q. And who is Stuart Evans?

21 A. Stuart Evans is a senior engineer,
22 senior reservoir engineer in Shell. At that time,
0545

1 he was the area reservoir engineer, area reservoir
2 engineer and consultant for the Middle East. What
3 else do you want me to say?

4 Q. Do you recall meeting with him at
5 the time of your audit in 1999?

6 A. I don't think I did.

7 Q. Do you know a Stuart Clayton?

8 A. Yes. He was in Oman. I am trying
9 to remember whether he was there at the time of
10 the first audit. He certainly was there during
11 the second -- during the time of the second audit
12 in 2003. I cannot remember whether he was there

13 in the first audit.

14 Q. Do you recall providing a draft of
15 Exhibit 25 to anyone at PDO prior to it being
16 finalized?

17 A. Not specifically, but it was -- as
18 I explained to you several times, that was my
19 habit of doing so. I must have done it here as
20 well.

21 Q. Do you recall receiving any comment
22 from any of the people that you distributed the
0546

1 draft to?

2 A. Not specifically. There is likely
3 to have been one or two, yes.

4 Q. At the time you conducted your
5 audit, did you review PDO's business plans?

6 A. No. No. That wasn't my task. I
7 may have used it, but to say that I reviewed it,
8 no. That was beyond my task.

9 MR. HABER: This is probably a good
10 time to take a quick break.

11 MR. TUTTLE: Great.

12 THE VIDEOGRAPHER: Going off the
13 record at 11:03.

14 (Short recess taken)

15 THE VIDEOGRAPHER: Returning to the
16 record at 11:33 from 11:03.

17 MR. FERRARA: Mr. Haber, over the
18 course of the break --

19 THE VIDEOGRAPHER: I don't have a
20 mic on you, do I? Who is talking.

21 MR. BEST: Mr. Ferrara. Just speak
22 up.

0547

1 THE VIDEOGRAPHER: Go ahead.

2 MR. FERRARA: Over the course of
3 the break, Mr. Barendregt had an opportunity to
4 reflect further on what appears to be some
5 confusion that's entered into our record with
6 respect to his testimony, on the one hand
7 indicating that on a field-by-field basis the Oman
8 Proved Reserves were understated, and his
9 testimony that with respect to as reported Proved

10 Reserves may have been as much as 15% overstated.

11 And what Mr. Barendregt has done
12 during the course of the break is to more
13 carefully study his reports of those audits, and
14 would like to have the opportunity to clarify the
15 confusion that's been introduced into the record
16 on these two points before we begin and continue
17 with his examination here today.

18 MR. HABER: That would be fine.

19 MR. FERRARA: Mr. Barendregt, could
20 you address yourself to those two issues, please?

21 THE WITNESS: Yes. Like I already
22 said earlier, I hadn't seen this particular

0548

1 document or read this particular document for
2 quite a long time. And it is by another careful
3 read of what I actually wrote down at the time
4 that I am beginning to have again a better
5 appreciation of what it was that -- of the points
6 that I was meaning to make.

7 I think one of the causes for the
8 confusion was that there were two issues in my
9 audit in '99.

10 One of them was that on an
11 individual field basis, Proved Reserves, in
12 particular proved remaining reserves in each of
13 the fields tended to be low to very low in
14 relation to expectation reserves, bearing in mind
15 the maturity of these fields, by which I mean the
16 amount of cumulative production that had meanwhile
17 been produced from these fields.

18 I comment on that, but I do not
19 give that comment a very high profile. That is
20 one point.

21 And the second point is that
22 accepting the proved volumes for each of the

0549

1 individual fields as a fair representation of the
2 volumes that are actually producible -- of the
3 volume that are producible from these fields and
4 taking the production forecasts that would be
5 commensurate with these proved volumes, proved
6 volumes which as I said earlier are in fact low.

7 But anyway, let's ignore that

8 particular effect.

9 If you do that, then the method

10 that they have applied in putting together these

11 forecasts in order to assess the affect of the end

12 of license has been improper for the proved

13 developed reserves, by which is meant the forecast

14 producible from existing wells, the no further

15 activity case, as it is sometimes referred to.

16 So you take your existing wells,

17 you don't drill any additional wells, and then you

18 get a gradually declining forecast.

19 And in order for it to get a proper

20 reflection, of course, it has to be cut off at to

21 2012, and the actual fact was that it hadn't been,

22 and that of course is improper.

0550

1 And that led to my statement saying

2 that these proved developed reserves are 15% too

3 high, the 15% being the portion in detail and

4 beyond 2012.

5 I think it is useful to bear in

6 mind also I have checked back at the record that

7 an appropriate correction has in fact been made by

8 PDO at the end of '99, so a couple of months after

9 my audit report in the proved developed estimate

10 for PDO.

11 So the point was accepted and an

12 appropriate reduction was made in a proved

13 reduction estimate.

14 I also make the point that the

15 proved total, by which we mean the proved

16 developed and the proved undeveloped reserves,

17 i.e. the reserves producible from future

18 activities, was probably -- was probably all

19 right, was of the right magnitude, and therefore

20 could be accepted as a fair representation. And

21 that is what appeared -- ultimately appeared in

22 the report.

0551

1 I hope this gives a better -- or

2 this gives you a better understanding of my

3 description of the situation in Oman around 1999.

4 BY MR. HABER:

5 Q. Just so I am clear then, the 15%
6 overstatement of proved developed entitlements,
7 that refers to reserves that have been booked, but
8 fall outside of the license period?

9 A. Correct, yes.

10 Q. Okay.

11 A. And like I said, these 15% of
12 reserves, overstated reserves had been corrected a
13 couple of months later at the end of '99.

14 Q. And was that reflected in the
15 year-end ARPR?

16 A. Yes. Indeed they were, yes.

17 Q. Okay. Thank you.

18 A. Okay.

19 Q. Now, with regard to production, I
20 believe you had mentioned a production forecast of
21 850,000 barrels a day.

22 Is that correct?

0552

1 A. Yes.

2 Q. And that forecast was seen by you
3 during your 1999 audit?

4 A. Yes. I am fairly certain it was.
5 I believe that I had access to the year Oman -- to
6 the PDO business plan. A copy was made available
7 to me during the audit. So in the end, that would
8 have contained the 850,000 barrels a day forecast.

9 Q. Did there come a time when that
10 forecast changed?

11 A. How do you mean?

12 Q. Well, after 1999, did there come a
13 time when PDO was finding it difficult to reach
14 production of 850,000 barrels a day?

15 A. Yes. It came as a shock to us all.
16 But I believe in the course of 2001, PDO were
17 having serious problems in maintaining the 850,000
18 barrels a day. One particular problem that
19 occurred, and one particular problem that stands
20 out in my memory is that in their largest field,
21 the Yibal field, they had over the previous years
22 been installing in-fill drilling, i.e. drilling

0553

1 wells in between existing wells in order to
2 accelerate oil production through water injection.

3 And it turned out that that latest
4 round of in-fill drilling was by no means as
5 successful as it had been anticipated. It is a
6 matter of fractures providing a direct --
7 fractures in the field, unrecognized fractures
8 providing a direct path between injectors and
9 producers.

10 And therefore, the water injector
11 would come out within hours or a very short period
12 to the producers and therefore not yield the
13 effect that had been anticipated.

14 That was a big project and dealt a
15 serious blow to PDO's ability to maintain the
16 forecasts. But that wasn't the only one. In
17 other fields, there were disappointments occurring
18 at the same time.

19 Q. Was the Yibal field the largest
20 field in PDO?

21 A. If not the largest, at least the
22 three largest. There were Natil, Fahuud, and
0554

1 Yibal. I believe Yibal had the highest volume of
2 recoverable oil. The others had somewhat lower
3 recovery factors. But the in-place volumes of the
4 other two fields may have been larger, but that I
5 am not too sure of.

6 Q. I am sorry. I just want to go back
7 to one second to your explanation when you were
8 talking about the 15%.

9 A. Mm-Hmm.

10 Q. Did that 15% exposure represent 15%
11 of PDO's total portfolio of Proved Reserves?

12 A. Proved developed.

13 Q. Proved developed reserves?

14 A. Yes.

15 Q. Now, coming back now to the
16 production issue, do you recall when in 2001 you
17 became aware of this production problem?

18 A. Somebody must have mentioned it to
19 me, probably Remco Aalbers, maybe Ian McKay at the
20 time, who was his supervisor.

21 Q. I am sorry. Was that Aidan McKay?

22 A. I am sorry. Aidan McKay, yes. But

0555

1 in all likelihood it would have been Remco

2 Aalbers.

3 Q. Now, you had mentioned that Mr.

4 Aalbers had gone to Oman in late 2000.

5 Do you recall the purpose of his

6 meeting?

7 A. One of the reasons for that

8 visit -- I don't remember them all, but one of the

9 reasons for the visit was to see to what extent

10 the recommendations that I had made in my audit

11 had been included in PDO's procedures. And by

12 "recommendations," I mean specifically the

13 recommendations that were made an Attachment to my

14 report in 1999.

15 Q. I would like to show you what we

16 marked as Exhibit Aalbers D and Aalbers E, and I

17 think we probably will just remark these with

18 Exhibits for this deposition as well.

19 (Barendregt Exhibit Nos. 29 and 30

20 marked for identification)

21 We are marking Aalbers Exhibit D

22 also as Barendregt Exhibit 29. And again just for

0556

1 the record, this is a series of E-mails, the last

2 of one is from Thomas Meijssen dated January 3rd,

3 2001 to Mr. Barendregt with a CC to Remco Aalbers,

4 Said Abri, Marcus Antonini. The subject line

5 reads "Proved Reserves Visit - Group Resource

6 Co-ordinator."

7 The second Exhibit, which was

8 previously marked as Aalbers Exhibit E, we are

9 marking as Barendregt Exhibit 30, also a series of

10 E-mails. The last of which is from Mr. Barendregt

11 dated January 4, 2001 to Thomas Meijssen with a CC

12 to Remco Aalbers, Said Abri, and Marcus Antonini.

13 Again, the subject line reads, "Proved Reserves

14 Visit - Group Resource Coordinator."

15 A. Yes.

16 Q. Now, with regard to Aalbers Exhibit

17 D, which we marked as Exhibit 29 --

18 A. Mm-Hmm.

19 Q. -- I'd like to direct your
20 attention to the second chart and the paragraph at
21 the bottom of the page that begins "I would
22 propose for external reserves reporting."

0557

1 So this is the E-mail from Mr.

2 Meijssen to you?

3 A. Yes.

4 Q. And if you could also take a look
5 at Exhibit 25 at the same time, and in particular,
6 your Attachment 3, number 2 on Attachment 3, which
7 ends 736.

8 A. Yes.

9 Q. Now, am I correct that what Mr.
10 Meijssen is proposing, which is, quote, "using the
11 40% maturity criterion," -- and I believe that's
12 referring to the chart -- consistent with what you
13 were including in your guidance that's reflected
14 in Attachment 3, number 2?

15 A. Yes. They are this same criteria,
16 yes.

17 Q. And when we look at the chart, the
18 second one?

19 A. Which chart are you on?

20 Q. I am on, I am sorry, Exhibit 29?

21 A. But which chart?

22 Q. On the first page?

0558

1 A. Oh, the table you mean.

2 Q. I am sorry. Yes. The table.

3 A. Oh, okay.

4 Q. If you look at the table, the
5 second table, would the second item listed there,
6 proven developed reserves 40%, that line, be
7 consistent with what you were recommending in your
8 audit report, which is Attachment 3, number 2 on
9 Exhibit 25?

10 MR. TUTTLE: Objection to the
11 characterization of the document to the extent
12 that you are just directing him to one paragraph
13 of his report.

14 MR. HABER: I am asking him, and he

15 can feel free to look at whatever he needs to
16 answer the question.

17 MR. TUTTLE: You should look at the
18 entirety of your recommendations before you answer
19 that.

20 THE WITNESS:

21 A. Okay. First, let me say that the
22 gist of my -- or a summary of my recommendation of
0559

1 how to deal with the apparent general
2 conservatism in the Oman Proved Reserves, and
3 that is the top half of Attachment 3 in Exhibit
4 25, is that I point to the '98 reserves
5 guidelines, the Shell reserves guidelines.

6 And I say that the point is made
7 there that for mature fields, proved developed
8 reserves can effectively be made equal to
9 expectation developed reserves in line with
10 accepted industry practice. Okay. That was a
11 point that was made in the reserves guidelines.

12 Then I add to say that in the Omani
13 context, a reasonable criterion for determining
14 which fields are mature, I said that you could
15 consider the fields with cumulative production
16 being in excess of 40% of expectation ultimate
17 recovery in that field.

18 That's what I say there. And that
19 is -- those are the -- that is the line of
20 thinking that they follow in this particular
21 table.

22 BY MR. HABER:

0560

1 Q. So in the table, which one of the
2 items in the left column is consistent with what
3 you were suggesting in Attachment 3 of Exhibit 25?

4 A. In order to do that, I would have
5 to read the -- I remember the conversation, but I
6 don't remember the details of the -- of the E-mail
7 discussion. So you will have to bear with me.

8 Q. Okay.

9 A. And I will to have read it
10 carefully. Somebody has some scribbling in it,
11 which certainly aren't my scribbles.

12 Q. That's going to be one of my next
13 questions.

14 A. Well, they are not.

15 MR. BEST: And just for the record,
16 Mr. Barendregt, you are speaking about the
17 document with Bates number RJW00151703?

18 THE WITNESS: Indeed, yes. Number
19 29, yes.

20 (Pause)

21 Yes. I believe your answer was
22 that about Anline, which is headchein thas
21 tabiclin Exhibit --at about Anline is provenas
22 dlielopchereserves, 40%, that thais t abe on thas
13 is in line t witf me remcumdinaties.

15 BY MRHABER:s.

17 </Attacumen3, Exhibit 5, didt, yomakemr ys.
18 e remcumdinatibt witndrardeg tr/Deretti proveds.
19 undlielopchereserves03?

20 A. Yes, I did. Thatp gotes numbe33?
21 e ot abfirjushalf --at/Tohalf e o</Attacumen3 in3?
22 thaExhibit, Exhibit 5, whe arI say, "F foproveds.
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22 ne sistement witw tha, you are remcumdakinoras
21 suggqueskinin </Attacumen3 e oExhibit 5?as

22 A. Bet farI r answeg th, I think itliwas
13 Paufulng to arnin minI thaf me remcumdinatiliw,)

15 g about foundlielopchereserves, thaitemerequiress.

17 mod Wetti is carricheabo.s.

18 Anbyeg th, I mean that ab0Trgoxt

9 of different reservoir simulation models are set
10 up and run in a future prediction mode to assess
11 what the realistic assessment is for expectation
12 and Proved Reserves in that field. And
13 particularly, the Proved Reserves would be the
14 result of somewhat more conservative assumptions
15 in those models.

16 I put it there fairly lightly, but
17 that is quite a major amount of effort, amount of
18 effort that PDO did not get a chance to get around
19 to.

20 And certainly by the end of 2000,
21 it was clear that accepted approach, although
22 certainly desirable, would not be physically
0563

1 possible before the end of 2000.

2 So coming to your question is
3 either of the two lines named proven developed
4 40%, undeveloped 60% or the one below that, 40%
5 and 40%, is that in concurrence with my
6 recommendation? The answer is no, it isn't.

7 Q. Now, if you look at Exhibit 30,
8 which was also marked as Aalbers Exhibit D, and in
9 particular, I'd like you to take a look at item 5,
10 which appears on the bottom of the page.

11 It says, "As for your proposed
12 volumes to book as externally reported Proved
13 Reserves," paren, "(before they are cut off by
14 license expiry)", close paren, "your line" quote
15 "'proven,'" comma "'DevRes 40%,'" comma "'UndevRes
16 60%'" close quote paren "(347 mln m3 Dev Res and
17 254 UndevRes)" close paren "seems to be the best
18 one to aim for?"

19 Do you recall having any
20 discussions with Mr. Aalbers concerning this
21 suggestion?

22 A. Yes. I -- yes I had, yes.

0564

1 Q. And how did you come to -- in the
2 context -- withdrawn.

3 What do you recall discussing with
4 Mr. Aalbers?

5 A. We mustn't forget that this is

6 almost seven years ago now. So I don't
7 specifically recall say sentence by sentence what
8 we discussed. I do recall of course the
9 discussion that we had on this issue. And I
10 recall writing this particular E-mail, which I did
11 after having a discussion with Remco Aalbers on
12 this.

13 Q. Do you recall what you and Mr.
14 Aalbers had discussed?

15 A. Yeah. The merits of the various
16 cases that Thomas Meijssen was presenting here.

17 Q. And was it in this discussion that
18 you and Mr. Aalbers arrived at what's reflected in
19 number 5 that I read, that proposal?

20 MR. TUTTLE: Objection to the
21 characterization of the testimony.

22 THE WITNESS:

0565

1 A. I do not remember it, but it's
2 clear that this is an E-mail which I sent.

3 So I wouldn't have sent this E-mail
4 if it would have been, say, disputed by Remco
5 Aalbers.

6 Then if there was any dispute, and
7 I still wanted to go at it, then I would have
8 reflected this in some way.

9 BY MR. HABER:

10 Q. Do you recall how your position
11 evolved from what is reflected in Attachment 6 of
12 Exhibit 25 to the proposal in Exhibit 30?

13 MR. TUTTLE: Attachment 6?

14 MR. HABER: I am sorry, Attachment
15 3. Thank you. I am sorry.

16 Q. Do you recall how -- let me reask
17 that so it's clear.

18 A. Mm-Hmm.

19 Q. Do you recall how your position had
20 evolved from what's reflected in Attachment 3 of
21 Exhibit 25 to what is proposed in Exhibit 30?

22 MR. MORSE: Objection to form.

0566

1 THE WITNESS:

2 A. We were faced with the reality that

3 my recommendation in item 3 of Attachment 3 of
4 Exhibit No. 25, that that recommendation was
5 describing the ideal case of what PDO should do.

6 As it happened, PDO never got
7 around to doing it. And I explained that to you.
8 So that was a fact. That was something that they
9 couldn't do something about any more, because it
10 would be a fairly sizeable task to carry out these
11 reservoir simulation studies for each and every
12 one of their fields.

13 That being the case, it was deemed
14 desirable to come up with a method of
15 recalculating Proved Reserves in such a manner
16 that the recommendation that I made here would be
17 better reflected than they were in the figures
18 that PDO had been carrying up to that date.

19 So it was in response to the
20 reality and to the unchangeable reality that PDO
21 hadn't been able to carry out these studies, which
22 is something that I personally only discovered at
0567

1 the time that all this played, which was late --
2 late 2000, that Remco and I discussed the cases
3 and Thomas Meijssen of PDO discussed the case that
4 we see here reflected.

5 Q. When you said in your answer, "It
6 was deemed desirable to come up with a method of
7 recalculating Proved Reserves in such a manner
8 that the recommendation that I made here would be
9 better reflected than they were."

10 And then it actually -- it's a
11 little difficult to read, but who deemed it
12 desirable to come up with a method of calculating
13 Proved Reserves?

14 MR. TUTTLE: Objection.
15 Characterization.

16 THE WITNESS:

17 A. The drive for this came from Remco
18 Aalbers.

19 BY MR. HABER:

20 Q. Did Mr. Aalbers say what was
21 causing him to be so driven?

22 MR. BEST: Objection.

0568

1 MR. HABER: You can answer.

2 MR. BEST: The question requires an
3 answer which is hearsay.

4 BY MR. HABER:

5 Q. You can answer.

6 A. I can't say of course precisely why
7 Remco Aalbers came to this conclusion, but I know
8 that he read my report. He saw my assessment that
9 the individual field Proved Reserves were low, and
10 obviously too low in comparison with expectation
11 reserves. And this was particularly for mature
12 fields.

13 And of course, Remco was fully
14 aware of the guidelines in 1998, which gave
15 instructions on how to approach reserves in mature
16 fields.

17 And it was clear that the reserves
18 by PDO -- put forward by PDO were not in line with
19 those guidelines for these mature fields.

20 Q. During your discussions with Mr.
21 Aalbers, did you discuss reserve replacement ratio
22 target?

0569

1 MR. TUTTLE: At any time? Any
2 discussion with Remco Aalbers?

3 MR. HABER: No. The discussions
4 concerning Oman.

5 THE WITNESS:

6 A. We may have done, but I don't
7 specifically recall them. But we may have done.

8 BY MR. HABER:

9 Q. Do you recall any conversation
10 concern this booking of reserves in Oman with Mr.
11 Aalbers where he said to you that he was under
12 pressure to reach a certain percentage of the RRR?

13 A. I remember comments to that effect,
14 yes. In that period, he was under pressure; he
15 appeared to be under pressure.

16 Q. What was the basis for your
17 observation?

18 A. Comments by himself, I think.

19 Q. Do you recall what he said to you?

20 A. He was saying --

21 MR. BEST: Object. The same

22 objection, as calling for a hearsay response.

0570

1 BY MR. HABER:

2 Q. And you can answer.

3 A. Not literally, of course. But it

4 was along the lines that he was under pressure to

5 come to a -- to a reserves replacement ratio of

6 around 100 percent.

7 Q. And did he say from where the

8 pressure was being exerted?

9 MR. BEST: Objection. Again, calls

10 for a hearsay answer.

11 BY MR. HABER:

12 Q. You can answer.

13 A. All I can remember is that he said

14 that Philip Watts was expressing a close interest

15 in the end-of-year reserves reporting and the

16 volumes that were about to be reported.

17 Q. Do you recall him saying anything

18 else on the subject?

19 MR. BEST: Same objection. All of

20 these questions are calling for responses which

21 are hearsay objections and are not part of any

22 known exception that I know of to the hearsay

0571

1 rule.

2 But go ahead and answer.

3 MR. HABER: You can raise them at

4 trial. Go ahead.

5 MR. BEST: Well, I am preserving

6 the record right now.

7 MR. HABER: All objections are

8 preserved for trial except as to form.

9 Q. Go ahead.

10 A. I am sorry. Can you ask the

11 question again?

12 Q. Do you recall Mr. Aalbers saying

13 anything else on the subject?

14 A. No. Not off-hand, no.

15 Q. Now, do you recall if the method as

16 proposed in Exhibit 30 is the method that was

17 implemented for booking reserves in PDO in the end
18 of 2000?

19 A. Not specifically. But it may well
20 have been.

21 Q. Do you recall how many -- how much
22 volume PDO booked as Proved Reserves for year-end
0572

1 2000?

2 A. As a quantified figure, no, I do
3 not. But I can easily look that up.

4 Q. Does approximately 355 or so
5 million barrels sound familiar to you?

6 A. No is the short answer.

7 Q. Okay. Now, a moment ago, you
8 testified that there did come a time when PDO's
9 production had declined.

10 Correct?

11 A. Yes. That was after this period.

12 Q. And my question now relates: Did
13 that decline have any effect on what had been
14 booked at the end of 2000?

15 A. Yes. I think you should understand
16 that my assessment in '99 was based on a
17 comparison of Proved Reserves versus expectation
18 reserves.

19 In my view, and in my knowledge,
20 there was no cause for concern regarding the
21 volumes that PDO carried as expectation reserves.

22 And I base that view on what I saw
0573

1 during the audit. I mean, we had discussions
2 about the major fields, some of the more -- some
3 of the smaller fields.

4 In all, PDO had something close to
5 100 fields in their portfolio, so we didn't
6 discuss each and every one of them. But certainly
7 the major ones, and some of those were major
8 developments were imminent, we discussed in the
9 way I described before. I sat together with the
10 team and we would look at it.

11 And on that basis, I had no reason
12 to have any serious doubts about the expectation
13 volumes that were carried in the books.

14 There was a further consideration

15 in the back of my head, and that was that all of
16 these field estimates of course were discussed
17 extensively with Oman ministry staff who had their
18 own external experts to help them.

19 So I was satisfied that the
20 expectation reserves were a realistic estimate for
21 the Oman portfolio.

22 What I was concerned about was the
0574

1 ratio between Proved Reserves and expectation
2 reserves in these fields. I make a comment about
3 that in my '99 report.

4 And there is even a plot in my '99
5 report which reflect in a graphical manner what I
6 was referring to.

7 And this particular item was taken
8 up in 2000 in order to bring the booked volume for
9 Oman into closer alignment with expectation
10 volumes.

11 What we were not aware of and what
12 was a surprise to everyone, certainly in the
13 center and I understand also in PDO themselves,
14 was the sudden production problems that began to
15 appear in 2001, i.e. within six months of us
16 trying to do what we are doing here.

17 That was a major surprise to all of
18 us. It meant that in fact the expectation
19 reserves, which we had been viewing as a standard
20 against which to judge the proven reserves, were
21 in themselves obviously too optimistic, and
22 therefore they had to be brought down. By how
0575

1 much that was far from clear at that time.

2 But clearly, some measure of
3 reduction had to be applied.

4 Q. Did there come a time where you
5 reached this conclusion?

6 A. In the course of 2001 when we heard
7 about the first of these production problems, yes.

8 Q. Did you begin to consider whether
9 the reserves that had just been booked should be
10 debooked?

11 MR. TUTTLE: Objection.

12 Foundation.

13 THE WITNESS:

14 A. I discussed it in my end-year 2001
15 report because that would be my first opportunity
16 to comment on it.

17 I discussed it in that report,
18 bringing the issue together with the issues that
19 are reported on SPDC and I believe Abu Dhabi,
20 saying that here we have companies that are boxed
21 in by end of license and a limit to their
22 production forecast, and that therefore the Proved

0576

1 Reserves that should be booked should be in
2 conformance with those.

3 And I forget the precise words, but
4 I am pretty certain that I did address Oman at
5 that time.

6 Q. You can feel free to look at
7 Exhibit 22. And if you can identify where you
8 said that, that would be helpful?

9 MR. BEST: While he is looking at
10 that, let me make the record clear, because I
11 apologize in our conversation, my objections were
12 all to form, in that your questions required a
13 hearsay response.

14 MR. HABER: Okay.

15 THE WITNESS:

16 A. Yes. In Exhibit 22, if you go to
17 page two of Attachment 1, item number 6, titled
18 "Production licence duration constraints," second
19 paragraph of which starts with, "For a proper
20 estimation of Proved Reserves (which have to
21 fulfill the criterion of 'reasonable certainty')",
22 et cetera, et cetera.

0577

1 I say that, "It is noted that PDO
2 still maintain an 850,000 kb/d plateau in their
3 forecast, in spite of recent problems in
4 maintaining that production level."

5 I go on to say in the following
6 paragraph that, "At present, the Group reserve
7 guidelines do not provide any guidance about what

8 assumptions to take for future forecasts in these
9 cases. This should be rectified. Following that,
10 the assumed forecasts should be reviewed with the
11 OU's concerned."

12 And that is a statement of fact,
13 that indeed the guidelines, as we had them in the
14 -- in place at that time, did not say anything
15 about what assumptions to take, nor was this
16 particular issue anywhere addressed in Rule 4-10.
17 BY MR. HABER:

18 Q. Had you made any recommendations as
19 to what the guidelines should include?

20 A. I am making them here now.

21 Q. So that paragraph that you just
22 read is --

0578

1 A. Is where I make the recommendation
2 and say effectively what I am saying there is
3 look, at this moment, I cannot say that this
4 particular assumption is not in line with our
5 guidelines.

6 I believe that the guidelines
7 should be tightened and should be made more
8 specific, and then we should review again the
9 situation of PDO and, as it happens, SPDC and the
10 others.

11 Q. I guess the question I am asking
12 you is: Did you suggest to anyone how the
13 guidelines should be tightened and be made more
14 specific?

15 A. Yes, I did, in the following year.
16 And that would have been in the year of 2002.

17 Q. And is that recommendation
18 reflected in your annual report?

19 A. Yes. Number 2 of my
20 recommendations on page 4 of the same Attachment.
21 But it says, "In the Group reserves guidelines,
22 include guidance on assumptions to use in future

0579

1 production profiles when these become important
2 for OUs with constrained production licence
3 durations. With such guidance, review the present
4 assumptions used by e.g. SPDC and PDO."

5 Q. Did you have any involvement in
6 providing the assumptions that were to be used in
7 any tightening of the guidelines?

8 A. The guidelines in 2002, as I
9 remember it, were put together by Jan Willem
10 Roosch at the beginning of 2002, and indeed I had
11 made recommendations for corrections in certain
12 parts, including this particular issue.

13 Q. And do you know if your
14 recommendations were implemented in the revised
15 guidelines?

16 A. I believe they were not.

17 Q. Do you have an understanding as to
18 why?

19 A. The short answer is no. Jan Willem
20 Roosch is Jan Willem Roosch, and he did his own
21 thing.

22 Q. With the guideline revisions in
0580

1 2003, did you raise this issue again for inclusion
2 into the guideline revisions?

3 A. We would have to refer to my
4 end-year document. I can't be precise. Certainly
5 the issue itself was raised. That of course I am
6 sure about. Whether the issue of the guidelines,
7 I cannot tell off-hand. I would have to look at
8 my report.

9 Q. Now, from -- other than the
10 challenge session -- withdrawn.

11 Other than the ARPR process, did
12 you have any follow-up with PDO concerning any of
13 the issues that you identified in your report, the
14 1999 report, that is?

15 A. None that I can remember.

16 Q. And again, other than the ARPR
17 process, did you have any follow-up with PDO
18 concerning the production problems that PDO --
19 that you had learned PDO was experiencing?

20 A. The only follow-up that I can
21 remember is the follow-up at the end of 2002 when
22 the issue of the production license constraints,

0581

1 et cetera, was raised again by me in my report.

2 And when I asked PDO and SPDC for

3 specific data regarding their assumed off-take
4 profiles, and that led to a specific item that I
5 raised in my end 2002 report where I said that
6 clearly the Proved Reserves estimate carried by
7 PDO is too high.

8 I made quite a specific assessment
9 of the volume by which, in my opinion, on the
10 basis of the limited data that I had available, it
11 was obvious that something was not right.

12 Q. If you can just take a look at
13 Exhibit 16 for a moment, and just identify where
14 that discussion is included or contained, rather?

15 A. It would be on page 3 of Attachment
16 1 of Exhibit 16, item number 8, last paragraph at
17 the bottom. First I introduced the issue again of
18 companies being constrained both by the end of
19 license and by their offtakes. And then I
20 described that I asked Shell Abu Dhabi PDO and
21 SPDC for additional information.

22 And where in the last paragraph, I

0582

1 say, "PDO did not provide a clear answer to the
2 query."

3 And I go on to say, "Comparison of
4 their stated Proved oil reserves volume against
5 their latest Business Plan forecast showed that
6 the Proved volume seems unrealistically high," and
7 then I go on.

8 Q. Now, with regard to this portion of
9 the year-end report, and the portion I am
10 referring now to what you just read under item 8,
11 do you recall having any comment -- receiving any
12 comment from any of the recipients on the first
13 page of Exhibit 16?

14 And that includes the direct
15 recipients and the recipients who are copied.

16 A. No specific comments stand out.
17 Walter van de Vijver and ExCom members certainly
18 didn't come back to me, Malcolm Harper didn't.
19 Frank Coopman and I had frequent contact with, so
20 he may have given some comments or asked
21 questions.

22 But I don't remember specifically

0583

1 which they were, and the same as we said for Han
2 van Delden and Brian Puffer who of course I saw at
3 the end of January 80.

4 Q. Other than specific conversations,
5 do you recall any specific conversations that you
6 had with Mr. Coopman concerning Oman?

7 A. Not specifically, no. No. I am
8 not saying that we hadn't, but I cannot remember
9 any specific points.

10 Q. And again, general discussion over
11 Oman, do you recall having that with Mr. Van
12 Delden?

13 A. Not specifically. But I made the
14 point, this particular point and many other
15 points, quite clear in my presentation.

16 I remember that I showed a view
17 graph with the production forecasts, at which I
18 drew various lines suggesting what the minimum
19 amount was by which I needed to see the Proved
20 Reserves estimate needed to be corrected.

21 Q. And was Mr. Puffer present during
22 this presentation?

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1 A. Yes, he would have been, yes.

2 Q. Do you recall any reaction from Mr.
3 Van Delden or Mr. Puffer to the presentation?

4 A. Not specifically. But I know that
5 it wasn't received in stony silence. We certainly
6 did get questions and comments. But if you ask me
7 who made what comment, I honestly cannot remember.

8 Q. Other than the recipients
9 identified on Exhibit 16, did Ms. Boynton provide
10 any comment about the Oman item that we just
11 talked about?

12 MS. WICKHEM: Object. Lack of
13 foundation.

14 MR. TUTTLE: To Mr. Barendregt?

15 MR. HABER: To Mr. Barendregt.

16 THE WITNESS:

17 A. Well, Ms. Boynton was not copied on
18 my note, nor do I think she received a copy, at

19 least to my knowledge.

20 BY MR. HABER:

21 Q. Well, let me ask a different
22 question. Did you have a different discussion
0585

1 with Ms. Boynton concerning the note that has been
2 marked as Exhibit 16?

3 A. No. I have never met Ms. Boynton.

4 Q. Same question with regard to Mr.
5 Watts. Did you discuss the note with Mr. Watts?

6 A. No. I never met Mr. Watts.

7 MR. BEST: Objection to form.
8 Asked and answered.

9 BY MR. HABER:

10 Q. Now, you did conduct another audit
11 of Oman.

12 Correct?

13 A. In 2003, yes.

14 Q. Was that audit a part of the cycle,
15 the four-year cycle that had been your practice?

16 A. As it happened, yes. Yeah. But I
17 think following my recommendation or my remark at
18 the end of 2002, even if it had been part of the
19 cycle, then in order it would have been carried
20 out in Oman in the following year.

21 MR. FERRARA: Excuse me, Mr. Haber.
22 If you think you are going to be able to wrap up
0586

1 with 2003 and conclude your examination the next
2 ten minutes or so, I would like to continue.

3 But in the event that you think
4 that you are going to go longer than that, we have
5 been on for a little more than an hour and we may
6 want to take a five-minute break.

7 MR. HABER: I think probably we
8 will be on for about ten to 15 minutes on 2003,
9 and then I just have, as I mentioned earlier, one
10 small area that I do want to inquire into that I
11 don't anticipate longer than a half-hour, and
12 should take less.

13 MR. FERRARA: Well then, we should
14 take a break.

15 MR. HABER: That's fine.

16 THE VIDEOGRAPHER: Going off the

17 record at 12:30.

18 (Short recess taken)

19 THE VIDEOGRAPHER: Beginning tape

20 number 9 and returning to the record at 12:41 from

21 1230.

22 BY MR. HABER:

0587

1 Q. Mr. Barendregt, I just want to go

2 back to one answer that you gave previously, and

3 that concerned that 15% of proved developed

4 entitlements.

5 I believe your earlier testimony

6 was that it was corrected a few months later?

7 A. Yes. Certainly a correction was

8 made to the proved developed estimate at that

9 time, yes.

10 Q. And do you recall the basis for

11 that correction?

12 A. As I recall it, it would have been

13 as a result of the recommendation that I made in

14 -- or the observation that I made in my 1999 audit

15 report.

16 Q. And that correction was reflected

17 in the final ARPR submission for PDO?

18 A. Yes, indeed it was. There was a

19 sizeable negative correction, yes.

20 Q. Do you know if PDO had ever

21 withdrawn its business plan during your tenure as

22 group reserves auditor?

0588

1 A. I cannot recall. I can't recall.

2 It wouldn't -- I wouldn't normally be involved in

3 the process of business plan and capital

4 allocation submissions.

5 Q. Were you involved in PDO's capital

6 allocation submissions?

7 A. No, I was not.

8 Q. Now, right before the break, we

9 were starting -- we were about to get into your

10 2003 audit.

11 Do you recall generally what you

12 had found in Oman when you audited PDO?

13 MR. TUTTLE: In 2003?

14 MR. HABER: In 2003.

15 THE WITNESS:

16 A. It was clear that the original
17 expectation reserves estimates for some fields,
18 some of the fields, were too high. It was also
19 clear that the production forecast, and in
20 particular proved production forecast, had been
21 too optimistic and needed review.

22 In addition, of course, we had the

0589

1 issue that we discussed before of the reserves
2 guidelines having been tightened and, in
3 particular, requiring a more strict hurdle before
4 undeveloped reserves could be produced. And that
5 also affected some of the proved forecasts for
6 undeveloped reserves on PDO's books.

7 And the net result was that proved
8 -- developed and proved undeveloped forecasts for
9 PDO were quite a lot less than what they were
10 before and, more importantly for me, that a lot of
11 work still needed to be done to mature reserves
12 such that they could be booked as Proved Reserves.

13 Q. If you take a look at Exhibit 26?

14 A. 26, yes, I have got it.

15 Q. And if you could pull 27 aside as
16 well, because we will get to it.

17 Do you recall preparing this Draft
18 Note?

19 MR. BEST: Which one?

20 MR. HABER: I am sorry. Exhibit
21 26.

22 THE WITNESS:

0590

1 A. Yes. As I explained several times
2 before, I was in the habit of preparing a Draft
3 Note shortly before my completion of the audit.

4 BY MR. HABER:

5 Q. And do you recall who you
6 distributed the Draft Note to?

7 A. Not specifically. But in this
8 case, I would have expected it to be Stuart
9 Clayton.

10 Q. Do you know who Said al-Harty is?

11 A. He was the -- and I am looking now
12 at Exhibit 27. He was the reserves coordinator.

13 Q. Do you recall providing him with a
14 draft?

15 A. Not specifically. I would expect
16 that I had done that via E-mail, yes.

17 Q. Do you recall if you sent a draft
18 to Stuart Evans?

19 A. Probably not. I do not recall.
20 The reason is that I sent my Draft Note typically
21 to one or two people in the organization that I
22 had -- I had audited, and I would expect them to
0591

1 distribute it further within their organization,
2 appropriate persons in their organization.

3 Q. Do you recall receiving any
4 feedback from the people that you sent the draft
5 to?

6 A. Again, not specifically. But I
7 always got feedback, small or slightly less small.
8 But no, I cannot recall in this instance.

9 Q. In this particular instance, do you
10 recall any of the people you distributed a draft
11 to challenging the facts and conclusions set forth
12 in Exhibit 26?

13 A. Not challenging it, no. No. I do
14 not recall.

15 Q. I'd like you just to take a look at
16 the first page for a moment of Exhibit 26. And
17 it's the paragraph that begins, "The audit found
18 that PDO's Group share proved developed reserves
19 are largely reasonable, but that the proved total
20 reserves are currently overstated by some 40%."

21 Do you see that?

22 A. Yes.

0592

1 Q. Now, when you referred to proved
2 total reserves, what are you referring to?

3 A. The sum of proved developed and
4 proved undeveloped reserves.

5 Q. And do you recall, between proved
6 developed and proved undeveloped, which made up a

7 greater portion of the overstatement?

8 A. No, I do not remember that detail.

9 Q. Now, further in this paragraph, you
10 write -- and it's the second to last sentence in
11 this paragraph, "PDO have recognised this and have
12 embarked on it on an aggressive study programme to
13 address the maturation of these projects."

14 Do you know when this project or
15 this study program commenced?

16 A. I wasn't there when it was
17 commenced. But it must have been in the course of
18 2003.

19 Q. So your understanding is it was
20 commenced prior to the time you conducted your
21 audit?

22 A. Yes. There was, of course, and I
0593

1 think I mentioned that earlier on, a study --
2 meanwhile a study was going on by staff in
3 Rijswijk, Stein Christiansen. There was a study
4 regarding the STOIP and reserves review of all
5 the PDO fields.

6 But that wasn't a development
7 study. Meanwhile, PDO themselves were starting --
8 at that time were starting to set up a program of
9 studies.

10 Q. And I am sorry. I just don't
11 recall, when did the study that was conducted by
12 Stein Christiansen commence?

13 A. As I remember it, it must have been
14 somewhere around the middle of the year, May/June
15 thereabouts would have been my estimate.

16 Q. Now, if you could just turn to page
17 175, number 5 on the page. The first sentence
18 reads, "There is mis-alignment between individual
19 field proved reserves and the corporate PDO
20 submission."

21 Was this a problem that existed at
22 PDO at the time you conducted your audit in 1999?
0594

1 A. I'll have to read the entire
2 paragraph.

3 Q. Okay. Please do.